As filed with the Securities and Exchange Commission on June 23, 2017

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CALYXT, INC.
(Exact name of Registrant as specified in its charter)

Not Applicable
(Translation of Registrant's name into English)

Delaware	**2870**	**27-1967997**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

600 County Road D West
Suite 8
New Brighton, MN 55112
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Calyxt, Inc.
600 County Road D West
Suite 8
New Brighton, MN 55112
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐
Non-accelerated filer ☒ (Do not check if a smaller reporting company) Smaller reporting company ☐
Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has not elected to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title Of Each Class Of Securities To Be Registered	**Proposed Maximum Aggregate Offering Price(1)**	**Amount Of Registration Fee**
Common stock, par value $0.0001 per share	$50,000,000	$5,795

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933. Includes offering price of shares that the underwriters have the option to purchase.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

SUBJECT TO COMPLETION, DATED JUNE 23, 2017

PRELIMINARY PROSPECTUS

Shares

Calyxt, Inc.

Common Stock

This is our initial public offering. We are offering shares of our common stock.

Prior to this offering, there has been no public market for our common stock. We intend to apply to list the common stock on the under the symbol " ." We anticipate that the initial public offering price will be between $ and $ per share of common stock.

We are an "emerging growth company" as that term is defined in the Jumpstart Our Business Startups Act of 2012 and, as such, will be subject to certain reduced public company reporting requirements. See "Summary—Implications of Being an Emerging Growth Company."

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 12.

	Per Share	Total
Public offering price	$	$
Underwriting discounts(1)	$	$
Proceeds to us before expenses(1)	$	$

(1) We have agreed to reimburse the underwriters for certain FINRA-related expenses. See "Underwriting."

The underwriters have the option to purchase up to additional shares of common stock from us at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares of common stock to purchasers on or about , 2017 through the book-entry facilities of The Depository Trust Company.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Citigroup **Credit Suisse** **Jefferies**

Wells Fargo Securities

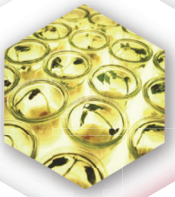
Ladenburg Thalmann

The date of this prospectus is , 2017

calyxt

Strong product development platform

Proprietary, de-risked gene-editing technologies with strong IP



Innovative business model

Dual targeting consumers and farmers

Lead products nearing commercialization

High Oleic Soybean and High Fiber Wheat

calyxt

A gene editing, consumer-centric, food- and ag-focused company

Strong Management Team

Gene-editing and ag experts

Deep, rich pipeline

Across multiple crops, developed with industry leading speed and reduced cost

Uniquely positioned

Amongst growing industry demand, ag bio consolidation and emergence of gene-editing as disruptive tech

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We, Cellectis S.A. and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We, Cellectis S.A. and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide you. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the shares of common stock.

For investors outside the United States: Neither we nor any of the underwriters have taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

Unless the context requires otherwise: (a) references to "Calyxt," the "Company," our "company," "we," "us" or "our" refer to Calyxt, Inc., a Delaware corporation (formerly known as Cellectis Plant Sciences, Inc.) and (b) references to "Cellectis" refer to Cellectis S.A., a French corporation, and its subsidiaries other than Calyxt and its subsidiaries. Unless the context requires otherwise, statements relating to our history in this prospectus describe the history of Cellectis' plant products business. See "Certain Relationships and Related Party Transactions—Relationship with Cellectis."

We have made rounding adjustments to some of the figures included in this prospectus. Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that precede them.

Currency amounts in this prospectus are stated in U.S. dollars, unless otherwise indicated.

This prospectus includes industry and market data that we obtained from periodic industry publications, third-party studies and surveys, filings of public companies in our industry and internal company surveys. These sources include government and industry sources. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Although we believe the industry and market data to be reliable as of the date of this prospectus, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. We do not know all of the assumptions regarding general economic conditions or growth that were used in preparing the forecasts from the sources relied upon or cited herein. Assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause future performance to differ materially from our assumptions and estimates. See "Special Note Regarding Forward-Looking Statements."

The name and trademark, Cellectis, and other trademarks, trade names and service marks of Cellectis appearing in this prospectus are the property of Cellectis. Prior to the completion of this offering, Calyxt and other trademarks, trade names and service marks of Calyxt appearing in this prospectus are the property of Cellectis, and after the completion of this offering, they will be the property of, or licensed to, Calyxt. This prospectus also contains additional trade names, trademarks and service marks belonging to Cellectis and to other companies. We do not intend our use or display of other parties' trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

SUMMARY

This summary highlights information included elsewhere in this prospectus and does not contain all of the information you should consider in making an investment decision. You should read this entire prospectus carefully, including the sections entitled "Risk Factors," "Special Note Regarding Forward-Looking Statements," "Selected Historical Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and the notes thereto before making an investment decision regarding our common stock.

Our Company

Overview

We are a consumer-centric, food- and agriculture-focused company. By combining our leading gene-editing technology and technical expertise with our innovative commercial strategy, we are pioneering a paradigm shift to deliver healthier specialty food ingredients, such as healthier oils and high fiber wheat, for consumers and agriculturally advantageous crop traits, such as herbicide tolerance, to farmers. While the traits that enable these characteristics may occur naturally and randomly through evolution—or under a controlled environment through traditional agricultural technologies—those processes are imprecise and take many years, if not decades. Our technology enables us to precisely and specifically edit a plant genome to elicit the desired traits and characteristics, resulting in a final product that has no foreign DNA. We believe the precision, specificity, cost effectiveness and development speed of our gene-editing technologies will enable us to provide meaningful disruption to the food and agriculture industries.

Food-related issues including obesity and diabetes are some of the most prevalent health issues today and continue to grow rapidly. As awareness of these diet-related health issues grows, consumers are emphasizing a healthier lifestyle and a desire for nutritionally rich foods that are more nutritious, better tasting, less processed and more convenient. This trend is leading to an increase in the demand for higher valued, premium segments of the food industry, such as higher fiber, reduced gluten and reduced fat products. As a result of these trends, food companies are looking for specialty ingredients and solutions that can help them satisfy their customers' evolving needs and drive growth in market share and new value-added products.

While food companies are focused on these trends, we believe the legacy agriculture companies have overlooked society's food-related issues and are not properly equipped to address health-driven consumer food trends. These legacy agriculture companies have historically focused on increasing yields, profit margins and market share. They have been burdened by high research and development costs and a high degree of commoditization in their deep, farmer-focused supply chains.

We have developed a robust product pipeline with our proprietary technology. Our first product candidate, which we expect to be commercialized by the end of 2018, is a high oleic soybean designed to produce a healthier oil that has zero trans fats and reduced saturated fats. We are also developing a high fiber wheat to create flour with up to three times more dietary fiber than standard white flour while maintaining the same flavor and convenience of use. Another product candidate we are developing is a herbicide tolerant wheat designed to provide farmers with better weed control options to increase yields and profitability. We believe each of these product candidates addresses a potential multi-billion dollar market opportunity.

We believe that our proprietary gene-editing technologies and innovative commercial strategy will allow us to bridge the divide between evolving consumer preferences and the historical approach by the large legacy companies in the agriculture supply chain.

Using our proprietary technologies and expertise, we edit the genome of food crops by using our "molecular scissors" to precisely cut DNA in a single plant cell, use the plant's natural repair machinery to make our desired

edit and finally regenerate the single cell into a full plant. We believe we are able to develop targeted traits—some of which would be nearly impossible to develop using traditional trait-development methods—quicker, more efficiently and more cost effectively than traditional trait-development methods. Our technology positions us to assess the probability of success early on in the research and development process, potentially eliminating expensive late stage failures and allowing for a larger breadth of products to be developed. We have a strong track record with respect to our technologies and expertise as we have successfully edited more than 20 unique genes in 6 plant species since our inception in 2010.

Our commercial strategy is centered on two core elements: developing healthier specialty food ingredients, such as healthier oils and high fiber wheat, to enable the food industry to address evolving consumer trends and developing agriculturally advantageous traits, such as herbicide tolerance, for farmers. This will involve developing and leveraging our supply chain to effectively bring our consumer- and farmer-centric products to the marketplace. For our consumer-centric products we intend to repurpose and leverage existing supply chain capacity by contracting, tolling or partnering with players in the existing supply chain, such as seed production companies, farmers, crushers, refiners or millers, which we expect will allow us to apply our resources to maximizing innovation and product development while minimizing our capital expenditures and overhead. For our farmer-centric products, we intend to broadly out-license our products to the seed industry.

Our Competitive Strengths

We believe that we are strategically well-positioned to develop high-value and innovative products. Our competitive strengths include:

- ***Proprietary technologies creating a powerful platform to design and develop new products.*** Since our founding, we have been at the forefront of the research, development and application of plant-based gene-editing technologies. Our capabilities enable us to precisely edit specific genes from a target food crop to improve the nutritional composition or provide agricultural benefits to farmers. Three examples of our technological innovation include:
  - *High Oleic Soybean*: We deactivated key genes associated with fatty acid biosynthesis to achieve a healthier soybean oil.
  - *High Fiber Wheat*: We simultaneously deactivated all six copies of a gene within a single wheat plant with the purpose of increasing fiber content.
  - *Herbicide Tolerance*: We believe we can develop crop varieties that will be tolerant to certain herbicides by identifying and making a subtle base substitution that we believe will be sufficient to confer herbicide tolerance. We expect to be able to replicate this process in various crops.
- ***Innovative portfolio of product candidates with an accelerated path to market.*** We are currently developing a diversified portfolio spanning across five core crops—soybean, wheat, canola, potato and alfalfa—and a multitude of product candidates. These include innovative consumer-centric product candidates like our high-fiber wheat that is designed to produce flour with up to three times the fiber content of standard white flour, as well as innovative, farmer-centric solutions like herbicide tolerant wheat and products with valuable supply chain benefits like cold storable potatoes that are designed to store longer and produce much less acrylamide in the frying process, a human health concern that has been linked to cancer. We believe our portfolio of product candidates, coupled with our ability to quickly develop future product candidates, affords us the opportunity to disrupt the food industry.
- ***Significant barriers to entry through our first-mover advantage and strong intellectual property.*** We command a first-mover advantage in the editing of genes in plants. As a pioneer in gene-editing technologies, we are building on more than two decades of hands-on experience and process

optimization which we believe cannot be easily replicated by competitors. Our proprietary technologies and product candidates benefit from the licensing of a portfolio of 81 issued patents and 170 pending patent applications.

- ***Faster, cheaper and innovative product development process focused on end user needs.*** Genetic modification has traditionally taken an average of 13 years and over $130 million to develop a commercially viable product. By contrast, a key advantage of our gene-editing technology platform is that we believe we can develop products from concept to commercialization in three to six years and at a fraction of the cost. For example, we created our high oleic soybean product candidate by generating fewer than 20 independent plants that were edited with TALEN. This contrasts with traditional genetic modification methods which we believe require thousands of plants to achieve the same result. We developed our high oleic soybean from concept to field in under four years and expect to commercialize this product by the end of 2018. We believe we will continue to be able to react quickly to consumer and farmer needs that we identify.
- ***Supply chain flexibility enabling us to capture significant downstream value.*** We plan to develop consumer traits and leverage existing supply chain capacity and our existing relationships to provide differentiated specialty ingredients to food companies. By doing so, we believe that we will be able to capture significant value as our innovative products move from "field to fork." Our supply chain is flexible, enabling us to layer on new products to our existing ones and capture additional value. By stacking additional characteristics on the same seeds, we believe we can create additional value without necessarily increasing acreage, volumes of grain produced or the amount of oil commercialized, but rather by aiming to increase the value of our products on a per unit basis. For example, we believe this value creation could be implemented in our high oleic soybean product candidate if we were to stack a trait that improves the protein composition of the meal, a trait that further improves the soybean oil fatty acid profile or a farmer-focused trait such as herbicide tolerance.
- ***A world-class management team with deep industry expertise.*** Our executive team has more than 120 years of collective experience in the agriculture and gene-editing fields. This includes over 95 years of collective experience in agricultural supply chain, product development and commercial operations, during which several members of our executive team have managed billions of dollars of revenue and cost at large multinational corporations. Several members of our executive team previously worked at well-known technology and agri-business companies, such as Monsanto, Syngenta, Stine Seed Company and Cargill. As pioneers in plant-based gene editing, members of our management team invented TALEN, one of the premier gene-editing tools. Dr. Daniel Voytas, our Chief Science Officer, is a Professor of Genetics, Cell Biology and Development at the University of Minnesota and Director of the Beckman Center for Genome Engineering. He is best known for his pioneering work to develop methods for precisely editing DNA sequences in living plant cells.

Our Growth Strategy

We believe that there are significant opportunities to grow our business both domestically and internationally by executing on the following key elements of our strategy:

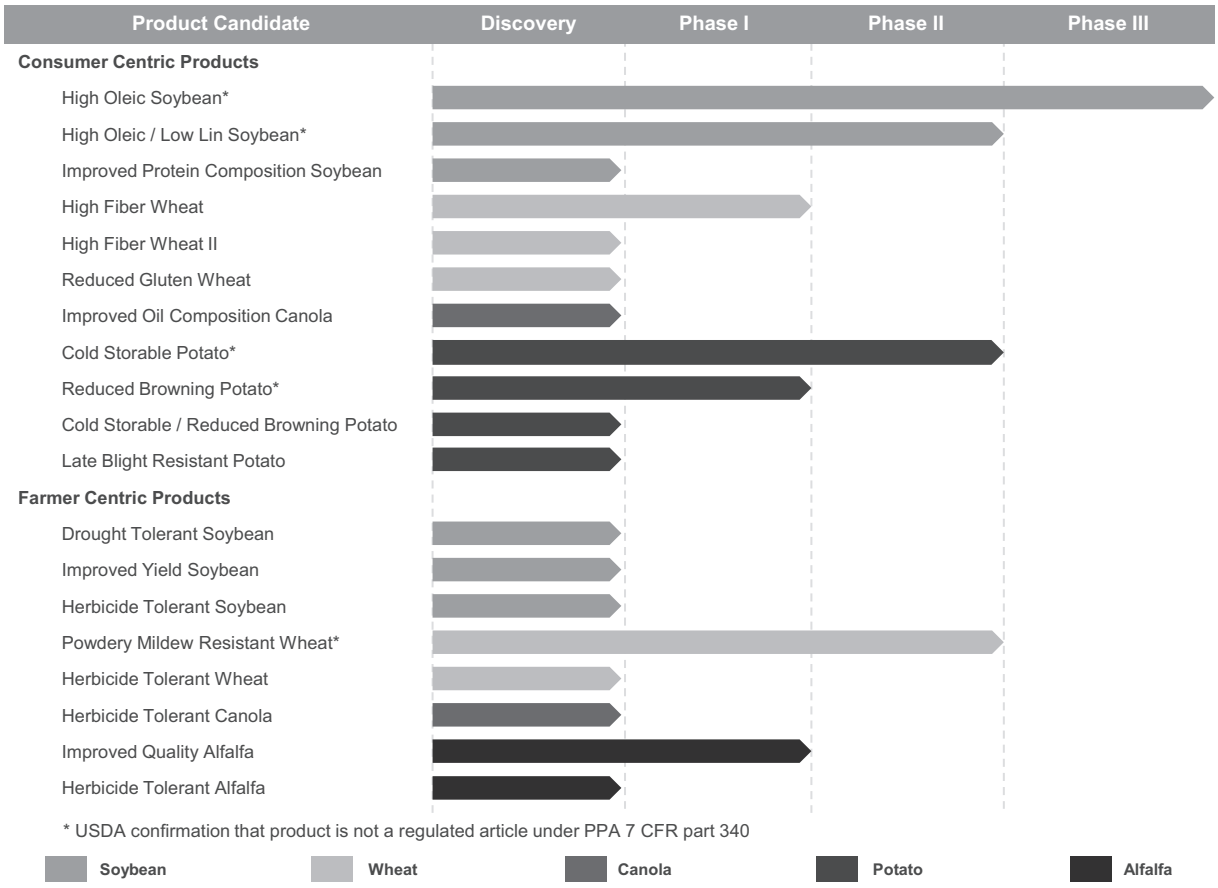
- ***Commercialize our current product candidates in North America.*** Our near-term focus is to launch our product candidates in North America where we believe the markets for healthier specialty food ingredients for consumers and unique, plant-trait solutions for farmers are significant and the existing supply chain enables us to accelerate growth.
- ***Identify new opportunities through our consumer- and farmer-centric approaches.*** We intend to continue to elicit desired traits and to include additional crops in our product pipeline. We continuously evaluate the evolving needs of the consumer and the farmer and seek to apply our technologies and

expertise to provide better solutions to meet their demands. We also expect to be able create additional opportunities from our existing product candidates once they are commercialized through combining traits, which may allow us to create products with additional benefits without adding significant cost.

- ***Accelerate our R&D productivity with enhanced automation and high throughput capabilities.*** We consistently strive to optimize our product development processes. Through our planned facility expansion, we are combining gene-editing automation with food science capabilities to enable us to rapidly identify new growth opportunities. We believe that this automation and our high-throughput platform will allow for greater standardization in our processes. We expect this standardization to increase our research and development productivity significantly and add a greater number of projects to our product pipeline.
- ***Expand through R&D agreements and acquisitions.*** We plan to selectively partner, in-license or acquire key enabling technologies and businesses across the value chain. This may include acquiring complementary technologies and intellectual property or fully developed products. In each case, we plan to look for R&D partners and acquisitions that give us a significant presence in the health focused specialty food ingredient markets where we will be able to accelerate the launch and commercialization of our innovative products.
- ***Leverage our North American market presence to globalize our products.*** While we believe the North American market opportunity remains attractive and extensive, in the future we plan to explore the possibility of expanding our business globally. This may involve exporting our products to international markets or establishing new supply chains in other attractive markets.

Our Product Pipeline

We have several products under development including: high oleic soybeans, powdery mildew resistant wheat, cold storable potato, high fiber wheat, reduced browning potato and herbicide tolerant wheat. Our current product candidates are depicted in the figure below:



We categorize our stages of pre-commercial development from Phase I to Phase III. Prior to entering Phase I, in Discovery, we identify genes of interest. In Phase I, we edit the identified genes of interest, target edits we desire to make, and produce an initial seed that contains the desired edit. Phase II is trait validation, where we perform small-scale and large-scale tests to confirm phenotype and ingredient functionality. In this phase we also perform replicated, multi-location field testing, after confirming that the product is not a regulated article by the USDA. In Phase III, we develop the first commercial-scale pilot production, begin to build out the supply chain and inventory and perform customer testing prior to commercialization.

High Oleic Soybean (Consumer Trait)

Soybean oil has historically been partially hydrogenated to enhance its oxidative stability in order to increase shelf life and improve frying characteristics. This process, however, creates trans-unsaturated fatty acids, or trans fats, which have been demonstrated to raise low-density lipoprotein (LDL) cholesterol levels and lower high-density lipoprotein (HDL), both of which contribute to cardiovascular disease.

We developed a soybean trait that has produced oils with a fatty acid profile that contains 80% oleic acid, 20% less saturated fatty acids compared to commodity soybean oil and zero trans fats. Our high oleic soybean oil

enhances oxidative stability more than fivefold when compared to commodity oil and also offers a threefold increase in fry-life. Our high oleic soybean was created using our TALEN gene-editing technology. We designed TALEN to specifically target two fatty acid desaturase genes (designated *FAD2A* and *FAD2B*). By key measures, including yield, our high oleic soybean variety performs comparably to its unedited counterpart. Our soybean product candidate is in Phase III of our development process. We are currently completing our commercialization plan and anticipate commercialization by the end of 2018.

High Fiber Wheat (Consumer Trait)

Research has shown that fiber may play a large role in maintaining bowel health, lowering cholesterol, stabilizing blood glucose levels and controlling weight gain. In recent years, the awareness of the health benefits of high fiber diets has increased. This has translated to a strong growth in demand for high fiber food products, with 35% of grocery shoppers now seeking high fiber foods. By 2018, the global market for high-fiber bread is expected to be $36 billion, a 25% jump from 2013.

We are developing high fiber wheat traits that could be used to produce white flour with up to three times more dietary fiber than standard white flour. We anticipate that by altering the proportion of certain slower digested carbohydrates in the wheat grain, we will increase dietary fiber. We believe our high fiber wheat flour will be incorporated into many food products—from pasta to bread. The product candidate is currently in Phase I of our development process.

Herbicide Tolerant Wheat (Farmer Trait)

With the constant need to increase yields, herbicides are an important component of commercial food production. Herbicide tolerance traits in crops can provide additional crop protection chemistry alternatives to control weeds and increase crop yields.

We are pioneering the development of herbicide tolerant traits in wheat without the use of foreign DNA. Herbicides act by inhibiting the activity of certain plant-encoded proteins that promote growth. We aim to achieve herbicide tolerance by specifically making a subtle repair to prevent herbicides from being able to recognize and block functions of these proteins, such that the edited plant survives the application of the herbicide. Our product will contain no foreign DNA. We believe this solution, if successfully developed and commercialized, will have the potential to increase the farmer's yield and revenue. The product candidate is currently in the Discovery phase of our development process.

Other Products in Our Development Pipeline

Our extensive product pipeline includes a variety of consumer centric and farmer centric traits for soybean, wheat, canola, alfalfa and potato. We will conduct further development programs to build upon our current pipeline which currently includes improved oil composition canola, herbicide tolerant canola, improved quality alfalfa and herbicide tolerant alfalfa, late blight resistant potato, cold storable / reduced browning potato, improved protein composition soybean, drought tolerant soybean, herbicide tolerant soybean and improved yield soybean. In the future, we anticipate expanding our product pipeline to include other food crops.

We plan to develop gene-editing automation processes that will enable us to implement a high throughput discovery platform to identify new growth opportunities. This high-throughput platform is intended to allow us to discover more gene traits and make more complex edits, enabling us to drive innovation at a significantly faster rate. We believe all of these steps will enable us to remain at the forefront of food and agriculture innovation.

Relationship with Cellectis

Prior to the completion of this offering, we were a wholly owned subsidiary of Cellectis, and all of our outstanding shares of common stock were owned by Cellectis. Immediately prior to the completion of this offering, we and Cellectis intend to enter into, or will have entered into, certain agreements that will provide a framework for our ongoing relationship with Cellectis. For a description of these agreements, see "Certain Relationships and Related Party Transactions—Relationship with Cellectis."

Risk Factors

There are a number of risks that you should understand before making an investment decision regarding this offering. These risks are discussed more fully in the section entitled "Risk Factors" following this prospectus summary. These risks include, but are not limited to:

- Our limited operating history;
- Our incurrence of significant losses since our inception and likelihood that we will continue to incur significant losses for the foreseeable future;
- Our product development efforts use complex integrated technology platforms and require substantial time and resources;
- Our crops are new, and producers may require instruction to successfully establish, grow and harvest our crops;
- Our ability to produce high-quality plants and seeds cost-effectively on a large scale and to accurately forecast demand for our products;
- Significant competition in plant biotechnology and the substantially greater financial, technical and other resources of our competitors;
- Challenges from public perceptions of genetically engineered products and ethical, legal, environmental and social concerns and the potential future government regulation of our products;
- Our ability to adequately protect our proprietary rights;
- Our success in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses;
- Our ability to retain and attract senior management and key employees;
- Our independent registered public accounting firm has identified a material weakness relating to our lack of a control in place to review forward purchase derivative contracts entered into by us, and this will require remediation;
- The influence of Cellectis over us after this offering, including its contractual right to nominate a majority of our directors and other contractual rights; and
- Our being a "controlled company" and, as a result, qualifying for, and intending to rely on, exemptions from certain corporate governance requirements.

Corporate Information

We were incorporated in Delaware on January 8, 2010. The address of our principal executive offices is currently 600 County Road D West, Suite 8, New Brighton, MN 55112. Our website is currently www.calyxt.com. Information on, or accessible through, our website is not part of this prospectus.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. As an emerging growth company, we may take advantage of certain reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- only two years of audited financial statements are required in addition to any required interim financial statements, and correspondingly reduced disclosure in management's discussion and analysis of financial condition and results of operations; and
- (i) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and (ii) exemptions from the requirements of holding a non-binding advisory vote on executive compensation, including golden parachute compensation.

We may take advantage of these provisions for up to five years or until such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earliest to occur of (1) the last day of the fiscal year in which we have more than $1.07 billion in annual revenue; (2) the date we qualify as a "large accelerated filer," with at least $700 million of equity securities; (3) the issuance, in any three-year period, by us of more than $1.07 billion in non-convertible debt securities held by non-affiliates; and (4) the last day of the fiscal year ending after the fifth anniversary of our initial public offering.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended (the "Securities Act") for complying with new or revised accounting standards. This permits an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We intend to take advantage of the exemptions discussed above. Accordingly, the information contained herein may be different than the information you receive from other public companies.

THE OFFERING

Share of common stock offered by us . . .	shares
Total shares of common stock to be outstanding after this offering	shares (shares if the underwriters exercise their option in full)
Underwriters' option to purchase additional shares	The underwriters have a 30-day option to purchase up to additional shares of common stock from us as described under the heading "Underwriting."
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional shares of our common stock, assuming an initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses. We intend to use the net proceeds of this offering to fund research and development, to build out commercial capabilities and for working capital and general corporate purposes, as described in greater detail under "Use of Proceeds."
Voting rights	Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholder. See "Description of Capital Stock—Common Stock" for a description of the material terms of our common stock.
Stock exchange symbol	

The number of shares outstanding after this offering is based on shares outstanding as of March 31, 2017 and excludes:

- shares of common stock issuable upon the exercise of outstanding stock options under the Calyxt, Inc. Equity Incentive Plan (the "Existing Plan") at a weighted-average exercise price of $ per share; or
- shares of common stock reserved for future grants or for sale under the Existing Plan or the new equity compensation plan that we adopted in connection with this offering (the "Omnibus Plan").

Unless we specifically state otherwise or the context otherwise requires, the information in this prospectus (i) reflects the 100-for-1 stock split completed on June 14, 2017 as described in note 15 to our unaudited condensed financial statements included elsewhere in this prospectus and (ii) assumes:

- the consummation of a stock split pursuant to which each share held of record by the holder thereof will be reclassified into shares; and
- the underwriters' option to purchase up to an additional shares of common stock from us is not exercised.

SUMMARY HISTORICAL FINANCIAL DATA

The summary financial information appearing below for the years ended December 31, 2016 and 2015 has been derived from our audited financial statements, included elsewhere in this prospectus. The summary financial information appearing below as of March 31, 2017 and for the three months ended March 31, 2017 and 2016 has been derived from our unaudited condensed financial statements, included elsewhere in this prospectus. The unaudited condensed financial statements have been prepared on the same basis as our audited financial statements and include all normal recurring adjustments that we consider necessary for a fair statement of our financial position and operating results as of the dates and for the periods presented. The summary financial data below should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in conjunction with the financial statements, related notes and other information included elsewhere in this prospectus.

Our historical results are not necessarily indicative of our future results and our interim results are not necessarily reflective of the results to be expected for the full year. The summary financial information below does not contain all the information included in our financial statements.

Statements of Operations

	(unaudited) Three Months Ended March 31,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands, except per share data)			
Revenue	$ 55	$ 106	$ 399	$ 1,272
Operating expenses:				
Cost of revenue	—	100	200	751
Research and development	1,266	1,370	5,638	2,766
Sales, general, and administrative	1,578	1,197	6,670	3,569
Total operating expenses	2,844	2,667	12,508	7,086
Loss from operations	(2,789)	(2,561)	(12,109)	(5,814)
Interest expense	(14)	(4)	(5)	(261)
Foreign currency transaction gains (losses)	(29)	(4)	28	186
Loss before income taxes	(2,832)	(2,569)	(12,086)	(5,889)
Income tax benefit	—	—	—	—
Net loss	$ (2,832)	$ (2,569)	$ (12,086)	$ (5,889)
Basic and diluted loss per share(1)	$ (0.35)	$ (0.32)	$ (1.51)	$ (2.15)
Weighted average shares outstanding—basic and diluted	8,000,000	8,000,000	8,000,000	2,745,200

Balance Sheet Data:

	(unaudited) As at March 31, 2017	
	Actual	As Adjusted(2)
	(in thousands)	
Cash and cash equivalents	$ 3,007	$
Total assets	15,092	
Accumulated deficit	(31,400)	
Total stockholder's equity	10,421	
Total liabilities and stockholder's equity	15,092	

(1) See note 8 to our audited financial statements and note 7 to our unaudited condensed financial statements, included elsewhere in this prospectus, for an explanation of the method used to calculate basic and diluted loss per share.

(2) As adjusted to give effect to the issuance and sale of shares of common stock in this offering, assuming an initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) each of as adjusted cash and cash equivalents, total assets total stockholder's equity and total liabilities and stockholder's equity by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the underwriting discount and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) as adjusted cash and cash equivalents, total stockholder's equity and liabilities and stockholder's equity by $ million, assuming an initial public offering price of $ per share, after deducting the underwriting discount and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the following risks, together with all the other information in this prospectus, including our financial statements and notes thereto, before you invest in our common stock. If any of the following risks actually materializes, our operating results, financial condition and liquidity could be materially adversely affected. As a result, the trading price of our common stock could decline and you could lose all or part of your investment.

Risks Related to Our Business and Industry

We have a limited operating history, which makes it difficult to evaluate our current business and future prospects and may increase the risk of your investment.

We are an early-stage gene-editing company with a limited operating history that to date has been focused primarily on research and development, conducting field trials and building our management team. Investment in agricultural biotechnology product development is a highly speculative endeavor. It entails substantial upfront research and development investment and there is significant risk that we will not be able to edit the genes in a particular plant to express a desired trait, or, once edited, we will not be able to replicate that trait across entire crops in order to commercialize the product candidate. Moreover, the regulatory pathway for some of our product candidates can be uncertain and could add significant additional cost and time to development. We have not yet generated any revenue from sales of these products.

Our limited operating history may make it difficult to evaluate our current business and our future prospects. We have encountered, and will continue to encounter, risks and difficulties frequently experienced by growing companies in rapidly developing and changing industries, such as the agricultural biotechnology industry, including challenges in forecasting accuracy, determining appropriate investments of our limited resources, gaining market acceptance of the products created using our gene-editing platform, managing a complex regulatory landscape and developing new product candidates. We may also face challenges in scaling our supply chain in a cost-effective manner, as we will rely on contracting with seed production companies, farmers, crushers, refiners, logistics and transportation providers and/or millers, in order to get our various products to market. Our current operating model may require changes in order for us to scale our operations efficiently. We may not be able to fully implement or execute on our business strategy or realize, in whole or in part within our expected time frames, the anticipated benefits of our growth strategies. You should consider our business and prospects in light of the risks and difficulties we face as an early-stage company focused on developing products in the field of agricultural biotechnology.

We have incurred significant losses since our inception, have no commercial products and anticipate that we will continue to incur significant losses for the foreseeable future.

Our net loss for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015 was $2.8 million, $12.1 million and $5.9 million, respectively. As of March 31, 2017, we had an accumulated deficit of $31.4 million. The amount of our future net losses will depend, in part, on the pace and amount of our future expenditures and our ability to obtain funding through equity or debt financings, funding provided by Cellectis, and on additional grants or tax credits. We currently have no commercial products and do not expect to have sales until the end of the 2018 at the earliest. Even then, our sales will be limited to a single product. As a result, we expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate that such expenses will increase substantially if and as we:

- establish a sales, marketing and distribution infrastructure, including relationships across our supply chain, to commercialize any products that have completed the development process;
- conduct additional field trials of our current and future product candidates;
- secure manufacturing arrangements for commercial production;

- continue to advance the research and development of our current and future product candidates;
- seek to identify and validate additional product candidates;
- acquire or in-license other product candidates, technologies, germplasm or other biological material;
- are required to seek regulatory and marketing approvals for our product candidates;
- make royalty and other payments under any in-license agreements;
- maintain, protect, expand and defend our intellectual property portfolio;
- seek to attract and retain new and existing skilled personnel; and
- experience any delays or encounter issues with any of the above.

The net losses we incur may fluctuate significantly from year-to-year and quarter-to-quarter, such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. In any particular period or periods, our operating results could be below the expectations of securities analysts or investors, which could cause the price of our common stock to decline.

We have never commercialized a product candidate and we may lack the necessary expertise, personnel and resources to successfully commercialize any of our product candidates.

We have never commercialized a product candidate. Our products are still in development, and there is no established market for them. Completion of product development could be protracted, and any products may not be ready for commercial launch for several years, if ever. If we are not able to commercialize our existing or future product candidates on a significant scale, then we may not be successful in building a sustainable or profitable business. Moreover, we expect to price our products based on our assessment of the value that we believe they will provide to food manufacturers or farmers, rather than on the cost of production. If food manufacturers or farmers attribute a lower value to our products than we do, they may not be willing to pay the premium prices that we expect to charge. Pricing levels may also be negatively affected if our products are unsuccessful in producing the yields or traits we expect. Food manufacturers or farmers may also be cautious in their adoption of new products and technologies, with conservative initial purchases and proof of product required prior to widespread deployment. It may take several growing seasons for food manufacturers or farmers to adopt our products on a large scale.

To achieve commercial success of our product candidates, we will have to develop our own sales, marketing and supply capabilities by outsourcing these activities to third parties. Factors that may affect our ability to commercialize our product candidates on our own include recruiting and retaining adequate numbers of effective sales and marketing personnel, obtaining access to or persuading adequate numbers of food manufacturers or farmers to purchase and use our product candidates and other unforeseen costs associated with creating an independent sales and marketing organization. Developing and maintaining a sales and marketing organization requires significant investment, is time-consuming and could delay the launch of our product candidates. We may not be able to build or maintain an effective sales and marketing organization in North America or other key global markets. If we are unable to find suitable partners for the commercialization of our product candidates, we may have difficulties generating revenue from them.

We will rely on contractual counterparties and they may fail to perform adequately.

Our commercial strategy depends on our ability to contract with counterparties that provide, and in the future may provide, a variety of seed production companies, farmers, crushers, refiners, millers, transportation and logistics companies and lab equipment service providers. We plan to rely on these third parties to provide services along our supply chain and in our research and development functions. The failure of these counterparties to fulfill the terms of our agreements could cause disruptions in our supply chains, research

efforts, commercialization efforts, and otherwise inhibit our ability to bring our products to market at the times and in the quantities as planned. For example, if our crushers and refiners fail to process our crops at the times and at the quantities as agreed, we may be unable to meet the demands of food manufacturers who we have contracted with to purchase our products, leading to lower sales and potential reputational damage and contractual liabilities. While we may have certain indemnification rights in our contracts with such counterparties, there is no assurance that such indemnification rights will be sufficient to cover any damage to us that would result from a failure of such a counterparty in their contractual arrangements with us.

We face significant competition and many of our competitors have substantially greater financial, technical and other resources than we do.

The market for agricultural biotechnology products is highly competitive, and we face significant direct and indirect competition in several aspects of our business. Competition for improving plant genetics comes from conventional and advanced plant breeding techniques, as well as from the development of advanced biotechnology traits. Other potentially competitive sources of improvement in crop yields include improvements in crop protection chemicals, fertilizer formulations, farm mechanization, other biotechnology, and information management. Programs to improve genetics and crop protection chemicals are generally concentrated within a relatively small number of large companies, while non-genetic approaches are underway with broader set of companies. Mergers and acquisitions in the plant science, specialty food ingredient and agricultural biotechnology, seed and chemical industries may result in even more resources being concentrated among a smaller number of our competitors. Additionally, competition for providing more nutritious ingredients for food companies come from chemical-based ingredients, additives and substitutes, which are developed by various companies. The majority of these competitors have substantially greater financial, technical, marketing, sales, distribution and other resources than we do, such as larger research and development staff, more experienced marketing and manufacturing organizations and more well-established sales forces. As a result, we may be unable to compete successfully against our current or future competitors, which may result in price reductions, reduced margins and the inability to achieve market acceptance for our products. We expect to continue to face significant competition in the markets in which we intend to commercialize our products.

Many of our competitors engage in ongoing research and development, and technological developments by our competitors could render our products less competitive, resulting in reduced sales compared to our expectations. Our ability to compete effectively and to achieve commercial success depends, in part, on our ability to: control manufacturing and marketing costs; effectively price and market our products; successfully develop an effective marketing program and an efficient supply chain; develop new products with properties attractive to food manufacturers or farmers; and commercialize our products quickly without incurring major regulatory costs. We may not be successful in achieving these factors and any such failure may adversely affect our business, results of operations and financial condition.

We also anticipate increased competition in the future as new companies enter the market and new technologies become available, particularly in the area of gene editing. Our technology may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors, which will prevent or limit our ability to generate revenue from the commercialization of our products. At the same time, the expiration of patents covering existing products reduces the barriers to entry for competitors.

The successful commercialization of our products may face challenges from public perceptions of genetically engineered products and ethical, legal, environmental, health and social concerns.

The successful commercialization of our product candidates depends, in part, on public acceptance of genetically engineered agricultural products. Any increase in negative perceptions of gene editing or more restrictive government regulations in response thereto, would have a negative effect on our business and may delay or impair the development and commercialization of our products.

The commercial success of our products may be adversely affected by claims that biotechnology plant products are unsafe for consumption or use, pose risks of damage to the environment, or create legal, social and ethical dilemmas.

If we are not able to overcome these concerns, our products may not achieve market acceptance. Any of the risks discussed below could result in expenses, delays or other impediments to our development programs or the market acceptance and commercialization of our products:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and biotechnology plant products, which could influence public acceptance of our technologies and products;
- public attitudes regarding, and potential changes to laws governing, ownership of genetic material, which could weaken our intellectual property rights with respect to our genetic material and discourage R&D partners from supporting, developing or commercializing our products and technologies; and
- failure to maintain or secure consumer confidence in, or to maintain or receive governmental approvals for, our products.

Any future labeling requirements could heighten these concerns and make consumers less likely to purchase food products containing gene-edited ingredients.

Regulatory requirements for genetically engineered products are uncertain and evolving. Changes in the current application of these laws would have a significant adverse impact on our ability to develop and commercialize our products.

Changes in applicable regulatory requirements could result in a substantial increase in the time and costs associated with developing our products and negatively impact our operating results. In the United States, the United States Department of Agriculture, or USDA, regulates, among other things, the introduction (including the importation, interstate movement, or release into the environment such as field testing) of organisms and products altered or produced through genetic engineering that are plant pests or that there is reason to believe are plant pests. Such organisms and products are considered "regulated articles." However, a petitioner may submit a request for a determination by the USDA of "nonregulated status" for a particular article. A petition for determination of nonregulated status must include detailed information, including relevant experimental data and publications, and a description of the genotypic differences between the regulated article and the nonmodified recipient organism, among other things. We previously submitted a request for a determination of "nonregulated status" to the USDA for our potato product candidates, our high oleic and low linolineic soybean product candidates and our powdery mildew-resistant wheat product candidate. The USDA confirmed in writing that each of these product candidates is not deemed to be a "regulated article" under the Plant Protection Act because it does not contain genetic material from plant pests. In the event any of our product candidates are found to contain inserted genetic material or otherwise differ from the descriptions we have provided to the USDA, the USDA could determine that such product candidates are regulated articles, which would require us to comply with the permit and notification requirements of the Plant Protection Act. While we believe that the USDA's reasoning will continue to extend to our other product candidates, we have not obtained a determination from the USDA that any of our other product candidates are not "regulated articles" under these regulations. USDA's regulations also require that companies obtain a permit or file a notification before engaging in the introduction (including the importation, interstate movement, or release into the environment such as field testing) of "regulated articles." We cannot predict whether the USDA or advocacy groups will challenge our interpretation, or whether the USDA will alter the manner in which it interprets its own regulations or institutes new regulations, or otherwise modifies regulations in a way that will subject our products to more burdensome standards, thereby substantially increasing the time and costs associated with developing our product candidates. Moreover, we cannot assure you that the USDA will apply this same analysis to any of our other product candidates in development. Complying with USDA's plant pest regulations, including permitting requirements, is a costly, time-consuming process and could substantially delay or prevent the commercialization of our products.

Our products may also be subject to extensive FDA food product regulations. Under sections 201(s) and 409 of the Federal Food, Drug, and Cosmetic Act, or FDCA, any substance that is reasonably expected to become a component of food added to food is a food additive, and is therefore subject to FDA premarket review and approval, unless the substance is generally recognized, among qualified experts, as having been adequately shown to be safe under the conditions of its intended use (generally recognized as safe, or GRAS), or unless the use of the substance is otherwise excluded from the definition of a food additive, and any food that contains an unsafe food additive is considered adulterated under section 402(a)(2)(C) of the FDCA. The FDA may classify some or all of our product candidates as containing a food additive that is not GRAS or otherwise determine that our products contain significant compositional differences from existing plant products that require further review. Such classification would cause these product candidates to require pre-market approval, which could delay the commercialization of these products. In addition, the FDA is currently evaluating its approach to the regulation of gene-edited plants. For example, on January 18, 2017, the FDA announced a Request for Comments, or RFC, seeking public input to help inform its regulatory approach to human and animal foods derived from plants produced using gene editing. Among other things, the RFC asks for data and information in response to questions about the safety of foods from gene-edited plants, such as whether categories of gene-edited plants present food safety risks different from other plants produced through traditional plant breeding. If the FDA enacts new regulations or policies with respect to gene-edited plants, such policies could result in additional compliance costs and/or delay the commercialization of our product candidates, which could negatively affect our profitability. Any delay in the regulatory consultation process, or a determination that our products do not meet regulatory approval, by the FDA could cause a delay in the commercialization of our products, which may lead to reduced acceptance by food manufacturers, farmers or the public and an increase in competitor products that may directly compete with ours.

The regulatory environment outside the United States varies greatly from region to region and is less developed than in the United States.

The regulatory environment around gene editing in plants for food ingredients is greatly uncertain outside of the United States and varies greatly from jurisdiction to jurisdiction. Each jurisdiction may have its own regulatory framework regarding genetically modified foods, which may include restrictions and regulations on planting and growing genetically modified plants and in the consumption and labeling of genetically modified foods, and which may encapsulate our products. The two leading jurisdictions, the United States and the European Union, or the EU, do, and may continue to in the future, have distinctly different regulatory regimes with different rules and requirements. We cannot predict how the global regulatory landscape regarding gene editing in plants for food ingredients will evolve and may incur increased regulatory costs as regulations in the jurisdictions in which we operate change.

In the EU, genetically modified foods can only be allowed on the market once they have been authorized subject to rigorous safety assessments. The procedures for evaluation and authorization of genetically modified foods are governed by Regulation (EC) 1829/2003 on genetically modified food and feed and Directive 2001/18/EC on the release of genetically modified organisms, or GMOs, into the environment. If the GMO is not to be used in food or feed, then an application must be made under Directive 2001/18/EC. If the GMO is to be used in food or feed (but it is not grown in the EU) then a single application for both food and feed purposes under Regulation 1829/2003 should be made. If the GMO is used in feed or food and it is also grown in the EU, an application for both cultivation and food/feed purposes needs to be carried out under Regulation (EC) 1829/2003. A different EU regulation, Regulation (EC) 1830/2003, regulates the labeling of products that contain GMOs that are placed on the EU market. There are currently legislative proposals in the EU that would allow EU Member States to restrict or prohibit growing GMOs in their territory, on a range of environmental grounds, even if such crops were previously authorized at EU level. Should these proposals become law, growing GMOs may become more difficult in individual EU Member States.

We cannot predict whether or when any jurisdiction will change its regulations with respect to our products. Advocacy groups have engaged in publicity campaigns and filed lawsuits in various countries against companies

and regulatory authorities, seeking to halt regulatory approval activities or influence public opinion against genetically engineered products. In addition, governmental reaction to negative publicity concerning our products could result in greater regulation of genetic research and derivative products or regulatory costs that render our products cost prohibitive.

The scale of the commodity food industry may make it difficult to monitor and control the distribution of our products. As a result, our products may be sold inadvertently within jurisdictions where they are not approved for distribution. Such sales may lead to regulatory challenges or lawsuits against us, which could result in significant expenses and management attention.

Government policies and regulations, particularly those affecting the agricultural sector and related industries, could adversely affect our operations and profitability.

Agricultural production and trade flows are subject to government policies and regulations. Governmental policies and approvals of technologies affecting the agricultural industry, such as taxes, tariffs, duties, subsidies, incentives and import and export restrictions on agricultural commodities and commodity products can influence the planting of certain crops, the location and size of crop production, and the volume and types of imports and exports. Future government policies in the United States or in other countries may discourage food manufacturers or farmers from using our products or encourage the use of products more advantageous to our competitors, which would put us at a commercial disadvantage and could negatively impact our future revenues and results of operations.

The overall agricultural industry is susceptible to commodity price changes and we, along with our food manufacturing customers and farmer customers, are exposed to market risks from changes in commodity prices.

Changes in the prices of certain commodity products could result in higher overall cost along the agricultural supply chain, which may negatively affect our ability to commercialize our products. We will be susceptible to changes in costs in the agricultural industry as a result of factors beyond our control, such as general economic conditions, seasonal fluctuations, weather conditions, demand, food safety concerns, product recalls and government regulations. As a result, we may not be able to anticipate or react to changing costs by adjusting our practices, which could cause our operating results to deteriorate. We do not engage in hedging or speculative financial transactions nor do we hold or issue financial instruments for trading purposes.

Our product development efforts use complex integrated technology platforms and require substantial time and resources; these efforts may not be successful, or the rate of product improvement may be slower than expected.

Development of successful agricultural products using complex technology platforms such as gene-editing technologies requires significant levels of investment in research and development, including laboratory, greenhouse and field testing, to demonstrate their effectiveness and can take several years or more. For the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015, we spent $1.3 million, $5.6 million and $2.8 million, respectively, on research and development expenses. We intend to continue to invest in research and development, including additional and expanded field testing, to validate our product candidates in real world conditions. Our investment in research and development may not result in significant product revenue over the next several years, if ever. Moreover, the successful application of gene-editing technologies can be unpredictable, and may prove to be unsuccessful when attempting to achieve desired traits in different crops and plants. For example, our gene-editing techniques may prove to be unsuccessful very early on during the discovery phase of new crop development based on technology limitations. Alternatively, even though we successfully implemented gene edits during the discovery phase, that trait may not ultimately appear in crops during field testing or crops may also exhibit other undesirable traits that adversely affect their commercial value.

Development of new or improved agricultural products involves risks of failure inherent in the development of products based on innovative and complex technologies. These risks include the possibility that:

- our products will fail to perform as expected in the field;
- our products will not receive necessary regulatory permits and governmental clearances in the markets in which we intend to sell them;
- our products may have adverse effects on consumers;
- consumer preferences, which are unpredictable and can vary greatly, may change quickly, making our products no longer desirable;
- our competitors develop new products that taste better or have other more appealing characteristics than our products;
- our products will be viewed as too expensive by food companies or farmers as compared to competitive products;
- our products will be difficult to produce on a large scale or will not be economical to grow;
- intellectual property and other proprietary rights of third parties will prevent us, our R&D partners, or our licensees from marketing and selling our products;
- we may be unable to patent or otherwise obtain intellectual property protection for our discoveries in the necessary jurisdictions;
- we or the food manufacturers that we sell our ingredients to may be unable to fully develop or commercialize products containing our products in a timely manner or at all; and
- third parties may develop superior or equivalent products.

Lastly, the field of gene editing, particularly in the area of plants, is still in its infancy, and no products using this technology have reached the market. Negative developments in the field of gene editing, including with respect to adverse side effects, could harm the reputation of the industry and negatively impact our business.

We are currently reliant on certain gene-editing technologies that may become obsolete in the future.

We currently rely on our proprietary TALEN technology in the development of our product candidates. There are several other gene-editing technologies currently available, including CRISPR/Cas9, meganucleases and zinc finger nucleases. If our competitors are able to refine existing gene-editing technologies—or develop new ones—that allow them to develop products faster, with lower research costs or with more desirable traits than we can, we may face a decline in the demand for our products. Our technologies may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors, which will prevent or limit our ability to generate revenues from the commercialization of our products.

We may need to raise additional funding, which may not be available on acceptable terms or at all. Failure to obtain this necessary capital when needed may force us to delay, limit or terminate our product development efforts or other operations.

The process of developing and commercializing product candidates is expensive, lengthy and risky. We expect our research and development expenses to increase substantially as we continue to develop our existing product candidates and identify new product candidates for development. We are beginning to prepare for the commercialization of our first product candidate, high-oleic soybean oil, which we expect to occur by the end of 2018. As a result, our selling, general and administrative expense will also increase significantly.

As of March 31, 2017, we had cash and cash equivalents of approximately $3.0 million. We believe our cash and cash equivalents, together with the net proceeds from this offering, will be sufficient to fund our operations through at least . However, in order to complete the development process, obtain regulatory approval for, if necessary, and commercialize our products, we may require additional funding. Also, our operating plan, including our product development plans, may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings, government or other third-party funding, marketing and distribution arrangements and other strategic alliances and licensing arrangements, or a combination of these approaches. To commercialize our products, we will require significant working capital to operate our business and maintain our supply chain. To the extent that we raise additional capital through the sale of additional equity or convertible securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, would result in increased fixed payment obligations and a portion of our operating cash flows, if any, being dedicated to the payment of principal and interest on such indebtedness. In addition, debt financing may involve agreements that include restrictive covenants that impose operating restrictions, such as restrictions on the incurrence of additional debt, the making of certain capital expenditures or the declaration of dividends. To the extent we raise additional funds through arrangements with R&D partners or otherwise, we may be required to relinquish some of our technologies, product candidates or revenue streams, license our technologies or product candidates on unfavorable terms, or otherwise agree to terms unfavorable to us. Any additional fundraising efforts may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all, or that we will be able to complete the sale leaseback transaction to finance the building for the planned facility expansion described under “Business—Facilities.” Even if we believe we have sufficient funds for our current or future operating plans, we may seek additional capital if market conditions are favorable or in light of specific strategic considerations. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research or product candidate development programs or the commercialization of any product candidate or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, operating results and prospects and cause the price of the common stock to decline.

We rely on third parties to conduct, monitor, support, and oversee field trials and other research services for product candidates in development, and any performance issues by third parties, or our inability to engage third parties on acceptable terms, may impact our ability to successfully commercialize such product candidates.

Prior to commercializing any product candidate we must conduct large scale field trials to validate the desired product trait. These field trials can take one to two years to complete. We currently conduct field trials, and plan to conduct further field trials, of our product candidates in various geographies. We currently rely on third parties to conduct, monitor, support and oversee these field trials. In some cases, these field trials are conducted outside of the United States, making it difficult for us to monitor the daily activity of the work being conducted by the third parties that we engage. Although we provide our third-party contractors with extensive protocols regarding the establishment, management, harvest, transportation and storage of our product candidates, we have limited control over the execution of field trials. Consequently, the success of these field trials depends upon the ability of these third parties to correctly follow our suggested protocols. However, there is no guarantee that third parties will devote adequate time and resources to our field trials or conduct the field trials in accordance with our protocols, including maintenance of all required field trial information. Any such failures may result in delays in the development of our product candidates or the incurrence of additional costs. Even if our third-party contractors adhere to our suggested protocols, field trials may fail to succeed for a variety of other reasons, including weather, disease or pests, improper timing of planting our seeds, or incorrect fertilizer use. Ultimately, we remain responsible for ensuring that each of our field trials is conducted in accordance with

the applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our responsibilities.

Additionally, if we are unable to maintain or enter into agreements with third-party contractors on acceptable terms, or if any such engagement is terminated prematurely, we may be unable to conduct or complete our field trials in the manner we anticipate. If our relationship with any of these third-party contractors is terminated, we may be unable to enter into arrangements with alternative contractors on commercially reasonable terms, or at all. Switching or adding third-party contractors can involve substantial cost and require extensive management time and focus. In addition, there is a natural transition period when any new third party commences field trial work. As a result, delays may occur, which could materially impact our ability to meet our desired development timelines.

Our crops are new, and if farmers and food processors are unable to work effectively with our crops, our various relationships, our reputation and our results of operations will be harmed.

We plan to provide farmers with information and protocols regarding the establishment, management, harvest, transportation and storage of our crops. These crop management recommendations may include equipment selection, planting and harvest timing, application of crop protection chemicals or herbicides and storage systems and protocols. Our general or specific protocols may not apply in all circumstances, may be improperly implemented, may not be sufficient, or may be incorrect, leading to reduced yields, crop failures or other production problems or losses. If farmers that are producing crops for our food ingredients experience these failures, we may be unable to provide product ingredients to food manufacturers on a timely basis or at all. If we are unable to deliver products in a timely basis or at all, or if farmers that are purchasing our seed in an a effort to meet their yields experience these failures, or if our food processors are unable to process our crops effectively and efficiently, we will experience damage to our relationships, reputation and ability to successfully market our products. Further, the use of our seeds may require a change in current planting, rotation or agronomic practices, which may be difficult to implement or may discourage the use of our products by agricultural producers.

There are various reasons why our crops, once available, may fail to succeed, including weather, disease or pests, improper timing of planting our seeds, or incorrect fertilizer use. In addition, cross contamination of our products can happen in any step of the supply chain. Statements by potential customers about negative experiences with our products could harm our reputation, and the decision by these parties not to proceed with large-scale seed purchases could harm our business, revenue and ability to achieve profitability.

The successful commercialization of our products depends on our ability to produce high-quality plants and seeds cost-effectively on a large scale and to accurately forecast demand for our products, and we may be unable to do so.

The production of commercial-scale quantities of seeds requires the multiplication of the plants or seeds through a succession of plantings and seed harvests. The cost-effective production of high-quality, high-volume quantities of any product candidates we successfully develop depends on our ability to scale our production processes to produce plants and seeds in sufficient quantity to meet demand. For example, food ingredients such as soybean oil and wheat flour will require optimized production and commercialization of the underlying plant and seed harvests. We cannot assure that our existing or future seed production techniques will enable us to meet our large-scale production goals cost-effectively for the products in our pipeline. Even if we are successful in developing ways to increase yields and enhance quality, we may not be able to do so cost-effectively or on a timely basis, which could adversely affect our ability to achieve profitability. If we are unable to maintain or enhance the quality of our plants and seeds as we increase our production capacity, including through the expected use of third parties, we may experience reductions in food manufacturer or farmer demand, higher costs and increased inventory write-offs.

In addition, because of the length of time it takes to produce commercial quantities of marketable plants and seeds, we will need to make seed production decisions well in advance of product sales. Our ability to accurately

forecast demand can be adversely affected by a number of factors outside of our control, including changes in market conditions, environmental factors, such as pests and diseases, and adverse weather conditions. A shortfall in the supply of our products may reduce product revenue, damage our reputation in the market and adversely affect relationships. Any surplus in the amount of products we have on hand may negatively impact cash flows, reduce the quality of our inventory and ultimately result in write-offs of inventory. Additionally, we will take financial risk in our inventory given that we will have to keep the inventory marked to market on our balance sheet. Fluctuations in the spot price our crops in inventory could have negative impacts on our financial statements. Any failure on our part to produce sufficient inventory, or overproduction of a particular product, could harm our business, results of operations and financial condition. In addition, food manufacturers or farmers may cancel orders or request a decrease in quantity at any time prior to delivery of the plants or seeds, which may lead to a surplus of our products.

In addition, while we estimate that the potential size of our target markets for our products is significant, that estimate has not been independently verified and is based on certain assumptions that may not prove to be accurate. As a result, these estimates could differ materially from actual market sizes, which could result in decreased demand for our products and therefore adversely impact our future business prospects, results of operation and financial condition.

The commercial success of our consumer-centric products is reliant on the needs of food manufacturers and the recognition of shifting consumer preferences.

The commercial success of our consumer-centric products will depend in part on the success of the food manufacturer's products that our products are included in. We will not control the marketing, distribution, labeling or any other aspects of the sale and commercialization of the food manufacturers' food products in which our products are an ingredient. Consumer preferences may be a significant driver in the success of our food manufacturer customers in their efforts to sell foods products including our products. While current trends indicate that consumer preferences may be moving towards "healthier" options, we cannot predict whether such trends will continue or which types of food products will be demanded by consumers in the future. Additionally, as health and nutritional science continues to progress, consumer perception of what foods, nutrients and ingredients are considered "healthy" may shift. We and our food manufacturer customers may not be dynamic enough in responding to consumer trends and creating products that will be demanded by consumers in the future. Failure by our food manufacturer customers to successfully recognize consumer trends and commercialize and sell their products which contain our ingredients could lower demand for our products and harm our business, results of operations and financial condition.

Farmers may not recognize the value in our farmer-centric products.

The commercial success of our farmer-centric products will rely on convincing farmers of the benefits to yield and natural resource usage. Farmers may not recognize the value of our farmer-centric products and may opt to use other seed products in the market with different varieties. The margins in the farmer-centric seed industry have historically been very narrow, so we may not be able to produce farmer-centric seed products at costs that would be competitive for our farmer customers, which may lead to a reduction in demand for our products.

Adverse weather conditions, natural disasters, crop disease, pests and other natural conditions can impose significant costs and losses on our business.

The ability to grow our products is vulnerable to adverse weather conditions, including windstorms, floods, drought and temperature extremes, which are quite common but difficult to predict, the effects of which may be influenced and intensified by ongoing global climate change. Unfavorable growing conditions can reduce both crop size and crop quality. This risk is particularly acute with respect to regions or countries in which we plan to source a significant percentage of our products. In extreme cases, entire harvests may be lost in some geographic

areas. Such adverse conditions can increase costs, decrease revenues and lead to additional charges to earnings, which may have a material adverse effect on our business, financial position and results of operations.

The ability to grow our products is also vulnerable to crop disease and to pests, which may vary in severity and effect, depending on the stage of production at the time of infection or infestation, the type of treatment applied, climatic conditions and the risks associated with ongoing global climate change. The costs to control disease and other infestations vary depending on the severity of the damage and the extent of the plantings affected. Moreover, there can be no assurance that available technologies to control such infestations will continue to be effective. These infestations can also increase costs, decrease revenues and lead to additional charges to earnings, which may have a material adverse effect on our business, financial position and results of operations.

We expect our business will be highly seasonal and subject to weather conditions and other factors beyond our control, which may cause our sales and operating results to fluctuate significantly.

The sale of plant products is dependent upon planting and growing seasons, which vary from year to year, and are expected to result in both highly seasonal patterns and substantial fluctuations in quarterly sales and profitability. As we have not yet made any sales of our products, we have not yet experienced the full nature or extent to which this business may be seasonal. Furthermore, significant fluctuations in market prices for agricultural inputs and crops could also have an adverse effect on the value of our products. Weather conditions and natural disasters, such as heavy rains, hurricanes, hail, floods, tornadoes, freezing conditions, drought or fire, also affect decisions by food manufacturers or farmers about the types and amounts of seeds to plant and the timing of harvesting and planting such seeds, as well as adversely impact the agricultural industry as a whole in various regions. Disruptions that cause delays by food manufacturers or farmers in harvesting or planting can result in the movement of orders to a future quarter. Disruptions that cause delays by our farmers in harvesting could create us to be delayed, or to fail entirely in delivering food ingredients to food manufacturers. Any of those delays or failures would negatively affect the quarter in which they occur and cause fluctuations in our operating results.

We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may be more profitable or for which there is a greater likelihood of success.

We have limited financial and managerial resources. As a result, we may forego or delay pursuit of opportunities with other product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates may not yield any commercially viable products.

If we are sued for defective products and if such lawsuits were determined adversely, we could be subject to substantial damages, for which insurance coverage is not available.

We may be held liable if any product we develop, or any product that uses or incorporates, any of our technologies, causes injury or is found otherwise unsuitable during marketing, sale or consumption. For example, the detection of unintended trait in a commercial seed variety or the crops and products produced may result in physical injury to consumers resulting in potential liability for us as the seed producer or technology provider. If this were to occur, we could be subject to claims by multiple parties based not only on the cost of our plant products but also on their lost profits and business opportunities, including but not limited to trade disruption. Courts could levy substantial damages against us in connection with claims for injuries allegedly caused by use of our products. We do not currently have insurance coverage for such claims. In addition, the detection of unintended traits in our seeds could result in governmental actions such as mandated crop destruction, product recalls or environmental cleanup or monitoring. Concerns about seed quality could also lead to additional regulations being imposed on our business, such as regulations related to testing procedures, mandatory

governmental reviews of biotechnology advances, or the integrity of the food supply chain from the farm to the finished product.

Our business activities are currently conducted at a limited number of locations, which makes us susceptible to damage or business disruptions caused by natural disasters or acts of vandalism.

Our current headquarters and certain research and development operations are located in New Brighton, Minnesota and our new headquarters and research facilities are located in Roseville, Minnesota. The greenhouse for the new headquarters is operational and the remainder of the new facility which includes an office, labs and demonstration kitchen are expected to be operational in the first half of 2018. Our seed production takes place primarily in the United States and Argentina. Warehousing for seed storage, which is conducted by a third-party contractor, is located primarily in Minnesota and Wisconsin. We may use a limited number of processing partners which may be located in concentrated areas. We take precautions to safeguard our facilities, including insurance, health and safety protocols, and off-site storage of critical research results and computer data. However, a natural disaster, such as a hurricane, drought, fire, flood, tornado, earthquake, or acts of vandalism, could cause substantial delays in our operations, damage or destroy our equipment, inventory or development projects, and cause us to incur additional expenses.

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2016, we had approximately $24.7 million of net operating losses, or NOLs, for federal and state income tax purposes, which may be available to offset federal income tax liabilities in the future. In addition, we may generate additional NOLs in future years. Under Section 382 of the Internal Revenue Code of 1986 (as amended, the "Code"), a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. For this purpose, an ownership change generally means a more than 50 percentage point change in the ownership of a corporation by one or more stockholders or specified groups of stockholders, each of which owns 5% or more of the corporation (determined after the application of certain attribution and grouping rules) over a three-year period. Although we do not believe that any of our NOLs are currently subject to limitation under Section 382 of the Code, future changes in our stock ownership, some of which may be outside of our control, could result in an ownership change under Section 382 of the Code, which could limit our ability to use our existing or future NOLs to offset future taxable income. In addition, under current law, we are permitted to carry forward an NOL from any taxable year to only the succeeding twenty taxable years, and, if we do not generate sufficient taxable income to utilize an NOL carryforward within this period, it may expire unused. There is also a risk that future legal or regulatory changes my limit our ability to use our current or future NOLs to offset our future federal income tax liabilities, or otherwise diminish the value of our NOLs to us.

Risks Related to Intellectual Property

We will license a significant portion of our intellectual property from Cellectis S.A., our controlling stockholder, and principally rely upon it to prosecute and defend such intellectual property.

Our business relies heavily on the intellectual property we will license from Cellectis S.A., or Cellectis. Our license from Cellectis will be exclusive in the field of researching, developing and commercializing seeds and food ingredients (excluding animal-derived ingredients) for agricultural, feed and food applications; however, Cellectis has previously granted other third parties non-exclusive rights to use the same intellectual property for research purposes and therefore our exclusive license will be subject to such previously granted rights. Pursuant to our license agreement with Cellectis, we will be required to pay Cellectis certain royalties and other consideration based upon our commercialization and exploitation of the licensed intellectual property. If we do not comply with our obligations under the license agreement, including the foregoing payment obligations, we may be subject to damages, which may be significant, and in some cases Cellectis may have the right to terminate the license agreement. Any termination of our license agreement with Cellectis would have a material adverse effect on our business and results of operations.

Under our license agreement with Cellectis, Cellectis will have the first right to control the prosecution, maintenance, defense and enforcement of the licensed intellectual property and we will have the right to step in and assume such control if Cellectis elects to not prosecute, maintain, defend or enforce such intellectual property. However, there can be no assurance that Cellectis will prosecute, maintain, defend and enforce such intellectual property, either in the best interests of our business or at all. Moreover, any enforcement of the licensed intellectual property could subject it to challenge by third parties and if any such challenge is successful, such intellectual property could be narrowed in scope or held to be invalid or unenforceable, which would materially impair any competitive advantage afforded to us by such intellectual property.

In addition, some of the intellectual property that will be licensed to us by Cellectis will include a sublicense of intellectual property originally licensed to Cellectis by the Regents of the University of Minnesota, which we refer to as the University of Minnesota. Therefore, our license from Cellectis will be subject to the terms and conditions of the license agreement between the University of Minnesota and Cellectis, and to the extent our activities under our license agreement with Cellectis violate any terms and conditions of the license agreement between Cellectis and the University of Minnesota, we will be responsible for any damages that Cellectis may incur. In addition, under the license agreement between Cellectis and the University of Minnesota, the University of Minnesota has the first right to control the prosecution and maintenance of the licensed intellectual property. There can be no assurance that the University of Minnesota will prosecute and maintain such intellectual property in the best interests of our business or at all, and, if the University of Minnesota fails to properly prosecute and maintain such intellectual property, we could lose our rights to such intellectual property, which would materially impair any competitive advantage afforded to us by such intellectual property. For more information regarding our license agreement with Cellectis or the license agreement between Cellectis and the University of Minnesota, please see “Business—Intellectual Property.”

Our ability to compete may decline if we do not, or Cellectis does not, adequately protect our proprietary rights.

Our commercial success depends, in part, on obtaining and maintaining proprietary rights to our and our licensors’ intellectual property estate, including with respect to our product candidates, as well as successfully defending these rights against third-party challenges. Cellectis will only be able to protect our product candidates from unauthorized use by third parties to the extent that valid and enforceable patents, or effectively protected trade secrets, cover them. Our ability to obtain patent protection for our product candidates is uncertain due to a number of factors, including:

- we or our licensors may not have been the first to invent the technology covered by our or their pending patent applications or issued patents;
- we cannot be certain that we or our licensors were the first to file patent applications covering our product candidates, including their compositions or methods of use, as patent applications in the United States and most other countries are confidential for a period of time after filing;
- others may independently develop identical, similar or alternative products or compositions or methods of use thereof;
- the disclosures in our or our licensors’ patent applications may not be sufficient to meet the statutory requirements for patentability;
- any or all of our or our licensors’ pending patent applications may not result in issued patents;
- we or our licensors may not seek or obtain patent protection in countries or jurisdictions that may eventually provide us a significant business opportunity;
- any patents issued to us or our licensors may not provide a basis for commercially viable products, may not provide any competitive advantages, or may be successfully challenged by third parties, which may result in our or our licensors’ patent claims being narrowed, invalidated or held unenforceable;

- our compositions and methods may not be patentable;
- others may design around our or our licensors' patent claims to produce competitive products that fall outside of the scope of our or our licensors' patents; and
- others may identify prior art or other bases upon which to challenge and ultimately invalidate our or our licensors' patents or otherwise render them unenforceable.

Even if we own, obtain or in-license patents covering our product candidates or compositions, we may still be barred from making, using and selling our product candidates or technologies because of the patent rights or other intellectual property rights of others. Others may have filed, and in the future may file, patent applications covering compositions, products or methods that are similar or identical to ours, which could materially affect our ability to successfully develop and commercialize our product candidates. In addition, because patent applications can take many years to issue, there may be currently pending applications unknown to us that may later result in issued patents that our product candidates or compositions may infringe. These patent applications may have priority over patent applications filed by us or our licensors.

Obtaining and maintaining a patent portfolio entails significant expense of resources. Part of such expense includes periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications due over the course of several stages of prosecuting patent applications, and over the lifetime of maintaining and enforcing issued patents. We or our licensors may or may not choose to pursue or maintain protection for particular intellectual property in our or our licensors' portfolio. If we or our licensors choose to forgo patent protection or to allow a patent application or patent to lapse purposefully or inadvertently, our competitive position could suffer. In some cases, the prosecution and maintenance of our licensed patents is controlled by the applicable licensor. If such licensor fails to properly prosecute and maintain such patents, we could lose our rights to them which could materially impair any competitive advantage afforded by such patents. Furthermore, we and our licensors employ reputable law firms and other professionals to help comply with the various procedural, documentary, fee payment and other similar provisions we and they are subject to and, in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which failure to make certain payments or noncompliance with certain requirements in the patent prosecution and maintenance process can result in abandonment or lapse of a patent or patent application, resulting in a partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

Legal action that may be required to enforce our patent rights can be expensive and may involve the diversion of significant management time. In addition, these legal actions could be unsuccessful and could also result in the invalidation of our or our licensors' patents or a finding that they are unenforceable. We or our licensors may or may not choose to pursue litigation or other actions against those that have infringed on our or their patents, or have used them without authorization, due to the associated expense and time commitment of monitoring these activities. In some cases, the enforcement and defense of patents we in-license is controlled by the applicable licensor. If such licensor fails to actively enforce and defend such patents, any competitive advantage afforded by such patents could be materially impaired. In addition, some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we or our licensors can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. If we fail to protect or to enforce our intellectual property rights successfully, our competitive position could suffer, which could harm our results of operations.

In addition to patent protection, because we operate in the highly technical field of biosciences, we rely in part on trade secret protection in order to protect our proprietary technology and processes. However, trade secrets are difficult to protect. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. We cannot guarantee

that our trade secrets and other proprietary and confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. We enter into confidentiality and intellectual property assignment agreements with our employees, consultants, outside scientific collaborators, sponsored researchers, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. These agreements also generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may be breached or held unenforceable and may not effectively assign intellectual property rights to us.

In addition to contractual measures, we try to protect the confidential nature of our proprietary information using physical and technological security measures. Such measures may not provide adequate protection for our proprietary information. For example, our security measures may not prevent an employee or consultant with authorized access from misappropriating our trade secrets and providing them to a competitor, and the recourse we have available against such misconduct may not provide an adequate remedy to protect our interests fully. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. Furthermore, our proprietary information may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, including our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed and our business could be materially and adversely affected.

Patents and patent applications involve highly complex legal and factual questions, which, if determined adversely to us, could negatively impact our competitive position.

The patent positions of biotechnology companies and other actors in our fields of business can be highly uncertain and typically involve complex scientific, legal and factual analyses. In particular, the interpretation and breadth of claims allowed in some patents covering biological compositions may be uncertain and difficult to determine, and are often affected materially by the facts and circumstances that pertain to the patented compositions and the related patent claims. The standards of the United States Patent and Trademark Office, or USPTO, and foreign patent offices are sometimes uncertain and could change in the future. Consequently, the issuance and scope of patents cannot be predicted with certainty. Patents, if issued, may be challenged, invalidated, narrowed or circumvented. U.S. patents and patent applications may also be subject to interference proceedings, and U.S. patents may be subject to reexamination proceedings, post-grant review, *inter partes* review, or other administrative proceedings in the USPTO. Foreign patents as well may be subject to opposition or comparable proceedings in corresponding foreign patent offices. Challenges to our or our licensors' patents and patent applications, if successful, may result in the denial of our or our licensors' patent applications or the loss or reduction in their scope. In addition, such interference, reexamination, post-grant review, *inter partes* review, opposition proceedings and other administrative proceedings may be costly and involve the diversion of significant management time. Accordingly, rights under any of our or our licensors' patents may not provide us with sufficient protection against competitive products or processes and any loss, denial or reduction in scope of any of such patents and patent applications may have a material adverse effect on our business.

Furthermore, even if not challenged, our or our licensors' patents and patent applications may not adequately protect our product candidates or technology or prevent others from designing their products or technology to avoid being covered by our or our licensors' patent claims. If the breadth or strength of protection provided by the patents we own or license with respect to our product candidates is threatened, it could dissuade companies from partnering with us to develop, and could threaten our ability to successfully commercialize, our product candidates. Furthermore, for U.S. patent applications in which claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third party or instituted by the USPTO in order to determine who was the first to invent any of the subject matter covered by such patent claims.

In addition, changes in, or different interpretations of, patent laws in the United States and other countries may permit others to use our discoveries or to develop and commercialize our technology and products without providing any notice or compensation to us, or may limit the scope of patent protection that we or our licensors are able to obtain. The laws of some countries do not protect intellectual property rights to the same extent as U.S. laws and those countries may lack adequate rules and procedures for defending our intellectual property rights.

If we or our licensors fail to obtain and maintain patent protection and trade secret protection of our product candidates and technology, we could lose our competitive advantage and competition we face would increase, reducing any potential revenues and have a material adverse effect on our business.

The lives of our patents may not be sufficient to effectively protect our products and business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Our or our licensors' issued patents will expire on dates ranging from 2020 to 2033, subject to any patent extensions that may be available for such patents. If patents are issued on our or our licensors' pending patent applications, the resulting patents are projected to expire on dates ranging from 2023 to 2037. In addition, although upon issuance in the United States a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. If we or our licensors do not have sufficient patent life to protect our products, our business and results of operations will be adversely affected.

Developments in patent law could have a negative impact on our business.

From time to time, the United States Supreme Court, or the Supreme Court, other federal courts, the United States Congress, the USPTO and similar foreign authorities may change the standards of patentability and any such changes could have a negative impact on our business.

The Leahy-Smith America Invents Act, or the America Invents Act, which was signed into law in 2011, includes a number of significant changes to U.S. patent law. These changes include a transition from a "first-to-invent" system to a "first-to-file" system, changes to the way issued patents are challenged, and changes to the way patent applications are disputed during the examination process. As a result of these changes, the patent law in the United States may favor larger and more established companies that have greater resources to devote to patent application filing and prosecution. The USPTO has developed new and untested regulations and procedures to govern the full implementation of the America Invents Act, and many of the substantive changes to patent law associated with the America Invents Act, and, in particular, the first-to-file provisions became effective on March 16, 2013. Substantive changes to patent law associated with the America Invents Act may affect our ability to obtain patents, and if obtained, to enforce or defend them. Accordingly, it is not clear what, if any, impact the America Invents Act will have on the cost of prosecuting our or our licensors' patent applications and the ability for us and our licensors to obtain patents and enforce or defend any patents that may issue from such patent applications, all of which could have a material adverse effect on our business.

In addition, recent Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the Supreme Court, the United States Congress, the federal courts, the USPTO and similar foreign authorities, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

We will not seek to protect our intellectual property rights in all jurisdictions throughout the world and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

Filing, prosecuting and defending patents on our product candidates in all countries and jurisdictions throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States could be less extensive than those in the United States, assuming that rights are obtained in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

Competitors may use our technologies in jurisdictions where we or our licensors do not pursue and obtain patent protection to develop their own products and further, may export otherwise infringing products to territories where we or our licensors have patent protection, but where the ability to enforce our or our licensors' patent rights is not as strong as in the United States. These products may compete with our products and our intellectual property rights and such rights may not be effective or sufficient to prevent such competition.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Patent protection must be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we and our licensors may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. In addition, the legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to biotechnologies, and the requirements for patentability differ, in varying degrees, from country to country, and the laws of some foreign countries do not protect intellectual property rights, including trade secrets, to the same extent as federal and state laws of the United States. As a result, many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. Such issues may make it difficult for us to stop the infringement, misappropriation or other violation of our intellectual property rights. For example, many foreign countries, including the EU countries, have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors' efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license. Similarly, if our trade secrets are disclosed in a foreign jurisdiction, competitors worldwide could have access to our proprietary information and we may be without satisfactory recourse. Such disclosure could have a material adverse effect on our business. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws.

Furthermore, proceedings to enforce our licensors' and our patent rights and other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our or our licensors' patents at risk of being invalidated or interpreted narrowly, could put our or our licensors' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded to us, if any, may not be commercially meaningful, while the damages and other remedies we may be ordered to pay such third parties may be significant. Accordingly, our licensors' and our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Third parties may assert rights to inventions we develop or otherwise regard as our own.

Third parties may in the future make claims challenging the inventorship or ownership of our or our licensors' intellectual property. We have written agreements with R&D partners that provide for the ownership of intellectual property arising from our strategic alliances. These agreements provide that we must negotiate certain commercial rights with such partners with respect to joint inventions or inventions made by our partners that arise from the results of the strategic alliance. In some instances, there may not be adequate written provisions to address clearly the allocation of intellectual property rights that may arise from the respective alliance. If we cannot successfully negotiate sufficient ownership and commercial rights to the inventions that result from our use of a third-party partner's materials when required, or if disputes otherwise arise with respect to the intellectual property developed through the use of a partner's samples, we may be limited in our ability to capitalize on the full market potential of these inventions. In addition, we may face claims by third parties that our agreements with employees, contractors, or consultants obligating them to assign intellectual property to us are ineffective, or are in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and could interfere with our ability to capture the full commercial value of such inventions. Litigation may be necessary to resolve an ownership dispute, and if we are not successful, we may be precluded from using certain intellectual property and associated products and technology, or may lose our rights in that intellectual property. Either outcome could have a material adverse effect on our business.

In addition, the research resulting in certain of our in-licensed patent rights and technology was funded in part by the United States government. As a result, the United States government has certain rights to such patent rights and technology, which include march-in rights. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, or because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to the United States industry. Any exercise by the government of any of the foregoing rights could have a material adverse effect on our business.

We may not identify relevant third party patents or may incorrectly interpret the relevance, scope or expiration of a third party patent which might adversely affect our ability to develop and market our products.

We cannot guarantee that any of our patent searches or analyses, including but not limited to the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third party patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction.

The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products are not covered by a third party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

We currently employ, and in the future may employ, individuals who were previously employed at universities or other biotechnology companies, including our competitors or potential competitors. Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in

their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Any infringement, misappropriation or other violation by us of intellectual property rights of others may prevent or delay our product development efforts and may prevent or increase the costs of our successfully commercializing our product candidates, if approved.

Our success will depend in part on our ability to operate without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of third parties. We cannot assure you that our business operations, products, product candidates and methods and the business operations, products, product candidates and methods of our partners do not or will not infringe, misappropriate or otherwise violate the patents or other intellectual property rights of third parties.

The biotechnology industry is characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may allege that our products, product candidates or the use of our technologies infringe, misappropriate or otherwise violate patent claims or other intellectual property rights held by them or that we are employing their proprietary technology without authorization. Patent and other types of intellectual property litigation can involve complex factual and legal questions, and their outcome is uncertain. Any claim relating to intellectual property infringement that is successfully asserted against us may require us to pay substantial damages, including treble damages and attorneys' fees if we or our partners are found to be willfully infringing another party's patents, for past use of the asserted intellectual property and royalties and other consideration going forward if we are forced to take a license. Such a license may not be available on commercially reasonable terms, or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same intellectual property rights or technologies licensed to us. In addition, if any such claim were successfully asserted against us and we could not obtain a license, we or our partners may be forced to stop or delay developing, manufacturing, selling or otherwise commercializing our products, product candidates or other infringing technology, or those we develop with our R&D partners.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention pursuing these proceedings, which could have a material adverse effect on us. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court, or redesign our products. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, intellectual property litigation or claims could force us to do one or more of the following:

- cease developing, selling or otherwise commercializing our product candidates;
- pay substantial damages for past use of the asserted intellectual property;
- obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable terms, if at all; and

- in the case of trademark claims, redesign, or rename trademarks we may own, to avoid infringing the intellectual property rights of third parties, which may not be possible and, even if possible, could be costly and time-consuming.

Any of these risks coming to fruition could have a material adverse effect on our business, results of operations, financial condition and prospects.

We may be unsuccessful in licensing or acquiring intellectual property from third parties that may be required to develop and commercialize our product candidates.

Because our programs may involve additional product candidates that may require the use of intellectual property or proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these intellectual property and proprietary rights. For example, if we determined to use a technology other than TALEN to perform our gene editing, such as CRISPR, we would likely need one or more licenses to use that technology. However, we may be unable to acquire or in-license any third party intellectual property or proprietary rights. Even if we are able to acquire or in-license such rights, we may be unable to do so on commercially reasonable terms. The licensing and acquisition of third party intellectual property and proprietary rights is a competitive area, and a number of more established companies are also pursuing strategies to license or acquire third party intellectual property and proprietary rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital resources and agricultural development and commercialization capabilities.

For example, we sometimes partner with academic institutions to accelerate our research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the strategic alliance. Regardless of such option, we may be unable to negotiate a license within the specified time frame or under terms that are acceptable to us, and the institution may license such intellectual property rights to third parties, potentially blocking our ability to pursue our development and commercialization plans.

Further, our consulting agreement with Dr. Voytas generally obligates Dr. Voytas to assign to us any intellectual property solely or jointly conceived, developed or reduced to practice by him in the course of the performance of his services to us. However, we do not have any rights, including any assignment or right of first refusal rights, to intellectual property conceived, developed or reduced to practice by Dr. Voytas outside the course of the performance of his services to us, including in connection with his employment at the University of Minnesota.

In addition, companies that perceive us to be a competitor may be unwilling to assign or license intellectual property and proprietary rights to us. We also may be unable to license or acquire third party intellectual property and proprietary rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully acquire or in-license rights to required third party intellectual property and proprietary rights or maintain the existing intellectual property and proprietary rights we have, we may have to cease development of the relevant program, product or product candidate, which could have a material adverse effect on our business.

Loss of or damage to our germplasm libraries would significantly slow our product development efforts.

We have access to a comprehensive collection of germplasm for our product candidates, in part, through licensing agreements with leading institutions. Germplasm comprises genetic material covering the diversity of a crop, the attributes of which are inherited from generation to generation. Germplasm is a key strategic asset since it forms the basis of plant breeding programs. To the extent that we lose access to the germplasm because of the termination or breach of our licensing agreements, our product development capabilities could be negatively impacted. In addition, loss of or damage to our germplasm would significantly impair our research and

development activities. Although we restrict access to our germplasm at our facilities to protect this valuable resource, we cannot guarantee that our efforts to protect our germplasm will be successful. The destruction or theft of a significant portion of our germplasm collection would adversely affect our business and results of operations.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our licensors, we could lose license rights that are important to our business.

We are a party to a number of intellectual property license agreements that are important to our business and expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that future license agreements will impose, various diligence, royalty and other obligations on us. If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy, our licensors may have the right to terminate the license, in which event we would not be able to market products or product candidates covered by the license.

In addition, disputes may arise regarding the payment of the royalties or other consideration due to licensors in connection with our exploitation of the rights we license from them. Licensors may contest the basis of payments we retained and claim that we are obligated to make payments under a broader basis. In addition to the costs of any litigation we may face as a result, any legal action against us could increase our payment obligations under the respective agreement and require us to pay interest and potentially damages to such licensors.

In some cases, patent prosecution of our licensed technology is controlled solely by the licensor. If such licensor fails to obtain and maintain patent or other protection for the proprietary intellectual property we license from such licensor, we could lose our rights to such intellectual property or the exclusivity of such rights, and our competitors could market competing products using such intellectual property. In addition, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. In that event, we may be required to expend significant time and resources to develop or license replacement technology. If we are unable to do so, we may be unable to develop or commercialize the affected products and product candidates, which could harm our business significantly. In other cases, we control the prosecution of patents resulting from licensed technology. In the event we breach any of our obligations related to such prosecution, we may incur significant liability to our licensing partners. We may also require the cooperation of our licensors to enforce any licensed patent rights, and such cooperation may not be provided. Moreover, we have obligations under these license agreements, and any failure to satisfy those obligations could give our licensor the right to terminate the agreement. Termination of a necessary license agreement could have a material adverse impact on our business.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and is complicated by the rapid pace of scientific discovery in our industry. Disputes may arise regarding intellectual property subject to a licensing agreement (including the intellectual property licensed to us by Cellectis), including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the basis of royalties and other consideration due to our licensors;
- the extent to which our products, product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;

- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have licensed from third parties prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business.

Any partnerships that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our product candidates.

We may seek R&D partnerships or joint venture arrangements with third parties for the development or commercialization of our product candidates depending on the merits of retaining commercialization rights for ourselves as compared to entering into partnerships or joint venture arrangements. We will face, to the extent that we decide to enter into partnerships or joint venture agreements, significant competition in seeking appropriate partners. Moreover, partnerships or joint venture arrangements are complex and time-consuming to negotiate, document, implement and maintain. We may not be successful in our efforts to establish and implement partnerships, joint ventures, or other alternative arrangements should we so chose to enter into such arrangements. The terms of any partnerships, joint ventures, or other arrangements that we may establish may not be favorable to us.

Any future partnerships or joint ventures that we enter into may not be successful. The success of our R&D partnerships or joint venture arrangements will depend heavily on the efforts and activities of our partners. R&D partnerships and joint ventures are subject to numerous risks, which may include that:

- partners have significant discretion in determining the efforts and resources that they will apply to R&D partnerships or joint ventures;
- partners may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on trial results, changes in their strategic focus due to the acquisition of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- partners may delay trials, provide insufficient funding for a trial program, stop a trial, abandon a product candidate, repeat or conduct new trials or require a new formulation of a product candidate for testing;
- partners could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a partner with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our partners that would prevent us from collaborating with others;
- partners may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a partner that causes the delay or termination of the research, development or commercialization of our current or future products or that results in costly litigation or arbitration that diverts management attention and resources;
- partnerships may be terminated, and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable current or future products;

- partners may own or co-own intellectual property covering our products that results from our partnering with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property; and
- a partner's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names and trademarks, which we need for name recognition by potential partners or food manufacturers or farmers in our markets of interest. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Risks Related to Our Organization, Structure and Operation

We will need to develop and expand our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations.

As of May 31, 2017, we had 27 employees and we expect to increase our number of employees and the scope and location of our operations. To manage our anticipated development and expansion, including the development and the commercialization of our product candidates, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Members of our management team may need to divert a disproportionate amount of their attention away from their day-to-day activities and devote a substantial amount of time to managing these development activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our product candidates. If our management is unable to effectively manage our expected development and expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the future development and expansion of our company.

We depend on key management personnel and attracting and retaining other qualified personnel, and our business could be harmed if we lose key management personnel or cannot attract and retain other qualified personnel.

Our success depends to a significant degree upon the technical skills and continued service of certain members of our management team: Federico A. Tripodi, our CEO, and Daniel Voytas, Ph.D., our CSO. Dr. Voytas works for us as a consultant pursuant to a consulting agreement under which he is required to work 10 days per month with us. The loss of the services of one or both of these key executive officers could have a material adverse effect on us. We do not maintain "key man" insurance policies on the lives of any of our employees. Our success also will depend upon our ability to attract and retain additional qualified management, regulatory, technical, and sales and marketing executives and personnel. The failure to attract, integrate, motivate, and retain additional skilled and qualified personnel could have a material adverse effect on our business.

We compete for such personnel against numerous companies, including larger, more established companies with significantly greater financial resources than we possess. In addition, failure to succeed in our product candidates' development may make it more challenging to recruit and retain qualified personnel. There can be no assurance that we will be successful in attracting or retaining such personnel and the failure to do so could have a material adverse effect on our business, financial condition, and results of operations.

We may not be able to fully enforce covenants not to compete with our key management personnel, and therefore we may be unable to prevent our competitors from benefiting from the expertise of such employees.

Our offer letters with key management personnel, which include executive officers, and our consulting agreement with Dr. Voytas, contain non-compete provisions. These provisions prohibit our key management personnel, if they cease working for us, from competing directly with us or working for our competitors for a period of time. Under applicable laws, we may be unable to enforce these provisions. If we cannot enforce the non-compete provisions with our key management personnel, we may be unable to prevent our competitors from benefiting from the expertise of such management personnel. Even if these provisions are enforceable, they may not adequately protect our interests. The defection of one or more of our management personnel to a competitor could materially adversely affect our business, results of operations and ability to capitalize on our proprietary information.

We must maintain effective internal control over financial reporting, and if we are unable to do so, the accuracy and timeliness of our financial reporting may be adversely affected, which could have a material adverse effect on our business, investor confidence and market price.

We must maintain effective internal control over financial reporting in order to accurately and timely report our results of operations and financial condition. In addition, as a public company, the Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our controls over financial reporting at the end of each fiscal year. We anticipate being first required to issue management's annual report on internal control over financial reporting, pursuant to Section 404 of the Sarbanes-Oxley Act, in respect of our annual report for the fiscal year ended December 31, 2018.

The rules governing the standards that must be met for our management to assess our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act are complex and require significant documentation, testing and possible remediation. These stringent standards require that our audit and finance committee be advised and regularly updated on management's assessment of internal control over financial reporting. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal controls over financial reporting beginning with our annual report following the date on which we are no longer an "emerging growth company." If we fail to staff our accounting and finance function adequately or maintain internal control over financial reporting adequate to meet the requirements of the Sarbanes-Oxley Act, our business and reputation may be harmed.

Our independent registered public accounting firm has identified a material weakness in our internal control over financial reporting which requires remediation.

Our independent registered public accounting firm issued a letter to our audit committee and management in which they identified certain matters that they consider to constitute a material weakness in the design and operation of our internal control over financial reporting as of December 31, 2016. A deficiency in internal control over financial reporting exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for the oversight of the company's financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

The material weakness identified by our auditors relates to our lack of a control in place to review forward purchase derivative contracts entered into by us for potential accounting implications or to determine the proper accounting treatment as a result of entering into the contract. We entered into soybean seed and grain production contracts with third parties. The price we paid for the seed and grain was indexed to the soybean commodity price. Payment terms were specified in the contract and often paid before the title for the grain and seed was transferred.

Management is taking steps to remediate this material weakness including standardizing our seed and grain contracts and developing internal accounting policies for recognizing expenses for seed and grain contracts. We cannot assure you that our plans will sufficiently address the identified material weakness, nor can we assure you that there will not be additional material weaknesses or significant deficiencies in our internal controls in the future. If we fail to remediate the material weakness, or if additional material weaknesses arise in the future, we may fail to meet our future reporting obligations, our financial statements may contain material misstatements and our operational results may be harmed. Any such failure could also adversely affect the results of the periodic management evaluations and, to the extent we are no longer an emerging growth company, the annual auditor attestation reports regarding the effectiveness of our internal control over financial reporting that will be required under Section 404 of the Sarbanes-Oxley Act of 2002. Internal control deficiencies could also cause investors to lose confidence in our reported financial information.

We may use hazardous chemicals and biological materials in our business and are subject to numerous environmental, health and safety laws and regulations. Compliance with such laws and regulations and any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

We are subject to numerous federal, state, local and foreign environmental, health and safety laws and regulations, including those governing laboratory procedures, the handling, use, storage, treatment, manufacture and disposal of hazardous materials and wastes, discharge of pollutants into the environment and human health and safety matters. Our research and development processes may involve the controlled use of hazardous materials, including chemicals and biological materials. We cannot eliminate the risk of contamination or discharge and any resultant injury from these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, or may otherwise be required to remediate such contamination, and our liability may exceed any insurance coverage and our total assets. Compliance with environmental, health and safety laws and regulations may be expensive and may impair our research and development efforts. If we fail to comply with these requirements, we could incur substantial costs and liabilities, including civil or criminal fines and penalties, clean-up costs or capital expenditures for control equipment or operational changes necessary to achieve and maintain compliance. In addition, we cannot predict the impact on our business of new or amended environmental, health and safety laws or regulations or any changes in the way existing and future laws and regulations are interpreted and enforced. These current or future laws and regulations may impair our research, development or production efforts.

Our internal computer systems, or those of our third-party contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we do not believe that we have experienced any such system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our programs. For example, the loss of field trial data for our product candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Additionally, there have been reported cases in the industry where product candidates have been stolen from the field during field trials. To the extent that any disruption or security breach results in a loss of or damage to our data or applications or other data or applications relating to our technology or product candidates, or inappropriate disclosure of confidential or proprietary information, we could incur liabilities and the further development of our product candidates could be delayed.

Our business and operations would suffer in the event of computer system failures, cyber-attacks or a deficiency in our cyber-security.

Despite the implementation of security measures, our internal computer systems, and those of third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization. The risk of a security breach or disruption, particularly through cyber-attacks or cyber-intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of field trial data from completed or ongoing or planned field trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach was to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur material legal claims and liability, damage to our reputation, and the further development of our product candidates could be delayed.

We may acquire businesses or products, or form strategic alliances, in the future, and we may not realize the benefits of such acquisitions.

We plan to selectively partner, in-license or acquired key enabling technologies and businesses across our value chain that we believe will keep us on the cutting edge of our industry. We may not be able to identify appropriate targets or make acquisitions under satisfactory conditions, in particular, satisfactory price conditions. In addition, we may be unable to obtain the financing for these acquisitions under favorable conditions, and could be led to finance these acquisitions using cash that could be allocated to other purposes in the context of existing operations. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, we will achieve the expected synergies to justify the transaction, which could have a material adverse effect on our business, financial conditions, earnings and prospects.

Risks Related to Our Relationship with Cellectis

Cellectis controls the direction of our business, and the concentrated ownership of our common stock and certain contractual rights Cellectis has will prevent you and other stockholders from influencing significant decisions.

Immediately following the completion of this offering, Cellectis will own % of our outstanding shares of common stock (or % if the underwriters exercise their option to purchase additional shares in full). Pursuant to our stockholders agreement with Cellectis, Cellectis will have certain contractual rights for so long as it beneficially owns at least 50% of the then outstanding shares of our common stock, as described under "Certain Relationships and Related Party Transactions—Relationship with Cellectis," including:

- to approve any modification to our or any future subsidiary's share capital (e.g., share capital increase or decrease), the creation of any subsidiary, any grant of stock-based compensation, any distributions or initial public offering, merger, spin-off, liquidation, winding up or carve-out transactions;
- to approve the annual business plan and annual budget and any modification thereof;
- to approve any external growth transactions exceeding $500,000 and not included in the approved annual business plan and annual budget;

- to approve any investment and disposition decisions exceeding $500,000 and not included in the approved annual business plan and annual budget (it being understood that this clause excludes the purchase and sale of inventory as a part of the normal course of business);
- to approve any related-party agreement and any agreement or transaction between the executives or shareholders of Calyxt, on the one hand, and Calyxt or any of its subsidiaries, on the other hand;
- to approve any decision pertaining to the recruitment, dismissal/removal, or increase of the compensation of executives and corporate officers;
- to approve any material decision relating to a material litigation;
- to approve any decision relating to the opening of a social or restructuring plan or pre-insolvency proceedings;
- to approve any buyback by us of our own shares;
- to approve any new borrowings or debts exceeding $500,000 and early repayment of loans, if any (it being understood that Cellectis will approve the entering into of contracts for revolving loans and other short-term loans and the repayment of such for financing general operating activities, such as revolving loans for inventory or factoring of receivables);
- to approve grants of any pledges on securities;
- to develop new activities and businesses not described in the annual business and annual budget;
- to approve entry into any material agreement or partnership; and
- to approve any offshore and relocation activities.

In addition, Cellectis will have the following rights for so long as it beneficially owns at least 15% of the then outstanding shares of our common stock, as described under "Certain Relationships and Related Party Transactions—Relationship with Cellectis," including:

- to nominate the greater of three members of our Board of Directors or a majority of the directors;
- to designate the Chairman of our Board of Directors and one member to each of the audit committee of the Board of Directors, the compensation committee of the Board of Directors and the nominating and corporation governance committee of the Board of Directors;
- to approve any amendments to our amended and restated certificate of incorporation or our amended and restated by-laws that would change the name of our company, its jurisdiction of incorporation, the location of its principal executive offices, the purpose or purposes for which our company is incorporated or the Cellectis approval items set forth in the stockholders agreement;
- to approve the payment of any regular or special dividends;
- to approve the commencement of any voluntary proceeding for the dissolution, winding up or bankruptcy of Calyxt or a material subsidiary;
- to approve any public or private offering, merger, amalgamation or consolidation of us or the spinoff of a business of ours or any sale, conveyance, transfer or other disposition of our assets; and
- to approve any appointment to our Board of Directors contrary to the stockholders agreement or our certificate of incorporation or our by-laws.

As a result, Cellectis controls the direction of our business, and the concentrated ownership of our common stock and the contractual rights described above will prevent you and other stockholders from influencing significant decisions.

If Cellectis sells a controlling interest in our company to a third party in a private transaction, you may not realize any change-of-control premium on shares of our common stock and we may become subject to the control of a presently unknown third party.

Following the completion of this offering, Cellectis will continue to own a significant equity interest in our company. Cellectis will have the ability, should it choose to do so, to sell some or all of its shares of our common stock in a privately negotiated transaction, which, if sufficient in size, could result in a change of control of our company.

The ability of Cellectis to privately sell its shares of our common stock, with no requirement for a concurrent offer to be made to acquire all of the shares of our common stock that will be publicly traded hereafter, could prevent you from realizing any change-of-control premium on your shares of our common stock that may otherwise accrue to Cellectis on its private sale of our common stock. Additionally, if Cellectis privately sells its significant equity interest in our company, we may become subject to the control of a presently unknown third party. Such third party may have conflicts of interest with those of other stockholders. In addition, if Cellectis sells a controlling interest in our company to a third party, any future indebtedness we have may be subject to acceleration, Cellectis may terminate the license agreement, and other transitional arrangements, and our other commercial agreements and relationships could be impacted, all of which may adversely affect our ability to run our business as described herein and may have a material adverse effect on our operating results and financial condition.

We will be a "controlled company" within the meaning of the rules of the and, as a result, will qualify for, and intend to rely on, exemptions from certain corporate governance requirements. You will not have the same protections afforded to stockholders of companies that are subject to such requirements.

Upon completion of this offering, Cellectis will continue to control a majority of the voting power of our outstanding common stock. As a result, we will be a "controlled company" within the meaning of the corporate governance standards of the . Under these rules, a listed company of which more than 50% of the voting power is held by an individual, group or another company is a "controlled company" and may elect not to comply with certain corporate governance requirements, including:

- the requirement that a majority of the board of directors consist of independent directors;
- the requirement that our nominating and corporate governance committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities;
- the requirement that our compensation committee be composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and
- the requirement for an annual performance evaluation of our corporate governance and compensation committees.

While Cellectis controls a majority of the voting power of our outstanding common stock, we may not have a majority of independent directors or corporate governance and compensation committees consisting entirely of independent directors and we will not be required to have written charters addressing these committees' purposes and responsibilities or have annual performance evaluations of these committees. Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of the .

Cellectis may compete with us.

Cellectis will not be restricted from competing with us in the plant sciences industry business, including as a result of acquiring a company that operates an agricultural biotechnology business. Due to the significant resources of Cellectis, including financial resources, name recognition and know-how resulting from the previous

management of our business, Cellectis could have a significant competitive advantage over us should it decide to engage in the type of business we conduct, which may cause our operating results and financial condition to be materially adversely affected.

Certain of our directors may have actual or potential conflicts of interest because of their positions with Cellectis.

Following this offering, Dr. André Choulika and will serve on our Board of Directors and retain their positions with Cellectis. In addition, such directors may own Cellectis ordinary shares, options to purchase Cellectis ordinary shares or other Cellectis equity awards. These individuals' holdings of Cellectis ordinary shares, options to purchase ordinary shares of Cellectis or other equity awards may be significant for some of these persons compared to these persons' total assets. Their position at Cellectis and the ownership of any Cellectis equity or equity awards creates, or may create the appearance of, conflicts of interest when these directors are faced with decisions that could have different implications for Cellectis than the decisions have for us.

Cellectis and its directors and officers will have limited liability to us or you for breach of fiduciary duty.

Our Certificate of Incorporation provides that, subject to any contractual provision to the contrary, Cellectis will have no obligation to refrain from:

- engaging in the same or similar business activities or lines of business as we do;
- doing business with any of our clients or consumers; or
- employing or otherwise engaging any of our officers or employees.

Under our Certificate of Incorporation, neither Cellectis nor any officer or director of Cellectis, except as provided in our Certificate of Incorporation, is liable to us or to our stockholders for breach of any fiduciary duty by reason of any of these activities.

Cellectis currently performs or supports many of our important corporate functions. We will incur significant charges in connection with this offering and incremental costs as a stand-alone public company.

We will need to replicate or replace certain functions, systems and infrastructure to which we will no longer have the same access after this offering. We may also need to make investments or hire additional employees to operate without the same access to Cellectis' existing operational and administrative infrastructure. These initiatives may be costly to implement. Due to the scope and complexity of the underlying projects relative to these efforts, the amount of total costs could be materially higher than our estimate, and the timing of the incurrence of these costs is subject to change.

Cellectis currently performs or supports many important corporate functions for our company. Our financial statements reflect charges for these services on an allocation basis. Following this offering, many of these services will be governed by our management services agreement with Cellectis. Under the management services agreement we will be able to use these Cellectis services for one year terms, which are automatically renewed. However, either party will have the right to terminate the agreement at the anniversary of the agreement by giving three months' prior notice. In addition, either party will be able to terminate the agreement due to a material breach of the other party, upon prior written notice, subject to limited cure periods and certain change of control, sale and bankruptcy events. See "Certain Relationships and Related Party Transactions—Relationship with Cellectis—Management Services Agreement."

We will pay Cellectis mutually agreed-upon fees for these services, which will be based on Cellectis' costs of providing the services.

We may not be able to replace these services or enter into appropriate third-party agreements on terms and conditions, including cost, comparable to those that we will receive from Cellectis under our management services agreement. Additionally, after the agreement terminates, we may be unable to sustain the services at the same levels or obtain the same benefits as when we were receiving such services and benefits from Cellectis. When we begin to operate these functions separately, if we do not have our own adequate systems and business functions in place, or are unable to obtain them from other providers, we may not be able to operate our business effectively or at comparable costs, and our profitability may decline. In addition, we have historically received informal support from Cellectis, which may not be addressed in our management services agreement. The level of this informal support will diminish or be eliminated following this offering.

Risks Related to Ownership of Our Common Stock

The requirements of being a U.S. public company require significant resources and management attention and affect our ability to attract and retain executive management and qualified board members.

As a U.S. public company following this offering, we will incur legal, accounting, and other expenses that we did not previously incur. We will be subject to the Exchange Act, including the reporting requirements thereunder, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company."

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, we will be required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include this attestation report on internal control over financial reporting issued by our independent registered public accounting firm. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of complying with Section 404 will significantly increase and management's attention may be diverted from other business concerns, which could adversely affect our business and results of operations. We may need to hire more employees in the future or engage outside consultants to comply with these requirements, which will further increase our cost and expense. If we fail to implement the requirements of Section 404 in the required timeframe, we may be subject to sanctions or investigations by regulatory authorities, including the SEC and the . Furthermore, if we are unable to conclude that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of shares of our common stock could decline, and we could be subject to sanctions or investigations by regulatory authorities. Failure to implement or maintain effective internal control systems required of public companies could also restrict our future access to the capital markets. In addition, enhanced legal and regulatory regimes and heightened standards relating to corporate governance and disclosure for public companies result in increased legal and financial compliance costs and make some activities more time consuming.

An active trading market for our common stock may not develop, and the market price for our common stock may be volatile or may decline regardless of our operating performance.

Prior to the completion of this offering, there has been no public market for our common stock. An active trading market for shares of our common stock may never develop or be sustained following this offering. If an active trading market does not develop, you may have difficulty selling your shares of common stock at an attractive price, or at all. The price for our common stock in this offering will be determined by negotiations among Cellectis, us and representatives of the underwriters, and it may not be indicative of prices that will prevail in the open market following this offering. Consequently, you may not be able to sell your common stock at or above the initial public offering price or at any other price or at the time that you would like to sell. An

inactive market may also impair our ability to raise capital by selling our common stock, and it may impair our ability to attract and motivate our employees through equity incentive awards and our ability to acquire other companies, products or technologies by using our common stock as consideration.

The price of our common stock may fluctuate substantially.

You should consider an investment in our common stock to be risky, and you should invest in our common stock only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Some factors that may cause the market price of our common stock to fluctuate, in addition to the other risks mentioned in this section of the prospectus, are:

- actual or anticipated fluctuations in our financial condition and operating results;
- our failure to develop and commercialize our product candidates;
- actual or anticipated changes in our growth rate relative to our competitors;
- competition from existing products or new products that may emerge;
- announcements by us, Cellectis, our R&D partners or our competitors of significant acquisitions, strategic partnerships, joint ventures, strategic alliances, or capital commitments;
- the imposition of regulatory requirements on any of our product candidates to be sold in North America;
- the inability to establish additional strategic alliances;
- unanticipated serious safety concerns related to the use of any of our products once commercialized;
- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- common stock price and volume fluctuations attributable to inconsistent trading volume levels of our common stock;
- additions or departures of key management or scientific personnel;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- announcement or expectation of additional equity or debt financing efforts;
- sales of common stock by us, Cellectis, our insiders or our other stockholders;
- announcements or actions taken by Cellectis as our principal stockholder; and
- general economic and market conditions.

These and other market and industry factors may cause the market price and demand for our common stock to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their common stock and may otherwise negatively affect the liquidity of our common stock. In addition, the stock market in general, and agricultural biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies.

If you purchase common stock in this offering, you will experience substantial and immediate dilution.

If you purchase common stock in this offering, you will experience substantial and immediate dilution of $ per share in the net tangible book value after giving effect to the offering at an assumed initial public

offering price of $ per share (the midpoint of the price range on the cover of this prospectus) because the price that you pay will be substantially greater than the net tangible book value per share that you acquire. For a further description of the dilution that you will experience immediately after this offering, see the section of this prospectus titled "Dilution."

Our historical financial data is not necessarily representative of the results we would have achieved as a stand-alone company and may not be a reliable indicator of our future results.

Our historical financial data included in this prospectus does not reflect the financial condition, results of operations or cash flows we would have achieved as a stand-alone company during the periods presented or those we will achieve in the future. This is primarily the result of the following factors:

- our historical financial data reflects expense allocations for certain support functions that are provided on a centralized basis within Cellectis, such as expenses for business technology, facilities, legal, finance, human resources and business development that may be higher or lower than the comparable expenses we would have actually incurred, or will incur in the future, as a stand-alone company; and
- significant increases will occur in our cost structure as a result of this offering, including costs related to public company reporting, investor relations and compliance with the Sarbanes-Oxley Act.

As a result of the separation, it may be difficult for investors to compare our future results to historical results or to evaluate our relative performance or trends in our business.

Future sales of common stock by Cellectis or others of our common stock, or the perception that such sales may occur, could depress the market price of our common stock.

Immediately following the completion of this offering, Cellectis will own % of our outstanding shares of common stock (or % if the underwriters exercise their option to purchase additional shares in full). Subject to the restrictions described in the paragraph below, future sales of these shares in the public market will be subject to the volume and other restrictions of Rule 144 under the Securities Act of 1933, or the Securities Act, for so long as Cellectis is deemed to be our affiliate, unless the shares to be sold are registered with the Securities and Exchange Commission, or SEC. We are unable to predict with certainty whether or when Cellectis will sell a substantial number of shares of our common stock. The sale by Cellectis of a substantial number of shares after this offering, or a perception that such sales could occur, could significantly reduce the market price of our common stock. Upon completion of this offering, except as otherwise described herein, all shares that are being offered hereby will be freely tradable without restriction, assuming they are not held by our affiliates.

We, our officers and directors and Cellectis have agreed with the underwriters that, without the prior written consent of , we and they will not, subject to certain exceptions and extensions, during the period ending 180 days after the date of this prospectus, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock. may, in their sole discretion and at any time without notice, release all or any portion of the shares of our common stock subject to the lock-up.

Following this offering, we intend to file one or more registration statements with the SEC covering shares of our common stock available for future issuance under our equity incentive plans. Upon effectiveness of such registration statements, any shares subsequently issued under such plans will be eligible for sale in the public market, except to the extent that they are restricted by the lock-up agreements referred to above and subject to compliance with Rule 144 in the case of our affiliates. Sales of a large number of the shares issued under these plans in the public market could have an adverse effect on the market price of our common stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, the price of our common stock and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that securities or industry analysts publish about us or our business. If few or no securities or industry analysts cover us, the trading price for our common stock would be negatively impacted. If one or more of the analysts who covers us downgrades our common stock or publishes incorrect or unfavorable research about our business, the price of our common stock would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, or downgrades our common stock, demand for our common stock could decrease, which could cause the price of our common stock or trading volume to decline.

We do not currently intend to pay dividends on our common stock.

We do not intend to pay any dividends to holders of our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future, and the success of an investment in our common stock will depend upon any future appreciation in its value. Consequently, investors may need to sell all or part of their holdings of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that our common stock will appreciate in value or even maintain the price at which our stockholders have purchased our common stock. Investors seeking cash dividends should not purchase our common stock.

Provisions in our Certificate of Incorporation, By-laws and Delaware law may prevent or delay an acquisition of us, which could decrease the trading price of our common stock.

Our Certificate of Incorporation and By-laws contain provisions that are intended to deter coercive takeover practices and inadequate takeover bids and to encourage prospective acquirers to negotiate with our Board of Directors rather than to attempt a hostile takeover. These include the following provisions that become effective once Cellectis' no longer holds at least 50% of our outstanding shares of common stock:

- a Board of Directors that is divided into three classes with staggered terms;
- rules regarding how our stockholders may present proposals or nominate directors for election at stockholder meetings;
- the right of our Board of Directors to issue preferred stock without stockholder approval; and
- limitations on the right of stockholders to remove directors.

These provisions could make it more difficult for a third party to acquire us, even if the third party's offer may be considered beneficial by many stockholders. As a result, stockholders may be limited in their ability to obtain a premium for their shares. See "Description of Capital Stock" for a discussion of these provisions.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

We have made statements under the captions "Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Business" and in other sections of this prospectus that are forward-looking statements. In some cases, you can identify these statements by forward-looking words such as "may," "might," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential" or "continue," the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including those factors discussed under the caption entitled "Risk Factors." You should specifically consider the numerous risks outlined under "Risk Factors."

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this prospectus to conform our prior statements to actual results or revised expectations.

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate is based on information from various sources, including independent industry publications. In presenting this information, we have also made assumptions based on such data and other similar sources, and on our knowledge of, and our experience to date in, the potential markets for our product. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled "Risk factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately $ million, or approximately $ million if the underwriters exercise in full their option to purchase additional shares of common stock, assuming an initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus), after deducting estimated underwriting discounts and commissions and estimated offering expenses.

Each $1.00 increase (decrease) in the public offering price per share would increase (decrease) our net proceeds, after deducting estimated underwriting discounts and commissions, by $ million (assuming no exercise of the underwriters' option to purchase additional shares of common stock). An increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting discount and estimated offering expenses payable by us, by approximately $ million, assuming the assumed initial public offering price stays the same.

We intend to use the net proceeds of this offering (including any net proceeds from the underwriters' exercise of their option to purchase additional shares of common stock) as follows:

- approximately $ million to fund research and for development costs to advance our existing product candidates including high fiber wheat and herbicide tolerant wheat and to add additional product candidates to our portfolio;
- approximately $ million to build out commercial capabilities, which includes incremental expansion of our sales force to build commercial relationships with supply chain and food companies, furnishing a demonstration kitchen, and producing demonstration and promotional products, such as high oleic oil and meal samples, to help drive demand creation;
- approximately $ million to be used as working capital related to seed production, grain purchases and meal and oil production; and
- the remainder for general corporate purposes.

We may also use a portion of the net proceeds to acquire or invest in complementary products, technologies or businesses, although we currently have no agreements or binding commitments to complete any such transaction.

The foregoing intended uses do not include our planned facility expansion, described under "Business—Facilities," as we intend to finance the building for the planned facility expansion in whole or in part through a sale leaseback transaction. On June 20, 2017, we signed an agreement with a third party buyer for the sale of the land and warehouse facility. The completion of the sale is conditioned on us and the buyer entering into a new facility construction agreement and a lease in respect of the property in the forms contemplated by the sale agreement. We expect to close on the proposed transaction and construction to begin on the new facilities in the second half of 2017.

However, due to the uncertainties inherent in the product development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. The amount and timing of our actual expenditures will depend upon numerous factors, including the results of our research and development efforts, the timing and success of our ongoing field tests or field tests we may commence in the future and the timing of regulatory submissions. As a result, our management will have broad discretion over the use of the net proceeds from this offering, and investors will be relying on our judgment regarding the application of the net proceeds. In addition, we might decide to postpone or not pursue certain activities or field tests if the net proceeds from this offering and our other sources of cash are less than expected.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments.

DIVIDEND POLICY

We do not anticipate declaring or paying any cash dividends to holders of our common stock in the foreseeable future. We currently intend to retain future earnings, if any, to finance the growth of our business. If we decide to pay cash dividends in the future, the declaration and payment of such dividends will be at the sole discretion of our Board of Directors and may be discontinued at any time. In determining the amount of any future dividends, our Board of Directors will take into account any legal or contractual limitations, our actual and anticipated future earnings, cash flow, debt service and capital requirements and other factors that our Board of Directors may deem relevant.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2017:

- on an actual basis; and
- on an as adjusted basis to give effect to the sale and issuance by us of shares in this offering at an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses, and assuming that the net proceeds of this offering are held as cash.

You should read this table in conjunction with our audited financial statements and the notes thereto, included in this prospectus as well as "Use of Proceeds," "Selected Historical Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

	(unaudited) As of March 31, 2017	
	Actual	As Adjusted(1)
	(in thousands)	
Cash and cash equivalents	$ 3,007	$
Long-term debt	$ —	$
Stockholder's equity:		
Common stock, $0.0001 par value, shares authorized; shares issued and outstanding; shares authorized; shares issued and outstanding on an as adjusted basis	1	
Additional paid-in capital	41,820	
Accumulated (deficit)	(31,400)	
Total stockholder's equity	$ 10,421	$
Total capitalization	$ 10,421	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) each of as adjusted cash and cash equivalents, additional paid-in capital, total stockholder's equity and total capitalization by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting the underwriting discount and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) as adjusted cash and cash equivalents, additional paid-in capital, total stockholder's equity and total capitalization by $ million, assuming an initial public offering price of $ per share, after deducting the underwriting discount and estimated offering expenses payable by us.

DILUTION

Our net tangible book value as of March 31, 2017 was $, or $ per share of common stock. Net tangible book value per share represents tangible assets, less liabilities, divided by the aggregate number of shares outstanding. After giving effect to the sale by us of shares of common stock in this offering, at an assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus) and the receipt and application of the net proceeds, our adjusted net tangible book value as of March 31, 2017 would have been $ or $ per share. This represents an immediate increase in adjusted net tangible book value to existing stockholders of $ per share and immediate dilution to new investors of $ per share. Dilution per share represents the difference between the price per share to be paid by new investors for the shares of common stock sold in this offering and the adjusted net tangible book value per share immediately after this offering. The following table illustrates this per share dilution:

Assumed initial public offering price per share		$
Net tangible book value per share at March 31, 2017	$	
Increase in net tangible book value per share attributable to new investors		
Adjusted net tangible book deficit per share as of March 31, 2017 after this offering		
Dilution per share to new investors in this offering		$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) our adjusted net tangible book deficit by approximately $ million, or approximately $ per share, and increase (decrease) the dilution per share to investors participating in this offering by approximately $( ) per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 in the number of shares offered by us would increase our adjusted net tangible book deficit by approximately $ million, or $ per share, and decrease the dilution per share to investors participating in this offering by $( ) per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a decrease of 1,000,000 shares in the number of shares offered by us would decrease our adjusted net tangible book deficit by approximately $ million, or $ per share, and increase the dilution per share to investors participating in this offering by $ per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. The adjusted information discussed above is illustrative only and will adjust based on the actual initial price to public and other terms of this offering determined at pricing.

If the underwriters exercise their option in full to purchase additional shares of common stock in this offering, the adjusted net tangible book deficit per share after the offering would be $ per share, the incremental increase in the adjusted net tangible book deficit per share to our existing stockholder, Cellectis, would be $ per share and the adjusted dilution to new investors participating in this offering would be $ per share.

The following table sets forth, on an adjusted basis as described above, as of March 31, 2017, the number of shares of common stock purchased from us, the total consideration paid, or to be paid, and the average price per share paid, or to be paid, by our existing stockholder and by the new investors, at an assumed initial public offering price of $ per share (the midpoint of the range set forth on the cover page of this prospectus) before deducting estimated underwriting discounts and commissions and offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholder		%	$	%	
New investors					
Total		100%	$	100%	

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) total consideration paid by new investors by approximately $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 in the number of shares offered by us would increase (decrease) total consideration paid by new investors by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

SELECTED HISTORICAL FINANCIAL DATA

The selected financial information as of December 31, 2016 and for the years ended December 31, 2016 and 2015 appearing below has been derived from our audited financial statements and the notes thereto, included elsewhere in this prospectus. The selected financial information as of March 31, 2017 and for the three months ended March 31, 2017 and 2016 appearing below has been derived from our unaudited condensed financial statements and the notes thereto, included elsewhere in this prospectus. The unaudited condensed financial statements have been prepared on the same basis as our audited financial statements and include all normal recurring adjustments that we consider necessary for a fair statement of our financial position and operating results as of the dates and for the periods presented. The selected financial information below should be read together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in conjunction with the financial statements, related notes and other financial information included elsewhere in this prospectus.

Our historical results are not necessarily indicative of our future results and our interim results are not necessarily reflective of the results to be expected for the full year. The summary financial information below does not contain all the information included in our financial statements.

Statements of Operations

	(unaudited) Three Months Ended March 31,		Year Ended December 31,	
	2017	2016	2016	2015
	(in thousands, except per share data)			
Revenue	$ 55	$ 106	$ 399	$ 1,272
Operating expenses:				
Cost of revenue	—	100	200	751
Research and development	1,266	1,370	5,638	2,766
Sales, general, and administrative	1,578	1,197	6,670	3,569
Total operating expenses	2,844	2,667	12,508	7,086
Loss from operations	(2,789)	(2,561)	(12,109)	(5,814)
Interest expense	(14)	(4)	(5)	(261)
Foreign currency transaction gains (losses)	(29)	(4)	28	186
Loss before income taxes	(2,832)	(2,569)	(12,086)	(5,889)
Income tax benefit	—	—	—	—
Net loss	$ (2,832)	$ (2,569)	$ (12,086)	$ (5,889)
Basic and diluted loss per share(1)	$ (0.35)	$ (0.32)	$ (1.51)	$ (2.15)
Weighted average shares outstanding—basic and diluted	8,000,000	8,000,000	8,000,000	2,745,200

Balance Sheet Data:

	As of	
	(unaudited) March 31, 2017	December 31, 2016
	(in thousands)	
Cash and cash equivalents	$ 3,007	$ 5,026
Total assets	15,092	16,623
Accumulated deficit	(31,400)	(28,568)
Total stockholder's equity	10,421	13,119
Total liabilities and stockholder's equity	15,092	16,623

(1) See note 8 to our audited financial statements and note 7 to our unaudited condensed financial statements, included elsewhere in this prospectus for an explanation of the method used to calculate basic and diluted loss per share.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and related notes which are included elsewhere in this prospectus. Our actual results could differ materially from those anticipated in the forward-looking statements included in this discussion as a result of certain factors, including, but not limited to, those discussed in "Risk Factors" included elsewhere in this prospectus.

Overview

We are a consumer-centric, food- and agriculture-focused company. By combining our leading gene-editing technology and technical expertise with our innovative commercial strategy, we are pioneering a paradigm shift to deliver healthier specialty food ingredients, such as healthier oils and high fiber wheat, for consumers and agriculturally advantageous crop traits, such as herbicide tolerance, to farmers. While the traits that enable these characteristics may occur naturally and randomly through evolution—or under a controlled environment through traditional agricultural technologies—those processes are imprecise and take many years, if not decades. Our technology enables us to precisely and specifically edit a plant genome to elicit the desired traits and characteristics, resulting in a final product that has no foreign DNA. We believe the precision, specificity, cost effectiveness and development speed of our gene-editing technologies will enable us to provide meaningful disruption to the food and agriculture industries.

Food-related issues, including obesity and diabetes, are some of the most prevalent health issues today and continue to grow rapidly. As awareness of these diet-related health issues grows, consumers are emphasizing a healthier lifestyle and a desire for nutritionally rich foods that are more nutritious, better tasting, less processed and more convenient. This trend is leading to an increase in the demand for higher valued, premium segments of the food industry, such as higher fiber, reduced gluten and reduced fat products. As a result of these trends, food companies are looking for specialty ingredients and solutions that can help them satisfy their customers' evolving needs and drive growth in market share and new value-added products.

We have developed a robust product pipeline with our proprietary technology. Our first product candidate, which we expect to be commercialized by the end of 2018, is a high oleic soybean designed to produce a healthier oil that has zero trans fats and reduced saturated fats. We are also developing a high fiber wheat to create flour with up to three times more dietary fiber than standard white flour while maintaining the same flavor and convenience of use. Another product candidate we are developing is a herbicide tolerant wheat designed to provide farmers with better weed control options to increase yields and profitability. We believe each of these product candidates addresses a potential multi-billion dollar market opportunity.

We are an early-stage company and have incurred net losses since our inception. As of March 31, 2017 we had an accumulated deficit of $31.4 million. Our net losses for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015 were $2.8 million, $12.1 million and $5.9 million, respectively. Substantially all of our net losses resulted from costs incurred in connection with our research and development (R&D) programs and from selling, general and administrative expenses associated with our operations. As we continue to develop our product pipeline, we expect to continue to incur significant expenses and increasing operating losses for the foreseeable future and those expenses and losses may fluctuate significantly from quarter-to-quarter and year-to-year. We expect that our expenses will increase substantially as we:

- establish a sales, marketing and distribution infrastructure, including relationships across our supply chain, to commercialize any products that have completed the development process;
- conduct additional field trials of our current and future product candidates;
- secure manufacturing arrangements for commercial production;

- continue to advance the research and development of our current and future product candidates;
- seek to identify and validate additional product candidates;
- acquire or in-license other product candidates, technologies, germplasm or other biological material;
- are required to seek regulatory and marketing approvals for our product candidates;
- make royalty and other payments under any in-license agreements;
- maintain, protect, expand and defend our intellectual property portfolio;
- seek to attract and retain new and existing skilled personnel; and
- experience any delays or encounter issues with any of the above.

We do not expect to generate material revenue unless and until we successfully complete development of one or more of our product candidates, which may take a number of years and is subject to significant uncertainty. Until such time that we can generate substantial revenues from sales of our product candidates, if ever, we expect to finance our operating activities through a combination of equity offerings, debt financings, government or other third-party funding, and licensing arrangements. However, we may be unable to raise additional funds or enter into such arrangements when needed on favorable terms, or at all, which would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our development programs or commercialization efforts or grant to others rights to develop or market product candidates that we would otherwise prefer to develop and market ourselves. Failure to receive additional funding could cause us to cease operations, in part or in full.

Our audited financial statements for the years ended December 31, 2015 and 2016 and our unaudited condensed financial statements for the three months ended March 31, 2016 and 2017 included elsewhere in this prospectus were prepared in accordance with U.S. Generally Accepted Accounting Principles, or U.S. GAAP, as issued by Financial Accounting Standards Board, or FASB.

Comparability of Our Results and Our Relationship with Cellectis

We currently operate as a wholly owned subsidiary of Cellectis. As a result, our historical financial statements may not be reflective of what our results of operations would have been had we been a stand-alone public company and no longer a subsidiary of Cellectis. In particular, certain legal, finance, human resources and other functions have historically been provided to us by Cellectis at cost plus an agreed-upon markup. Following this offering, pursuant to agreements with Cellectis, we expect that Cellectis will continue to provide us with some of the services related to these functions on a transitional basis in exchange for agreed-upon fees, and we expect to incur other costs to replace the services and resources that will not be provided by Cellectis. We will also incur additional costs as a stand-alone public company. As a stand-alone public company, our total costs related to certain support functions may differ from the costs that were historically allocated to us from Cellectis. In addition, in the future, we expect to incur internal costs to implement certain new systems, including infrastructure and an enterprise resource planning system, while our legacy systems are currently being fully supported by Cellectis. See “Certain Relationships and Related Party Transactions—Relationship with Cellectis” for a description of certain agreements that we have entered into or intend to enter into with Cellectis in connection with this offering that will provide a framework for our ongoing relationship upon and after completion of this offering.

Financial Operations Overview

Revenue

We recognized approximately $0.1 million, $0.4 million and $1.3 million of revenue for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015, respectively, from payments we

received pursuant to our R&D agreements under which we conduct research activities for a number of companies. Our R&D agreements provide for non-refundable upfront payments that we receive upon execution of the relevant agreement; milestone payments upon the achievement of certain scientific, regulatory or commercial milestones; license payments from licenses that we grant to third parties; and R&D cost reimbursements that are recognized over the period of these services and royalty payments. Our reliance on revenue from our R&D agreements has been systematically diminishing as we purposely reduce the number of R&D contracts we enter into with other companies and focus on in-house product development.

To date, we have not generated any product revenue. Our ability to generate future product revenue depends upon our R&D partners' ability to assist us in successfully developing and commercializing our products. If we fail to complete the development of our product candidates in a timely manner or fail to obtain their regulatory approval if necessary, our ability to generate future revenue would be compromised.

Research and Development Expenses

R&D expenses consist of expenses incurred while performing R&D activities to discover and develop potential product candidates. We recognize R&D expenses as they are incurred.

Our R&D expenses consist primarily of:

- personnel costs, including salaries and related benefits, for our employees engaged in scientific R&D functions;
- cost of third-party contractors, such as contract research organizations, or CROs, and third-party contractors who support our product candidate development;
- seed increases (small-scale and large-scale testing) for trait validation;
- purchases and manufacturing of biological materials, real-estate leasing costs, as well as conferences and travel costs;
- certain other expenses, such as expenses for use of laboratories and facilities for our R&D activities; and
- costs of in-licensing or acquiring technology from third parties.

Our R&D efforts are focused on our existing product candidates and in broadening our pipeline with new product candidates. We use our employee and infrastructure resources across multiple R&D programs directed toward identifying and developing product candidates. We manage certain activities such as field trials and the manufacture of product candidates through third-party vendors. Due to the number of ongoing projects and our ability to use resources across several projects, we do not record or maintain information regarding the costs incurred for our R&D programs on a program-specific basis.

Our R&D efforts are central to our business and account for a significant portion of our operating expenses. We expect that our R&D expenses will increase for the foreseeable future as we expand our R&D and process development efforts, access and develop additional technologies and hire additional personnel to support our R&D efforts. Product candidates in later stages of product development generally have higher development costs than those in earlier stages of development, primarily due to the increased size of field trials and commercial scale product testing.

R&D expenses, including licensing fees, are expensed as incurred, due to the uncertainty of future commercial value. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development of our current product candidates or any new product candidates we may identify and develop.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of employee-related expenses for executive, business development, intellectual property, finance and human resource functions. Other selling, general and administrative expenses include facility-related costs not otherwise allocated to R&D expense, professional fees for auditing, tax and legal services, expenses associated with obtaining and maintaining patents, consulting costs, management fees and costs of our information systems.

Cellectis provides us services, which include general sales and administration functions, accounting and finance functions, legal advice, human resources, and information technology. We have a management agreement in which they charge us in euros at cost plus a markup ranging from zero to 10%.

We expect that our selling, general and administrative expense will increase as we continue to operate as a public reporting company and continue to develop and commercialize our product candidates. We also expect to incur increased costs to comply with corporate governance, internal controls, investor relations, disclosure and similar requirements applicable to public reporting companies.

Critical Accounting Policies and Estimates

Some of the accounting methods and policies used in preparing our financial statements under U.S. GAAP are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances concerned. The actual value of our assets, liabilities and shareholders' equity and of our losses could differ from the value derived from these estimates if conditions changed and these changes had an impact on the assumptions adopted. We believe that the most significant management judgments and assumptions in the preparation of our financial statements and the notes thereto are named below. For further details, see our financial statements and the notes thereto, included elsewhere in this prospectus.

Going Concern

During the three months ended March 31, 2017 and the years ended December 31, 2016 and 2015, we incurred losses from operations and net cash outflows from operating activities as disclosed in the statements of operation and cash flows, respectively. At March 31, 2017, we had an accumulated deficit of $31.4 million and expect to incur losses for the foreseeable future. To date, we have been funded primarily by various cash and equity infusions by Cellectis. Although we believe that we will be able to successfully fund our operations through funding from Cellectis, the proceeds of this offering and cash on hand of $3.0 million at March 31, 2017, there can be no assurance we will be able to do so or that we will ever operate profitably. Cellectis has guaranteed funding for our operations through August 2018, which guarantee will not be released, modified or otherwise affected by the timing of, or amount raised in, this offering. Our ability to continue as a going concern prior to this offering is subject to this guaranteed funding from Cellectis and our ability to develop and successfully commercialize our product candidates.

Revenue

We enter into R&D agreements that may consist of nonrefundable up-front payments, milestone payments, royalties and R&D services. In addition, we may license our technology to third parties, which may be part of the R&D agreements.

For agreements that contain multiple elements, each element within a multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a stand-alone basis; and for an arrangement that includes a general right of return relative to the delivered products or services, delivery or performance of the undelivered product or service is considered probable and is substantially controlled by us. We consider a deliverable to have stand-

alone value if the product or service is sold separately by us or another vendor or could be resold by the customer. Further, our revenue arrangements do not include a general right of return relative to the delivered products.

Nonrefundable up-front payments are deferred and recognized as revenue over the period of the R&D agreement.

Milestone payments represent amounts received from our R&D partners, the receipt of which is dependent upon the achievement of certain scientific, regulatory or commercial milestones. We recognize milestone payments when the triggering event has occurred, there are no further contingencies or services to be provided with respect to that event, and the counterparty has no right to refund of the payment. The triggering event may be scientific results achieved by us or another party to the arrangement, regulatory approvals, or the marketing of products developed under the arrangement.

Royalty revenue arises from our contractual entitlement to receive a percentage of product sales revenues achieved by counterparties. Royalty revenue is recognized on an accrual basis in accordance with the terms of the agreement when sales can be determined reliably and there is reasonable assurance that the receivables from outstanding royalties will be collected.

License revenue from licenses that we grant to third parties are recognized ratably over the period of the license agreements.

Revenue from R&D services is recognized over the duration of the service period.

Research and Development

R&D expenses represent costs incurred for the development of various products using licensed gene editing technology. R&D expenses consist primarily of salaries and related costs of our scientists, in-licensing of technology, consumables, property and equipment depreciation, and fees paid to third-party consultants. All R&D costs are expensed as incurred.

In the normal course of business, we enter into R&D arrangements with third parties where the arrangements are contractual agreements whereby we perform R&D of certain gene traits for the outside party. We have entered into various multiyear arrangements where we perform the R&D of the gene technology and the third parties generally have primary responsibility for any commercialization of the technology. These arrangements are performed with no guarantee of either technological or commercial success.

We in-license certain technology from third-parties that is a component of ongoing research and product development. We expense up-front license fees upon contracting due to the uncertainty of future commercial value, as well as expensing any ongoing annual fees when incurred.

Forward Purchase Contracts and Derivatives

We enter into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. We account for these derivative financial instruments utilizing the authoritative guidance in ASC 815, *Derivatives and Hedging*. We recognize the realized gains and losses from derivative contracts and record them as a component of R&D expenses as a result of breeding contract activity. We also recognize the unrealized derivative asset and unrealized derivative liability in other current assets and other current liabilities, respectively.

Stock-Based Compensation

Calyxt, Inc. Equity Incentive Plan

We adopted the Calyxt, Inc. Equity Incentive Plan, or the Existing Plan, which allows for the grant of stock options to attract and retain highly qualified employees. We reserved 831,500 shares of common stock to be issued upon the exercise of stock options under the plan. Option awards were granted with an exercise price equal to the estimated fair value of the stock at the grant date.

The awards granted under the Existing Plan are only exercisable upon a triggering event or Initial Public Offering as defined by the option plan. These stock awards are accounted for as liability awards and are remeasured each reporting period. Because there were no triggering events that occurred during the three months ended March 31, 2017 and the years ended December 31, 2016 and 2015, no compensation expense was recognized in these respective periods. At March 31, 2017, we had 825,500 stock options outstanding. Of that total, 201,800 stock options were fully vested at March 31, 2017, and have total unrecognized stock-based compensation expense of $4.54 million. The stock-based compensation expense related to these awards will be recorded upon the consummation of this offering and is expected to be $, based on the assumed initial public price of $ per share, the midpoint of the range set forth on the cover of this prospectus. Each $1.00 increase or decrease in the assumed initial public offering price of $ per share would increase or decrease this additional stock compensation expenses by approximately $ million.

The fair value of each stock option is estimated using the Black-Scholes option pricing model at each measurement date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the stock price, and expected dividends. The awards currently outstanding were granted with vesting terms between two and four years. Certain awards contain a 25% acceleration vesting clause upon a triggering event or Initial Public Offering as defined in the Existing Plan.

We have not historically paid cash dividends to our stockholders, and we currently do not anticipate paying any cash dividends in the foreseeable future. As a result we assumed a dividend yield of 0%. The risk free interest rate is based upon the rates of U.S. Treasury bills with a term that approximates the expected life of the option. We use the simplified method to reasonably estimate the expected life of its option awards. Expected volatility is based upon the volatility of comparable public companies.

Parent Awards

Cellectis granted stock options to our employees. Compensation costs related to the grant of the Cellectis awards to our employees have been recognized in our statements of operations with a corresponding credit to stockholder's equity, representing Cellectis's capital contribution. The fair value of each stock option is estimated at the grant date using the Black-Scholes option pricing model. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the stock price, and expected dividends.

Cellectis granted certain of our consultants non-employee warrants to purchase Cellectis stock in exchange for services provided. We recorded the fair value of the warrants as a dividend paid to Cellectis in exchange for the warrants issued to them.

We recognized share-based compensation expense related to Cellectis's grants of stock options and warrants to our employees and consultants of $134,000, $948,000 and $692,000 for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015, respectively.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, *"Revenue from Contracts with Customers,"* which creates Accounting Standards Codification ("ASC") 606 *"Revenue from Contracts with Customers"* and supersedes the

revenue recognition requirements in ASC 605 *"Revenue Recognition."* The guidance in ASU 2014-09 and subsequently issued amendments ASU 2016-08, *"Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net),"* ASU 2016-10, *"Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing,"* and ASU 2016-12, *"Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients"* outlines a comprehensive model for all entities to use in accounting for revenue arising from contracts with customers as well as required disclosures. Entities have the option of using either a full retrospective or modified approach to adopt the new guidance. For public entities, certain not-for-profit entities, and certain employee benefit plans, the new revenue standard is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. For all other entities, the new revenue standard is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted. We are evaluating the impact of adopting this pronouncement.

In August 2014, the FASB issued ASU 2014-15, *"Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern."* The guidance in ASU 2014-15 sets forth management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern as well as required disclosures. ASU 2014-15 indicates that, when preparing financial statements for interim and annual periods, management should evaluate whether conditions or events, in the aggregate, raise substantial doubt about the entity's ability to continue as a going concern one year from the date the financial statements are issued or are available to be issued. This evaluation should include consideration of conditions and events that are either known or are reasonably knowable at the date the financial statements are issued or are available to be issued, as well as, whether it is probable that management's plans to address the substantial doubt will be implemented and, if so, whether it is probable that the plans will alleviate the substantial doubt. ASU 2014-15 is effective for annual periods ending after December 15, 2016 for both public and nonpublic entities, and interim periods and annual periods thereafter. We adopted this guidance in the current fiscal year; accordingly, this is disclosed in Note 1 to the financial statements included elsewhere in this prospectus.

In November 2015, the FASB issued ASU 2015-17, *"Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes."* The amendment simplifies the presentation of deferred income taxes. Instead of separating deferred income tax liabilities and assets into current and noncurrent amounts in a classified statement of financial position, the amendments in this update require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. For public entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For nonpublic entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. We do not expect the adoption of this standard to have a material impact on our financial statements.

In February 2016, the FASB issued ASU 2016-02, *"Leases (Topic 842)."* The guidance requires that lessees will be required to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. The amendment also will require disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative information. For public entities, not-for-profit entities, or employee benefit plans, ASU 2016-02 is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. For all other entities, ASU 2016-02 is effective for annual periods beginning after December 15, 2019, and interim periods within annual periods beginning after December 15, 2020. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Early adoption is permitted. We are evaluating the impact of adopting this pronouncement.

In March 2016, the FASB issued ASU No. 2016-09, *"Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting."* This ASU eliminates the APIC pool concept and

requires that excess tax benefits and tax deficiencies be recorded in the statement of operations when awards are settled. The ASU also addresses simplifications related to statement of cash flows classification, accounting for forfeitures, and minimum statutory tax withholding requirements. For public entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For all other entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. We are evaluating the impact of adopting this pronouncement.

Results of Operations

Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016 (unaudited)

The following table summarizes key components of our results of operations for the periods indicated:

	Three Months Ended March 31,		% change
	2017	2016	March 31, 2017 vs 2016
	($ in thousands)		
Revenue	55	106	(48)%
Operating expenses:			
Cost of revenue	—	100	(100)%
Research and development	1,266	1,370	(8)%
Sales, general, and administrative	1,578	1,197	32%
Total operating expenses	2,844	2,667	7%
Loss from operations	(2,789)	(2,561)	9%
Interest expense	(14)	(4)	250%
Foreign currency transaction (losses)	(29)	(4)	625%
Loss before income taxes	(2,832)	(2,569)	10%
Income tax expense	—	—	—
Net loss	(2,832)	(2,569)	10%

Revenue

Revenue decreased $51,000, or (48)%, from $106,000 for the three months ended March 31, 2016 to $55,000 for the three months ended March 31, 2017. The decrease was primarily attributable to a strategic decision to focus on in-house development of product candidates and to reduce the amount of R&D we were performing for third parties.

Cost of Revenue

Cost of revenue decreased $100,000, or (100)%, from $100,000 for the three months ended March 31, 2016 to $0 for the three months ended March 31, 2017. The decrease was a result of not having contractual obligations to fulfill in 2017 for our R&D contracts.

Research and development expenses

R&D expenses decreased $104,000, or (8)%, from $1.37 million for the three months ended March 31, 2016 to $1.27 million for the three months ended March 31, 2017. The decrease was primarily attributable to reduced license expenses partially offset by an increase in sub-contracted R&D such as third-party germplasm breeding, third-party germplasm trials and meal and oil product testing.

Selling, general, and administrative expenses

Selling, general, and administrative expenses increased $381,000, or 32%, from $1.20 million for the three months ended March 31, 2016 to $1.58 million for the three months ended March 31, 2017. The increase was primarily attributable to increased personnel expenses, depreciation, facilities costs and recruiting costs and partially offset by a reduction in legal and professional fees.

Interest expense

Interest expense increased $10,000, or 250%, from $4,000 for the three months ended March 31, 2016 to $14,000 for the three months ended March 31, 2017. The increase was primarily attributable to an increase in our accounts payable balance owed to Cellectis.

Foreign currency transaction loss

Foreign currency transaction loss increased $25,000, or 625%, from $4,000 for the three months ended March 31, 2016 to $29,000 for the three months ended March 31, 2017. The increase was primarily attributable to changes in accounts payable balances and foreign exchange rates.

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

The following table summarizes key components of our results of operations for the periods indicated:

	Year Ended December 31,		% change
	2016	2015	2016 vs 2015
	($ in thousands)		
Revenue	399	1,272	(68.6)%
Operating expenses:			
Cost of revenue	200	751	(73.4)%
Research and development	5,638	2,766	103.8%
Sales, general, and administrative	6,670	3,569	86.9%
Total operating expenses	12,508	7,086	76.5%
Loss from operations	(12,109)	(5,814)	108.3%
Interest expense	(5)	(261)	(98.1)%
Foreign currency transaction gains	28	186	(84.9)%
Loss before income taxes	(12,086)	(5,889)	105.2%
Income tax expense	—	—	—
Net loss	(12,086)	(5,889)	105.2%

Revenue

Revenue decreased $873,000, or (68.6)%, from $1.3 million for the year ended December 31, 2015 to $0.4 million for the year ended December 31, 2016. The decrease was primarily attributable to a strategic decision to focus on in-house development of product candidates and to reduce the amount of R&D we were performing for third parties.

Cost of Revenue

Cost of revenue decreased $551,000, or (73.4)%, from $751,000 for the year ended December 31, 2015 to $200,000 for the year ended December 31, 2016. The decrease was a result of lower R&D expense associated with fulfilling the contractual obligations of our R&D contracts.

Research and development expenses

R&D expenses increased by $2.9 million, or 103.8%, from $2.8 million for the year ended December 31, 2015 to $5.6 million for the year ended December 31, 2016. The increase was primarily attributable to a $1.9 million increase in purchased and external expenses due to increased costs for outsourcing of breeding and product development. We also experienced a $1.0 million increase in personnel expense due to an increase in headcount to support product development activities.

Selling, general, and administrative expenses

Selling, general, and administrative expenses increased $3.1 million, or 86.9%, from $3.6 million for the year ended December 31, 2015 to $6.7 million for the year ended December 31, 2016, primarily due to a $2.7 million increase in purchase and external expenses resulting from increased support from Cellectis and increased costs of professional services firms, in each case to support our growth, and an increase of $400,000 in personnel expenses as we expanded our executive management team.

Interest expense

Interest expense decreased $256,000, or (98.1)%, from $261,000 for the year ended December 31, 2015 to $5,000 for the year ended December 31, 2016, due to a reduction in our accounts payable balance owed to Cellectis throughout the year.

Foreign currency transaction gains

Foreign currency transaction gains decreased $158,000, or (84.9)%, from $186,000 for the year ended December 31, 2015 to $28,000 for the year ended December 31, 2016, due to the reduction in our accounts payable balance owed to Cellectis throughout the year.

Liquidity and Capital Resources

As of March 31, 2017, we had cash and cash equivalents of $3.0 million.

Sources of Liquidity

We have funded our operations primarily through cash infusions provided by Cellectis.

During the three months ended March 31, 2017 and the years ended December 31, 2016 and 2015, we incurred losses from operations of $2.8 million, $12.1 million and $5.9 million, respectively, and net cash used in operating activities of $1.7 million, $9.2 million and $6.7 million, respectively. At March 31, 2017, we had an accumulated deficit of $31.4 million and expect to incur losses for the foreseeable future. Although we believe that we will be able to successfully fund our operations with funding from Cellectis, the proceeds of this offering and our cash and cash equivalents at March 31, 2017, there can be no assurance we will be able to do so or that we will ever operate profitably. Cellectis has guaranteed funding for our operations through August 2018, which guarantee will not be released, modified or otherwise affected by the timing of, or amount raised in, this offering. Our ability to continue as a going concern prior to this offering is subject to this guaranteed funding from Cellectis and our ability to develop and successfully commercialize our product candidates.

Historical Changes in Cash Flows

Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016 (unaudited)

The table below summarizes our sources and uses of cash for the three months ended March 31, 2017 and 2016:

	Three Months Ended March 31,	
	2017	2016
	(in thousands)	
Net cash used in operating activities	$(1,707)	$(1,627)
Net cash used in investing activities	(312)	(6,780)
Net cash provided by financing activities	—	—
Total	$(2,019)	$(8,407)

Net cash used in operating activities was $1.7 million and $1.6 million in the three months ended March 31, 2017 and 2016, respectively. The net cash used in each of these periods primarily reflects the net loss for those periods, offset in part by depreciation, stock-based compensation and the effects of changes in operating assets and liabilities.

Net cash used in investing activities was $0.3 million and $6.8 million in the three months ended March 31, 2017 and 2016, respectively. The majority of cash used in investing activities in the three months ended March 31, 2017 was related to site improvements and architect fees for the design of our headquarters and greenhouse facility in Roseville, MN, and equipment purchases. The majority of the cash used in investing in the three months ended March 31, 2016 was related to a land purchase in Roseville, MN for our future greenhouse and headquarters.

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

The table below summarizes our sources and uses of cash for the years ended December 31, 2016 and 2015:

	Year Ended December 31,	
	2016	2015
	($ in thousands)	
Net cash used in operating activities	$ (9,237)	$ (6,691)
Net cash used in investing activities	(10,424)	(665)
Net cash provided by financing activities	—	31,740
Total	$(19,661)	$24,384

Net cash used in operating activities was $9.2 million and $6.7 million in the years ended December 31, 2016 and 2015, respectively. The net cash used in each of these periods primarily reflects the net loss for those periods, offset in part by depreciation, stock-based compensation and the effects of changes in operating assets and liabilities.

Net cash used in investing activities was $10.4 million and $665,000 in the years ended December 31, 2016 and 2015, respectively. The majority of cash used in investing activities in 2016 was related to the purchase of the land for our headquarters and the construction of our R&D greenhouses. The majority of the cash used in investing in 2015 was for office furniture and equipment associated with our current R&D laboratories and office space.

Net cash provided by financing activities was zero and $31.7 million in the years ended December 31, 2016 and 2015, respectively. Net cash provided by financing activities in 2015 was attributable to a capital contribution from Cellectis.

Contractual Obligations, Commitments and Contingencies

The following table discloses aggregate information about material contractual obligations and periods in which payments were due as of December 31, 2016. Future events could cause actual payments to differ from these estimates.

As of December 31, 2016	Total	Less than 1 year	1-3 years	More than 3 years
		(in thousands)		
Operating lease agreements	$121	121	—	—
Capital lease obligations	—	—	—	—
Forward purchase contracts	$383	383	—	—
Total contractual obligations	$504	504	—	—

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. Purchase contracts consist of purchase commitments with growers to purchase seed and grain at a future date.

The table does not include obligations under agreements that we can cancel without a significant penalty. We have R&D agreements whereby we are obligated to pay royalties and other payments based on future events that are uncertain and therefore, they are not included in the table above.

The above table also does not include the amount of funds necessary to complete our planned facility expansion, described under "Business—Facilities," as we intend to finance the building for the planned facility expansion in whole or in part through a sale leaseback transaction. On June 20, 2017, we signed an agreement with a third party buyer for the sale of the land and warehouse facility. The completion of the sale is conditioned on us and the buyer entering into a new facility construction agreement and a lease in respect of the property in the forms contemplated by the sale agreement. We expect to close on the proposed transaction and construction to begin on the new facilities in the second half of 2017.

Operating capital requirements

To date, we have not generated any revenues from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one of our current or future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of our product candidates and begin to commercialize our product candidates that complete the development process. We are subject to all risks incident in the development of new agricultural products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. We also anticipate substantial expenses related to audit, legal, regulatory and tax-related services associated with our public company obligations in the United States and our compliance with applicable U.S. exchange listing and SEC requirements. We anticipate that we will need additional funding in connection with our continuing operations, including for the further development of our existing product candidates and to pursue other development activities related to additional product candidates.

We believe our cash and cash equivalents on hand and our cash flow from operations, after giving effect to our receipt of the net proceeds of this offering, will be sufficient to fund our operations through . However, we may require additional capital for the further development of our existing product candidates and may also need to raise additional funds sooner to pursue other development activities related to additional product candidates.

Until we can generate a sufficient amount of revenue from our products, if ever, we expect to finance a portion of future cash needs through public or private equity or debt financings. Additional capital may not be

available on reasonable terms, if at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. If we raise additional funds through the issuance of additional debt or equity securities, it could result in dilution to our existing stockholders, increased fixed payment obligations and these securities may have rights senior to those of our ordinary shares. If we incur indebtedness, we could become subject to covenants that would restrict our operations and potentially impair our competitiveness, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Any of these events could significantly harm our business, financial condition and prospects.

Our assessment of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to:

- the initiation, progress, timing, costs and results of field trials for our product candidates;
- the outcome, timing and cost of regulatory approvals by U.S. and non-U.S. regulatory authorities, including the possibility that regulatory authorities will require that we perform studies;
- the ability of our product candidates to progress through late stage development successfully, including through field trials;
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- our need to expand our research and development activities;
- our need and ability to hire additional personnel;
- our need to implement additional infrastructure and internal systems;
- the effect of competing technological and market developments; and
- the cost of establishing sales, marketing and distribution capabilities for any products we commercialize.

If we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, financial condition and results of operations could be materially adversely affected.

Off Balance Sheet Obligations

We enter into seed and grain production agreements with settlement value based on commodity market future pricing. Otherwise, we do not have any off-balance sheet arrangements as defined under SEC rules.

Internal Control over Financial Reporting

In preparing our financial statements for the year ended December 31, 2016, a material weakness in our internal control over financial reporting was identified, as defined by the SEC guidelines for public companies. The material weakness relates to our lack of a control in place to review forward purchase derivative contracts entered into by us. The derivative contracts were to produce high oleic soybean seed and grain and the purchase price was indexed to the soybean commodity price.

We implemented improvements and remedial measures in response to these assessments, including:

- standardizing our production contracts,
- developing a database to track production contracts, and
- implementing written policies for the accounting treatment of the production contracts.

Although our management is implementing these measures, they may not fully address this material weakness in our internal control over financial reporting, and we, therefore, may not be able to conclude that it has been fully remedied.

Quantitative and Qualitative Disclosure About Market Risk

We are exposed to a limited amount of foreign currency exchange risk, principally in euros, primarily as a result of certain services and infrastructure costs charged to us by Cellectis.

JOBS Act

We are an emerging growth company under the JOBS Act. The JOBS Act provides that an emerging growth company can delay adopting new or revised accounting standards until such time as those standards apply to private companies.

Subject to certain conditions set forth in the JOBS Act, if, as an "emerging growth company", we choose to rely on such exemptions we may not be required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the CEO's compensation to median employee compensation. These exemptions will apply for a period of five years following the completion of our initial public offering or until we are no longer an "emerging growth company," whichever is earlier.

BUSINESS

Our mission is to make the food you love a healthier choice.

Overview

We are a consumer-centric, food- and agriculture-focused company. By combining our leading gene-editing technology and technical expertise with our innovative commercial strategy, we are pioneering a paradigm shift to deliver healthier food ingredients for consumers and agriculturally advantageous traits for farmers. We are developing and creating specialty food ingredients, such as healthier oils and high fiber wheat, and food crops with desirable traits, such as herbicide tolerance. While the traits that enable these characteristics may occur naturally and randomly through evolution—or under a controlled environment through traditional agricultural technologies—those processes are imprecise and take many years, if not decades. Our technology enables us to precisely and specifically edit a plant genome to elicit the desired traits and characteristics, resulting in a final product that has no foreign DNA. We believe the precision, specificity, cost effectiveness and development speed of our gene-editing technologies will enable us to provide meaningful disruption to the food and agriculture industries.

Our first product candidate, which we expect to be commercialized by the end of 2018, is a high oleic soybean designed to produce a healthier oil that has increased heat stability with zero trans fats. Among our other product candidates are high fiber wheat and herbicide tolerant wheat. We are developing a high fiber wheat to create flour with up to three times more dietary fiber than standard white flour while maintaining the same flavor and convenience of use. Our high fiber wheat may provide benefits associated with a high fiber diet, including reduced risk of coronary heart disease. Our herbicide tolerant wheat is designed to provide farmers with better weed control options to increase yields. We believe each of these three product candidates addresses a multi-billion dollar market opportunity.

Food-related issues including obesity and diabetes are some of the most prevalent health issues today and continue to grow rapidly. In the last 30 years, obesity rates have doubled in adults, tripled in children and quadrupled in adolescents in the United States, according to data from the Centers for Disease Control and Prevention and other industry sources. The medical care costs—including doctors' appointments, hospital stays, prescription drugs and home health care—for the obese population in the United States was approximately $315 billion in 2010. This figure represents approximately 20% of all U.S. healthcare costs and a 48% inflation-adjusted increase from 2005. According to data provided by the National Center for Health Statistics, approximately 43% of deaths in 2012 were caused by diseases linked to poor diet, including heart diseases and diabetes. Food allergies, which can be life threatening, have increased by approximately 50% from 1997 to 2011 in children, and the economic costs of children's food allergies are approximately $25 billion per year.

As awareness of these diet-related health issues grows, consumers have emphasized a healthier lifestyle and a desire for nutritionally rich foods that are more nutritious, better tasting, less processed and more convenient. This trend is leading to an increase in the demand for higher valued, premium segments of the food industry, such as higher fiber, reduced gluten and reduced fat products. As a result of these trends, food companies are looking for specialty ingredients and solutions that can help them satisfy their customers' evolving needs and drive growth in market share and new value added products.

While food companies are focused on these trends, we believe the legacy agriculture companies have overlooked society's food-related issues and are not properly equipped with a business model to address health-driven consumer food trends. These legacy agriculture companies have historically focused on increasing yields and volume—to address population growth—while increasing profit margins and market share by reducing input costs. They have been burdened by high research and development costs and a high degree of commoditization in their deep, farmer-focused supply chains. Industry sources indicate it can take approximately 13 years or more and require an investment of over $130 million to generate a desired trait through traditional trait-development

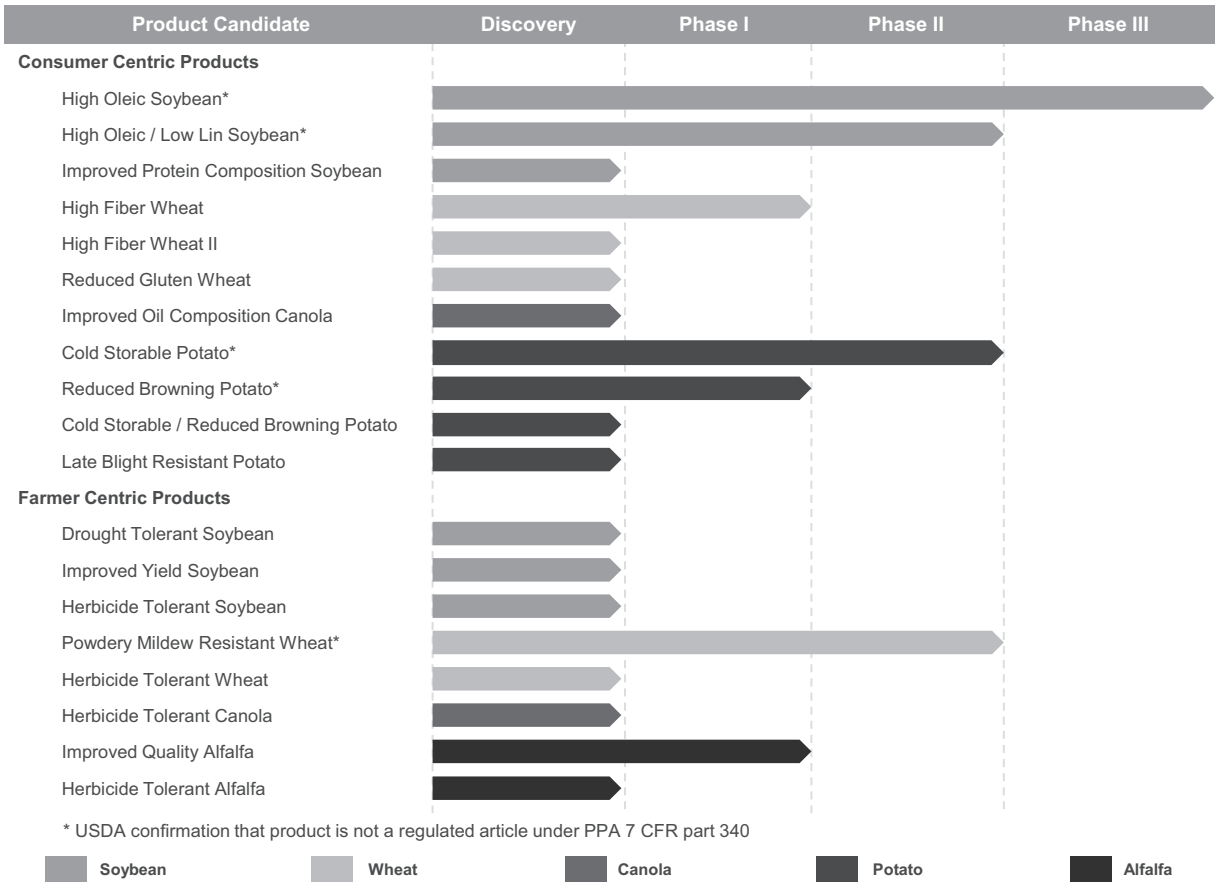
methods. In contrast, the food industry has seen new entrants growing aggressively and taking market share through premium segment product offerings from existing players, who are facing stagnating growth and divestitures in their core businesses. These factors have resulted in a disconnect between the legacy agriculture industry players' current products and the consumer's food-related health demands.

We believe that our proprietary gene-editing technologies and innovative commercial strategy will allow us to bridge the divide between evolving consumer preferences and the historical approach by the large legacy companies in the agriculture supply chain.

Using our proprietary technologies and expertise, we edit the genome of food crops by using our "molecular scissors" to precisely cut DNA in a single plant cell, use the plant's natural repair machinery to make our desired edit and finally regenerate the single cell into a full plant. We believe we are able to develop targeted traits—some of which would be nearly impossible to develop using traditional trait-development methods—quicker, more efficiently and more cost effectively than traditional trait-development methods. Our technology positions us to assess the probability of success early on in the research and development process, potentially eliminating expensive late stage failures and allowing for a larger breadth of products to be developed. We have a strong track record with respect to our technologies and expertise as we have successfully edited more than 20 unique genes in 6 plant species since our inception in 2010.

Our commercial strategy is centered on two core elements: developing healthier specialty food ingredients to enable the food industry to address evolving consumer trends and developing agriculturally advantageous traits, such as herbicide tolerance, for farmers. This will involve developing and leveraging our supply chain to effectively bring our consumer- and farmer-centric products to the marketplace. For our consumer-centric products, we intend to repurpose and leverage existing supply chain capacity by contracting, tolling or partnering with players in the existing supply chain, such as seed production companies, farmers, crushers, refiners or millers, which we expect will allow us to apply our resources to maximizing innovation and product development while minimizing our capital expenditures and overhead. For our farmer-centric products, we intend to broadly out-license our products to the seed industry.

We believe that we are able to identify a consumer or farmer need and develop a product from "concept to fork" or "concept to field" in approximately three to six years by utilizing our proprietary technologies and expertise and leveraging our innovative supply chain. We have an extensive product pipeline, as set forth in the table below, that is intended to address the potential market opportunities we have identified to date.



We categorize our stages of pre-commercial development from Phase I to Phase III. Prior to entering Phase I, in Discovery, we identify genes of interest. In Phase I, we edit the identified genes of interest, target edits we desire to make, and produce an initial seed that contains the desired edit. Phase II is trait validation, where we perform small-scale and large-scale tests to confirm phenotype and ingredient functionality. In this phase we also perform replicated, multi-location field testing, after confirming that the product is not a regulated article by the USDA. In Phase III, we develop the first commercial-scale pilot production, begin to build out the supply chain and inventory and perform customer testing prior to commercialization.

While we intend to initially deploy our commercial strategy in North America with respect to our current product candidates, we also see many avenues of potential future growth beyond North America. In particular, over time we may explore opportunities to apply our commercial strategy elsewhere around the world and leverage our North American products and footprint to target geographies where there are unmet consumer or farmer needs. We also intend to explore the ability to add value through our existing product candidates once they are commercialized by combining traits in the same crop, which may allow us to create products with additional benefits without adding significant cost. In the near term, we are planning an expansion of our campus to enhance our gene-editing automation processes and develop a high-throughput discovery platform to identify new growth opportunities. We believe this high-throughput platform will allow us to discover more products, make more complex edits and enable us to drive product innovation at a significantly faster rate. We believe our expanded campus will be the only "concept to fork" facility of its kind, containing gene-editing labs,

greenhouses, fields and a commercial kitchen to develop, test and showcase products. We believe all of these steps will enable us to remain at the forefront of food and agriculture innovation.

As of May 31, 2017, we employed 27 employees, of whom approximately 74% are involved in research and development and 8 hold a Ph.D. degree. Our multidisciplinary team includes experts in biology, chemistry, plant genetics, agronomics and other related fields. Several members of our executive team previously worked at industry-leading technology and agricultural companies, such as Monsanto Company, Syngenta AG and Cargill, Inc. As pioneers in the field of gene editing for plant sciences, members of our management team have invented TALEN, one of the premier gene-editing tools.

Calyxt was established in 2010 as a wholly owned subsidiary of Cellectis, a leading gene-editing company with a focus on the development of immuno-oncology therapeutics.

Our Competitive Strengths

We believe that we are strategically well-positioned to develop high-value and innovative products. Our competitive strengths include:

- ***Proprietary technologies creating a powerful platform to design and develop new products.*** Since our founding, we have been at the forefront of the research, development and application of plant-based gene-editing technologies. Our capabilities enable us to precisely edit specific genes from a target food crop to improve the nutritional composition or provide agricultural benefits to farmers. Three examples of our technological innovation include:
  - *High Oleic Soybean*: We deactivated key genes associated with fatty acid biosynthesis to achieve a healthier soybean oil.
  - *High Fiber Wheat*: We simultaneously deactivated all six copies of a gene within a single wheat plant with the purpose of increasing fiber content.
  - *Herbicide Tolerance*: We believe we can develop crop varieties that will be tolerant to certain herbicides by identifying and making a subtle base substitution that we believe will be sufficient to confer herbicide tolerance. We expect to be able to replicate this process in various crops.
- ***Innovative portfolio of product candidates with an accelerated path to market.*** We are currently developing a diversified portfolio spanning across five core crops—soybean, wheat, canola, potato and alfalfa—and a multitude of product candidates. These include innovative consumer-centric product candidates like our high-fiber wheat that is designed to produce flour with up to three times the fiber content of standard white flour, as well as innovative, farmer-centric solutions like herbicide tolerant wheat and products with valuable supply chain benefits like cold storable potatoes that are designed to store longer and produce much less acrylamide in the frying process, a human health concern that has been linked to cancer. We believe our portfolio of product candidates, coupled with our ability to quickly develop future product candidates, affords us the opportunity to disrupt the food industry.
- ***Significant barriers to entry through our first-mover advantage and strong intellectual property.*** We command a first-mover advantage in the editing of genes in plants. As a pioneer in gene-editing technologies, we are building on more than two decades of hands-on experience and process optimization which we believe cannot be easily replicated by competitors. Our proprietary technologies and product candidates benefit from the licensing of a portfolio of 81 issued patents and 170 pending patent applications.
- ***Faster, cheaper and innovative product development process focused on end user needs.*** Genetic modification has traditionally taken an average of 13 years and over $130 million to develop a commercially viable product. By contrast, a key advantage of our gene-editing technology platform is that we believe we can develop products from concept to commercialization in three to six years and at a fraction of the cost. For example, we created our high oleic soybean product candidate by generating

fewer than 20 independent plants that were edited with TALEN. This contrasts with traditional genetic modification methods which we believe require thousands of plants to achieve the same result. We developed our high oleic soybean from concept to field in under four years and expect to commercialize this product by the end of 2018. We believe we will continue to be able to react quickly to consumer and farmer needs that we identify.

- ***Supply chain flexibility enabling us to capture significant downstream value.*** We plan to develop consumer traits and leverage existing supply chain capacity and our existing relationships to provide differentiated specialty ingredients to food companies. By doing so, we believe that we will be able to capture significant value as our innovative products move from "field to fork." Our supply chain is flexible, enabling us to layer on new products to our existing ones and capture additional value. By stacking additional characteristics on the same seeds, we believe we can create additional value without necessarily increasing acreage, volumes of grain produced or the amount of oil commercialized, but rather by increasing the value of our products on a per unit basis. For example, we believe this value creation could be implemented in our high oleic soybean product candidate if we were to stack a trait that improves the protein composition of the meal, a trait that further improves the soybean oil fatty acid profile or a farmer-focused trait such as herbicide tolerance.
- ***A world-class management team with deep industry expertise.*** Our executive team has more than 120 years of collective experience in the agriculture and gene-editing fields. This includes over 95 years of collective experience in agricultural supply chain, product development and commercial operations, during which several members of our executive team have managed billions of dollars of revenue and cost at large multinational corporations. Several members of our executive team previously worked at well-known technology and agri-business companies, such as Monsanto, Syngenta, Stine Seed Company and Cargill. As pioneers in plant-based gene editing, members of our management team invented TALEN, one of the premier gene-editing tools. Dr. Daniel Voytas, our Chief Science Officer, is a Professor of Genetics, Cell Biology and Development at the University of Minnesota and Director of the Beckman Center for Genome Engineering. He is best known for his pioneering work to develop methods for precisely editing DNA sequences in living plant cells.

Our Growth Strategy

We believe that there are significant opportunities to grow our business both domestically and internationally by executing on the following key elements of our strategy:

- ***Commercialize our current product candidates in North America.*** Our near-term focus is to launch our product candidates in North America where we believe the markets for healthier specialty food ingredients for consumers and unique, plant-trait solutions for farmers are significant and the existing supply chain enables us to accelerate growth. The regulatory environment in North America is well established, which we believe provides a stable, predictable and otherwise attractive backdrop as we focus our near term efforts in these markets.
- ***Identify new opportunities through our consumer- and farmer-centric approaches.*** We intend to continue to elicit desired traits and to include additional crops in our product pipeline. We continuously evaluate the evolving needs of the consumer and the farmer and seek to apply our technologies and expertise to provide better solutions to meet their demands. We also expect to be able create additional opportunities from our existing product candidates once they are commercialized through combining traits, which may allow us to create products with additional benefits without adding significant cost.
- ***Accelerate our R&D productivity with enhanced automation and high throughput capabilities.*** We consistently strive to optimize our product development processes. Through our planned facility expansion, we are combining gene-editing automation with food science capabilities to enable us to rapidly identify new growth opportunities. We believe that this automation and our high-throughput platform will allow for greater standardization in our processes. We expect this standardization to

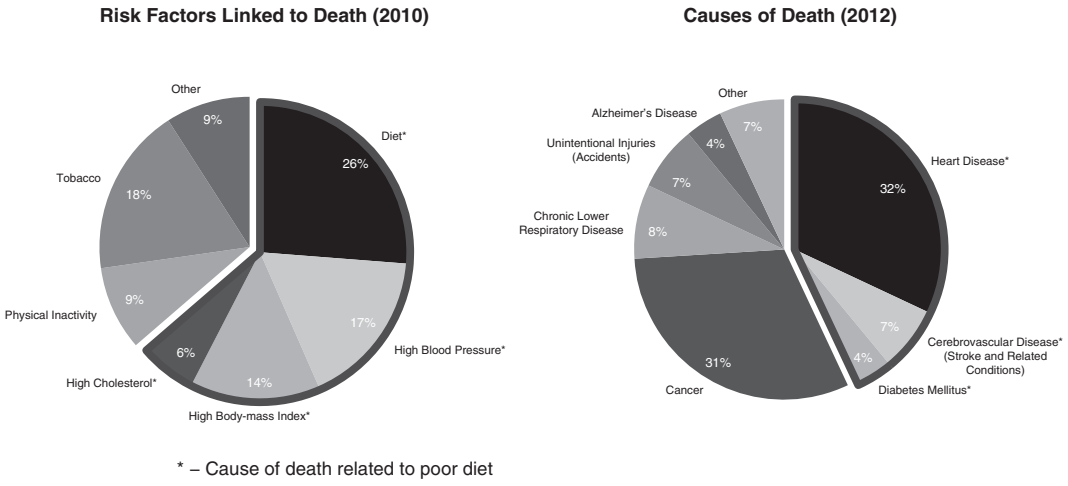
increase our research and development productivity significantly and add a greater number of projects to our product pipeline.

- ***Expand through R&D agreements and acquisitions.*** We plan to selectively partner, in-license or acquire key enabling technologies and businesses across the value chain. This may include acquiring complementary technologies and intellectual property or fully developed products. In each case, we plan to look for R&D partners and acquisitions that give us a significant presence in the health focused specialty food ingredient markets where we will be able to accelerate the launch and commercialization of our innovative products.
- ***Leverage our North American market presence to globalize our products.*** While we believe the North American market opportunity remains attractive and extensive, in the future we plan to explore the possibility of expanding our business globally. This may involve exporting our products to international markets or establishing new supply chains in other attractive markets.

The Evolution of the Food and Agriculture Industries

The Food Industry is Struggling to Find Solutions to Address Many of Society's Food-Related Issues

The United States is experiencing a dramatic increase in the prevalence of food-related health issues. In addition to being an underlying cause of some of the most prevalent diseases in western society, an unhealthy diet is a contributor to three of the ten leading causes of death: heart disease, diabetes and stroke. As shown in the chart below, according to data provided by the National Center for Health Statistics, approximately 43% of deaths in 2012 were caused by these diseases. Furthermore, a 2010 study suggested that poor diet and diet-related risk factors, such as high blood pressure and high cholesterol, were linked to 63% of deaths.

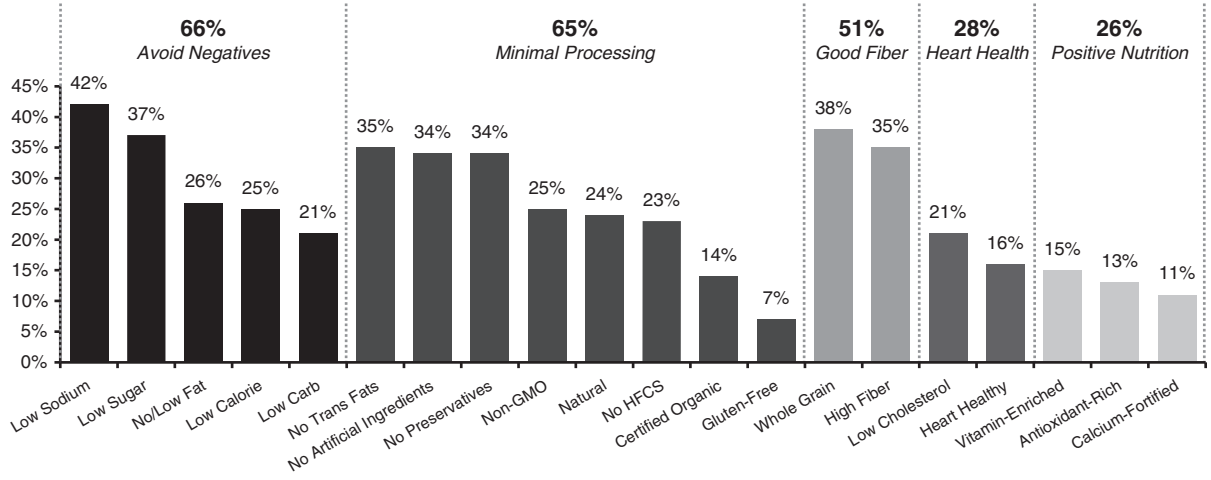


* – Cause of death related to poor diet

As a result of the increase in food-related health issues, consumers have developed an increasingly heightened awareness of the role that dietary habits play in long-term wellness. This trend is especially prevalent in wealthier, developed nations where consumers have greater access to information that is helping to shift their consumption habits. According to a 2016 survey of U.S. grocery shoppers, 74% of the surveyed shoppers said that the food they eat at home could be healthier. Consumers have also demonstrated a willingness to spend more than in the past on specialty or high quality foods. These high-end items now account for approximately 25% of the average American's food budget.

The chart below represents the responses of over 1,000 respondents when asked what packaging health claims they looked for when purchasing a food product:

Product Claims Shoppers Seek When Purchasing a Food Product



Regulatory agencies are playing a larger role in monitoring which food ingredients reach consumers. Beginning in 2018, the FDA's will ban partially hydrogenated oils in foods, the primary artificial source of trans fat in processed foods. A recent study showed that New York State counties that implemented a ban on trans fats experienced an approximately 6% decline in hospitalizations for heart attacks and strokes as compared to New York State counties that did not. Additionally, following the passage of the Healthy, Hunger-Free Kids Act of 2010, the USDA gained significant oversight of the federal school lunch program and holds the authority to set new, healthier standards for food sold in U.S. schools. These healthier food mandates include minimum serving requirements for fiber, fruits and vegetables and maximum allowable content standards for fat, sugar and sodium.

With today's consumers increasingly conscious and interested in the food they eat, buying habits have been creating dynamic shifts in the grocery aisle. The market has shifted from a focus on diet foods to a focus on "real" food as a way to maintain health. Yet it is sometimes difficult for customers to find healthy alternatives without compromising taste or convenience. Consumers now view food—particularly food with health benefits—as the key to good health. More foods are being launched that go beyond basic nutrition to support health, digestive health, and higher energy levels. Locally sourced foods with a direct-to-consumer model are becoming more attractive, the demand for transparency in food sourcing, production and labeling is gaining traction, and consumers are discovering novel, foreign ingredients. We believe that as consumers continue the shift from a traditional production-driven food culture to a modern demand-driven food culture, they will continue to press companies and retailers for more information and accountability about how ingredients are sourced and processed, how "real" their food products are, and how responsive they are to consumers' desire for choice and customization.

As consumers seek healthier and more nutritious food options, the health and wellness food sector has benefitted. Healthier food options are capturing an increasing share of the consumer wallet. Although this segment currently represents only 6% of total sales for conventional multi-outlet channels (defined as retail outlets spanning grocery, drug and convenience, such as Target, Kroger, Walgreens, Wegmans and Walmart), natural products drove 45% of the dollar growth for these multi-outlet channels. As conventional multi-outlet channels and food processors try to capitalize on the fact that a significant percentage of North American consumers are willing to pay a premium for healthy and nutritious foods, their ability to quickly adapt to changing consumer demands is hampered by commoditized business models and supply chains.

The impact of changing consumer preferences is increasingly evident as market share and sales shifts towards smaller consumer packaged goods companies. Industry sources estimate that consumer packaged goods

companies with annual revenue greater than $5 billion have lost approximately $18 billion in sales and approximately 3% in market share to smaller companies in the last five years. These sources also note that the sales growth in these larger companies has grown at 1.3% as compared to sales growth of upwards of 4% or 5% for smaller companies. These changes in consumer preferences benefit small and medium-sized companies with above-average growth and slowing the growth of the largest food and beverages companies.

As a result of the consumer's rising demand for healthier food and the inability of traditional outlets and food processors to satisfy this demand, we believe that an opportunity exists for us to provide our innovative solutions for our customers and food industry.

The Agricultural Industry has Overlooked Society's Food-Related Issues

The agriculture industry has historically been burdened by high infrastructure costs in a market that has focused on price and market share resulting in commoditization. A highly segmented supply chain has also resulted in the legacy agriculture companies focusing on increasing margins and market share through increased yields and consolidation, and on passing along maximum value to the growers, thereby keeping pace with the growing demand for food globally. Over the past few decades the agriculture industry has seen a consolidation of over 200 seed companies, leaving the industry with only a handful of large, dominant players such as Syngenta AG, Bayer AG, Monsanto Company, BASF SE, Dow Chemical Co. and Dupont Pioneer, which together accounted for approximately 76% of the U.S. seed sales for soybeans and 82% for corn in 2014–2015. In addition, development at these legacy agriculture companies has been significantly limited by time and cost constraints. According to industry estimates, genetic modification, a primary method of these companies to improve crops, requires an average of approximately 13 years and more than $130 million to progress a new crop from the discovery stage through commercialization. These innovations have primarily achieved increases in yields and food production volumes through the creation of herbicide tolerance and insect resistance, using genetically modified traits that in many cases contain bacterial DNA. We believe these industry dynamics explain the inability for the agricultural industry to evolve to a consumer- and farmer-focused approach, and thereby effectively meet their demands as societal trends shift and provide new market opportunities.

Traditional Trait-Development Techniques

In addition to these market dynamics, innovation within the industry has been slow given the limitations of traditional trait-development techniques. While plant breeders have been crossbreeding varieties and selecting advantageous traits for thousands of years, the modern agriculture industry has relied primarily on two methods of crop improvement:

- ***Genetic Modification***—this involves the use of genetic technologies to randomly insert foreign genetic material, such as bacterial derived genes, into a plant's genome for the development of seeds in which the inserted genes express specific traits. Historically, genetic modification techniques have been focused on mitigating negative yield impacts related to biotic causes, such as insect protection and herbicide tolerance traits.

  The development process for genetically modified seeds involves:

  - identifying genes, many times outside the plant kingdom, that may include desirable traits;
  - randomly inserting the extracted genetic material into seeds, and delivering transgenic products that contain foreign DNA;
  - spending years testing, growing and confirming these random genetic modifications did not cause unintended consequences;
  - working with global regulatory bodies to approve the above; and
  - working with an agricultural supply chain to ensure broad adoption of the new trait in varieties across multiple countries, justifying the high development costs this process requires.

The use of genetically modified crops has continued to face challenges due to various factors, including:

- high development costs and a lengthy development process;
- a significant regulatory burden associated with obtaining marketing approval; and
- prevalence of durability issues such as weed resistance to chemistries used in herbicide tolerant crops and the evolution of insect resistance to toxins produced by genetically engineered crops with insecticidal traits.

- ***Chemical Mutagenesis***—this process involves the induction of mutagenesis in plants using agents and chemicals. Chemical mutagenesis creates non-specific mutations throughout the whole plant genome. As a result, mutagenesis techniques have proven to be slow, random and have not yielded disruptive agricultural improvements. The major limitations of mutagenesis include:
  - off-target effects that can induce unwanted mutations;
  - lengthy development process of up to ten years or longer necessary to identify the desired mutations, remove the unwanted mutations and breed the new mutations into commercial seeds; and
  - applicability is limited to certain types of mutations that do not require precision or complexity.

While these primary methods for addressing the agricultural challenges will continue to be applied, we believe these approaches can no longer effectively meet societal demands for innovative solutions demanded by the consumer and the farmer.

Calyxt's Solution: Bridging the Divide Between Evolving Consumer Preferences and the Agriculture Industry

We believe that our proprietary technologies and commercial strategy will allow us to bridge the divide between evolving consumer preferences and the historical approach by the legacy companies in the food and agriculture industries.

Our Technologies

Using our proprietary technologies and expertise, we edit the genome of food crops by using our "molecular scissors" to precisely cut DNA in a single plant cell, use the plant's natural repair machinery to make our desired edit and finally regenerate the single cell into a full plant. We are able to develop targeted traits—some of which would be nearly impossible to develop using traditional trait-development methods—quicker, more efficiently and more cost effectively than would be possible using traditional trait-development methods. Our technology also puts us in a position to assess the probability of success early on in the research and development process, potentially eliminating excess cost associated with traditional trait-development methods and further reducing the risk of our product development process.

We believe we are disrupting the agriculture and food industry by utilizing our proprietary gene-editing expertise to prototype and develop traits at a fraction of the cost while simultaneously reducing the time to market. We believe our trait development process makes it possible to commercialize a product in three to six years, which would make it possible to effectively respond to evolving consumer preferences and farmer needs.

We are poised to become a leader in agriculture innovation through the use of gene editing. Our scientists have developed certain critical elements enabling us to make precise edits to DNA in living plant cells, including the use of reagents referred to as sequence-specific nucleases and the delivery methods of those reagents to plant cells. Our proprietary gene-editing platform relies on our capacity to custom design DNA-sequence specific

cutting enzymes, or nucleases, for any chosen gene we need to edit and our capability to introduce such custom-made nucleases into the living plant cells we want to edit. Our platform relies on precisely chosen protein families that can specifically recognize unique DNA sequences and can be tailored to target such sequences in any chosen gene or genetic region.

Our proprietary technologies and intellectual property portfolio enable us to edit the plant genome by knocking out genes or creating precise gene edits. We take advantage of our knowledge about plant gene function to create novel genetic variation that results in traits of value. In all applications, a feature that distinguishes our products from those created through genetic modification is that our crop varieties lack foreign DNA. As such, for each of the five product candidates we have submitted to date, the USDA has confirmed that the products are not regulated articles, which represents regulatory cost savings for the development of these products.

We believe a vast number of favorable traits can be created by editing the genes of the plants or by inserting genes that occur within the same plant species. To date, we have not targeted the development of any products that would require foreign DNA in the final product, and we prefer to focus on finding natural traits existing within a plant species that can be elicited in our products. Where no naturally occurring trait exists within the plant species, we may not be able to create the desired trait without inserting foreign DNA. We believe there are a sufficient number of naturally occurring plant traits to allow us to continue to grow and expand our product pipeline for the foreseeable future.

Our Commercial Strategy

Our commercial strategy is centered on two core elements:

- *Developing healthier specialty food ingredients for the food industry to benefit consumers*—We intend to disrupt the food industry by continuing to identify market opportunities to help food manufacturers provide consumers with healthier and better tasting foods without sacrificing convenience or quality. Given trends in consumer preferences, we envision selling specialty ingredients such as healthier oils, high fiber flours and ingredients with reduced allergen and carcinogen content to the food industry.
- *Developing herbicide tolerance and other agriculturally advantageous traits for farmers*—We intend to disrupt the agriculture industry by developing agriculturally advantageous traits that have a broad appeal to farmers and the seed companies that sell to farmers. For example, we are developing a herbicide tolerant wheat product that is designed to be resistant to multiple herbicide chemistries currently in the market. Because these traits have broad applicability, we believe it is important to get these traits into as many seed varieties and acres as possible, similar to what has occurred in other major row crops such as corn, soybean and cotton. Our strategy is to invent and develop these agriculturally advantageous traits for farmers and broadly out-license them to the seed industry, with the potential to collect license fees and royalties in return.

We believe our two-pronged strategy will disrupt the traditional food and agriculture industries by aligning the needs of the consumer, farmer and the food and agriculture value chains. We intend to repurpose and leverage existing supply chain capacity by contracting, tolling or partnering with players in the existing supply chain, which will allow us to apply our resources to maximizing innovation and product development while minimizing our capital expenditures and overhead. As we continue to streamline our supply chain, we expect to enter into additional contracts and strategic partnerships within the various participants and members of the value chain, in an effort to maintain control of the process and help ensure product quality, manage cyclical demand changes and capture value.

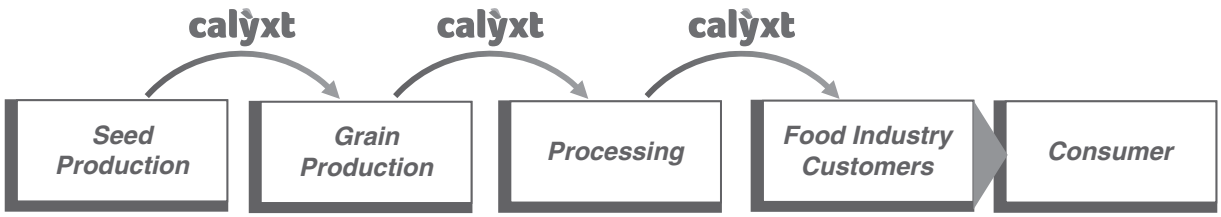
We believe our product candidates will benefit from being grown, processed and stored utilizing the same existing third-party infrastructure and standard industry practices that are currently used in the non-GMO products in the industry. Our intent is to outsource to third parties, such as seed production companies, farmers

under identity preservation contracts and soybean crushers or wheat millers, for the production and processing of our consumer-focused products. Given that our strategy is to outsource these processes, we do not anticipate using proceeds to build or purchase processing or farming assets. Once we establish a supply chain for our first consumer-focused product in soybeans and wheat, we anticipate that future products within the same crop will benefit from utilizing the same supply chain.

Farmers are an essential component of our business model as they produce and prepare crops for processing. Within the traditional agriculture industry supply chain, farmers sell to elevators or processors who operate a high volume/low margin business to store crops and convert them into consumer and industrial products. Our strategy is to partner with farmers to grow premium products and have them allocate some of their land to grow our crops and, in turn, we will then buy back the crops produced by the farmers. We can then contract with processors to create our specialty food ingredients, which we will market directly to food manufacturers. We can also take our product and negotiate prices with food manufacturers and capture the incremental value without substantial capital outlays using these "closed-loop" contracts. Due to our partnership-oriented, vertically-integrated supply chain, we believe we can create and retain more value for ourselves that we can share with our farmers and processers, creating a supply chain that is a favorable for all participants involved.

Soybean crushers that manage existing crushing and refining infrastructure in the United States have small margins and compete largely in commoditized low margin markets. We intend to sign tolling agreements, which are common in our industry, to hire the crusher and refiner to transform our grain into meal for animal feed and oil for human consumption. We believe this will enable us to focus our investment on building inventory and commercial activity while leveraging the existing third-party infrastructure and knowledge regarding processing and crushing in the soybean industry. We intend to replicate this model for our consumer-oriented wheat products.

The following chart shows our plans for commercializing our consumer-focused product candidates:



We have made substantial progress in our supply chain execution. We currently have established relationships with multiple seed production partners, crop farmers and crushers, in addition to our internal capabilities. We believe that we can extract meaningful value from each of our relevant supply chains in a similar manner and we expect to establish similar relationships across the value chain with our wheat and canola product candidates.

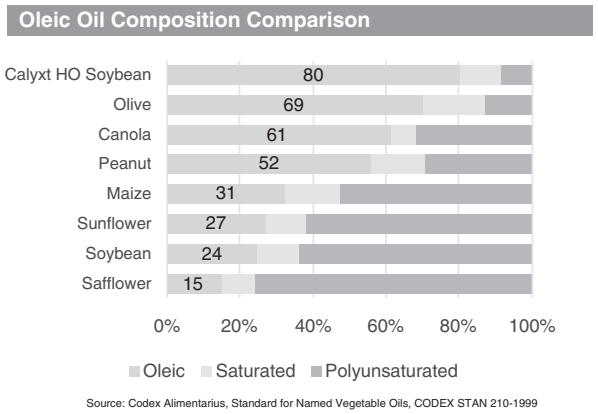
Our Product Pipeline and Commercial Opportunity

High Oleic Soybean (Consumer Trait)—a Premium Oil Market Commercial Opportunity

Soybean oil has historically been partially hydrogenated to enhance its oxidative stability in order to increase shelf life and improve frying characteristics. This process, however, creates trans-unsaturated fatty acids, or trans fats, which have been demonstrated to raise low-density lipoprotein (LDL) cholesterol levels and lower high-density lipoprotein (HDL), both of which contribute to cardiovascular disease. The discovery that dietary trans fats increase the risk of several health issues led the FDA to rule in 2003 that manufacturers be required to include trans fat content information on the "Nutrition Facts" label of foods. In 2015, the FDA took a further step and banned the use of partially hydrogenated oils, the primary dietary source of artificial trans fat in processed foods, by all food manufacturers beginning in 2018. After the FDA's 2003 ruling, commodity soybean

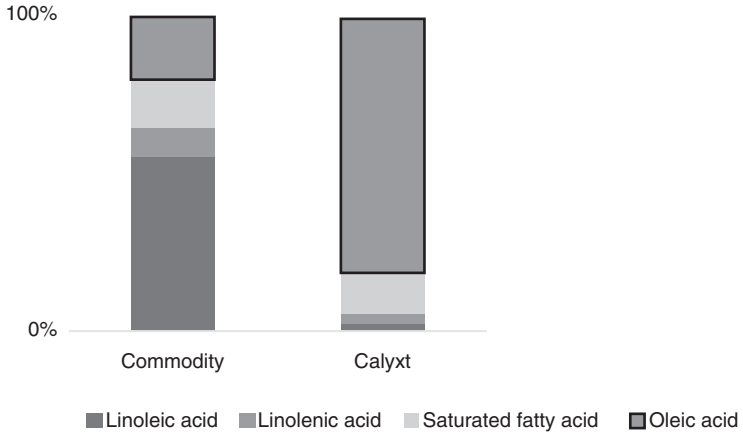
oil—which leads to high trans fats in foods—lost approximately 20% market share to other vegetable oils, such as palm oil and canola oil.

Monounsaturated fats, such as oleic acid, have been linked to reducing LDL cholesterol and triglycerides and raising HDL cholesterols. Diets rich in monounsaturated acids are associated with lower fat mass and decreased blood pressure. High levels of oleic acids can be found in olive, canola, sunflower and safflower oils. The following chart shows the oil composition in our soybean oil compared to these and certain other oils:



Source: Codex Alimentarius, Standard for Named Vegetable Oils, CODEX STAN 210-1999

We developed a soybean trait that has produced oils with a fatty acid profile that contains 80% oleic acid, 20% less saturated fatty acids compared to commodity soybean oil and zero transfats, as shown in the chart below.



Oil created from our high oleic soybean product candidate has multiple desirable characteristics as an ingredient for the food industry. The high level of oleic acid in our soybean oil enhances oxidative stability more than fivefold when compared to commodity oil. This eliminates the need for partial hydrogenation, and thus no trans fats are produced during oil production. Furthermore, our high oleic soybean oil offers additional potential benefits, including reduced saturated fats, a threefold increase in fry-life, and reduced polymerization upon frying at high temperatures. Soybean oil is also neutral in flavor, odorless and colorless, and is therefore highly desired as a food ingredient because it has limited impact on the sensory characteristics of the final food product.

Our high oleic soybean product candidate was created using our TALEN gene-editing technology. We designed TALEN to specifically target two fatty acid desaturase genes (designated *FAD2A* and *FAD2B*). These genes convert oleic acid (a mono-unsaturated fatty acid) to linoleic acid (a polyunsaturated fat). By specifically inactivating both the *FAD2A* and *FAD2B* genes by removing DNA with TALEN, oleic acid accumulates in the

seed—increasing from about 20% to 80%. By key measures, including yield, our high oleic soybean variety performs comparably to its unedited counterpart. Further, our improved soybean variety does not contain any foreign DNA. Because our technology is so precise and we target genes with well known functions in the plant, we have not, to date, detected any other changes as a result of the gene-editing process or undesired effects in our product.

In mid-2015, we received a letter from the USDA indicating that our high oleic soybean variety is not a regulated article under the Plant Protection Act. This allowed us to test the performance of our soybean variety in the field. In November 2015, we announced the completion of the second year of multi-location field trials in Minnesota and South Dakota. The agronomic and yield performance of our high oleic soybeans is on par with the non-GMO variety used to create this product. In 2016, 45,000 bushels of soybean seeds were produced by our farmers and we established supply chain partnerships.

Our soybean product candidate is in Phase III of our development process, and we are making preparations to create the capacity to crush on a commercial scale, which will enable product testing by potential food company customers. We are currently completing our commercialization plan and anticipate commercialization by the end of 2018. The interim critical milestones to complete in the remainder of 2017 and in 2018 to achieve that goal include the following:

- building up our commercial supply chain for seed, grain and oil;
- creating relationships with customers, and encouraging them to start testing oil created from our soybean product candidate;
- planting additional seed acres in 2017 to have sufficient seed supply in 2018;
- signing tolling agreements with one or more crushers; and
- building up the commercial grain inventory toward the end of the 2018 crop year in order to generate 2019 oil and meal sales.

In addition, our high oleic soybean product candidate can be stacked with other soybean traits. For example, we intend to combine our high oleic acid trait with a trait that reduces linoleic acid, which would further improve the quality of our oil for frying. We are also developing an improved protein composition trait, which is in the Discovery phase of our development process. We believe this trait will increase the value of the soybean meal. Soybean meal is an important source of dietary protein for animals, and our product may have a better balance of amino acids for animal nutrition. These output traits that affect oil and protein quality will be combined with traits of value to the farmer. Among these are herbicide and drought tolerance and traits that confer improved yield. Thus, we have established a pipeline in which additional traits can be stacked with our initial products to increase their commercial value over time.

Premium Oil Market Opportunity

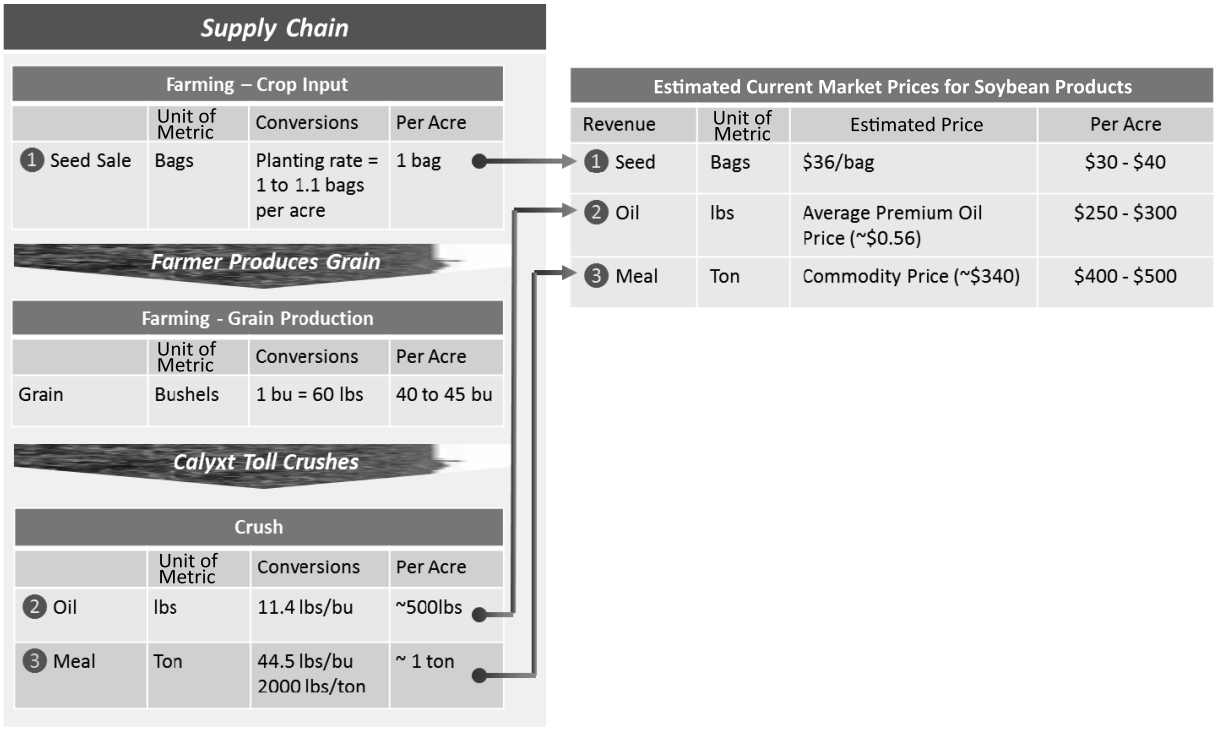
According to industry sources, the vegetable oil market in North America is estimated at 40.7 billion pounds per year. Certain premium priced oils such as canola, sunflower, corn, cotton and others represent approximately 34% of this market, or approximately 14 billion pounds per year. We believe this market has grown by a 6.7% compound annualized growth rate over the trailing fifteen years. Data from the USDA suggests that the average price of various premium oils over the 10-year period ended 2016 was approximately $0.56 per pound versus soybean oil that we estimate currently sells in a range of approximately $0.33-$0.39 per pound. Based on these estimates, the premium oil market segment could potentially generate approximately $8 billion in annual revenue. Assuming the market grows at a 5% CAGR, which assumes 2% growth for inflation and 3% population growth, we believe this market opportunity could grow to approximately $13 billion in the next ten years. In addition, in the United States, according to a report by Qualisoy, high oleic soybean acreage and oil production is expected to more than double year upon year, resulting in 9.3 billion pounds of available soybean oil within the next decade. Accordingly, we believe the oil generated from our soybean product candidate targets a potential multi-billion dollar market.

Vertically Integrated Soybean Franchise, Supply Chain and Business Model

We intend to pursue a vertically integrated business model for our soybean product candidate that we believe will provide three potential revenue opportunities:

- seed sales to farmers that are part of what is called the identity-preserved supply chain, which entails entering into a contract with the farmer, who, in return for a premium, produces and stores our soybeans while maintaining the quality and purity of our product;
- oil sales to food companies; and
- meal sales to animal feed companies.

The following chart shows a high level indicative approach to our business model within the supply chain:



Soybean Germplasm (Seeds) – Soybeans are a crop that is photoperiod sensitive, meaning the crop is sensitive to the length of the day. Plant breeders have developed soybean varieties that are adapted to distinct latitudes and agroclimatic conditions – which are referred to as maturity groups. Different growing regions in the United States require different maturity groups. For example, the northern United States requires soybeans in the 1.5- 2.2 maturity group ranges, with farmers typically planting a few varieties within this range to diversify their risk.

We have in-licensed over thirty non-genetically modified soybean varieties with commercial rights. We intend to initially introduce our high oleic soybean product candidate in the northern United States on one variety within a particular maturity group range and over time expand to additional varieties to farmers in the same region to provide farmers with the ability to diversify their risk. We expect to continue this expansion over time by adding regions in other maturity groups and varieties. Over the next five to 10 years we envision expanding our germplasm portfolio to early, middle and late maturity groups. We believe this strategy will enable us to expand our supply chain through additional crushing plants within target growing regions and at the same time lower potential premiums and production costs as we introduce into the supply chain additional varieties that meet the diversity of seed variety that farmers need to mitigate their risk.

Crusher operators are generally divided into two categories—crushers owned and operated by large companies in the industry and crushers that are independently operated. Each group generally follows a different business strategy. Large crushers typically focus on maximizing utilization and production, whereas the independently operated crushers typically focus on maximizing profitability by specialization and production focus. Within our target regions, we believe there are many independent crushers that process soybean and that are under utilized. We expect this to provide us with a meaningful opportunity to leverage their services in our business model.

Farmers

We plan to initially focus our supply chain strategy on contracting with farmers within a 50-100 mile area from certain predetermined crushing plants with which we are forming commercial tolling relationships. This will allow these farmers and growers to deliver their grain to these crushing plants in a cost-effective manner to avoid high transportation costs. Over time, we foresee supplying farmers with seeds in multiple states near multiple crushing plants with which we have contracted.

There are a number of key metrics by which we will measure our success in the established supply chain, including the number of farmers using our seeds to grow high oleic soybeans, the number of acres planted with our seeds, the number of farmers that we need to contract with in order to add an incremental crushing plant to the supply chain and the retention rate of how many farmers choose to grow our soybeans year after year. We also anticipate farmers continuing to grow multiple varieties from multiple seed companies, which means we may initially represent a small percentage of a particular grower's soybean acreage. Over time, we plan to seek to increase that percentage and, as our product offering expands, become one of the partners of choice for that farmer's soybean seed needs.

Soybean Meal Sales to Animal Food Companies – Another potential opportunity for our high oleic soybean is for consumption in soybean meal. Approximately 97% of the soybean meal consumption is in the animal nutrition industry, with the industry experiencing increased demand for differentiated and non-GMO soybean meal. As a result, we believe the soybean meal industry provides us another competitive opportunity as we establish our commercial strategy.

Soybean Oil Customers – Given the characteristics of our soybean oil—neutral taste, heat stability and fatty acid profile similar to olive oil—we believe our oil presents a competitive alternative to existing premium oils in multiple food application categories.

Additional Soybean Growth Opportunities – We intend to initially focus commercialization of our soybean product candidate in North America. However, over time, we foresee a number of expansion opportunities given the global nature of soybean uses, including extensive import and exports of soybean co-products such as meal and oils. Some of these expansion opportunities may include:

- Oil Exports: As global regulatory frameworks continue to evolve for gene-edited products, we believe we will have the opportunity to export our soybean oil to other markets, which in turn we expect will create the opportunity for additional market expansion and increased premiums.
- Global Launches of High Oleic Soybeans: Soybeans are grown in other countries such as Brazil and Argentina. We therefore believe that we have the potential to expand our supply chain and business relationships to other countries, providing additional global opportunities.
- Expand Product Offering in Existing Supply Chain: Once a supply chain is established, we believe we will have the potential to leverage the same acres, meal and oil sales to create additional value through increased quality, such as improved protein contents, or farmer-focused traits such as herbicide tolerance, improved yield and drought stress tolerance.
- Expansion of Seed Sales: We believe that once we establish a supply chain in soybeans through commercial relationships with farmers, we may be able to expand our product offerings to these farmers.

High Fiber Wheat (Consumer Trait)

Fiber is the indigestible portion of food that is essential for healthy digestion. Research has shown that fiber may play a large role in maintaining bowel health, lowering cholesterol, stabilizing blood glucose levels and controlling weight gain. A high fiber diet has the potential to lower the rate of glucose entry into circulation, thus decreasing the risk of food-related chronic diseases, such as coronary artery disease and diabetes. The average American adult consumes approximately 15-18 grams of fiber daily, only half of the amount recommended by the U.S. Department of Health's dietary guidelines based on the average caloric intake. In recent years, the awareness of the health benefits of high fiber diets has increased. This has translated to a strong growth in demand for high fiber food products, with 38% of grocery shoppers now seeking high fiber foods.

We are developing high fiber wheat traits that could be used to produce white flour with up to three times more dietary fiber than standard white flour. We anticipate that by altering the proportion of certain slower digested carbohydrates in the wheat grain, we will increase dietary fiber. This would allow consumers to reach their daily value of fiber without changing their existing food preferences. These high fiber wheat product candidates will not contain any foreign DNA.

We believe our high fiber wheat flour will be incorporated into many food products—from pasta to bread. Whereas a single serving of whole wheat flour can provide 49% of an individual's daily fiber needs, a single serving of our high fiber flour may provide up to 100% of the recommended daily requirement thereby allowing food manufacturers to make high fiber products sought after by many consumers.

This product candidate is currently in Phase I of our development process. The gene-edited wheat line has been identified and grown and the fiber levels are under examination in grain derived from greenhouse grown plants.

In addition to our high fiber wheat product candidate, we are also developing other consumer traits in our wheat pipeline, including a reduced gluten product candidate.

High Fiber Wheat Market Opportunity

According to industry sources, the wheat market in North America is estimated at 108 million tons per year with approximately 43% produced for human consumption in the United States. Humans consume approximately 650 million hundredweight, or cwt, of wheat flour in the United States, including an estimated 91 million cwt of premium wheat flour. Assuming an average price of approximately $15 per cwt we believe the premium wheat market could represent a potential multi-billion dollar market opportunity.

High Fiber Wheat Germplasm (Seeds)

The wheat flour market in the United States consists of six classes, which are designated by color, hardness and growing season: hard red winter, hard red spring, soft red winter, soft white, hard white and durum.

The wheat classes grown by a particular farmer depend on geographic location and the germplasm offerings in the different classes of wheat. The classes pose different quality and functionality characteristics, and growing wheat of multiple classes diversifies harvest risk.

We plan to expand our product offerings into potentially all classes of wheat with an emphasis on those that provide superior functionality. We will then selectively in-license and acquire third-party genetics to build germplasm platform in potentially all classes of wheat. These additional product offerings will impact our regional expansion of production as well as market opportunities.

Flour

Miller operators fall into one of two categories—millers owned and operated by large companies in the industry and millers that are independently operated. Each group generally follows a different business strategy.

Large millers typically focus on maximizing utilization, blending and economies of scale, whereas independently operated millers typically focus on maximizing profitability by specialization and production focus. We believe there are many independent millers that process flour that are underutilized and eager to work with specialty products. We expect this to provide us with a meaningful opportunity to leverage their services in our business model. We expect to commence commercialization of our wheat product, once developed, using two to four millers, and to expand that number as commercialization progresses.

High Fiber Wheat Customers

The market for wheat-based products is diverse and, in the United States, includes fresh bread and rolls, snack bars and granola bars, pastries and doughnuts, frozen pizza, bakery snacks and Mexican foods. As a result, we believe there are multiple opportunities to supply our high fiber wheat to food producers.

Additional High Fiber Wheat Opportunities

We intend to initially focus commercialization of our high fiber wheat product candidate in North America. However, over time, we foresee a number of expansion opportunities. Some of these expansion opportunities may include:

- Global expansion: We believe there would be potential in being able to export our high fiber wheat to other countries with conducive regulatory frameworks with respect to our products. We also believe that we will be able to grow high fiber wheat in other countries given the extensive amount of wheat grown outside of the North American market. We believe both of these opportunities create the potential for increased premiums and market penetration.
- Cross selling: Once we have established an initial relationship with a food industry customer, we believe there is potential opportunity to cross sell products to the customer. For example, the customer may also have a demand for our high oleic soybean or another product as the customer's needs evolve.
- Trait stacking: Another potential opportunity for us is using trait stacking. For example, we may be able to add characteristics to our high fiber wheat, such as reduced gluten or a more favorable carbohydrate profile. Alternatively, we may be able to add herbicide tolerance to our high fiber wheat. In each case, we would expect the additional trait to enhance the value of our products on a per unit basis and further drive demand.

Herbicide Tolerant Wheat (Farmer Trait)

Weed control is one of the greatest challenges farmers face in producing crops. Weeds compete not only with crops for water, nutrients, sunlight and space, but also harbor insect and disease pests, clog irrigation and drainage systems, undermine crop quality, and deposit weed seeds into crop harvests. Poorly controlled weeds significantly increase farmers' cost while reducing crop yield and quality. With the constant need to increase yields, herbicides are an important component of commercial food production and account for 70% of all agricultural chemical use.

Herbicide tolerance is a plant's ability to withstand a particular chemical herbicide. Herbicide tolerance traits in crops can provide additional crop protection chemistry alternatives to control weeds and increase crop yields. Weed resistance is a growing problem in the United States and other countries in the world. As weeds develop resistance to herbicides they become more difficult to control which can reduce yields and the quality of crops. The use of different chemistries has been an important tool to control herbicide resistant weeds. For example, Glyphosate tolerant weeds are controlled with other herbicide chemistries effective in grasses. Certain crops—such as wheat and soybeans—may not be tolerant to such chemistries, rendering this option non-viable for over-the-top applications.

Herbicide tolerant traits may offer farmers a vital tool in managing weeds effectively during crop production. The deployment of herbicide tolerant traits in wheat significantly lags other major crops and wheat

production is constantly faced with yield-robbing weeds that can result in lower yield and higher dockage costs at the elevator. In the United States, nearly 90% of major row crops, including corn and soybeans, contain at least one herbicide tolerant trait. In contrast, no broad acre GMO herbicide tolerant trait has been developed for wheat, largely due to the complexity of the wheat genome. Without effective control, weeds can lower winter wheat yield by up to 23% on average worldwide, and in turn significantly decreases profitability potential.

Wheat Herbicide Tolerant Trait Opportunities

We are pioneering the development of herbicide tolerant traits in wheat without the use of foreign DNA, built using our TALEN gene-editing technology. Herbicides act by inhibiting the activity of certain plant-encoded proteins that promote plant growth. We aim to achieve herbicide tolerance by specifically making a subtle repair to prevent herbicides from being able to recognize and block functions of these proteins, such that the edited plant survives the application of the herbicide. Our product candidate will contain no foreign DNA. We believe this solution, if successfully developed and commercialized, will have the potential to increase the farmer's yield and revenue. Accordingly, we believe our herbicide tolerant trait would have broad appeal and applicability into the 76 million acres of wheat that are grown in North America each year and potentially into the over 500 million acres grown worldwide. One industry source has suggested that there can be up to $71 per acre of loss for wheat due to weeds. Given the amount of wheat acreage in North America, products with herbicide tolerant traits represent a potential multi-billion dollar industry.

This product candidate is currently in the Discovery phase of our development process. In addition to herbicide tolerance, we are developing traits that are advantageous to the farmer including our variety of wheat that confers resistance to a fungal pathogen, namely powdery mildew. We believe powdery mildew resistance may increase yield and reduce the need for the use of costly fungicides.

Building Up a Licensing Franchise and Supply Chain

We intend to develop our herbicide tolerant wheat technology and plan for initial commercialization in North America in the second half of the coming decade. Under this proposed model, we anticipate that we would establish licensing relationships with seed company customers (and public seed institutions) to enable conversion of elite wheat lines from multiple classes. These seed institutions would then sell seed containing our herbicide tolerant technologies either directly to farmers or through seed distributors. We would seek to receive royalty payments from these seed institutions.

Additional Licensing Growth Opportunities

We believe herbicide tolerant wheat represents the first broad licensing opportunity for a large acre trait for us in a major row crop. Additional licensing opportunities may include:

- Herbicide tolerant wheat being developed by us that will enable the application of two different types of chemistries currently available in the market (off patent chemistries). We could pursue a strategy to collaborate with strategic partners, exclusively or on a non-exclusive basis to register the application of chemistries on its herbicide tolerant wheat and seek additional revenue opportunities from such chemistries.
- We could combine our herbicide tolerance technology in wheat with our high fiber wheat products under identity preservation, creating potential synergies between both products being sold on the same acreage.
- Over 500 million acres are cultivated globally, and we could replicate our business model and deploy herbicide tolerant technologies in wheat in other world regions beyond North America.
- Development and out-licensing of additional farmer traits in wheat such as disease resistance, additional herbicide tolerance products, improved yield products and other agronomic characteristics.

- Similar or alternative herbicide tolerant technologies could be developed by Calyxt in other crops such as soybeans and canola, expanding the herbicide tolerance franchise across multiple crops, first in North America and then globally.

Other Products in Our Development Pipeline

Our extensive product pipeline includes a variety of consumer- and farmer-centric traits for soybean, wheat, canola, alfalfa and potato. We will conduct further development programs to build upon our current pipeline, which currently includes improved oil composition canola, herbicide tolerant canola, improved quality alfalfa and herbicide tolerant alfalfa, late blight resistant potato, cold storable / reduced browning potato, improved protein composition soybean, drought tolerant soybean, herbicide tolerant soybean and improved yield soybean. In the future, we anticipate expanding our product pipeline to include other food crops.

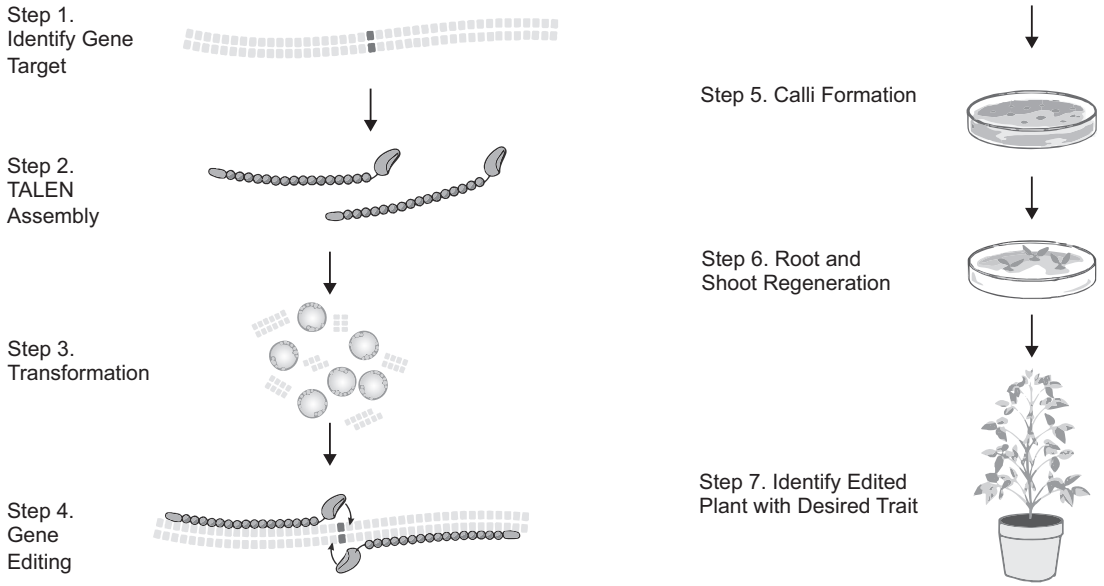
We plan to develop gene-editing automation processes that will enable us to implement a high throughput discovery platform to identify new growth opportunities. This high-throughput platform is intended to allow us to discover more gene traits and make more complex edits, enabling us to drive innovation at a significantly faster rate. We believe all of these steps will enable us to remain at the forefront of food and agriculture innovation.

Technology and Process Overview

Calyxt is a Pioneer in Plant Gene Editing

Gene editing is a technological leapfrog that makes it possible to overcome many of the limitations of traditional trait-development techniques. Gene editing creates novel traits by making minor DNA sequence edits to plant genomes. These edits occur in a precise manner and at high efficiency, providing accelerated development and commercialization timelines and potentially lower regulatory hurdles.

The following chart depicts our development process:



Step 1: We begin by identifying the gene target and the edit we would like to introduce into the plant genome. We do not have an in-house gene discovery platform. Rather, we supplement our own scientific knowledge and expertise with the efforts of universities, non-profit organizations, government agencies and gene discovery biotech companies to identify genes, which when altered, express desired crop traits. Some of the

information on gene targets is in the public domain, and in other instances, we may engage in intellectual property licensing agreements. We believe there are scientific teams around the world continually identifying new gene targets, providing new opportunities for us to expand our product pipeline. We are typically able to assess gene targets and the types of edits to be introduced in several weeks.

Step 2: We create TALEN (Transcription Activator-Like Effector Nucleases) to specifically recognize the DNA target we seek to edit in the plant genome. TALEN were invented by our scientists and are one of the most effective reagents for gene editing. Two TALEN are used to recognize a given target, each of which recognizes 15-20 bases of the genetic code. A 30 base DNA sequence target occurs, on average, once every quintillion bases. Thus it is relatively easy to design TALEN to recognize unique sites in complex genomes. We have unparalleled expertise in TALEN design, and we have an automated TALEN assembly pipeline that allows us to make thousands of TALEN per week—far more than what is needed for product development.

Step 3: We deliver our TALEN and other reagents as necessary to achieve the desired gene editing outcome to plant cells in a process known as transformation. We rely on three methods of transformation—agrobacterium, particle bombardment and protoplast—to deliver reagents to plant cells to achieve targeted edits at high efficiency.

Step 4: Gene editing typically occurs within a few hours after reagent delivery.

Step 5: We place the edited cells in culture and allow them to grow and divide. The cells form a mass of unorganized tissue called a calli. Calli are produced for most plants cells we edit, and the callus stage can last from several weeks to several months.

Step 6: Once calli are obtained, we induce them to differentiate leaf and root tissues through the application of plant hormones. Shoots regenerate first and then roots, ultimately resulting in a “plantlet.” Depending on the plant species, this step can take from a few to several months.

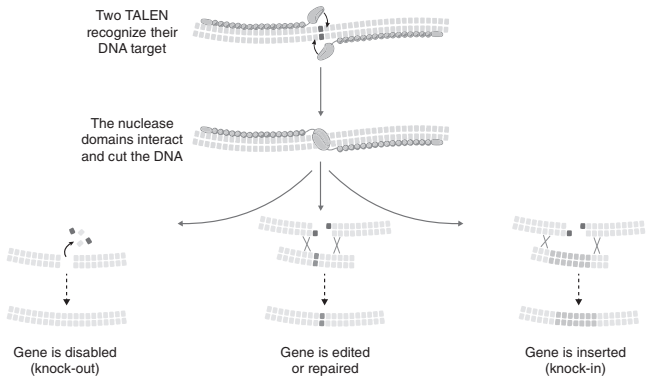
Step 7: We screen the resulting plantlets to identify those with the desired gene edit. We have an automated pipeline to prepare and analyze DNA from plantlets to identify those that have the desired editing outcome.

Once the steps in the chart above are completed, we continue on to Phase II our development process by moving plants with edited genes to soil and growing them in the greenhouse to test for the intended trait and to produce more seed. This step is often the most time-consuming, and is constrained by biology; that is, it takes time for a plant to mature, flower and produce seed. Once we validate the trait in the greenhouse, we advance the edited plants to field trials. We carry out the field trials at multiple locations over multiple growing seasons. In some instances, we carry out field trials in the Southern hemisphere to capture two growing seasons in a given calendar year.

Gene Editing with TALEN

TALEN enable genome editing through a simple two-step process—first by recognizing a specific DNA sequence, and then by precisely inducing a controlled DNA double-strand break. TALEN protein structure comprises a DNA-recognition domain and DNA-cleaving domain. DNA-recognition is achieved by individual repeat domains (depicted in the figure below as an array of spheres); each domain recognizes a specific nucleotide (depicted in the figure below as grey boxes). By rearranging central repeat domains, TALEN can be designed to target nearly any DNA sequence. DNA-cleavage is achieved by a nuclease that is fused to the DNA-recognition domain (depicted in the figure below as large half spheres). The nucleases must interact to cleave DNA, and cleavage occurs only after two TALEN precisely recognize a target DNA sequence. The requirement for two nucleases to interact minimizes cleavage at unintended sites due to binding of a single TALEN.

The following figure depicts the process of making gene edits using TALEN:



A precisely placed double-strand DNA break is the key to unlocking gene editing. This break can be the substrate for a wide range of outcomes, from single nucleotide deletions, to large DNA insertions. Left alone, a DNA break will result in removal of nucleotides (through a process called non-homologous end-joining). This removal of nucleotides, if placed appropriately, can result in gene inactivation or a gene knock-out. Our high oleic soybean variety, for example, was achieved by gene knock-out. By precisely removing DNA, we inactivated two *FAD2* genes, which resulted in the accumulation of oleic acid in the seed.

If a user-supplied DNA fragment with a similar sequence to the TALEN binding site is provided at the time of the DNA break, then novel information in the user-supplied DNA is copied into the plant genome (through a process called homologous recombination). The information that is incorporated can be a single base change that repairs or edits the target gene to improve its function. For example, we believe herbicide tolerance can be achieved in many plant species by specifically making a subtle repair to prevent herbicides from being able to recognize and block functions of certain plant-encoded proteins that promote plant growth. Alternatively, it is possible to incorporate or knock-in one or more transgenes to create a new trait. At present, we are focused on using gene knock-outs and gene repair to create new traits. Other major agricultural biotechnology companies, which commercialize GMOs, are interested in targeted knock-in approaches. Gene editing and gene insertion through homologous recombination are collectively referred to as gene targeting.

Tissue Transformation Systems

Key to achieving a gene-edited plant is the ability to deliver TALEN to plant cells (a process referred to as transformation). Our scientists have proficiency using the three main methods of transforming plant cells—agrobacterium, particle bombardment and protoplast transformation. Agrobacterium is a soil bacterium that naturally delivers DNA to plant cells. This method can be used to deliver our TALEN; it can also be used to deliver templates to copy information to the break site. Particle bombardment uses DNA-coated gold or tungsten particles to deliver DNA to plant cells. The particles are shot at plant tissue at high velocity, and the DNA is either transiently expressed or integrated into the host genome. Protoplasts are plant cells lacking a cell wall. Our TALEN reagents can be directly delivered to protoplasts at high efficiency (between 50% and 90% transformation frequencies). Further, we have shown that purified TALEN proteins can be delivered to plant protoplasts to achieve gene editing, thereby obviating the need to use nucleic acids. Over the past six years our scientists have developed the expertise and know-how to deploy these methods in a variety of plant species.

We believe that our ability to select the appropriate transformation method, our capabilities to use these technologies, as well as our innovative solutions to achieve increased efficiency, creates both a competitive advantage and a barrier to entry. Our technology enables us to precisely and specifically elicit the desired traits with the desired characteristics in a matter of months. For example, in order to develop our high-oleic soybean

oil, we designed TALEN to specifically target two fatty acid desaturase genes (designated *FAD2A* and *FAD2B*). These genes convert oleic acid (a mono-unsaturated fatty acid) to linoleic acid (a polyunsaturated fat). By inactivating both the *FAD2A* and *FAD2B* genes with TALEN, oleic acid accumulates in the seed—increasing from about 20% to 80%, which improves its characteristics for frying and is healthier for the consumer.

The plant transformation and regeneration steps described above are inherently scalable, and we envision that through the use of robotics, it will be possible to generate thousands of plantlets with a desirable gene edit. By implementing a platform that creates multiple plantlets with the same gene edit, we believe we will be able to greatly accelerate product commercialization. For example, if we are interested in developing wheat flour with a healthier carbohydrate composition, we can harvest enough seed from our population of edited plantlets to produce enough flour to test for functionality and ensure it has the properties desired for our customers. This eliminates the time needed to amplify enough seed over multiple generations from one or a few edited plants.

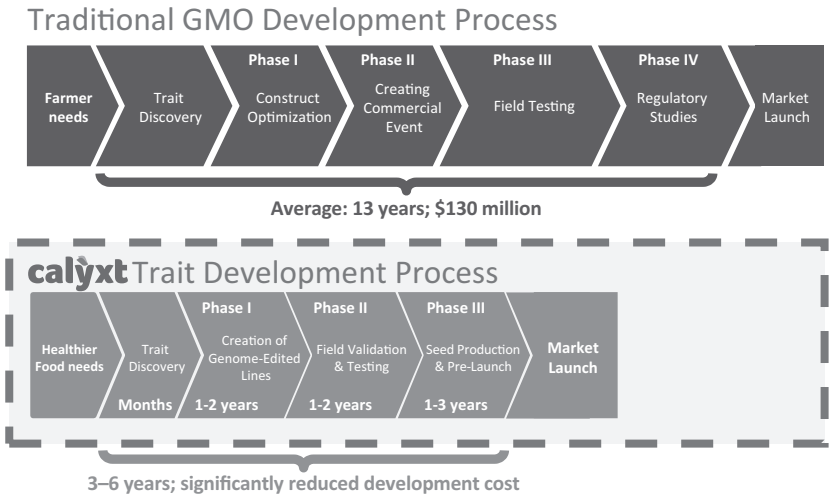
Key Advantages of TALEN Over Other Gene-Editing Technologies

In addition to TALEN, we are aware of three other classes of nucleases that enable gene editing, including meganucleases, zinc finger nucleases and CRISPR/Cas9. Despite the availability of other gene-editing platforms, we currently rely on TALEN because of the following benefits:

- *Intellectual property*—We have a strong intellectual property position with respect to TALEN technology and its use to make our product candidates. We have actively sought to protect our proprietary technologies and product candidates through the licensing of a portfolio of 81 issued patents and 170 pending patent applications.
- *Specificity*—TALEN may be designed to limit its DNA cleavage to the desired sequence and to avoid cutting elsewhere in the genome. This parameter is essential as plant genomes are highly complex; for example, the wheat genome comprises 17 billion bases.
- *Precision*—It is possible to design a TALEN that will cleave at any selected region in any gene. For example, there are four related *FAD* genes in the soybean genome. Our TALEN edited only the two genes that produce fatty acids in the seed; no edits were introduced into the other related genes.
- *Efficiency*—A large percentage of cells treated by TALEN bear the desired gene edit. Because of TALEN efficiency, only a handful of plants have to be regenerated to recover those with edits in our target gene. For example, three of 19 transgenic soybean lines expressing the *FAD2* TALEN transmitted heritable edits to the next generation.
- *Validation*—We have a strong track record with respect to our technologies and expertise as we have successfully edited more than 20 unique genes in 6 plant species since our inception in 2010.
- *Ease of use*—We have extensive expertise in the design and assembly of TALEN and can generate thousands of TALEN per week.

A Comparison of Crop Development Processes—Traditional vs. Calyxt

Our solution for agriculture biotechnology can provide significant speed and cost advantages as compared to the traditional trait-development methods employed by the current agriculture industry companies. Through our accelerated development process, we believe we are capable of commercializing our product portfolio significantly quicker and at reduced cost.



Traditional Agricultural GMO Development Process:

We provide an overview of the development process involved in GMO trait commercialization, which is currently employed by the agricultural industry. This process typically requires an average of 13 years and costs upwards of $130 million to develop a new trait:

- *Discovery*—The screening and identification of potential traits of interest using foreign DNA which many times is from outside the plant kingdom. This process requires the expertise in genetics, molecular biology and bioinformatics/genomics approaches to identify target genes.
- *Phase 1 (Proof of Concept)*—At this stage of development, tests are performed on a variety of constructs based on lead candidate genes. This is undertaken to achieve the optimal expression of gene in order to obtain the desired trait.
- *Phase 2 (Early Development)*—Plants with optimized genetic constructs are chosen and evaluated in greenhouse and field trials. This involves upwards of tens of thousands of plants being grown and evaluated.
- *Phase 3 (Advanced Development)*—Large scale field trials are conducted to measure trait expression and crop yield.
- *Phase 4 (Pre-Launch)*—Build up seed inventory for commercial launch and regulatory studies to test the safety of the crop.

Calyxt's Accelerated Development Process:

We can assess the viability of a trait in less than two years and commercialize it in as short as six years with a significantly reduced development cost.

- *Discovery (Several Months)*—The preliminary screening and identification of genes with the potential to deliver a trait of interest. We do not spend significant resources on the screening and identification of genes in plants that will lead to beneficial traits. Rather, we supplement our own scientific knowledge and expertise with the efforts of universities, non-profit organizations, government agencies and gene discovery biotech companies to identify genes, which when altered, express desired crop traits.

- *Phase I: Product Transformation & Event Selection (1-2 Years)*—The process to make our product, in which we leverage our gene-editing platform and expertise to induce the expression of a desired trait. We have proficiency in three different tissue transformation systems—agrobacterium, particle bombardment, and direct DNA delivery to protoplasts—which allows us to edit the genome in nearly all major crops. Once a product is created we grow seed in our greenhouse to initiate testing. At the end of Phase I, we submit a petition to the USDA to confirm the product candidate is a non-regulated article.
- *Phase II: Trait Validation (1-2 Years)*—After obtaining USDA confirmation, trait validation is conducted in small and large scale field trials. Small scale trials take place in a limited number of locations, where we test our products in the field and increase seed production. Larger scale field trials occur across multiple field locations and years and help us ensure our field performance across multiple conditions. At this stage we also test the specialty food ingredients produced from these plants for unique healthier properties. At the end of Phase II, we expect to be able to assess the technical viability of a trait. We can then decide whether to further invest in the product and continue to develop the asset or dispose of the asset with minimal development costs, allowing us to continue to innovate at a rapid pace.
- *Phase III: Pre-Commercial (1-3 Years)*—This phase is the first commercial scale production and provides us the opportunity to build seed and product inventory prior to commercialization. During this period we also establish our grower supply chains and customer relationships in preparation for commercialization.
- *Commercial*—When a product is ready to be commercialized, we plan to utilize our innovative commercial strategy to leverage existing supply chains to ensure product quality, manage cyclical demand changes and capture value. Depending on what supply chain relationships may exist at the time when a product candidate is ready to be commercialized, we believe we may be able to leverage our existing supply chain relationships to lower commercialization costs and time to market. We plan to continue to build out our germplasm during commercialization to enhance our seed capability and regional footprint.

Additional Opportunities

We—through our license agreement with Cellectis—have access to intellectual property that broadly covers the use of engineered nucleases for plant gene editing. This intellectual property covers methods to edit plant genes using "chimeric restriction endonucleases," which include TALEN, CRISPR/Cas9, zinc finger nucleases, and some types of meganucleases. The granted claims cover methods of introducing chromosomal edits through non-homologous end-joining to create gene knock-outs, as well as methods of introducing chromosomal edits by homologous recombination to produce precise gene edits or gene knock-ins. We believe this umbrella intellectual property applies broadly across gene editing in plants and makes us a key player in the gene editing intellectual property space.

Making precise edits through gene targeting is technically challenging, as frequencies of gene editing or DNA insertion are significantly lower than frequencies of gene knock-outs. Under our license agreement with Cellectis, we have exclusive sublicense rights (subject to existing non-exclusive sublicenses to third parties) to intellectual property exclusively licensed to Cellectis from the University of Minnesota in the field of researching, developing and commercializing seeds and food ingredients (excluding animal-derived ingredients) for agricultural, feed and food applications. These patent applications cover the use of DNA replicons for gene editing. The replicons carry DNA sequences encoding TALEN as well as a DNA template to copy precise edits into the plant genome. When introduced into plant cells by any of the tissue transformation systems described below, the replicons amplify to a high copy number. This allows us to achieve gene editing at frequencies up to 12-fold higher than the use of traditional methods. The replicon technology, combined with our transformation platforms, expand the versatility of the TALEN technology for generating products.

Intellectual Property

Our success depends in part on our ability to obtain and maintain intellectual property and proprietary protection for our product candidates and technology related to our business, defend and enforce our intellectual property rights, in particular, our patent rights, preserve the confidentiality of our trade secrets, and operate without infringing valid and enforceable intellectual property rights of others. We seek to protect our proprietary position by, among other things, licensing and filing United States and certain foreign patent applications related to our technology, products and product candidates, and improvements that are important to the development of our business, where patent protection is available. We also rely on trade secrets to develop and maintain our proprietary position and protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection. We seek to protect our proprietary technologies, in part, by confidentiality agreements with our employees, consultants, scientific advisors, and contractors.

Notwithstanding these efforts, we cannot be sure that patents will be granted with respect to any patent applications we have licensed or filed or may license or file in the future, and we cannot be sure that any patents we have licensed or patents that may be licensed or granted to us in the future will not be challenged, invalidated, or circumvented or that such patents will be commercially useful in protecting our product candidates and technology. Moreover, trade secrets can be difficult to protect. While we have confidence in the measures we take to protect and preserve our trade secrets, such measures can be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. For more information regarding the risks related to our intellectual property, please see “Risk Factors—Risks Related to Intellectual Property.”

As of May 31, 2017, we have licensed approximately 16 U.S. patents, 49 U.S. patent applications, 65 foreign patents, and 121 foreign patent applications. Within this portfolio, approximately 178 patents and patent applications relate to the genetic editing of plants using TALEN technology, 118 patents and patent applications relate to the genetic editing of plants using meganuclease technology, 76 patents and patent applications relate to the genetic editing of plants using CRISPR technology, and 49 patents and patent applications relate to specific plant traits.

The issued patents in our portfolio consist of approximately 6 Cellectis-owned and 10 other in-licensed U.S. patents, 18 Cellectis-owned and 36 other in-licensed European patents, and 2 Cellectis-owned and 9 other in-licensed patents in other jurisdictions, including Japan, China, Australia, Hong Kong, Singapore, Mexico and Canada. The pending patent applications in our portfolio consist of approximately 41 Cellectis-owned and 8 other in-licensed U.S. patent applications, 19 Cellectis-owned and 4 other in-licensed European patent applications, 67 Cellectis-owned and 26 other in-licensed patent applications in other jurisdictions, including Japan, China, Australia, India, Paraguay, Uruguay, Argentina, Brazil, Hong Kong, Singapore, Israel, Mexico, New Zealand and Canada, and 5 Cellectis-owned and 1 other in-licensed Patent Cooperation Treaty (PCT) applications.

Individual patent terms extend for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance, and the legal term of patents in the countries in which they are obtained. In most countries in which patent applications are filed, including the United States, the patent term is 20 years from the date of filing of the first non-provisional application to which priority is claimed. Under certain circumstances, a patent term can be extended. For example, in the United States, a patent’s term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in reviewing and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. The issued patents that we have licensed will expire on dates ranging from 2020 to 2033. If patents are issued on the pending patent applications that we have licensed, the resulting patents are projected to expire on dates ranging from 2023 to 2037. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of legal remedies in a particular country, and the validity and enforceability of the patent.

License Agreement with Cellectis

We will be party to a license agreement with Cellectis, pursuant to which we will be granted an exclusive, worldwide license to use, commercialize and exploit certain intellectual property in the field of researching, developing and commercializing seeds and food ingredients (excluding animal-derived ingredients) for agricultural, feed and food applications. Any improvements we make to the licensed intellectual property will be owned by us but licensed back to Cellectis on an exclusive basis for any use outside of our exclusive agricultural field of use. The exclusivity of our license agreement with Cellectis will be subject to existing non-exclusive licenses granted to third parties in the field of research.

In consideration for the license from Cellectis, we will be required to pay to Cellectis, on a product-by-product and country-by-country basis, a royalty of % of net sales of any products that are covered by the patents licensed from Cellectis. In addition, we will be required to pay Cellectis % of revenue we receive for sublicensing our rights under the agreement to third parties. Our payment obligations to Cellectis will expire upon the expiration of the last-to-expire valid claim of the patents licensed to us by Cellectis.

Under our license agreement with Cellectis, Cellectis will have the first right to control the prosecution, maintenance, defense and enforcement of the licensed intellectual property and we will have the right to step in and assume such control if Cellectis elects to not prosecute, maintain, defend or enforce such intellectual property. In addition, some of the intellectual property that will be licensed to us by Cellectis will include a sublicense of intellectual property originally licensed to Cellectis by the University of Minnesota. Therefore, our license from Cellectis will be subject to the terms and conditions of the license agreement between the University of Minnesota and Cellectis, and to the extent our activities under our license agreement with Cellectis violate any terms and conditions of the license agreement between Cellectis and the University of Minnesota, we will be responsible for any damages that Cellectis may incur. In addition, we will be required to reimburse Cellectis for any and all payments made by Cellectis to the University of Minnesota pursuant to the license agreement between the University of Minnesota and Cellectis to the extent that any such payments are required to be made as a result of our applicable activities. Under the license agreement between Cellectis and the University of Minnesota, the University of Minnesota has the first right to control the prosecution and maintenance of the licensed intellectual property.

Our license agreement with Cellectis will be perpetual. However it may be terminated at any time upon the mutual written agreement of both parties, either party's uncured material breach of the agreement, or upon certain bankruptcy and insolvency related events.

License Agreement from Regents of the University of Minnesota—TALEN

In January 2011, Cellectis entered into an exclusive license agreement with the University of Minnesota, which was amended in 2012, 2014 and 2015. Pursuant to the agreement, as amended, Cellectis and its affiliates were granted an exclusive, worldwide, royalty-bearing, sublicensable license, under certain patents and patent applications owned by the University of Minnesota, to make, use, sell, import and otherwise dispose of products covered by the licensed patents, in all fields of use. These licensed patents relate to TALEN molecules and their use in gene editing.

Pursuant to the agreement, with respect to the agricultural field, Cellectis is required to pay to the University of Minnesota a low six digit annual fee per year, as well as a low five digit commercialization fee for every seed variety containing new traits developed using the licensed technology. Cellectis is also required to pay the University of Minnesota, in the aggregate, up to a low seven digit amount of milestone payments based on the net sales of licensed products in the agricultural field. Cellectis must also pay the University of Minnesota certain patent-related expenses for prosecuting and maintaining the licensed patents.

The agreement will expire upon the expiration of the last to expire valid claim of the licensed patents. The University of Minnesota may terminate the agreement upon advance written notice in the event of the insolvency

or bankruptcy of Cellectis, and immediately upon written notice in the event that Cellectis challenges the validity or enforceability of any licensed patent in a court or other applicable authority. Cellectis and the University of Minnesota may terminate the agreement by written notice in the event of the other party's breach that has not been cured within a specified number of days after receiving notice of such breach.

License Agreement from Regents of the University of Minnesota—CRISPR

In December 2014, we entered into an exclusive license with the University of Minnesota, pursuant to which we were granted an exclusive, worldwide, sublicensable license under a specified patent application and any patents that issue therefrom owned by the University of Minnesota relating to the use of the CRISPR-Cas9 technology to make use, and commercialize products covered by the licensed patents in any field of use. Pursuant to the terms of the agreement, we must use commercially reasonable efforts to commercialize the licensed technology and to manufacture, offer to sell, and sell licensed products as soon as practicable and to maximize sales. We must also achieve certain sales- and patent-related milestones.

Pursuant to the terms of the agreement, we paid the University of Minnesota an upfront license fee payment in the amount of $130,000 in connection with entering into the agreement. We are also required to pay the University of Minnesota a tiered annual fee that increases from $20,000 to $225,000 based on the occurrence of certain specified events, including the grant of a sublicense to a third party, as well as patent-related expenses incurred under the agreement in prosecuting and maintaining the licensed patents. We are also required to pay the University of Minnesota a certain percentage of all revenues received by us under sublicenses. If we undergo a change of control and wish to assign all of our rights and duties under the agreement, we must pay the University of Minnesota a specified transfer fee.

Unless earlier terminated, the agreement will continue in effect until no licensed patent is active and until no licensed patent application is pending. The University of Minnesota may terminate the agreement for our uncured breach of the agreement upon 90 days' prior written notice, or 60 days' prior written notice if the breach relates to our payment obligations under the agreement. The University of Minnesota may also terminate the agreement, upon 10 days' prior written notice, if we file for bankruptcy or become insolvent. The University of Minnesota may also immediately terminate the agreement if we or our agents or representatives commences or maintains an action in any court or before any governmental agency asserting or alleging the invalidity or unenforceability of the licensed patent rights. We may terminate the agreement for The University of Minnesota's uncured breach of the agreement upon 90 days' prior written notice. We may also terminate the agreement at any time upon 60 days' prior written notice.

License Agreement from Plant Bioscience Limited

In April 2015, we entered into an exclusive license agreement with Plant Bioscience Limited, or PBL, pursuant to which we were granted an exclusive, worldwide license to use and exploit certain gene-editing technologies related to wheat with endogenous resistance to powdery mildew, and to provide commercial development and technical services to third parties. The technology licensed to us was originally exclusively licensed to PBL by the Institute of Genetics and Developmental Biology, or IGDB, which holds certain rights to which our exclusive license from PBL is subject. Pursuant to the agreement, we are required to use commercially reasonable efforts to achieve certain milestones in a specified development and commercial program, and to exploit the license so as to maximize the sublicensing of the licensed technology and the development and commercial use of the licensed products.

The agreement will expire on the later of the tenth anniversary of the date that sales of the licensed products first occurred or the last expiration of a valid claim of a licensed patent. We may terminate the agreement at any time for any reason by giving PBL written notice. PBL may terminate the agreement upon our material breach of the agreement that has not been cured within a specified number of days after receiving notice of such breach. The agreement will also automatically terminate if we become insolvent or bankrupt.

Commercial License Agreement with Two Blades Foundation

In December 2014, we entered into a commercial license agreement with Two Blades Foundation relating to TAL nuclease technologies, which was amended in 2016. Pursuant to the agreement, we granted Two Blades Foundation a non-exclusive license to TALEN technology for not-for-profit uses within the field of plants genetically engineered by TAL nuclease, including use in Two Blades Foundation's humanitarian efforts to support subsistence farming, and for certain commercial applications related to Two Blades Foundation's plant disease resistance programs. The intellectual property licensed to Two Blades Foundation was originally licensed to Cellectis by the University of Minnesota. In addition, pursuant to the agreement and subject to certain restrictions, we received a non-exclusive license under Two Blades Foundation's TAL Code technology related to nucleases for commercial uses of TAL nucleases in certain specified crop plants. We have an option to expand our license to additional crops under certain conditions.

The agreement will expire upon the expiration of the last to expire valid claim of the licensed patents under the agreement. Either party may terminate the agreement in the event of the insolvency or bankruptcy of the other party, or immediately upon written notice in the event that the other party, or its sublicensees or subcontractors challenges the validity or enforceability of any licensed patent in a court or other applicable authority. Either party may terminate the agreement by written notice in the event of the other party's breach that has not been cured within a specified number of days after receiving notice of such breach. In the event of termination of license agreement between the University of Minnesota and Cellectis with respect to the TALEN technology, our license from Two Blades Foundation will terminate.

Trademarks

As of May 31, 2017, we had two pending trademark applications in the United States.

Government Regulation and Product Approval

In the United States, the FDA and the USDA Food Safety Inspection Service, or FSIS, are primarily responsible for overseeing food regulation and safety, although as many as fifteen federal agencies also play a role in U.S. food regulation, including several other agencies within USDA.

USDA has regulatory jurisdiction over transgenic crops through the Animal and Plant Health Inspection Service, or APHIS. Under the Plant Protection Act, USDA requires anyone who wishes to import, transport interstate, or plant a "regulated article" to apply for a permit or notify APHIS that the introduction will be made. Regulated articles are defined as "any organism which has been altered or produced through genetic engineering … which USDA determines is a plant pest or has reason to believe is a plant pest." The petition process can be a multi-year process that varies based on a number of factors, including APHIS' familiarity with similar products, the type and scope of the environmental review conducted, and the number and types of public comments received. APHIS conducts a comprehensive science-based review of the petition to assess, among other things, plant pest risk, environmental considerations pursuant to the National Environmental Policy Act of 1969, or NEPA, and any potential impact on endangered species. If, upon the completion of the review, APHIS grants the petition, the product is no longer deemed a "regulated article" and the petitioner may commercialize the product, subject to any conditions set forth in the decision. If APHIS does not determine the product to be non-regulated, the product may be subject to extensive regulation, including permitting requirements for import, handling, interstate movement, and release into the environment, and inspections.

We have submitted petitions to APHIS for five of our product candidates to date: high oleic soybeans, high oleic/low lin soybeans, cold storable potatoes, reduced browning potatoes and powdery mildew resistant wheat. We have received confirmation from APHIS for all five product candidates that APHIS does not consider such product candidate to be a "regulated article" under the Plant Protection Act. There can be no guarantee of the timing or success in obtaining nonregulated status from APHIS for our other crops or that the governing regulations will not change. Government regulations, regulatory systems, and the politics that influence them vary widely among jurisdictions and change often.

The FDA has jurisdiction to regulate more than 80 percent of the U.S. food supply. It derives its regulatory power from the FDCA, which has been amended over time by several subsequent laws. The FDA's oversight of food safety and security is primarily carried out by its Center for Food Safety and Applied Nutrition. To execute its responsibilities, the FDA employs a team of more than 900 investigators and 450 analysts in the foods program who conduct inspections and collect and analyze product samples. The FDA typically does not perform pre-market inspection for foods. The FDA also regulates ingredients, packaging, and labeling of foods, including nutrition and health claims and the nutrition facts panel. Foods are typically not subject to premarket review and approval requirements, with limited exceptions.

For its part, the FDA regulates foods made with GMOs under its 1992 "Statement of Policy: Foods Derived from New Plant Varieties." Under this policy, the FDA regulates foods derived from genetically modified plant varieties consistent with the framework for non-genetically modified foods. Under Section 409 of the FDCA, any substance that is reasonably expected to become a component of food is considered a "food additive" that is subject to premarket approval by the FDA, unless the substance is generally recognized as safe, or GRAS. Companies are responsible for making an initial determination of whether a food substance falls under an existing food additive regulation, requires a new food additive petition, or is GRAS. A company may market a new food ingredient based on its independent determination that the substance is GRAS; however, the FDA can disagree and take enforcement action. The FDA offers a voluntary consultation process to determine whether foods derived from genetically modified plant varieties will be subject to these more stringent regulatory requirements. In most cases, however, foods derived from genetically modified plant varieties are not subjected to premarket review and approval processes.

The FDA does not currently require manufacturers to label foods made with GMOs as such, but permits voluntary labeling pursuant to a 2001 guidance document. This policy has been the subject of pressure from consumer groups and there can be no guaranty that it will not change in the future.

Competition

The market for agricultural biotechnology products is highly competitive, and we face significant direct and indirect competition in several aspects of our business. Competition for improving plant genetics comes from conventional and advanced plant breeding techniques, as well as from the development of genetically modified traits. Other potentially competitive sources of improvement in crop yields include improvements in crop protection chemicals, fertilizer formulations, farm mechanization, other biotechnology, and information management. Programs to improve genetics and chemistry are generally concentrated within a relatively small number of large companies, while non-genetic approaches are underway with broader set of companies. Additionally, competition for providing more nutritious ingredients for food companies come from chemical-based ingredients, additives and substitutes, which are developed by various companies.

In general, we believe that our direct competitors generally fall into the following categories:

- ***Large Agricultural Biotechnology, Seed, and Chemical Companies***—Only a limited number of companies have been actively involved in new trait discovery, development, and commercialization: BASF SE, Bayer AG, DuPont Pioneer, Monsanto Co., Syngenta AG, Takii & Company, LTD and The Dow Chemical Co. Many of these companies have substantially larger budgets for gene discovery, research, development, and product commercialization than we do. Some of these companies also have substantial resources and experience managing the regulatory process for new genetically modified seed traits. Each of Monsanto, DuPont Pioneer, Syngenta, Dow, and Bayer also has significant chemical crop protection background and businesses. The trait pipelines of these companies are heavily weighted toward biotic stress traits, although they also have significant programs aimed at development of abiotic stress traits, and would compete with our farmer-centric agriculturally advantageous trait products. While these companies have internal programs that may compete with our own, they also seek new traits externally and, as such, some of them have been, and may in the future be, our partners.

- ***Specialty Food Ingredient Companies***—Companies focused on providing solutions to the food industry through chemical, synthetic, or other methods. These companies include International Flavors & Fragrances Inc., Givaudan, Kerry Group plc, CSM N.V., FMC Corporation, CP Kelco, Novozymes, Ingredion Incorporated and Royal DSM N.V. These companies develop products that include chemical modification of food ingredients to achieve functional performance, such as chemical additives for food products. Such products currently do, and may in the future, compete with our consumer-centric food ingredient products. While these companies may produce products that directly compete with our own, some may in the future be our partners in developing healthier food ingredients for consumers.

We also believe that we may face indirect competition from trait research and development companies as well as agricultural research universities and institutions. Given the global importance of agriculture, there are a number of companies, research universities and institutions that specialize in research and development of agricultural yield and product quality traits. Companies such as Evogene Ltd., Ceres, Inc., and Keygene N.V., among others, are competitors in our field but typically focus on a limited number of traits, and do not generally have the product development, gene-editing technologies and regulatory infrastructure necessary to bring traits to market. Therefore, they typically outlicense trait technologies to large industry players with in-house development and regulatory capabilities at a relatively early stage of development. Most publicly funded research is focused on basic research programs that aim to understand basic biological processes and does not necessarily engage in further development and commercialization of discovered traits. While these programs are potentially competitive with us, we view them primarily as sources of innovation that fit with our business model.

Many of our current or potential competitors, either alone or with their R&D or collaboration partners, have significantly greater financial resources and expertise in research and development, manufacturing, testing and marketing approved products than we do. Mergers and acquisitions in the plant science, specialty food ingredient and agricultural biotechnology, seed and chemical industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through R&D and collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel, as well as in acquiring technologies complementary to, or necessary for, our programs.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products faster, with lower research costs or with more desirable traits than we can.

Research and Development

As of May 31, 2017, we had 20 employees dedicated to research and development. Our research and development team has technical expertise in genome engineering, molecular biology, biochemistry, genetics and genetic engineering, plant physiology and plant breeding. Our research and development activities are conducted principally at our Minnesota facilities. We have made, and will continue to make, substantial investments in research and development. Our research and development expenses were $1.3 million, $5.6 million and $2.8 million for the three months ended March 31, 2017 and for the years ended December 31, 2016 and 2015, respectively.

Facilities

We lease a 17,485 square-foot facility in New Brighton, Minnesota, which commenced on October 15, 2012 and expires on October 14, 2017. In March 2016, we acquired a 10-acre parcel in Roseville, Minnesota where we built a 10,900 square-foot greenhouse facility that became operational in July 2016. We plan to build our headquarters facility at the same location and expect the new facility to be composed of a 35,000 square-foot office and lab building, with greenhouses and outdoor research plots. We intend to finance the building for the new facility in whole or in part through a sale leaseback transaction. On June 20, 2017, we signed an agreement with a third party buyer for the sale of the land and warehouse facility. The completion of the sale is conditioned

on us and the buyer entering into a new facility construction agreement and a lease in respect of the property in the forms contemplated by the sale agreement. We expect to close on the proposed transaction and construction to begin on the new facilities in the second half of 2017.

Legal Proceedings

We currently are not a party to any material litigation or other material legal proceedings. From time to time, we may be subject to legal proceedings and claims in the ordinary course of business.

Corporate Information

We were incorporated in Delaware on January 8, 2010 and are a wholly owned subsidiary of Cellectis S.A. (*société anonyme*). Our principal executive offices are located at 600 County Road D West, Suite 8, New Brighton, MN 55112, United States of America, and our telephone number is +1 (651) 683-2807. We also maintain a website at www.calyxt.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

MANAGEMENT

Director, Director Nominees and Executive Officers

The following table sets forth information regarding our director, director nominees and executive officers, as of the date of this prospectus. Upon completion of this offering, our Board of Directors is expected to consist of five members. It is expected that each of our director nominees will become directors effective upon the consummation of this offering.

Name	Age	Position
André Choulika, Ph.D.	52	Chairman and Director
Federico A. Tripodi	40	Chief Executive Officer
Bryan W. J. Corkal	49	Chief Financial Officer
Daniel Voytas, Ph.D.	54	Chief Science Officer
Feng Zhang, Ph.D.	42	Chief Operations Officer
Manoj Sahoo	42	Chief Commercial Officer
Glenn Bowers, Ph.D.	64	Vice President of Breeding
Michel Arbadji	52	Director of Business Development
Joseph B. Saluri, J.D.	50	General Counsel, Executive Vice President – Corporate Development
		Director Nominee
		Director Nominee
		Director Nominee
		Director Nominee

Set forth below is information concerning our director, director nominees and executive officers as of the date of this prospectus.

André Choulika, Ph.D., has served as Chairman of our Board of Directors since August 2010. Dr. Choulika is one of the founders of Cellectis and has served as Chief Executive Officer of Cellectis since the company's inception in 1999. He has served as the Chairman of the Board of Directors of Cellectis since 2011. Since December 2014, Dr. Choulika has served as Chief Executive Officer of Cellectis, Inc. From 1997 to 1999, Dr. Choulika worked as a post-doctoral fellow in the Division of Molecular Medicine at Boston Children's Hospital, where he was one of the inventors of nuclease-based genome editing technologies and a pioneer in the analysis and use of meganucleases to modify complex genomes. After receiving his Ph.D. in molecular virology from the University of Paris VI (Pierre et Marie Curie), he completed a research fellowship in the Harvard Medical School Department of Genetics. His management training is from HEC (Challenge +). Based on Dr. Choulika's deep knowledge of our company and scientific experience, we believe Dr. Choulika has the appropriate set of skills to serve as a member of our Board of Directors.

Federico A. Tripodi has served as our Chief Executive Officer since May 2016. He holds a Master of Business Administration degree from Washington University's Olin Business School, as well as an agronomic engineering degree from Buenos Aires University, and has gathered extensive experience in agricultural R&D and product development during his nearly two-decade career in the agriculture biotechnology and seeds industry. Prior to joining Calyxt, Mr. Tripodi worked as General Manager for Monsanto Company's Sugarcane Division in Brazil for nearly three years. He held other roles for Monsanto in Saint Louis, Missouri, spanning Corporate Strategy (2011– 2013), Omega-3 Program Lead (2009 – 2011), Oilseeds Global Quality Management Lead (2008 – 2009) and multiple other roles that involved managing multidisciplinary research teams in the technology organization between 2001 and 2008. During his tenure at Monsanto, Mr. Tripodi led or participated with early discovery and late commercialization phase product launches across the Americas, which included biotech consumer traits (improved composition soybean oils) and farmer traits (high yield, drought tolerance, insect protection and herbicide tolerance). Mr. Tripodi started his career in Argentina in 1998 in field research of biotechnology traits and chemistry formulations until he moved to Saint Louis in 2001. Mr. Tripodi also has experience as a director of a startup and served on the board of directors for a not-for profit.

Bryan W. J. Corkal has served as our Chief Financial Officer since December 2016. Mr. Corkal received his MBA from York University in Toronto, Canada and a B.Sc. in Civil Engineering from the University of Manitoba. Mr. Corkal is a CFA charter holder and is a CPA in the state of Missouri. Mr. Corkal brings extensive finance and commercial experience in the seeds and traits agricultural sector having worked over 17 years at Monsanto in a variety of finance and strategy roles including the acquisition and integration of several companies. Prior to joining Calyxt, Mr. Corkal was the North America Supply Chain Finance Lead at Monsanto, a business with a total annual product cost of over $2 billion. Mr. Corkal's career at Monsanto also included roles as Director of Investor Relations and Director of Finance (regional CFO) for the Latin America North division, a region covering 30 countries throughout the Americas, where he managed the controllership, credit and collections, tax, payroll, treasury, pension plan and financial planning and analysis functions. Early in his career, Mr. Corkal worked for Ernst & Young and Delcan Corporation as a consultant on a number of projects throughout Canada and Latin America.

Daniel Voytas, Ph.D., has served as our Chief Science Officer since May 2010. Dr. Voytas graduated summa cum laude from Harvard College in 1984 and received his Ph.D. in genetics from Harvard Medical School in 1990. He is one of our co-founders and one of the inventors of the TALEN technology. He continues to optimize the use of TALEN for the targeted modification of plant genomes. In addition to his role at Calyxt, Dr. Voytas is a professor in the Department of Genetics, Cell Biology and Development at the University of Minnesota (UMN), which he joined in 2008, and Director of the UMN's Center for Genome Engineering. In 1992, Dr. Voytas joined the faculty at Iowa State University. Prior to this, he conducted postdoctoral research at Johns Hopkins University School of Medicine. Dr. Voytas is an elected Fellow of the American Association for the Advancement of Science.

Feng Zhang, Ph.D., has served as our Chief Operations Officer since May 2010. Dr. Zeng joined Calyxt in 2010 to develop and lead the trait development programs for crops and vegetables. Dr. Zhang obtained his Ph.D. from Iowa State University working on maize genetics and received post-doctoral training at the University of Georgia. Dr. Zhang has more than 10 years of experience in plant biotechnology development and commercialization and has pioneered development of highly efficient technologies for crop improvement. He has published more than 20 peer-reviewed papers in various journals including Nature, Nature Methods, Proceedings of the National Academy of Sciences and Plant Cell. Dr. Zhang is the co-inventor of more than 10 patents and patent applications. Before joining us, he co-invented TALEN technology with Dr. Voytas at the University of Minnesota and Dr. Adam Bogdanove at Iowa State University.

Manoj Sahoo has served as our Chief Commercial Officer since March 2017. He holds a MBA from the Tuck School of Business at Dartmouth College and a B.S. in Chemical Engineering from the National Institute of Technology in India. Mr. Sahoo has more than two decades of experience working in a variety of roles covering commercial, strategy, business development and mergers and acquisitions for global corporations in agriculture, food, energy and materials fields. Prior to joining us he was Assistant Vice President for Food Ingredients and Bio-industrial Enterprise at Cargill. At Cargill, he was responsible for revenues of over $1 billion, leading the commercial enterprise team to triple its earnings from bio-based products and managing relationships with large institutional customers. His prior roles at Cargill included Business Development Director for Starches and Sweeteners North America as well as serving as an investment team member with the Emerging Business Accelerator, a group structured along corporate venture capital groups, to invest in white space opportunities for Cargill; he also worked in the Corporate Strategy & Development Group. Mr. Sahoo has also served on the boards of both Calysta Inc. and Rivertop Renewables as a Cargill representative. He was responsible for leading Cargill's equity investments in the industrial biotechnology space including co-investment in real assets with institutional financial investors to build a $600 million commercial-scale aquaculture nutrition plant. He also serves on Industry Advisory Board of Larta Institute which assists the USDA, NIH and NSF with the commercialization assistance program.

Glenn Bowers, Ph.D., has served as our Vice President of Breeding since December 2015. He is responsible for breeding, field trialing and seed production for all crops. Dr. Bowers has M.S. and Ph.D. degrees in Plant

Pathology with a focus on breeding and genetics of resistance. He spent 17 years managing a soybean breeding program with Texas A&M University, followed by a year doing the same at Purdue University. He then spent 16 years with Syngenta, first managing a soybean breeding program and then as global head of soybean breeding. He has extensive experience in Argentina and Brazil, in addition to North America. He is also a certified project manager (PMP). Dr. Bowers has extensive experience in delivering products, both global and stateside, through effective collaboration with marketing and supply chain. He is skilled in creating, developing, and managing diverse and globally dispersed teams. He has a deep knowledge of and experience in field trialing, disease phenotyping, and agronomy.

Michel Arbadji has served as our Director of Business Development since July 2015. Mr. Arbadji manages the external supply chain operations. Mr. Arbadji received his degree in Agriculture Engineering and M.A. in Economics and Agriculture Machinery from the Institut National Agronomique Paris Grignon in Paris, France. Prior to joining us, he headed the European and Middle East Operation for Signature Control Systems, build and managed the distribution network, EU marketing and sales. During that period he managed as project manager the new business development of the golf Irrigation division in Europe at John Deere with over 440 accounts. Mr. Arbadji started his career at the Toro Company EMEA, where he held several positions in business development, sales and marketing. Over his 27 years career he successfully built several pioneering businesses from R&D to large scale distribution channels set up. He participated as well in several product launches on the international market. In his career at Cellectis he served as CEO for Sceil the stem cells project (2013 – 2015). He is skilled in negotiation, communication and in delivering complex tasks.

Joseph B. Saluri, J.D., has served as General Counsel and Executive Vice President - Corporate Development since May 2017. He holds a Juris Doctorate from Drake Law School and a B.S.B.A. in investment finance from Drake University. Mr. Saluri has over 20 years of legal and business experience in in the global seeds and biotechnology industry, having served as Chief Legal Officer and Vice President of Business Development for Stine Seed Company, the largest supplier of soybean genetics in the U.S. market, together with its affiliates and related entities. Mr. Saluri was responsible for managing all legal matters related to the Stine Companies. He has a broad depth of experience in litigation, licensing, intellectual property, acquisitions, corporate and regulatory matters. In addition, Mr. Saluri also executed successful business development strategies at Stine that included the acquisitions of seed trait technologies, seed genetics and other ag-biotech technologies. He was involved in the execution and project management of major collaboration projects with various multinational agri-business corporations. Mr. Saluri has served on the public Board of Directors of Newlink Genetics Corporation since 2010, serving on the Compensation and Nominating and Governance Committees and on the Board of Directors of KemPharm, Inc. since 2014, where he chairs the Nominating and Governance Committee and serves on the Audit Committee. Previous to his employment at Stine, Mr. Saluri was an attorney and solicitor at law with Nicholas Critelli & Associates, PC, in Des Moines and London.

Controlled Company Exemption

After completion of this offering, Cellectis will continue to control a majority of the voting power of our outstanding common stock. As a result, we will be a "controlled company" within the meaning of the corporate governance standards. Under the rules, a company of which more than 50% of the voting power is held by an individual, group or another company is a "controlled company" and may elect not to comply with certain corporate governance standards, including the requirements that:

- a majority of the board of directors consist of independent directors;
- we have a nominating and corporate governance committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities; and
- we have a compensation committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

We intend to utilize certain of these exemptions following the offering, and may utilize any of these exemptions for so long as we are a "controlled company". Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements.

Composition of the Board of Directors After this Offering

Following the completion of this offering, our Board of Directors will consist of five directors: Dr. André Choulika (Chairman), , , and . In connection with this offering, we intend to enter into the a stockholders agreement, which will provide Cellectis with certain rights relating to the composition of our Board of Directors. See "Certain Relationships and Related Party Transactions—Relationship with Cellectis—Stockholders Agreement."

Board Committees

The standing committees of our Board of Directors are described below.

Audit Committee

The Audit Committee will initially be composed of (Chairman), and . We expect our Board of Directors to determine that and are independent under the applicable standards of the and the Exchange Act. qualifies as an "audit committee financial expert" as such term is defined in the regulations under the Exchange Act. We expect that the Audit Committee will comply with the applicable standards of the and the Exchange Act. The Audit Committee is responsible for, among other things, the oversight of the integrity of our financial statements and system of internal controls, the qualifications and independence of our independent registered accounting firm and the performance of our internal auditor and independent auditor. The Audit Committee also has the sole authority and responsibility to select, determine the compensation of, evaluate and, when appropriate, replace our independent registered public accounting firm. In addition, the Audit Committee will review reports from management, legal counsel and third parties relating to the status of compliance with laws, regulations and internal procedures. The Audit Committee will also be responsible for reviewing and discussing with management our policies with respect to risk assessment and risk management.

A copy of our Audit Committee Charter will be available on our website upon consummation of this offering.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee will initially be composed of (Chairman), and . The Nominating and Corporate Governance Committee is responsible for, among other things, matters of corporate governance and matters relating to the practices, policies and procedures of our Board of Directors, identifying and recommending candidates for election to our Board of Directors and each committee of our Board of Directors, and reviewing, at least annually, our corporate governance principles. The Nominating and Corporate Governance Committee will also advise on and recommend director compensation, which will be approved by the full Board of Directors. As a "controlled company," we will not be required to have a corporate governance committee comprised entirely of independent directors.

A copy of our Nominating and Corporate Governance Committee Charter will be available on our website upon consummation of this offering.

Compensation Committee

The Compensation Committee will initially be composed of (Chairman), and . The Compensation Committee is responsible for, among other things, reviewing and approving our overall

compensation philosophy and overseeing the administration of related compensation benefit programs, policies and practices. The Compensation Committee is also responsible for annually reviewing and approving the corporate goals and objectives relevant to the compensation of our chief executive officer and other executive officers and evaluating their performance in light of these goals, reviewing the compensation of our executive officers and other appropriate officers, and administering our incentive and equity-based compensation plans. As a "controlled company," we will not be required to have a compensation committee comprised entirely of independent directors.

A copy of our Compensation Committee Charter will be available on our website upon consummation of this offering.

Code of Business Conduct and Ethics

In connection with this offering, we will adopt a Code of Business Conduct and Ethics, or the Code of Conduct that is applicable to all of our employees, executive officers and directors. Following the completion of this offering, the Code of Conduct will be available on our website. The Audit Committee will be responsible for overseeing the Code of Conduct and will be required to approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website or in filings under the Exchange Act as required by the applicable rules and exchange requirements.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth total compensation of our named executive officers for the year ended December 31, 2016. Our NEOs are current executive officers Federico A. Tripodi, Bryan W. J. Corkal and Daniel Voytas and former executive officers Luc Mathis, Gregory Smith and Richard Benish.

Name and Principal Position	Fiscal Year	Salary ($)	Bonus ($)	Option Awards ($)(7)	All Other Compensation ($)(8)	Total ($)
Current Executive Officers						
Federico A. Tripodi(1) Chief Executive Officer	2016	210,538	96,219	232,050	78,000	616,807
Bryan W. J. Corkal(2) Chief Financial Officer	2016	16,782	—	—	2,538	19,320
Daniel Voytas(3) Chief Science Officer	2016	180,000	100,000	273,000	240	553,240
Former Executive Officers						
Luc Mathis(4) Former Chief Executive Officer	2016	65,769	9,865	—	—	75,634
Gregory Smith(5) Former Chief Financial Officer	2016	45,766	—	—	43,750	89,516
Richard Benish(6) Former Interim Chief Financial Officer	2016	—	—	—	—	—

(1) Mr. Tripodi was appointed our CEO, effective on May 23, 2016.

(2) Mr. Corkal was appointed our CFO, effective on December 5, 2016.

(3) Dr. Voytas provided his services to us through a consulting agreement with us. The amount in the "Salary" column represents the consulting fee that he received under this agreement.

(4) During 2016, Dr. Mathis served as our CEO until his resignation on May 22, 2016. Dr. Mathis' compensation was converted from euros to U.S. dollars using the exchange rate of USD 1.0523 for 1 euro, which was the exchange rate on December 31, 2016. The amount in the "Bonus" column represents a bonus that he received in connection with his secondment to us.

(5) During 2016, Mr. Smith served as our CFO until the termination of his employment on March 22, 2016.

(6) Mr. Benish was appointed our interim CFO, effective on April 11, 2016, and served in that role until the termination of his service on December 4, 2016. Mr. Benish provided his services to us through a consulting agreement with CliftonLarsonAllen LLP ("CLA"), a third party. We paid CLA $262,838 for Mr. Benish's services as our interim CFO.

(7) This column reflects the fair value of options granted in 2016 based on their grant date fair value. In accordance with FASB ASC Topic 718, dollar amounts are not recognized for financial accounting reporting purposes for the fiscal year until the occurrence of a triggering event, i.e., a change of control, liquidation, dissolution or initial public offering. These amounts reflect our accounting expense for these awards, and do not correspond to the actual value that will be realized by the NEO. The assumptions used in the calculation of the amounts are described in note 9 "Stock-Based Compensation" to our audited financial statements included in this prospectus. The fair value of these awards will be remeasured each reporting period in accordance with liability accounting.

On April 7, 2016, each of Mr. Tripodi and Dr. Voytas was granted an option to purchase 85,000 and 100,000 common shares, respectively, with an exercise price of $8.79 per share.

(8) All other compensation for the year ended December 31, 2016 includes (a) for Mr. Tripodi, relocation assistance of $78,000, (b) for Mr. Corkal, relocation assistance of $2,538, (c) for Dr. Voytas, telephone expenses of $240 and (d) for Mr. Smith, a payment of $43,750 made in connection with his termination of employment.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth certain information regarding outstanding equity awards of our NEOs as of December 31, 2016. The market value of the shares in the following table is the fair value of such shares as of December 31, 2016.

	Option Awards(1)(2)			
Name	**Number of Securities Underlying Unexercised Options (#) Exercisable**	**Number of Securities Underlying Unexercised Options (#) Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**
Federico A. Tripodi	—	85,000(1)	8.79	4/7/2026
Bryan W. J. Corkal	—	—	—	—
Daniel Voytas	—	20,000(1)	9.10	12/3/2024
	—	6,900(1)	53.49	9/9/2025
	—	50,000(2)	31.13	5/18/2025
	—	50,000(2)	29.52	9/8/2025
	—	100,000(1)	8.79	4/7/2026
Luc Mathis(3)		21,000(1)	9.10	12/3/2024
	—	900(1)	53.49	9/9/2025
Gregory Smith	—	—	—	—
Richard Benish	—	—	—	—

(1) The option grants under the Existing Plan vest and become exercisable upon the achievement of two conditions: a time-vesting condition and a liquidity condition. In addition, in order for each such option to become exercisable, a triggering event, i.e., a change of control, liquidation, dissolution or initial public offering, must occur. Options will only become exercisable upon the occurrence of both the time-vesting and liquidity conditions. Options granted on December 3, 2014 vest 20% on January 3, 2015 and 20% on April 10, 2015, with the remainder vesting quarterly in equal installments over the following three years (or with an additional 25% vesting immediately if we undergo a change in control, liquidation, dissolution or initial public offering and the remainder vesting quarterly thereafter). Options granted on September 9, 2015 vest 20% on the grant date and 20% on the first anniversary of the grant date, with the remainder vesting quarterly in equal installments over the following three years (or with an additional 25% vesting immediately if we undergo a change in control, liquidation, dissolution or initial public offering and the remainder vesting quarterly thereafter). Options granted on April 7, 2016 vest 20% on the grant date and 10% on the first anniversary of the grant date, with the remainder vesting quarterly in equal installments over the following 42 months (or with an additional 25% vesting immediately if we undergo a change in control, liquidation, dissolution or initial public offering and the remainder vesting quarterly thereafter).

On December 3, 2014, each of Dr. Voytas and Dr. Mathis was granted an option to purchase 20,000 and 30,000 common shares, respectively, with an exercise price of $9.10 per share.

On September 9, 2015, each of Dr. Voytas and Dr. Mathis was granted an option to purchase 6,900 and 2,000 common shares, respectively, with an exercise price of $53.49 per share.

On April 7, 2016, each of Mr. Tripodi and Dr. Voytas was granted an option to purchase 85,000 and 100,000 common shares, respectively, with an exercise price of $8.79 per share.

(2) Warrants granted by Cellectis on May 8, 2015 and September 8, 2015 vest in equal annual installments over the first, second and third anniversaries of the grant date.

On May 18, 2015, Dr. Voytas was granted warrants to purchase 50,000 common shares of Cellectis with an exercise price of €29.58 per share, or $31.13 per share using the exchange rate of USD 1.0523 for 1 euro, which was the exchange rate on December 31, 2016.

On September 8, 2015, Dr. Voytas was granted warrants to purchase 50,000 common shares of Cellectis with an exercise price of €28.01 per share, or $29.52 per share using the exchange rate of USD 1.0523 for 1 euro, which was the exchange rate on December 31, 2016.

(3) Dr. Mathis received grants of Cellectis free shares and options. However, these grants were made in respect of his services to Cellectis.

Agreements with Named Executive Officers

We have entered into offer letters with each of Messrs. Tripodi and Corkal. Each of these arrangements provides for at-will employment and generally includes the named executive officer's initial base salary, an indication of eligibility for an annual cash incentive award opportunity and equity awards. In addition, we have entered into an independent contractor agreement with Dr. Voytas. We and Cellectis previously entered into an employment agreement with Dr. Mathis, and we previously entered into a consulting agreement with CLA, through which we engaged Mr. Benish's services. We also entered into a separation agreement with Mr. Smith in connection with his departure.

Federico A. Tripodi

We are party to an offer letter with our Chief Executive Officer, Federico A. Tripodi dated May 6, 2016. Pursuant to the offer letter, Mr. Tripodi's initial base salary was established at $345,000. In addition, Mr. Tripodi is eligible to receive an annual cash bonus with a target value of 50% of his base salary based on his achievement of individual and/or company performance goals as determined by the Board of Directors if he remains employed through the bonus payment date. Mr. Tripodi's base salary and his target bonus percentage are subject to periodic review, but any modification that results in a reduction of such compensation must be approved in writing by Mr. Tripodi. On April 7, 2016, in accordance with the terms of his offer letter, Mr. Tripodi was granted an option to purchase 85,000 shares of our common stock at an exercise price of $8.79 per share.

The offer letter provides Mr. Tripodi's principal place of employment is New Brighton, Minnesota and requires that he relocate to within 50 miles by car of our headquarters within 6 months following the date of the agreement. In exchange for his relocation, the offer letter provides for relocation assistance of up to $78,000, which includes reimbursement of home sale assistance, travel relating to house hunting, temporary living and transition expenses, home purchase closing costs, moving expenses and an additional payment of 30% of any amount of reimbursed home sale assistance costs that are not tax deductible, up to $20,000. The offer letter requires Mr. Tripodi to repay all relocation-related amounts paid by us if he has not relocated by November 22, 2016 and he is required to repay a prorated portion of these sums if, prior to May 23, 2019, he resigns or his employment is terminated for "cause."

While Mr. Tripodi's offer letter provides that his employment is at-will and may be terminated at any time, with or without cause, his offer letter also provides that he will be entitled to severance benefits in the event his employment is terminated by us without cause (which does not include a termination due to Mr. Tripodi's death or disability). Upon such a termination, he will be eligible to receive a pro rata bonus and 12 months of base salary severance paid in installments, provided that, upon our request, he executes a release in favor of us.

Under the terms of Mr. Tripodi's offer letter, he has agreed to maintain the confidentiality of our proprietary or confidential information at all times during his employment and thereafter. He has assigned to us all of the intellectual property rights in any work product created or developed by him during the term of his employment. Mr. Tripodi has also agreed to notify us prior to starting a new position after which we may exercise an election to restrict him from competing for a restricted period of up to 12 months after termination. If Mr. Tripodi is

receiving severance at this time, the severance payments will cease and he will be entitled to receive his base salary during the restricted period. If he breaches the non-competition provision, he is required to reimburse us for all severance and non-competition payments he has received. Furthermore, he has agreed not to solicit any of our customers, employees or prospective customers of any of our subsidiaries for the 24-month period following his termination of employment.

"Cause" means Mr. Tripodi's (i) conviction, guilty plea or plea of nolo contendere of a felony or misdemeanor involving moral turpitude; (ii) any act of fraud or dishonesty or unauthorized disclosure of confidential information; (iii) failure or refusal to follow lawful directions of the Board of Directors; (iv) gross negligence or willful misconduct; (v) failure to perform his duties (other than resulting from illness) which is not cured within five days after written notice is provided to him; (vi) material failure to comply with written company policy or rule which is not cured within five days after written notice is provided to him; or (vii) material breach of an agreement with us which is not cured within 30 days after written notice is provided to him.

Bryan W. J. Corkal

We are party to an offer letter with our Chief Financial Officer, Bryan W. J. Corkal, dated November 16, 2016. Pursuant to the offer letter, Mr. Corkal's initial base salary was established at $220,000. In addition, Mr. Corkal is eligible to receive an annual cash bonus with a target value of 30% of his base salary based on his achievement of individual and/or company performance goals as determined by the Board of Directors if he remains employed through the bonus payment date. Mr. Corkal's base salary and his target bonus percentage are subject to periodic review.

The offer letter provides Mr. Corkal's principal place of employment is New Brighton, Minnesota and requires that he relocate to within 50 miles by car of our headquarters prior to June 30, 2017. In exchange for his relocation, the offer letter provides for relocation assistance of $30,000, paid after the relocation is complete, and reimbursement of up to $20,000 for temporary living and transition expenses incurred prior to June 30, 2017. The offer letter requires Mr. Corkal to repay all relocation-related amounts paid by us by July 15, 2017 if he has not relocated by June 30, 2017, and he is required to repay a prorated portion of these sums if he resigns prior to the December 5, 2019.

While Mr. Corkal's offer letter provides that his employment is at-will and may be terminated at any time, with or without cause, his offer letter also provides that he will be entitled to severance benefits in the event his employment is terminated by us without cause (which does not include a termination due to Mr. Corkal's death or disability). Upon such a termination he will be eligible to receive a pro rata bonus and 12 months of base salary severance paid in installments, provided that, upon our request, he executes a release in favor of us.

Under the terms of Mr. Corkal's offer letter, he has agreed to maintain the confidentiality of our proprietary or confidential information at all times during his employment and thereafter. He has assigned to us all of the intellectual property rights in any work product created or developed by him during the term of his employment. Mr. Corkal has also agreed to notify us prior to starting a new position after which we may exercise an election to restrict him from competing for a restricted period of up to 12 months after termination. If Mr. Corkal is receiving severance at this time, the severance payments will cease and he will be entitled to receive his base salary during the restricted period. If he breaches the non-competition provision, he is required to reimburse us for all severance and non-competition payments he has received. Furthermore, he has agreed not to solicit any of our customers, employees or prospective customers of any of our subsidiaries for the 24-month period following his termination of employment.

The definition of "cause" is generally consistent with the definition in Mr. Tripodi's agreement.

Daniel Voytas

Dr. Voytas entered into a consulting agreement with us, dated January 1, 2010, as amended on December 21, 2012, and spends 10 days per month providing his service to us under this agreement. Under the agreement, he renders support and advisory services including providing scientific support during business development missions, running the scientific advisory board and strategic planning services and analyses relating to project review, agricultural research and development and new technologies. Under the agreement, Dr. Voytas receives a monthly fee of $15,000 for 10 days of service per month.

The initial term of the agreement with Dr. Voytas expired on January 1, 2013 and was extended for a period of one year, with automatic renewals for an additional year unless Calyxt delivers written notice of nonrenewal. The agreement also terminates immediately if Dr. Voytas does not comply with the college and university policies at which he is a faculty member and obtain all necessary approvals to provide services and assign work product to us. The agreement provides that we will pay Dr. Voytas a lump sum equal to three months of consultation fees if he executes and does not revoke a release in favor of us and its subsidiaries if we terminate his agreement prior to the end of the term.

Under the terms of Dr. Voytas' consulting agreement, he has agreed to maintain the confidentiality of proprietary or confidential information of ours and its subsidiaries at all times during his service and thereafter. He has assigned to us all of the intellectual property rights in any work product created or developed by him during the term of his service. Furthermore, he has agreed to not participate in a business that competes with our or solicit any of our customers or employees for the 12-month period following his termination of his consulting term.

Luc Mathis

Cellectis entered into an employment agreement with Dr. Mathis dated as of January 1, 2006, which was subsequently amended several times, with the most recent amendment entered into as of July 1, 2016. Dr. Mathis was our Chief Executive Officer from April 6, 2012 until his resignation on May 22, 2016. On his resignation date, Dr. Mathis was compensated at a monthly rate of $13,154 for his services to Cellectis and at a monthly rate of $1,973 for his secondment to Calyxt using the exchange rate of USD 1.0523 for 1 euro, which was the exchange rate on December 31, 2016.

Under the terms of Dr. Mathis' employment agreement, he agreed to maintain the confidentiality of the Cellectis group's proprietary or confidential information at all times during his employment and thereafter. He has assigned to Cellectis all of the intellectual property rights in any work product created or developed by him during the term of his employment. Dr. Mathis agreed with Cellectis to be subject to a non-competition provision for the 24-month period following his termination of employment. If Dr. Mathis breaches the non-competition provision, he is required to reimburse Cellectis a lump sum equal to 6 months' of his non-competition payment of 60% of base compensation and bonus.

Under his employment agreement, Dr. Mathis became Vice President of New Venture at Cellectis after he ceased to be our Chief Executive Officer. Dr. Mathis's employment agreement includes an exclusivity waiver, under which Dr. Mathis will not participate in any other professional activity without receiving authorization from the Chief Executive Officer of Cellectis, including any activity that competes with the business of any entities of the Cellectis group worldwide. If Dr. Mathis breaches this exclusivity provision, he may be required to pay a lump sum of 150,000 euros to Cellectis.

Gregory Smith

We entered into an offer letter with our former Chief Financial Officer, Mr. Smith, effective May 19, 2015, pursuant to which he was compensated at a rate of $175,000 per year, and eligible for an annual performance

bonus no greater than 25% of his base salary and a one-time $50,000 bonus subject to certain performance metrics and following our completion of an IPO. Mr. Smith's offer letter subjected him to various restrictive covenants including perpetual confidentiality obligations, assignment of intellectual property and 12-month noncompetition and 24-month employee and customer non-solicitation covenants. Under the terms of the offer letter, Mr. Smith was also eligible for severance benefits equal to three months of base salary if his employment was terminated without cause.

We and Mr. Smith agreed that he would separate from us and enter into a separation agreement effective March 22, 2016. Under the separation agreement, Mr. Smith is entitled to a sum of $43,750 in respect of specified claims. In addition, the separation agreement contains customary release and non-disparagement provisions and Mr. Smith forfeited all of his options and any rights under such equity documentation.

Richard Benish

We entered into a consulting agreement with a third party, CLA, dated as of April 5, 2016. The agreement provides that a third party, Richard Benish, will serve as interim CFO at a rate of $150 per hour, with travel time billed at half the normal hourly rate. His duties include financial reporting, analysis and planning, merger and acquisition support, management reporting and other accounting duties or special projects as needed. It contains clarifying language that CLA will serve as an independent contractor of ours and that we and CLA have not entered into an employment relationship.

Director Compensation

The following table sets forth the amount of compensation we paid to our sole director during our fiscal year 2016.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
André Choulika	—	—	273,000	—	273,000

(1) As of December 31, 2016, Dr. Choulika held options to purchase an aggregate of 112,900 common shares.

This column reflects the fair value of options granted in 2016 based on their grant date fair value. In accordance with FASB ASC Topic 718, dollar amounts are not recognized for financial accounting reporting purposes for the fiscal year until the occurrence of a triggering event, i.e., a change of control, liquidation, dissolution or initial public offering. These amounts reflect our accounting expense for these awards, and do not correspond to the actual value that will be realized by the director. The assumptions used in the calculation of the amounts are described in note 9 "Stock-Based Compensation" to our audited financial statements included in this prospectus.

Other than the equity award grant made to Dr. Choulika, we did not pay any director compensation.

Equity-Based Awards

We believe our ability to grant equity-based awards is a valuable and necessary compensation tool that aligns the long-term financial interests of our personnel with the financial interests of our stockholders. In addition, we believe that our ability to grant stock options and other equity-based awards helps us to attract and retain and top talent, and encourages them to drive company performance to promote the success of our business. The material terms of our equity incentive plans are described below.

Calyxt, Inc. Equity Incentive Plan

General

We adopted the Existing Plan on December 13, 2014.

Awards

Awards granted under the Existing Plan may consist of incentive stock options or non-qualified stock options. Each award is subject to the terms and conditions set forth in the Existing Plan and to those other terms and conditions specified by the committee and memorialized in a written award agreement. The options will only become exercisable in the event that a triggering event or this offering occurs.

Shares Subject to the Existing Plan

Subject to adjustment in certain circumstances as discussed below, the Existing Plan authorizes up to 831,500 shares of our common stock for issuance pursuant to the terms of the Existing Plan. The maximum number of shares available for issuance of incentive stock options is 831,500. If and to the extent awards granted under the Existing Plan terminate, expire, cancel or are forfeited without being exercised and/or delivered, the shares subject to such awards will again be available for grant under the Existing Plan. Additionally, to the extent any shares subject to an award are tendered and/or withheld in settlement of any exercise price and/or any tax withholding obligation associated with that award, those shares will again be available for grant under the Existing Plan, but shares issued under the Existing Plan and later repurchased by us pursuant to a repurchase right shall not be available for grant under the Existing Plan in the future.

In the event of any stock split, reverse stock split, stock dividend, combination, consolidation, recapitalization or reclassification of the shares, rights offering, reorganization, merger, spin-off, split-up change in corporate structure or similar event or transaction, adjustments will be made by the administrator of the Existing Plan to: (i) to the aggregate number, class and/or issuer of the securities reserved for issuance under the Existing Plan; (ii) to the number, class and/or issuer of securities subject to outstanding awards; (iii) to the exercise price of outstanding options and (iv) any repurchase price per share applicable to shares issued pursuant to an award, in each case in a manner that reflects equitably the effects of such event or transaction.

Administration

The Board of Directors or, to the extent authority is delegated by the Board of Directors, its Compensation Committee or other committee (in either event, the "Administrator") will administer the Existing Plan and determine the following items:

- designate participants;
- determine the fair market value of common stock, provided that the determination is applied consistently to participants under the Existing Plan;
- determine the types of awards to grant, the number of shares to be covered by awards, the terms and conditions of awards, whether awards may be settled or exercised in cash, shares, other awards, other property or net settlement and the circumstances under which awards may be canceled, repurchased or forfeited and vesting will be accelerated or forfeiture restrictions waived;
- interpret and administer the Existing Plan and any instrument or agreement relating to, or award made under, the Existing Plan;
- amend the terms or conditions of outstanding awards, including to accelerate the time or times at which an award becomes vested, unrestricted or may be exercised and to accommodate differences in local law, tax policy or custom which deviate from the terms and conditions of the Existing Plan, provided that the amendment does not materially and adversely affect the rights of any participant without his or her consent;
- implement an option exchange program;
- make any other determination and take any other action that it deems necessary or desirable to administer the Existing Plan.

Eligibility

Employees, directors, consultants and other of our service providers that provide services to us or our affiliates are eligible to participate in the Existing Plan. Only our employees or employees of our subsidiaries are eligible to receive incentive stock options.

Stock Options

Term, Purchase Price and Vesting. The exercise price of any stock option granted under the Existing Plan will be not less than the fair market value of our common stock, par value $0.0001 per share, on the date the option is granted.

The administrator of the Existing Plan may determine the term for each option, provided that the term of any option may not exceed ten years from the date of grant. The vesting schedule for each option will be determined by the administrator of the Existing Plan.

Effects of Termination of Service

Unless otherwise provided in an award agreement, all unvested awards under the Existing Plan will terminate and be forfeited in the event of any termination of employment. Generally, unless provided otherwise in the award agreement, the right to exercise any vested option terminates three months following termination of the participant's relationship with us for reasons other than death, disability or termination for cause. If the participant's relationship with us terminates due to death or disability, unless provided otherwise in the award agreement, the right to exercise a previously vested option will terminate nine months or six months, respectively following such termination. If the participant's relationship with us is terminated for cause, any option not already exercised will automatically be forfeited as of the date of such termination.

Buyout Provision

The Existing Plan contains a provision that permits the Administrator to buy out using cash or common stock an option that was previously granted under the Existing Plan pursuant to the terms and conditions provided in the option award agreement.

Amendment and Termination of the Existing Plan

The Existing Plan will terminate on the tenth anniversary of the effective date. Our Board of Directors may amend, alter or discontinue the Existing Plan at any time.

Change of Control

In the event of a dissolution, liquidation or change in control of us, our Board of Directors has discretion to cash out all or any portion of outstanding awards, provided that the successor company will assume all or a portion of outstanding awards or substitute for equivalent awards, any combination thereof or, if the successor company does not agree to such treatment, the outstanding awards will terminate upon the transaction and, unless otherwise provided in the award agreement, the administrator may accelerate the vesting and exercisability of outstanding options to be terminated prior to the change in control.

A change of control will be deemed to have taken place upon: (i) the acquisition of all or substantially all of our assets, other than to an entity where the majority of its combined voting power is owned by us, where it is owned by the holders of our capital stock in substantially the same proportions as their ownership in us or where the majority of the voting capital stock retains majority voting power; (ii) a merger, consolidation or other business combination that results in the current holders of a majority of voting stock to cease to hold a majority

of such stock following the transaction; or (iii) the acquisition by any person or group of persons other than the current, directly or indirectly, of more than 50% of the voting power of us or more than 50% of our equity interests, excluding transactions that are determined to be capital raising transactions by the Board of Directors.

2017 Omnibus Incentive Plan

General

Prior to our initial public offering, our Board of Directors adopted a new equity compensation plan in the form of an omnibus incentive plan, or the Omnibus Plan. We have granted awards of restricted stock units to certain employees and awards of restricted stock units and stock options to our employees, director, director nominees, officers and consultants and those of our parent or affiliates. The following is a summary of the material terms of the Omnibus Plan.

Purpose

The purpose of the Omnibus Plan is to motivate and reward those employees, directors and consultants who are expected to contribute significantly to our long term success and to further align employee interests to those of our stockholders.

Plan Term

The Omnibus Plan is scheduled to expire after ten years. The term will expire sooner if, prior to the end of the ten-year term or any extension period, the maximum number of shares available for issuance under the Omnibus Plan has been issued or our Board of Directors terminates the Omnibus Plan.

Authorized Shares and Award Limits

Subject to adjustment, 2,000,000 shares of our common stock (representing % of our issued and outstanding shares as of the effective time of this offering) will be available for awards to be granted under the Omnibus Plan (other than substitute awards; that is, awards that are granted in assumption of, or in substitution for, an outstanding award previously granted by a company or other business acquired by us or with which we combine). The total number of shares available for issuance under the Omnibus Plan will be increased on the first day of each Company fiscal year following the effective date of the Company's Initial Public Offering in an amount equal to the least of (i) 2,000,000 shares, (ii) 5% of outstanding shares on the last day of the immediately preceding fiscal year of (iii) such number of shares as determined by the Board of Directors in its discretion. An individual who is a non-employee director may not receive an award under the Omnibus Plan that relates to more than $5,000,000 for any calendar year.

Subject to adjustment, the maximum number of shares of our common stock that may be granted to any single individual during any calendar year is as follows: (i) stock options and SARs that relate to no more than 200,000 shares of our common stock; (ii) restricted stock and RSUs that relate to no more than 200,000 shares of our common stock; (iii) performance awards denominated in shares and other share-based awards that relate to no more than 200,000 shares of our common stock; (iv) deferred awards denominated in shares that relate to no more than 200,000 shares of our common stock; (v) deferred awards denominated in cash that relate to no more than $5,000,000; and (vi) performance awards denominated in cash and other cash-based awards that relate to no more than $5,000,000, provided that such no participant may receive awards that relate to more than 200,000 shares of our common stock during the fiscal year of any participant's initial year of service with the Company.

If an award is forfeited, expires, terminates or otherwise lapses or is settled for cash, the shares covered by such award will again be available for issuance under the Omnibus Plan.

Administration

The Board of Directors or, to the extent authority is delegated by the Board of Directors, its Compensation Committee or other committee will administer the Omnibus Plan.

The Board of Directors or, to the extent authority is delegated by the Board of Directors, its Compensation Committee or other committee (in either event, the "Administrator") will administer the Omnibus Plan and determine the following items:

- determine the fair market value of the common stock;
- select the participants to whom awards may be granted
- approve forms of agreements, amend or modify outstanding awards or award agreements
- correct any defect, supply any omission and reconcile any inconsistency in the Plan or any Award, in the manner and to the extent it will deem desirable to carry the Plan into effect;
- establish, amend, suspend or waive rules and regulations and appoint agents, trustees, brokers, depositories and advisors and determine such terms of their engagement as it will deem appropriate;
- construe and interpret the terms of the plan, any award agreement and any agreement related to any award; and
- make any other determination and take any other action that it deems necessary or desirable to administer the Omnibus Plan

To the extent not inconsistent with applicable law, the Administrator may delegate to one or more of our officers the authority to grant stock options or SARs or other awards in the form of share rights under the Omnibus Plan.

Types of Awards

The Omnibus Plan provides for grants of incentive and non-qualified stock options, SARs, restricted stock, RSUs, performance awards, deferred awards, other share-based awards and other cash-based awards:

- *Stock Options*. A stock option is a contractual right to purchase shares at a future date at a specified exercise price. The per share exercise price of a stock option (except in the case of substitute awards) will be determined by the Administrator at the time of grant but may not be less than the closing price of a share of our common stock on the day prior to the grant date. The Administrator will determine the date on which each stock option becomes vested and exercisable and the expiration date of each option. No stock option will be exercisable more than ten years from the grant date, except that the Administrator may generally provide for an extension of such ten-year term in the event the exercise of the option would be prohibited by law on the expiration date. Stock options that are intended to qualify as incentive stock options must meet the requirements of Section 422 of the Internal Revenue Code.
- *SARs*. A SAR represents a contractual right to receive, in cash or shares, an amount equal to the appreciation of one share of our common stock from the grant date over the exercise or hurdle price of such SAR. The per share exercise price of a SAR (except in the case of substitute awards) will be determined by the Administrator but may not be less than the closing price of a share of our common stock on the day prior to the grant date. The Administrator will determine the date on which each SAR may be exercised or settled and the expiration date of each SAR. However, no SAR will be exercisable more than ten years from the grant date.
- *Restricted Stock*. Restricted stock is an award of shares of our common stock that are subject to restrictions on transfer and a substantial risk of forfeiture.
- *RSUs*. An RSU represents a contractual right to receive the value of a share of our common stock at a future date, subject to specified vesting and other restrictions.
- *Performance Awards*. Performance awards, which may be denominated in cash or shares, will be earned upon the satisfaction of performance conditions specified by the Administrator. The performance conditions for awards that are intended to qualify as "performance-based compensation"

for purposes of Section 162(m) of the Internal Revenue Code may include, but not be limited to, the following: return measures (including total shareholder return; return on equity; return on assets or net assets; return on risk-weighted assets; and return on capital (including return on total capital or return on invested capital)); revenues (including total revenue; gross revenue; net revenue; and net sales); income/earnings measures (including earnings per share; earnings or loss (including earnings before or after interest, taxes, depreciation and amortization); gross income; net income; operating income (before or after taxes); pre-or after-tax income or loss (before or after allocation of corporate overhead and bonus); pre- or after-tax operating income; net earnings; net income or loss (before or after taxes); operating margin; gross margin; and adjusted net income); expense measures (including expenses; operating efficiencies; and improvement in or attainment of expense levels or working capital levels (including cash and accounts receivable)); cash flow measures (including cash flow or cash flow per share (before or after dividends); and cash flow return on investment); share price measures (including share price; appreciation in and/or maintenance of share price; and market capitalization); strategic objectives (including market share; debt reduction; customer growth; employee satisfaction; research and development achievements; mergers and acquisitions; management retention; dynamic market response; expense reduction initiatives; reductions in costs; risk management; regulatory compliance and achievements; recruiting and maintaining personnel; and business quality); and other measures (including economic value-added models or equivalent metrics; economic profit added; gross profits; economic profit; comparisons with various stock market indices; financial ratios (including those measuring liquidity, activity, profitability or leverage); cost of capital or assets under management; and financing and other capital raising transactions (including sales of the Company's equity or debt securities; factoring transactions; sales or licenses of the Company's assets, including its intellectual property, whether in a particular jurisdiction or territory or globally; or through partnering transactions)). These performance criteria may be measured on an absolute (e.g., plan or budget) or relative basis, may be established on a corporate-wide basis or with respect to one or more business units, divisions, subsidiaries or business segments, may be based on a ratio or separate calculation of any performance criteria and may be made relative to an index or one or more of the performance goals themselves.

- *Deferred Awards*. The Administrator is authorized to grant awards denominated in a right to receive shares of our common stock or cash on a deferred basis.
- *Other Share-Based Awards*. The Administrator is authorized to grant other share-based awards, which may be denominated in shares of our common stock or factors that may influence the value of our shares.
- *Other Cash-Based Awards*. The Administrator is authorized to grant other cash-based awards either independently or as an element of or supplement to any other award under the Omnibus Plan.

Adjustments

In the event that the Administrator determines that, as result of any stock split, reverse stock split, stock dividend, combination, consolidation, recapitalization (including a recapitalization through a large nonrecurring cash dividend) or reclassification of the shares, repurchase, exchange or subdivision of the Shares or other securities of the Company, a rights offering, a reorganization, merger, spin-off, split-up, change in corporate structure or other similar occurrence, in each case excluding any triggering event, i.e., a change in control to an entity of which the Company is not a majority owner, or is not a majority owner of the Company, an adjustment is appropriate to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Omnibus Plan, the Administrator will, subject to compliance with Section 409A of the Internal Revenue Code, adjust equitably any or all of:

- the number, type and class of shares or other stock or securities: available for future awards and covered by each outstanding award.
- the grant, purchase, exercise or hurdle price covered by each such outstanding award; and

- any repurchase price per share applicable to shares issued pursuant to any award, or, if deemed appropriate, will make a provision for a cash payment to the holder of an outstanding award.

In addition, the Administrator may adjust the terms and conditions of, and the criteria included in, outstanding awards in recognition of events affecting the Company or the financial statements of the Company, or changes in applicable laws, regulations or accounting principles, whenever the Administrator determines that such adjustments are appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Omnibus Plan, subject, in all such instances, to compliance with Section 162(m) of the Internal Revenue Code.

No Repricing

Except as provided the Omnibus Plan's adjustment provisions, no action will directly or indirectly, through cancellation and regrant or any other method, reduce, or have the effect of reducing, the exercise or hurdle price of any award established at the time of grant thereof without approval of our stockholders.

Termination of Service and Change of Control

The Administrator will determine the effect of a termination of employment or service on outstanding awards, including whether the awards will vest, become exercisable, settle or be forfeited. In the event of a change of control, except as otherwise provided in the applicable award agreement, the Administrator may provide for:

- assumption or substitution with equivalent awards of outstanding awards under the Omnibus Plan by us (if we are the surviving corporation) or by the surviving corporation or its parent or subsidiary;
- Termination of outstanding awards under the Omnibus Plan in exchange for a payment of cash, securities and/or other property equal to the excess of the fair market value of the portion of the awards stock that is vested and exercisable immediately prior to the consummation of the corporate transaction over the per share exercise price;
- any combination of assumption, substitution or termination of outstanding awards under the Omnibus Plan as above; *provided* that outstanding awards of stock options and SARs may be cancelled without consideration if the fair market value on the date of the change in control is greater than the exercise or hurdle price of such award; or
- acceleration of the vesting (including the lapse of any restrictions, with any performance criteria or conditions deemed met at target) and exercisability of outstanding award in full prior to the date of the change of control and the expiration of awards not timely exercised by the date determined by the Administrator.

Amendment and Termination

Our Board of Directors may amend, alter, suspend, discontinue or terminate the Omnibus Plan. The Administrator may also amend, alter, suspend, discontinue or terminate, or waive any conditions or rights under, any outstanding award. However, subject to the adjustment provision and change of control provision, any such action by the Administrator that would materially adversely affect the rights of a holder of an outstanding award may not be taken without the holder's consent, except to the extent that such action is taken to cause the Omnibus Plan to comply with applicable law, stock market or exchange rules and regulations, or accounting or tax rules and regulations, or to impose any "clawback" or recoupment provisions on any awards in accordance with the Omnibus Plan. The Company will also seek, to the extent necessary and desirable to comply with applicable laws, the approval of holders of capital stock with respect to any amendment of the Omnibus Plan.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding beneficial ownership of our common stock as of May 31, 2017, and as adjusted to reflect the sale of the shares of common stock in this offering, for:

- each person whom we know to own beneficially more than 5% of our common stock;
- each director, director nominee and named executive officer individually; and
- all director, director nominees and executive officers as a group.

In accordance with the rules of the SEC, beneficial ownership includes voting or investment power with respect to securities and includes the shares issuable pursuant to stock options that are exercisable within 60 days of May 31, 2017. Shares issuable pursuant to stock options are deemed outstanding for computing the percentage of the person holding such options but are not outstanding for purposes of computing the percentage of any other person. The number of shares of common stock outstanding after this offering includes shares of common stock being offered for sale by us in this offering.

The percentage of beneficial ownership for the following table is based on shares of common stock outstanding as of May 31, 2017, and shares of common stock outstanding after the completion of this offering assuming no exercise of the underwriters' over-allotment option.

Unless otherwise indicated, the address for each listed director, director nominee and named executive officer is c/o Calyxt, 600 County Road D West, Suite 8, New Brighton, MN 55112. The address of Cellectis S.A. is 8, rue de la Croix Jarry, 75013, Paris, France.

	Common Stock Beneficially Owned Prior to the Completion of This Offering		Common Stock Beneficially Owned Following the Completion of This Offering	
Name of Beneficial Owner	**Number of Shares**	**Percentage of Class**	**Number of Shares**	**Percentage of Class**
5% Beneficial Owner:				
Cellectis S.A.		100%		%
Director, Director Nominees and Executive Officers:				
André Choulika				
Federico A. Tripodi				
Bryan W. J. Corkal				
Daniel Voytas				
Luc Mathis				
Gregory Smith				
Richard Benish				
Director, director nominees and executive officers as a group (12 persons)		100%		

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

We describe below transactions and series of similar transactions, during our last three fiscal years or currently proposed, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, executive officers or beneficial holders of more than 5% of any class of our capital stock had or will have a direct or indirect material interest.

Other than as described below, there have not been, nor are there any currently proposed, transactions or series of similar transactions meeting this criteria to which we have been or will be a party other than compensation arrangements, which are described where required under "Executive Compensation."

Relationship with Cellectis

Prior to the completion of this offering, we were a wholly owned subsidiary of Cellectis. Following this offering, Cellectis will continue to beneficially own a majority of our outstanding common stock, and as a result Cellectis will continue to have significant control of our business, including pursuant to the agreements described below. In addition, we expect that, following this offering, Cellectis will continue to consolidate our financial results in its financial statements.

In connection with this offering, we and Cellectis intend to enter into, or have entered into, certain agreements that relate to our relationship with Cellectis prior to this offering or will provide a framework for our ongoing relationship with Cellectis. Of the agreements summarized below, the material agreements are filed as exhibits to the registration statement of which this prospectus is a part, and the summaries of these agreements set forth the terms of the agreements that we believe are material. These summaries are qualified in their entirety by reference to the full text of such agreements.

Contribution Agreement and Guarantee

On October 1, 2015, we entered into an amended and restated contribution with Cellectis pursuant to which Cellectis contributed $40 million to us in exchange for 7,000,000 shares of our common stock. The $40 million contribution consisted of $30 million of cash and the conversion to equity of $10 million of loans and outstanding obligations owed by us to Cellectis.

Cellectis has guaranteed funding for our operations, which guarantee will not be released, modified or otherwise affected by the timing of, or amount raised in, this offering, as described in Note 1 to the audited financial statements included elsewhere in this prospectus.

Management Services Agreement

We are party to a management services agreement dated January 1, 2016 that we entered into with Cellectis and Cellectis, Inc., a Delaware corporation and wholly owned subsidiary of Cellectis that we refer to as Cellectis, Inc., pursuant to which Cellectis and Cellectis, Inc. provide certain services to us, including certain general management, finance, investor relations, communication, legal, intellectual property, human resources and information technology services. In consideration for such services, we pay to Cellectis and Cellectis, Inc. certain fees, consisting of reimbursement of all costs and expenses reasonably incurred by Cellectis in connection with the provision of such services, payment of a mark-up corresponding to a percentage of certain of the costs and expenses, which range from zero to 10%, and reimbursement of costs and expenses of services that are subcontracted by Cellectis on our behalf.

The management services agreement is automatically renewed for one year periods starting on January 1st of each year. Either party will have the right to terminate the agreement at the anniversary date of the agreement

by giving three months prior notice. We also intend to enter into an amendment to the agreement in connection with this offering to provide that the agreement may otherwise be terminated by Cellectis or by us in connection with certain material breaches by the other party upon prior written notice subject to limited cure periods, the sale of all or substantially all of the assets of either party, certain bankruptcy events or certain judgments.

During fiscal year 2016, we made payments to Cellectis for services provided under our management services agreement of $1.8 million, which excludes direct re-invoicing and royalties paid to Cellectis.

Stockholders Agreement

We intend to enter into a stockholders agreement with Cellectis, which we refer to as the stockholders agreement and which will become effective upon completion of this offering. Pursuant to our stockholders agreement with Cellectis, Cellectis will have certain contractual rights for so long as it beneficially owns at least 50% of the then outstanding shares of our common stock, including:

- to approve any modification to our or any future subsidiary's share capital (e.g., share capital increase or decrease) the creation of any subsidiary, any grant of stock-based compensation, any distributions or initial public offering, merger, spin-off, liquidation, winding up or carve-out transactions;
- to approve the annual business plan and annual budget and any modification thereto;
- to approve any external growth transactions exceeding $500,000 and not included in the approved annual business plan and annual budget;
- to approve any investment and disposition decisions exceeding $500,000 and not included in the approved annual business plan and annual budget (it being understood that this clause excludes the purchase and sale of inventory as a part of the normal course of business);
- to approve any related-party agreement and any agreement or transaction between the executives or shareholders of Calyxt, on the one hand, and Calyxt or any of its subsidiaries, on the other hand;
- to approve any decision pertaining to the recruitment, dismissal/removal, or increase of the compensation of executives and corporate officers;
- to approve any material decision relating to a material litigation;
- to approve any decision relating to the opening of a social or restructuring plan or pre-insolvency proceedings;
- to approve any buyback by us of our own shares;
- to approve any new borrowings or debts exceeding $500,000 and early repayment of loans, if any (it being understood that Cellectis will approve the entering into of contracts for revolving loans and other short-term loans and the repayment of such for financing general operating activities, such as revolving loans for inventory or factoring of receivables);
- to approve grants of any pledges on securities;
- to develop new activities and businesses not described in the annual business plan and annual budget; and
- to approve entry into any material agreement or partnership; and
- to approve any offshore and relocation activities.

In addition, Cellectis will have the following rights for so long as it beneficially owns at least 15% of the then outstanding shares of our common stock, including:

- to nominate the greater of four members of our Board of Directors or a majority of the directors;

- to designate the Chairman of our Board of Directors and one member to each of the audit committee of the Board of Directors, the compensation committee of the Board of Directors and the nominating and corporation governance committee of the Board of Directors;
- to approve any amendments to our amended and restated certificate of incorporation or our amended and restated by-laws that would change the name of our company, its jurisdiction of incorporation, the location of its principal executive offices, the purpose or purposes for which our company is incorporated or the Cellectis approval items set forth in the stockholders agreement;
- to approve the payment of any regular or special dividends;
- to approve the commencement of any proceeding for the voluntary dissolution, winding up or bankruptcy of Calyxt or a material subsidiary;
- to approve any public or private offering, merger, amalgamation or consolidation of us or the spinoff of a business of ours or any sale, conveyance, transfer or other disposition of our assets; and
- to approve any appointment to our Board of Directors contrary to the stockholders agreement or our certificate of incorporation or our by-laws.

In addition, for so long as Cellectis beneficially owns at least 15% of the then outstanding shares of our common stock, (i) Cellectis will be entitled to certain information rights, including the right to consult with and advise senior management, to receive quarterly and annual financial statements and to review our books and records and (ii) we will also be required to cooperate with Cellectis in connection with certain sales and pledges of our shares or grants of security interests in respect thereof, including in connection with margin loans.

The stockholders agreement will also provide Cellectis with certain registration rights, as follows:

- *Demand Registration*—At any time beginning 180 days after the effective date of the registration statement of which this prospectus forms a part (or such earlier time as agreed by us), Cellectis may request that we register for resale all or a portion of their shares. Any such request must cover a quantity of shares with an anticipated aggregate offering price of at least $25.0 million. To the extent we are a well-known seasoned issuer, Cellectis may also request that we file an automatic shelf registration statement on Form S-3 that covers the registrable securities requested to be registered. Depending on certain conditions, we may defer a demand registration for up to 90 days in any twelve-month period. Cellectis will agree pursuant to a contractual lock-up not to exercise any of its rights under the registration rights agreement during the 180-day restricted period described under "Underwriting."
- *Piggyback Registration Rights*—In the event that we propose to register any of our securities under the Securities Act, either for our account or for the account of our other security holders, Cellectis will be entitled to certain piggyback registration rights allowing each to include its shares in the registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, Cellectis is entitled to notice of the registration.
- *Expenses; Indemnification*—The registration rights agreement will provide that we must pay all registration expenses (other than the underwriting discounts and commissions) in connection with effecting any demand registration or shelf registration. The registration rights agreement will contain customary indemnification and contribution provisions.
- *Term*—The registration rights will remain in effect with respect to any shares covered by the Stockholders Agreement until (i) all of Cellectis' shares have been sold pursuant to an effective registration statement under the Securities Act; (ii) all of Cellectis' shares have been sold to the public pursuant to Rule 144 under the Securities Act; or (iii) Cellectis owns less than 10% of our then outstanding shares of our common stock.

Separation Agreement

We intend to enter into a separation agreement with Cellectis immediately prior to the completion of this offering. The separation agreement will set forth certain agreements between Cellectis and us that will govern the relationship between Cellectis and us following this offering, including with respect to the following matters:

- guarantees;
- insurance policies;
- mutual releases and indemnification matters;
- accounting, financial reporting and internal control issues;
- confidentiality;
- ability of the parties to compete with each other; and
- settlement of intercompany accounts.

The separation agreement will terminate upon the earlier of (i) mutual written consent of Cellectis and us and (ii) the date on which Cellectis and its affiliates cease to hold at least 15% of the then outstanding shares of our common stock.

License Agreement with Cellectis

We will be party to a license agreement with Cellectis, pursuant to which we will be granted an exclusive, worldwide license (subject to existing non-exclusive sublicenses to third parties) to use, commercialize and exploit certain intellectual property in the field of researching, developing and commercializing seeds and food ingredients (excluding animal-derived ingredients) for agricultural, feed and food applications. Any improvements we make to the licensed intellectual property will be owned by us but licensed back to Cellectis on an exclusive basis for any use outside of our exclusive agricultural field of use.

In consideration for the license from Cellectis, we will be required to pay to Cellectis, on a product-by-product and country-by-country basis, a royalty of % of net sales of any products that are covered by the patents licensed from Cellectis. In addition, we will be required to pay Cellectis % of revenue we receive for sublicensing our rights under the agreement to third parties. Our payment obligations to Cellectis will expire upon the expiration of the last-to-expire valid claim of the patents licensed to us by Cellectis.

Under our license agreement with Cellectis, Cellectis will have the first right to control the prosecution, maintenance, defense and enforcement of the licensed intellectual property and we will have the right to step in and assume such control if Cellectis elects to not prosecute, maintain, defend or enforce such intellectual property. In addition, some of the intellectual property that will be licensed to us by Cellectis will include an exclusive sublicense, subject to existing non-exclusive sublicenses granted to third-parties, of intellectual property originally licensed to Cellectis by the University of Minnesota. Therefore, our license from Cellectis will be subject to the terms and conditions of the license agreement between the University of Minnesota and Cellectis, and to the extent our activities under our license agreement with Cellectis violate any terms and conditions of the license agreement between Cellectis and the University of Minnesota, we will be responsible for any damages that Cellectis may incur. In addition, we are required to reimburse Cellectis for any and all payments made by Cellectis to the University of Minnesota pursuant to the license agreement between the University of Minnesota and Cellectis to the extent that any such payments are required to be made as a result of our applicable activities. Under the license agreement between Cellectis and the University of Minnesota, the University of Minnesota has the first right to control the prosecution and maintenance of the licensed intellectual property.

Our license agreement with Cellectis is perpetual, however it may be terminated at any time upon the mutual written agreement of both parties, either party's uncured material breach of the agreement, or upon certain bankruptcy and insolvency related events.

Indemnification Agreements

We expect to enter into indemnification agreements with each of our directors at or prior to the completion of this offering. The indemnification agreements and our Certificate of Incorporation and By-laws will require us to indemnify our directors to the fullest extent permitted by Delaware law.

Policy Concerning Related Person Transactions

Prior to the consummation of this offering, our Board of Directors will adopt a written policy, which we refer to as the related person transaction approval policy, for the review of any transaction, arrangement or relationship in which we are a participant, if the amount involved exceeds $120,000 and one of our executive officers, directors, director nominees or beneficial holders of more than 5% of our total equity (or their immediate family members), each of whom we refer to as a related person, has a direct or indirect material interest. This policy was not in effect when we entered into the transactions described above.

Each of the agreements between us and Cellectis that have been entered into prior to the completion of this offering, and any transactions contemplated thereby, will be deemed to be approved and not subject to the terms of such policy. If a related person, other than Cellectis and its affiliates, proposes to enter into such a transaction, arrangement or relationship, which we refer to as a related person transaction, the related person must report the proposed related person transaction to the chairman of our Audit Committee for so long as the controlled company exception applies and the Nominating and Corporate Governance Committee thereafter (for purposes of this section only, we refer to each of these committees as the Committee). The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the Committee. In approving or rejecting such proposed transactions, the Committee will be required to consider relevant facts and circumstances. The Committee will approve only those transactions that, in light of known circumstances, are deemed to be in our best interests. In the event that any member of the Committee is not a disinterested person with respect to the related person transaction under review, that member will be excluded from the review and approval or rejection of such related person transaction; provided, however, that such Committee member may be counted in determining the presence of a quorum at the meeting of the Committee at which such transaction is considered. If we become aware of an existing related person transaction which has not been approved under the policy, the matter will be referred to the Committee. The Committee will evaluate all options available, including ratification, revision or termination of such transaction. In the event that management determines that it is impractical or undesirable to wait until a meeting of the Committee to consummate a related person transaction, the chairman of the Committee may approve such transaction in accordance with the related person transaction approval policy. Any such approval must be reported to the Committee at its next regularly scheduled meeting.

DESCRIPTION OF CAPITAL STOCK

Below is a description of the material terms and provisions of our amended and restated certificate of incorporation, which we refer to as our Certificate of Incorporation, and our amended and restated bylaws, which we refer to as our By-laws, in each case as in effect and affecting the rights of our stockholders upon the completion of this offering, as well as relevant terms and provisions of our indemnification agreements with directors and Delaware law affecting the rights of our stockholders. This summary does not purport to be complete and is qualified in its entirety by the provisions of our Certificate of Incorporation, By-laws and such indemnification agreements. Copies of our Certificate of Incorporation and By-laws have been or will be filed with the SEC as exhibits to the registration statement of which this prospectus forms a part.

General

Upon the completion of our initial public offering, our authorized capital stock will consist of:

- shares of common stock, par value $0.0001 per share; and
- shares of preferred stock, par value $ per share.

As of March 31, 2017, there were shares of common stock outstanding, all of which were held by Cellectis. At that date, there were no shares of preferred stock outstanding. Immediately after the completion of this offering, shares of common stock will be outstanding, assuming the underwriters' option to purchase additional shares is not exercised, and no shares of preferred stock will be outstanding.

Common Stock

Voting Rights. The holders of our common stock will be entitled to one vote per share on all matters to be voted upon by the stockholders. Holders of our common stock will not have cumulative voting rights in the election of directors. Accordingly, the holders of a majority of the voting power of our common stock could, if they so choose, elect all the directors.

Dividend Rights. Holders of common stock will be entitled to receive dividends if, as and when declared by our Board of Directors, out of our legally available assets, in cash, property, shares of our common stock or other securities, after payments of dividends required to be paid on outstanding preferred stock, if any.

Distributions in Connection with Mergers or Other Business Combinations. Upon a merger, consolidation or substantially similar transaction, holders of common stock will be entitled to receive equal per share payments or distributions.

Liquidation Rights. Upon our liquidation, dissolution or winding up, any business combination or a sale or disposition of all or substantially all of our assets, the assets legally available for distribution to our stockholders will be distributable ratably among the holders of the common stock, subject to prior satisfaction of all outstanding debts and other liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding preferred stock.

Stockholders Agreement. In connection with this offering, we will enter into a stockholders agreement with Cellectis, pursuant to which Cellectis will have certain rights so long as it beneficially owns at least 15% of the then outstanding shares of our common stock, as described in "Certain Relationships and Related Party Transactions—Relationship with Cellectis—Stockholders Agreement."

Other Matters. Our Certificate of Incorporation will not entitle holders of our common stock to preemptive rights. No redemption or sinking fund provisions will be applicable to our common stock. All outstanding shares of our common stock are, and the shares of common stock offered in this offering will be upon payment and delivery in accordance with the underwriting agreement, fully paid and non-assessable.

Preferred Stock

Our Certificate of Incorporation authorizes our Board of Directors to issue preferred stock in one or more series and to determine the preferences, limitations and relative rights of any shares of preferred stock that we choose to issue, without vote or action by the stockholders.

Anti-Takeover Effects of Delaware Law, Our Certificate of Incorporation and Our By-laws

The following provisions may make a change in control of our business more difficult and could delay, defer or prevent a tender offer or other takeover attempt that a stockholder might consider to be in its best interest, including takeover attempts that might result in the payment of a premium to stockholders over the market price for their shares. These provisions also may promote the continuity of our management by making it more difficult for a person to remove or change the incumbent members of our Board of Directors.

Authorized but Unissued Shares; Undesignated Preferred Stock. The authorized but unissued shares of our common stock will be available for future issuance without stockholder approval. These additional shares may be used for a variety of corporate purposes, including future public offerings to raise additional capital, acquisitions and employee benefit plans. In addition, our Board of Directors may authorize, without stockholder approval, the issuance of undesignated preferred stock with voting rights or other rights or preferences designated from time to time by our Board of Directors. The existence of authorized but unissued shares of common stock or preferred stock may enable our Board of Directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise.

Election and Removal of Directors. Our Board of Directors will consist of not less than five nor more than eleven directors, excluding any directors elected by holders of preferred stock pursuant to provisions applicable in the case of defaults, if any. The exact number of directors will be fixed from time to time by resolution of our Board of Directors. Our Board of Directors will initially have five members.

Pursuant to the Stockholders Agreement, Cellectis has the right to nominate the greater of three directors or a majority of directors to our Board of Directors so long as it continues to own at least 15% of our then outstanding shares of our common stock.

At any time after Cellectis beneficially owns less than 50% of our then outstanding common stock, our Certificate of Incorporation provides that directors may be removed only for cause and only by the affirmative vote of holders of a majority of our then outstanding stock. Prior to such time, directors may be removed with or without cause.

Classified Board of Directors. Initially, our Board of Directors will not be classified. However, our Certificate of Incorporation and our By-laws will provide that our Board of Directors will be classified with approximately one-third of the directors elected each year at such time as Cellectis no longer holds at least 50% of our then outstanding common stock. The number of directors will be fixed from time to time by a majority of the total number of directors that we would have at the time such number is fixed if there were no vacancies. The directors will be divided into three classes, designated class I, class II and class III. Each class will consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. At each annual meeting of stockholders, successors to the class of directors whose term expires at that annual meeting will be elected for a three-year term and until their successors are duly elected and qualified. In addition, if the number of directors is changed, any increase or decrease will be apportioned by our Board of Directors among the classes so as to maintain the number of directors in each class as nearly equal as possible, and any additional director of any class elected to fill a vacancy resulting from an increase in such class or from the removal from office, death, disability, resignation or disqualification of a director or other cause will hold office for a term that will coincide with the remaining term of that class, but in no case will a decrease in the number of directors have the effect of removing or shortening the term of any incumbent director.

Director Vacancies. Our Certificate of Incorporation authorizes only our Board of Directors to fill vacant directorships.

No Cumulative Voting. Our Certificate of Incorporation provides that stockholders do not have the right to cumulate votes in the election of directors.

Special Meetings of Stockholders. At any time after Cellectis beneficially owns less than 50% of our then outstanding common stock, our By-laws and our Certificate of Incorporation provide that special meetings of our stockholders may only be called by the Board of Directors. Prior to such time, a special meeting may also be called by the secretary of the Company at the request of stockholders holding a majority of the outstanding shares entitled to vote.

Advance Notice Procedures for Director Nominations. Our By-laws establish advance notice procedures for stockholders seeking to nominate candidates for election as directors at an annual or special meeting of stockholders. Although our By-laws do not give the Board of Directors the power to approve or disapprove stockholder nominations of candidates to be elected at an annual meeting, our By-laws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of the Company.

Action by Written Consent. At any time after Cellectis beneficially owns less than 50% of our then outstanding common stock, our By-laws and our Certificate of Incorporation provide that any action required or permitted to be taken by the stockholders must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing in lieu of a meeting of such stockholders, subject to the rights of the holders of any series of preferred stock. Prior to such time, such actions may be taken without a meeting by written consent.

Amending Our Certificate of Incorporation and Bylaws. At any time after Cellectis beneficially owns less than 50% of our then outstanding common stock, our Certificate of Incorporation and By-laws may be amended by the affirmative vote of the holders of at least two-thirds of our common stock. Prior to such time, our Certificate of Incorporation and By-laws may be amended by the affirmative vote of the holders of a majority of the voting power of our common stock.

Exclusive Jurisdiction. Our Certificate of Incorporation provides that, unless we consent to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers, or other employees to us or to our stockholders, any action asserting a claim arising pursuant to the DGCL, or any action asserting a claim governed by the internal affairs doctrine.

Business Combinations with Interested Stockholders. Subject to certain exceptions, Section 203 of the DGCL prohibits a public Delaware corporation from engaging in a business combination (as defined in such section) with an "interested stockholder" (defined generally as any person who beneficially owns 15% or more of the outstanding voting stock of such corporation or any person affiliated with such person) for a period of three years following the time that such stockholder became an interested stockholder, unless (i) prior to such time the Board of Directors of such corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder; (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of such corporation at the time the transaction commenced (excluding for purposes of determining the voting stock of such corporation outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (A) by persons who are directors and also officers of such corporation and (B) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer); or (iii) at or subsequent to such time the business combination is approved by the Board of Directors of such corporation and authorized at a

meeting of stockholders (and not by written consent) by the affirmative vote of at least 66 2/3% of the outstanding voting stock of such corporation not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have expressly elected not to be governed by the "business combination" provisions of Section 203 of the DGCL, until after such time as Cellectis no longer beneficially owns at least 50% of our common stock. At that time, such election shall be automatically withdrawn and we will thereafter be governed by the "business combination" provisions of Section 203 of the DGCL.

Conflicts of Interest

Delaware law permits corporations to adopt provisions renouncing any interest or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. Our Certificate of Incorporation will, to the maximum extent permitted from time to time by Delaware law, renounce any interest or expectancy that we have in, or right to be offered an opportunity to participate in, specified business opportunities that are from time to time presented to our officers, directors or stockholders or their respective affiliates, other than those officers, directors, stockholders or affiliates who are our or our subsidiaries' employees. Our Certificate of Incorporation will provide that, to the fullest extent permitted by law, none of Cellectis or any of its affiliates or any director who is not employed by us or his or her affiliates will have any duty to refrain from (i) engaging in a corporate opportunity in the same or similar lines of business in which we or our affiliates now engage or propose to engage or (ii) otherwise competing with us or our affiliates. In addition, to the fullest extent permitted by law, in the event that Cellectis or any non-employee director acquires knowledge of a potential transaction or other business opportunity which may be a corporate opportunity for itself or himself or its or his affiliates or for us or our affiliates, such person will have no duty to communicate or offer such transaction or business opportunity to us or any of our affiliates and they may take any such opportunity for themselves or offer it to another person or entity. Our Certificate of Incorporation will not renounce our interest in any business opportunity that is expressly offered to a non-employee director solely in his or her capacity as a director of Calyxt. To the fullest extent permitted by law, no business opportunity will be deemed to be a potential corporate opportunity for us unless we would be permitted to undertake the opportunity under our Certificate of Incorporation, we have sufficient financial resources to undertake the opportunity and the opportunity would be in line with our business.

Registration Rights

We will enter into the Stockholders Agreement prior to the completion of this offering that will provide Cellectis with registration rights relating to shares of our common stock held by Cellectis after this offering. See "Certain Relationships and Related Party Transactions—Relationship with Cellectis—Stockholders Agreement."

Indemnification and Limitations on Directors' Liability

Section 145 of the DGCL grants each Delaware corporation the power to indemnify any person who is or was a director, officer, employee or agent of a corporation, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation, by reason of serving or having served in any such capacity, if he or she acted in good faith in a manner reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A Delaware corporation may similarly indemnify any such person in actions by or in the right of the corporation if he or she acted in good faith in a manner reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which the person shall have been adjudged to be liable to the corporation

unless and only to the extent that the Delaware Court of Chancery or the court in which the action was brought determines that, despite adjudication of liability, but in view of all of the circumstances of the case, the person is fairly and reasonably entitled to indemnity for expenses which the Delaware Court of Chancery or other court shall deem proper.

Section 102(b)(7) of the DGCL enables a corporation in its certificate of incorporation, or an amendment thereto, to eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for violations of the director's fiduciary duty as a director, except (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL (providing for director liability with respect to unlawful payment of dividends or unlawful stock purchases or redemptions) or (iv) for any transaction from which a director derived an improper personal benefit.

Our Certificate of Incorporation and By-laws indemnify our directors and officers to the full extent permitted by the DGCL and our Certificate of Incorporation also allows our Board of Directors to indemnify other employees. This indemnification extends to the payment of judgments in actions against officers and directors and to reimbursement of amounts paid in settlement of such claims or actions and may apply to judgments in favor of the corporation or amounts paid in settlement to the corporation. This indemnification also extends to the payment of attorneys' fees and expenses of officers and directors in suits against them where the officer or director acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of Calyxt, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. This right of indemnification is not exclusive of any right to which the officer or director may be entitled as a matter of law and shall extend and apply to the estates of deceased officers and directors.

We maintain a directors' and officers' insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions that are normal and customary for policies of this type.

We intend to enter into indemnification agreements with our directors providing for certain advancement and indemnification rights. In each indemnification agreement, we agreed, subject to certain exceptions, to indemnify and hold harmless the director or officer to the maximum extent then authorized or permitted by the DGCL or by any amendment(s) thereto.

We believe that the limitation of liability and indemnification provisions in our Certificate of Incorporation, By-laws, indemnification agreements and insurance policies are necessary to attract and retain qualified directors and officers. However, these provisions may discourage derivative litigation against directors and officers, even though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers as required or allowed by these limitation of liability and indemnification provisions.

At present, there is no pending litigation or proceeding involving any of our directors, officers, employees or agents as to which indemnification is sought from us, nor are we aware of any threatened litigation or proceeding that may result in an indemnification claim.

Listing

We intend to apply to list the common stock on the under the symbol " ."

Transfer Agent and Registrar

The transfer agent and registrar for the common stock is .

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for shares of our common stock. Future sales of substantial amounts of shares of our common stock, including shares issued upon the exercise of outstanding options, in the public market after this offering, or the possibility of these sales occurring, could adversely affect the prevailing market price for our common stock from time to time or impair our ability to raise equity capital in the future.

Based on the number of shares outstanding as of , 2017, upon the completion of this offering, shares of our common stock will be outstanding, assuming no exercise of the underwriters' option to purchase additional shares, no exercise of outstanding options. Of the outstanding shares, shares sold in this offering will be freely tradable, except that any shares acquired by our affiliates, as that term is defined in Rule 144 under the Securities Act, in this offering may only be sold in compliance with the limitations described below.

The remaining shares of common stock outstanding after this offering will be restricted as a result of securities laws, lock-up agreements or substantially similar contractual agreements, as described below. Following the expiration of the lock-up period, all shares will be eligible for resale in compliance with Rule 144 or Rule 701. "Restricted securities" as defined under Rule 144 were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. These shares may be sold in the public market only if registered or pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell such securities, provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of shares of our common stock on the during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144 to the extent applicable.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchases shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of this offering is entitled to resell such shares 90 days after the effective date of this offering in reliance on Rule 144, without having to comply with the holding period requirements or other restrictions contained in Rule 701.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus. Securities issued in reliance on Rule 701 are restricted securities and, subject to the contractual restrictions described above, beginning 90 days after the date of this prospectus, may be sold by persons other than "affiliates," as defined in Rule 144, subject only to the manner of sale provisions of Rule 144 and by "affiliates" under Rule 144 without compliance with its one-year minimum holding period requirement.

Registration Rights

Upon completion of this offering, Cellectis will be entitled to various rights with respect to the registration of its shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See "Certain Relationships and Related Party Transactions—Relationship with Cellectis—Stockholders Agreement."

Stock Options and RSUs

As of , 2017, options to purchase a total of shares of common stock were outstanding under the Existing Plan. An additional shares of common stock were available for future grants under the Existing Plan. Prior to this offering, we adopted a new equity compensation plan under which shares of our common stock will be available for awards granted thereunder, as described under "Executive Compensation—2017 Omnibus Incentive Plan." As of , 2017, options to purchase a total of shares of common stock and RSUs with respect to shares of common stock were outstanding under the Omnibus Plan. All of the shares subject to options under both plans and with respect to RSUs under the Omnibus Plan are subject to lock-up agreements.

Registration Statement

Upon completion of this offering, we intend to file a registration statement on Form S-8 under the Securities Act covering all shares of common stock subject to outstanding options and RSUs or otherwise issuable in the future pursuant to our equity incentive plans. Subject to Rule 144 volume limitations applicable to affiliates, shares registered under any registration statements will be available for sale in the open market, beginning 90 days after the date of the prospectus, except to the extent that the shares are subject to vesting restrictions with us or the contractual restrictions described below.

Lock-up Agreements

Our directors, executive officers, Cellectis and our other securityholders have agreed, subject to certain exceptions, not to offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock for a period of 180 days after the date of this prospectus, without the prior written consent of the representatives of the underwriters. See "Underwriting."

MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a discussion of the material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock acquired in this offering by a "Non-U.S. Holder" that does not own, and has not owned, actually or constructively, more than 5% of our common stock. You are a Non-U.S. Holder if for U.S. federal income tax purposes you are a beneficial owner of our common stock that is:

- a nonresident alien individual;
- a foreign corporation; or
- a foreign estate or trust.

You are not a Non-U.S. Holder if you are a nonresident alien individual present in the United States for 183 days or more in the taxable year of disposition, or if you are a former citizen or former resident of the United States for U.S. federal income tax purposes. If you are such a person, you should consult your tax adviser regarding the U.S. federal income tax consequences of the ownership and disposition of our common stock.

If you are a partnership or other pass-through entity (including an entity or arrangement treated as a partnership or other type of pass-through entity for U.S. federal income tax purposes) that owns our common stock, the U.S. federal income tax treatment of a partner or beneficial owner will generally depend on the status of the partner or beneficial owner and your activities. Partnerships, partners and beneficial owners in partnerships or other pass-through entities that own our common stock should consult their tax advisers as to the particular U.S. federal income tax consequences of the ownership and disposition of our common stock.

This discussion is based on the Internal Revenue Code of 1986, as amended to the date hereof (the "Code"), administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, changes to any of which subsequent to the date of this prospectus may affect the tax consequences described herein, possibly with retroactive effect. This discussion does not describe all aspects of U.S. federal income and estate taxation that may be relevant to you in light of your particular circumstances, does not discuss alternative minimum tax and Medicare contribution tax consequences and does not address any aspect of state, local or non-U.S. taxation. You should consult your tax adviser with regard to the application of the U.S. federal tax laws to your particular situation, as well as any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Dividends

Distributions of cash or other property (other than certain distributions of stock) will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed our current and accumulated earnings and profits, they will constitute a return of capital, which will first reduce your basis in our common stock, but not below zero, and then will be treated as gain from the sale of our common stock, as described below under "—Gain on Disposition of Our Common Stock."

Dividends paid to you generally will be subject to withholding tax at a 30% rate or a reduced rate specified by an applicable income tax treaty. In order to obtain a reduced rate of withholding, you will be required to provide us or our paying agent with a properly executed applicable Internal Revenue Service, or IRS, Form W-8BEN or IRS Form W-8BEN-E, as applicable, certifying your entitlement to benefits under a treaty. A Non-U.S. Holder eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty who fails to timely provide a W-8BEN or W-8BEN-E may obtain a refund of any excess amounts withheld by timely filing an appropriate claim with the IRS.

If dividends paid to you are effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed

base maintained by you in the United States), you will generally be taxed on the dividends in the same manner as a U.S. person. In this case, you will be exempt from the withholding tax discussed in the preceding paragraph, although you will be required to provide a properly executed IRS Form W-8ECI in order to claim an exemption from withholding. You should consult your tax adviser with respect to other U.S. tax consequences of the ownership and disposition of our common stock, including the possible imposition of a branch profits tax at a rate of 30% (or a lower treaty rate) if you are a corporation.

Gain on Disposition of Our Common Stock

Subject to the discussions below under "—Information Reporting and Backup Withholding" and "—FATCA," you generally will not be subject to U.S. federal income or withholding tax on gain realized on a sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with your conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by you in the United States), or
- we are or have been a "United States real property holding corporation," as defined in the Code, at any time within the five-year period preceding the disposition or your holding period, whichever period is shorter, and our common stock has ceased to be regularly traded on an established securities market prior to the beginning of the calendar year in which the sale or disposition occurs.

We believe that we are not, and do not anticipate becoming, a United States real property holding corporation.

If you recognize gain on a sale or other disposition of our common stock that is effectively connected with your conduct of a trade or business in the United States (and if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base maintained by you in the United States), you will generally be taxed on such gain in the same manner as a U.S. person. You should consult your tax adviser with respect to other U.S. tax consequences of the ownership and disposition of our common stock, including the possible imposition of a branch profits tax at a rate of 30% (or a lower treaty rate) if you are a corporation.

Information Reporting and Backup Withholding

Information returns will be filed with the IRS in connection with payments of dividends on our common stock. Unless you comply with certification procedures to establish that you are not a U.S. person, information returns may also be filed with the IRS in connection with the proceeds from a sale or other disposition of our common stock. You may be subject to backup withholding on payments on our common stock or on the proceeds from a sale or other disposition of our common stock unless you comply with certification procedures to establish that you are not a U.S. person or otherwise establish an exemption. Compliance with the certification procedures required to claim a reduced rate of withholding under a treaty will satisfy the certification requirements necessary to avoid backup withholding as well. Amounts withheld under the backup withholding rules are not additional taxes and may be refunded or credited against your U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

FATCA

Provisions of the Code commonly referred to as "FATCA" require withholding of 30% on payments of dividends on our common stock, as well as payments of gross proceeds of dispositions occurring after December 31, 2018 of our common stock, to "foreign financial institutions" (which is broadly defined for this purpose and in general includes investment vehicles) and certain other non-U.S. entities unless various U.S. information reporting and due diligence requirements (generally relating to ownership by U.S. persons of interests in or accounts with those entities) have been satisfied, or an exemption applies. An intergovernmental

agreement between the United States and an applicable foreign country may modify these requirements. If FATCA withholding is imposed, a beneficial owner that is not a foreign financial institution generally may obtain a refund of any amounts withheld by filing a U.S. federal income tax return (which may entail significant administrative burden). You should consult your tax adviser regarding the effects of FATCA on your investment in our common stock.

Federal Estate Tax

Individual Non-U.S. Holders and entities the property of which is potentially includible in such an individual's gross estate for U.S. federal estate tax purposes (for example, a trust funded by such an individual and with respect to which the individual has retained certain interests or powers), should note that, absent an applicable treaty exemption, our common stock will be treated as U.S.-situs property subject to U.S. federal estate tax.

UNDERWRITING

are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

Underwriter	Number of Shares
Citigroup Global Markets Inc.	
Credit Suisse Securities (USA) LLC.	
Jefferies LLC	
Wells Fargo Securities, LLC	
Ladenburg Thalmann & Co. Inc.	
Total	

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of $ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	$	$	$
Underwriting discount	$	$	$
Proceeds, before expenses, to us	$	$	$

The expenses of the offering, not including the underwriting discount, are estimated at $ and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses in an amount up to $.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to additional shares at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

No Sales of Similar Securities

We have agreed that, during a period of 180 days from the date of this prospectus, we will not, without the prior written consent of the representatives of the underwriters, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock or file any registration statement under the Securities Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of our common stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of our common stock or other securities, in cash or otherwise. The foregoing sentence will not apply to (A) the shares of common stock to be sold in this offering, (B) any shares of our common stock issued by us upon the exercise of an option or warrant or the conversion of a security outstanding on the date of this prospectus and referred to in this prospectus, (C) any shares of our common stock issued or options to purchase our common stock granted pursuant to our existing employee benefit plans of referred to in this prospectus, (D) any shares of our common stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan referred to in this prospectus, (E) shares of our common stock or other securities issued by us in connection with joint ventures, commercial relationships or other strategic transactions, provided that (x) the aggregate number of securities issued pursuant to this clause (E) shall not exceed % of the total number of outstanding shares of our common stock immediately following the issuance and sale of the shares of our common stock in this offering and (y) such securities issued pursuant to this clause (E) during the 180-day restricted period described above shall be subject to the restrictions described in the form of lock-up agreement attached to the underwriting agreement for the remainder of such restricted period and the recipient of any such securities shall enter into an agreement substantially in such form or (F) the filing by us of a registration statement on Form S-8 covering the registration of securities issued under our existing employee benefit plans referred to in this prospectus.

In addition, certain of our existing security holders (including Cellectis and all of our directors and executive officers), whose shares, options and RSUs represent substantially all of our outstanding equity on a fully diluted basis, have agreed that, during the 180-day restricted period described above, such holder will not, without the prior written consent of the representatives of the underwriters, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock, whether now owned or hereafter acquired by such holder or with respect to which such holder has or hereafter acquires the power of disposition (collectively, the "lock-up securities"), or exercise any right with respect to the registration of any of the lock-up securities, or file or cause to be filed any registration statement in connection therewith, under the Securities Act, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the lock-up securities, whether any such swap or transaction is to be settled by delivery of our common stock or other securities, in cash or otherwise.

Notwithstanding the immediately preceding paragraph, and subject to the conditions below, such holder may transfer the lock-up securities without the prior written consent of the representatives of the underwriters, provided that (1) the representatives receive a signed lock-up agreement for the balance of the lockup period

from each donee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) such transfers are not required to be reported with the SEC on Form 4 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended, and (4) such holder does not otherwise voluntarily effect any public filing or report regarding such transfers:

(i) as a bona fide gift or gifts; or

(ii) to any trust for the direct or indirect benefit of such holder or the immediate family of such holder (for this purpose, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin); or

(iii) to a member of the immediate family of such holder; or

(iv) to a corporation, partnership, limited liability company or other entity of which such holder and the immediate family of such holder are the direct or indirect legal and beneficial owners of all the outstanding equity securities or similar interests of such corporation, partnership, limited liability company or other entity; or

(v) by will or intestate succession upon the death of such holder; or

(vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement; or

(vii) as a distribution to limited partners or stockholders of such holder; or

(viii) to such holder's affiliates or to any investment fund or other entity controlled or managed by such holder; or

(ix) to a nominee or custodian of a person or entity to whom disposition or transfer would be permissible under (i) - (viii) above.

Notwithstanding the foregoing, nothing in the lock-up agreements for such holders will prohibit them from:

(i) entering into a written plan meeting the requirements of Rule 10b5-1 under the Exchange Act of 1934, as amended, relating to the sale of our securities, provided that the securities subject to such plan may not be sold and no public disclosure of any such action shall be required or shall be voluntarily made by any person until after the expiration of the 180-day lock-up period; or

(ii) exercising any stock option to purchase shares of our common stock, or any securities convertible into or exercisable or exchangeable for our common stock, or other similar awards granted on or prior to the date of this prospectus or granted pursuant to our equity incentive plans described in this prospectus; *provided* that the lock-up agreement shall apply to any securities issued upon such exercise; or

(iii) transferring shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock from such holder to us (or the purchase and cancellation of the same by us) upon a vesting event of our securities or upon the exercise of options to purchase shares of our common stock that expire during the 180-day lock-up period by such holder, in each case on a "cashless" or "net exercise" basis, or to cover tax withholding obligations of such holder in connection with such vesting or exercise, whether by means of a "net settlement" or otherwise, in each case pursuant to employee benefit plans disclosed in this prospectus; *provided* that in the case of any transfer or distribution pursuant to this clause, no filing under Section 16(a) of the Exchange Act (other than a filing on Form 5 after the expiration of the 180-day lock-up period) reporting a reduction in beneficial ownership of shares of our common stock shall be required or shall be voluntarily made during the 180-day lock-up period; or

(iv) transferring shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock that occurs by any order or settlement resulting from any legal proceeding pursuant to a qualified domestic order or in connection with a divorce settlement; *provided* that in the case of any transfer or distribution pursuant to this clause, any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of our common stock shall state that

such transfer is pursuant to an order of a court or a settlement resulting from a legal proceeding unless such a statement would be prohibited by any applicable law or order of a court; or

(v) if such holder is a corporation, partnership, limited liability company or other entity, transferring shares of our common stock in connection with the sale or other bona fide transfer in a single transaction or all or substantially all of such holder's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of such holder's assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by the lock-up agreement; *provided* that each transferee shall sign and deliver a lock-up letter substantially in the form contemplated by the underwriting agreement; or

(vi) transferring shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock pursuant to an order of a court or regulatory agency; *provided* that each transferee shall sign and deliver a lock-up letter substantially in the form contemplated by the underwriting agreement, unless prohibited by any applicable law or order of a court; and *provided further* that any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of our common stock shall state that such transfer is pursuant to an order of a court or a settlement resulting from a legal proceeding unless such a statement would be prohibited by any applicable law or order of a court; or

(vii) transferring shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock after the date of this prospectus pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of the shares of our common stock involving a change of control of us; *provided* that all of such holder's common stock subject to the lock-up agreement that are not so transferred, sold, tendered or otherwise disposed of remain subject to the lock-up agreement; *provided further* that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the shares of our common stock owned by such holder shall remain subject to the restrictions contained in the lock-up agreement (for this purpose, "change of control" shall mean the transfer (whether by tender offer, merger, consolidation, or other similar transaction), in one transaction or a series of related transactions, to a person or a group of affiliated persons, of shares of capital stock if, after such transfer, such person or group of affiliated persons would hold more than 50% of our outstanding voting securities (or the surviving entity)).

Market Listing

We intend to apply to list the shares offered hereby on the under the symbol " ."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations between us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- our financial information,
- the history of, and the prospects for, our company and the industry in which we compete,
- an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters and selling group members from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the , in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as e-mail.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities)

and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

European Economic Area

In relation to each member state of the European Economic Area, no offer of ordinary shares which are the subject of the offering has been, or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of ordinary shares referred to in (a) to (c) above shall result in a requirement for the Company or any representative to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of ordinary shares is made or who receives any communication in respect of an offer of ordinary shares, or who initially acquires any ordinary shares will be deemed to have represented, warranted, acknowledged and agreed to and with each representative and the Company that (1) it is a "qualified investor" within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any ordinary shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the ordinary shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where ordinary shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those ordinary shares to it is not treated under the Prospectus Directive as having been made to such persons.

The Company, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for the Company or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the Company nor the representatives have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the Company or the representatives to publish a prospectus for such offer.

For the purposes of this provision, the expression an "offer of ordinary shares to the public" in relation to any ordinary shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the ordinary shares to be offered so as to enable an investor to decide to purchase or subscribe the ordinary shares, as the same may be varied in that Member State by any measure

implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to Prospective Investors in the Dubai International Financial Centre

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The securities have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Non-CIS Securities may not be circulated or distributed, nor may the Non-CIS Securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in

Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Non-CIS Securities are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Non-CIS Securities pursuant to an offer made under Section 275 of the SFA except:

(a) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

(b) where no consideration is or will be given for the transfer;

(c) where the transfer is by operation of law;

(d) as specified in Section 276(7) of the SFA; or

(e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The securities may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the representatives are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

The validity of the issuance of the shares of common stock offered hereby and certain matters of U.S. federal and New York State law will be passed upon for Calyxt, Inc. by Davis Polk & Wardwell LLP, New York, New York, and for the underwriters by Latham & Watkins LLP, Costa Mesa, California.

EXPERTS

The financial statements of Calyxt, Inc. as of December 31, 2016 and 2015, and for the years then ended, appearing in this prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the U.S. Securities and Exchange Commission a registration statement (including amendments and exhibits to the registration statement) on Form S-1 under the Securities Act. This prospectus, which is part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. For further information, we refer you to the registration statement and the exhibits and schedules filed as part of the registration statement. If a document has been filed as an exhibit to the registration statement, we refer you to the copy of the document that has been filed. Each statement in this prospectus relating to a document filed as an exhibit is qualified in all respects by the filed exhibit.

Upon completion of this offering, we will become subject to the informational requirements of the Exchange Act. Accordingly, we will be required to file reports and other information with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K. You may inspect and copy reports and other information filed with the SEC at the Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is *www.sec.gov*.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

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Unaudited Condensed Financial Statements for the Three Months Ended March 31, 2017 and 2016

Financial Statements

Financial Statements for the Years Ended December 31, 2016 and 2015

Financial Statements

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Condensed Balance Sheets
(Amounts in Thousands, Except Share Data and Per Share Data)

	March 31, 2017 (unaudited)	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 3,007	$ 5,026
Trade accounts receivable	—	110
Due from related parties	40	47
Prepaid expenses and other current assets	650	282
Total current assets	3,697	5,465
Property and equipment, net	11,173	10,994
Other long-term assets	222	164
Total assets	$ 15,092	$ 16,623
Liabilities and stockholder's equity (deficit)		
Current liabilities:		
Due to related parties	$ 2,168	$ 1,712
Accounts payable	694	357
Accrued salaries, wages, and other compensation	243	332
Accrued liabilities	781	363
Current deferred revenue	162	101
Total current liabilities	4,048	2,865
Other liabilities:		
Non-current deferred revenue	623	639
Total other liabilities	623	639
Total liabilities	4,671	3,504
Stockholder's equity:		
Common stock, $0.0001 par value; 30,000,000 shares authorized, 8,000,000 shares issued and outstanding as of March 31, 2017 and December 31, 2016.	1	1
Additional paid-in capital	41,820	41,686
Accumulated deficit	(31,400)	(28,568)
Total stockholder's equity	10,421	13,119
Total liabilities and stockholder's equity	$ 15,092	$ 16,623

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Condensed Statements of Operations
(Amounts in Thousands except Shares Outstanding and per share amounts)

	Three Months Ended March 31,	
	2017	2016
	(unaudited)	
Revenue	$ 55	$ 106
Operating expenses:		
Cost of revenue	—	100
Research and development	1,266	1,370
Sales, general, and administrative	1,578	1,197
	2,844	2,667
Loss from operations	(2,789)	(2,561)
Interest expense	(14)	(4)
Foreign currency transaction (losses)	(29)	(4)
Loss before income taxes	(2,832)	(2,569)
Income tax expense	—	—
Net loss	$ (2,832)	$ (2,569)
Basic and diluted loss per share	$ (0.35)	$ (0.32)
Weighted average shares outstanding—basic and diluted	8,000,000	8,000,000

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Condensed Statements of Stockholder's Equity
(Amounts in Thousands except Shares Outstanding)

	Shares Outstanding	Common Stock	Additional Paid-In Capital	Accumulated Deficit	Total Stockholder's Equity (Deficit)
Balances at December 31, 2015	8,000,000	$ 1	$40,738	$(16,482)	$ 24,257
Stock-based compensation		—	948	—	948
Net loss	—	—	—	(12,086)	(12,086)
Balances at December 31, 2016	8,000,000	$ 1	$41,686	$(28,568)	$ 13,119
Stock-based compensation		—	134	—	134
Net loss	—	—	—	(2,832)	(2,832)
Balances at March 31, 2017 (unaudited)	8,000,000	$ 1	$41,820	$(31,400)	$ 10,421

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Condensed Statements of Cash Flows
(Amounts in Thousands)

	Three Months Ended March 31,	
	2017	2016
	(unaudited)	
Operating activities		
Net loss	$(2,832)	$ (2,569)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	133	55
Stock-based compensation	134	318
Changes in operating assets and liabilities:		
Trade accounts receivable	110	(9)
Due to/from related parties	463	363
Prepaid expenses and other assets	(426)	(196)
Accounts payable	337	379
Accrued salaries, wages, and other compensation	(89)	(111)
Accrued liabilities	418	111
Deferred revenue	45	32
Net cash used in operating activities	(1,707)	(1,627)
Investing activities		
Purchases of property and equipment	(312)	(6,780)
Net cash used in investing activities	(312)	(6,780)
Financing activities		
Capital contribution from Parent	—	—
Advances from Parent	—	—
Repayments of advances from Parent	—	—
Dividend to Parent	—	—
Net cash provided by financing activities	—	—
Net (decrease) increase in cash and cash equivalents	(2,019)	(8,407)
Cash and cash equivalents—beginning of year	5,026	24,687
Cash and cash equivalents—end of year	$ 3,007	$16,280
Supplemental cash flow information		
Interest paid	$ 14	$ 4
Income taxes paid	$ —	$ —

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Notes to Condensed Financial Statements
(unaudited)

1. Nature of Business

Calyxt, Inc., formerly known as Cellectis Plant Sciences, Inc. (the Company or Calyxt), was founded in 2010 and incorporated in Delaware. The Company is headquartered in New Brighton, Minnesota. The Company is an agriculture biotechnology company focused on creating healthier specialty food ingredients and agriculturally advantageous food crops through the use of gene editing technology for plants. The Company changed its name from Cellectis Plant Sciences, Inc. to Calyxt, Inc. on May 4, 2015. The Company is a wholly owned subsidiary of Cellectis (Parent).

Going Concern

During the three months ended March 31, 2017 and year ended December 31, 2016, the Company incurred losses from operations and net cash outflows from operating activities as disclosed in the statements of operation and cash flows, respectively. At March 31, 2017, the Company had an accumulated deficit of $31.4 million and expects to incur losses for the foreseeable future. To date, the Company has been funded primarily by various cash and equity infusions by the Parent. Although the Company believes that it will be able to successfully fund its operations through funding from its Parent and cash on hand of $3.0 million at March 31, 2017, there can be no assurance the Company will be able to do so or that the Company will ever operate profitably. The Parent has guaranteed funding for the Company's operations through August 2018. The ability of the Company to continue as a going concern is subject to this guaranteed funding from its Parent and the ability of the Company to develop and successfully commercialize the Company's product candidates.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and term deposits with original maturities of three months or less. The carrying value of these instruments approximate fair value. The balances, at times, may exceed federally insured limits. The Company has not experienced any losses on its cash and cash equivalents.

Trade Accounts Receivable

Accounts receivable are unsecured, are recorded at net realizable value, and do not bear interest. The Company makes judgments as to its ability to collect outstanding receivables based upon patterns of uncollectability, historical experience, and management's evaluation of specific accounts and will provide an allowance for credit losses when collection becomes doubtful. The Company performs credit evaluations of its customers' financial condition on an as-needed basis. Payment is generally due 30 days from the invoice date, and accounts past 30 days are individually analyzed for collectability. When all collection efforts have been exhausted, the account is written off against the related allowance.

As of March 31, 2017, the Company had no trade accounts receivables. The Company considered its trade receivables to be fully collectible at December 31, 2016; accordingly, no allowance for doubtful accounts was considered necessary.

Other Current Assets

Other current assets represent prepayments and deposits made by the Company.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed based upon the estimated useful lives of the respective assets. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or the estimated useful life of the assets. Repairs and maintenance costs are expensed as incurred. The cost and accumulated depreciation of property and equipment retired, or otherwise disposed of, are removed from the related accounts, and any residual values are charged to expense. Depreciation expense has been calculated using the following estimated useful lives:

Buildings and other improvements	10–20 years
Leasehold improvements	Remaining lease period
Office furniture and equipment	5–7 years
Computer equipment and software	3–5 years

Long-Lived Assets

Management reviews for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. If the impairment tests indicate that the carrying value of the asset, or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, further analysis is performed to determine the fair value of the asset or asset group. To the extent the fair value of the asset or asset group is less than its carrying value, an impairment loss is recognized equal to the amount the carrying value exceeds the fair value of the asset or asset group. The Company generally measures fair value by considering sale prices for similar assets or asset groups, or by discounting estimated future cash flows from such assets or asset groups using an appropriate discount rate. Assets to be disposed of are carried at the lower of their carrying value or fair value less costs to sell.

There have been no impairment losses recognized for the three months ended March 31, 2017 or March 31, 2016.

Fair Value of Financial Instruments

Pursuant to the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, *Fair Value Measurement* the Company's financial assets and liabilities measured at fair value on a recurring basis are classified and disclosed in one of the following three categories:

Level 1—Financial instruments with unadjusted quoted prices listed on active market exchanges.

Level 2—Financial instruments lacking unadjusted, quoted prices from active market exchanges, including over-the-counter traded financial instruments. The prices for the financial instruments are determined using prices for recently traded financial instruments with similar underlying terms as well as directly or indirectly observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3—Financial instruments that are not actively traded on a market exchange. This category includes situations where there is little, if any, market activity for the financial instrument. The prices are determined using significant unobservable inputs or valuation techniques.

The Company has derivative instruments which are classified as Level 2. The Company does not have any financial instruments classified as Level 3, and there were no movements between these categories during the three months ended March 31, 2017 or March 31, 2016.

Forward Purchase Contracts and Derivatives

The Company enters into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. We account for these derivative financial instruments utilizing the authoritative guidance in ASC 815, *Derivatives and Hedging*. Realized gains and losses from derivative contracts are recorded as research and development (R&D) expenses as a result of breeding contract activity. The fair value for forward purchase contracts is estimated based on exchange-quoted prices.

Unrealized gains and losses on all derivative contracts are recorded in other current assets or other current liabilities on the balance sheet at fair value. The gains and losses recorded by the Company are not significant for the three months ended March 31, 2017 or March 31, 2016.

The table below summarizes the carrying value of derivative instruments as of March 31, 2017 and December 31, 2016.

Derivatives not designated as hedging instruments under ASC 815	Asset Derivatives			Liability Derivatives		
		Fair Value			Fair Value	
	Balance Sheet Location	March 31, 2017	December 31, 2016	Balance Sheet Location	March 31, 2017	December 31, 2016
		(in thousands)	(in thousands)		(in thousands)	(in thousands)
Forward Purchase Contracts	Prepaid expenses and other current assets	$3	$9	Accrued liabilities—Current	$31	$19
Total Derivatives		$3	$9		$31	$19

Revenue Recognition

The Company enters into R&D agreements that may consist of nonrefundable up-front payments, milestone payments, royalties, and R&D Services. In addition, the Company may license its technology to third parties, which may be part of the R&D agreements.

For agreements that contain multiple elements, each element within a multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a stand-alone basis and, for an arrangement that includes a general right of return relative to the delivered products or services, delivery, or performance of the undelivered product or service is considered probable and is substantially controlled by the Company. The Company considers a deliverable to have stand-alone value if the product or service is sold separately by the Company or another vendor or could be resold by the customer. Further, the Company's revenue arrangements do not include a general right of return relative to the delivered products.

Nonrefundable up-front payments are deferred and recognized as revenue over the period of the R&D agreement.

Milestone payments represent amounts received from the Company's R&D partners, the receipt of which is dependent upon the achievement of certain scientific, regulatory, or commercial milestones. The Company recognizes milestone payments when the triggering event has occurred, there are no further contingencies or services to be provided with respect to that event, and the counterparty has no right to refund of the payment. The triggering event may be scientific results achieved by the Company or another party to the arrangement, regulatory approvals, or the marketing of products developed under the arrangement.

Royalty revenue arises from the Company's contractual entitlement to receive a percentage of product sales revenues achieved by counterparties. Royalty revenue is recognized on an accrual basis in accordance with the terms of the agreement when sales can be determined reliably and there is reasonable assurance that the receivables from outstanding royalties will be collected.

Licenses revenue from licenses which were granted to third parties is recognized ratably over the period of the license agreements.

Revenue from R&D services is recognized over the duration of the service period.

Cost of Revenue

Cost of revenue relates to the performance of services or contract research and consists of direct external expenses relating to projects and internal costs, including overhead allocated on a full-time equivalent basis.

Research and Development

R&D expenses represent costs incurred for the development of various products using licensed gene editing technology. R&D expenses consist primarily of salaries and related costs of the Company's scientists, in-licensing of technology, consumables, property and equipment depreciation, and fees paid to third-party consultants. All research and development costs are expensed as incurred.

In the normal course of business, Calyxt enters into R&D arrangements with third parties where the arrangements are contractual agreements, whereby Calyxt performs R&D of certain gene traits for the outside party. The Company has entered into various multiyear arrangements where Calyxt performs the R&D of the gene technology and the third parties generally have primary responsibility for any commercialization of the technology. These arrangements are performed with no guarantee of either technological or commercial success.

The Company in-licenses certain technology from third-parties that is a component of ongoing research and product development. The Company expenses up-front license fees upon contracting due to the uncertainty of future commercial value as well as expensing any ongoing annual fees when incurred. Related-party in-licensing expenses were $6 thousand and $14 thousand for the three months ended March 31, 2017 and 2016, respectively. Third-party in-licensing expenses were $65 thousand and $309 thousand for the three months ended March 31, 2017 and 2016, respectively.

Foreign Currency Transactions

Transactions in foreign currencies are remeasured into the Company's functional currency, U.S. dollars, at the exchange rates effective at the transaction dates. Assets and liabilities denominated in foreign currencies at

the reporting date are remeasured into the functional currency using the exchange rate effective at that date. The resulting exchange gains or losses are recorded in the statements of operations under sales, general, and administrative expenses. Transaction gains were $29 thousand and $4 thousand for the three months ended March 31, 2017 and 2016, respectively.

Income Taxes

Current income taxes are recorded based on statutory obligations for the current operating period for the jurisdictions in which the Company has operations.

Deferred taxes are provided on an asset and liability method, whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

The tax effects from an uncertain tax position can be recognized in the financial statements only if the position is more likely than not to be sustained on audit, based on the technical merits of the position. Calyxt recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon settlement with the relevant tax authority. The Company is subject to income taxes in U.S. federal and state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal and state income tax examinations by tax authorities for years ending prior to 2013. In the event of any future tax assessments, the Company's accounting policy is to record the income taxes and any related interest or penalties as current income tax expense on the statements of operations.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers,* which creates ASC 606, *Revenue from Contracts with Customers,* and supersedes the revenue recognition requirements in ASC 605, *Revenue Recognition.* The guidance in ASU 2014-09 and subsequently issued amendments ASU 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net),* ASU 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing,* and ASU 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients,* outlines a comprehensive model for all entities to use in accounting for revenue arising from contracts with customers as well as required disclosures. Entities have the option of using either a full retrospective or modified approach to adopt the new guidance. For public entities, certain not-for-profit entities, and certain employee benefit plans, the new revenue standard is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. For all other entities, the new revenue standard is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern.* The

guidance in ASU 2014-15 sets forth management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern as well as required disclosures. ASU 2014-15 indicates that, when preparing financial statements for interim and annual periods, management should evaluate whether conditions or events, in the aggregate, raise substantial doubt about the entity's ability to continue as a going concern one year from the date the financial statements are issued or are available to be issued. This evaluation should include consideration of conditions and events that are either known or are reasonably knowable at the date the financial statements are issued or are available to be issued, as well as whether it is probable that management's plans to address the substantial doubt will be implemented and, if so, whether it is probable that the plans will alleviate the substantial doubt. ASU 2014-15 is effective for annual periods ending after December 15, 2016, for both public and non-public entities, and interim periods and annual periods thereafter. The Company adopted this guidance in the current fiscal year, and, accordingly, this is disclosed in Note 1 to these financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes.* The amendment simplifies the presentation of deferred income taxes. Instead of separating deferred income tax liabilities and assets into current and non-current amounts in a classified statement of financial position, the amendments in this update require that deferred tax liabilities and assets be classified as non-current in a classified statement of financial position. For public entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For non-public entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. The Company does not expect the adoption of this standard to have a material impact on its financial statements, as all net deferred tax assets are fully reserved.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842).* The guidance requires that lessees will be required to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. The amendment also will require disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative information. For public entities, not-for-profit entities, or employee benefit plans, ASU 2016-02 is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. For all other entities, ASU 2016-02 is effective for annual periods beginning after December 15, 2019, and interim periods within annual periods beginning after December 15, 2020. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

In March 2016, the FASB issued ASU 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This ASU eliminates the APIC (additional paid-in capital) pool concept and requires that excess tax benefits and tax deficiencies be recorded in the statement of operations when awards are settled. The ASU also addresses simplifications related to statement of cash flows classification, accounting for forfeitures, and minimum statutory tax withholding requirements. For public entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For all other entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

3. Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, and trade accounts receivable. The Company also has concentrations of revenue with certain customers.

Cash and cash equivalents concentration—The Company places its cash at financial institutions with balances that, at times, may exceed federally insured limits. The Company evaluates the creditworthiness of these financial institutions in determining the risk associated with these deposits. Calyxt has not experienced any losses on such accounts.

Trade accounts receivable concentration—At March 31, 2017, the Company had no trade accounts receivable. At December 31, 2016, one customer accounted for 100% of trade accounts receivable.

Revenue concentration— For the three months ended March 31, 2017, three customers accounted individually for 50%, 30% and 16% of revenue, respectively. For the three months ended March 31, 2016, four customers accounted individually for 32%, 25%, 24%, and 14% of revenue, respectively.

4. Property and Equipment

Property and equipment consists of the following:

(Amounts in Thousands)	Three months ending March 31, 2017	Year ending December 31, 2016
Land	$ 5,690	$ 5,690
Buildings and other improvements	4,304	4,304
Leasehold improvements	169	169
Office furniture and equipment	1,560	1,506
Computer equipment and software	20	20
Assets under construction	295	37
	12,038	11,726
Less accumulated depreciation	(865)	(732)
Net property and equipment	$11,173	$10,994

On March 1, 2016, the Company purchased approximately 11 acres of land in Roseville, MN, for approximately $5.7 million to build its new headquarters facility. The Company completed construction of approximately $4.3 million for phase one of the corporate headquarter plan on this parcel of land, which consists of the Company's R&D green houses and storage facility. The Company began operations in the greenhouse facility on September 1, 2016.

For the three months ended March 31, 2017, the Company recorded $258 thousand in assets under construction for site improvements and architect fees related to phase two of the corporate headquarter plan.

Depreciation expense was $133 thousand and $55 thousand for the three months ended March 31, 2017 and 2016, respectively.

5. Related-Party Transactions

Due to related parties consists of cash advances, license fees, amounts owing under the intercompany management agreement, and interest charged on outstanding amounts due. Amounts due to the Parent bear interest at a rate of the London Interbank Offered Rate plus 5% per annum. All interest expense in the statements of operations is related to interest accruing on amounts due to the Parent.

The Company has a management agreement with its Parent, in which the Company pays the Parent a monthly fee for certain services provided by the Parent, which include general sales and administration functions, accounting functions, legal advice, human resources, and information technology. The Company recorded expenses associated with the management agreement of $412 thousand and $371 thousand for the three months ended March 31, 2017 and 2016, respectively. The Company classified $380 and $325 thousand, for the three months ended March 31, 2017 and 2016, respectively, as a component of sales, general, and administrative expenses, while $32 thousand and $46 thousand was classified as a component of R&D expenses for the three months ended March 31, 2017 and 2016, respectively.

Due from related parties consists of receivables due from another subsidiary of the Parent Company related to employee benefit services provided by Calyxt to the other subsidiary.

TALEN technology was invented by researchers at the University of Minnesota and Iowa State University and exclusively licensed to Cellectis. Calyxt, as a wholly owned subsidiary of Cellectis, obtained an exclusive license to the technology in 2011 for the use in plants and this is the primary technology used by Calyxt. Calyxt seeks to leverage TALEN technology by creating plants and food products with consumer health benefits. TALEN technology works by enabling the Company to edit genes and overcoming many of the limitations of traditional trait-development techniques. The Company will be required to pay a royalty to Cellectis on future sales for the licensing of the technology.

6. Accrued Liabilities

As of March 31, 2017, and December 31, 2016, respectively, the Company had accrued liabilities of $781 thousand and $363 thousand, which consist of capital expenditures and miscellaneous operating expenses.

7. Net Loss per Share

Basic earnings per share is computed based on the net loss allocable to common stockholders for each period, divided by the weighted average number of common shares outstanding. All outstanding stock options are excluded from the calculation since they are anti-dilutive.

8. Stock-Based Compensation

Calyxt, Inc. Equity Incentive Plan

The Company has adopted the Calyxt, Inc. Equity Incentive Plan, which allows for the grant of stock options to attract and retain highly qualified employees. The Company has reserved 831,500 shares of common stock to be issued upon the exercise of stock options under the plan. Option awards are granted with an exercise price equal to the estimated fair value of the Company’s stock at the grant date.

The awards granted under the Calyxt, Inc. Equity Incentive Plan are only exercisable upon a triggering event or Initial Public Offering of the Company, as defined by the plan. These stock awards are accounted for as liability awards and are remeasured each reporting period. Because there were no triggering events that occurred during the three months ended March 31, 2017 or 2016, no compensation expense was recognized in these respective periods. At March 31, 2017 and December 31, 2016, the Company had 825,500 stock options outstanding. Of that total, 201,800 stock options were fully vested at March 31, 2017, and have total unrecognized stock-based compensation expense of $4.54 million. The stock compensation expense related to the awards will be recorded upon either the triggering event or Initial Public Offering of the Company, and the amount recorded will be based upon the stock price at that time.

Valuation Assumptions: The fair value of each stock option is estimated using the Black-Scholes option pricing model at each measurement date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Company's stock price, and expected dividends. The awards were granted with vesting terms between two and four years. Certain awards contain a 25% acceleration vesting clause upon a triggering event or Initial Public Offering of the Company.

The Company has not historically paid cash dividends to its stockholders and currently does not anticipate paying any cash dividends in the foreseeable future. As a result, the Company has assumed a dividend yield of 0%. The risk-free interest rate is based upon the rates of U.S. Treasury bills with a term that approximates the expected life of the option. The Company uses the simplified method to reasonably estimate the expected life of its option awards. Expected volatility is based upon the volatility of comparable public companies.

The following table provides the assumptions used in the Black-Scholes model to measure the unrecognized compensation expense for the Calyxt option awards as of March 31, 2017:

Expected dividend yield	0%
Risk-free interest rate	1.28%
Expected volatility	25%
Expected life (in years)	5.75-6.25

Parent Awards

The Company's Parent grants stock options to employees of Calyxt. Compensation costs related to the grant of the Parent company awards to Calyxt's employees has been recognized in the statements of operations with a corresponding credit to stockholder's equity, representing the Parent Company's Capital contribution. The fair value of each stock option is estimated at the grant date using the Black-Scholes option pricing model. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Company's stock price, and expected dividends.

The following table provides the range of assumptions used in the Black-Scholes model for the Parent awards:

Expected dividend yield	0%
Risk-free interest rate	0.00-0.42%
Expected volatility	59.8%-63.2%
Expected life (in years)	6.11-6.12

The Company's Parent granted certain consultants of Calyxt non-employee warrants to purchase Cellectis stock in exchange for services provided to the Company. The Company recorded the fair value of the warrants as a dividend paid to the Parent in exchange for the warrants issued to them.

The Company recognized stock-based compensation expense related to its Parent's grants of stock options and warrants to Calyxt employees and consultants of $134 thousand and $318 thousand for the three month period ended March 31, 2017 and 2016, respectively. The following table summarizes the stock-based compensation expense, which was recognized in the statements of operations for the three month period ended March 31:

(Amounts in Thousands)	Three months ending March 31, 2017	Three months ending March 31, 2016
Selling, general, and administrative	$ 3	$ 7
Research and development	131	311
Total	$134	$318

9. Income Taxes

The Company provides for a valuation allowance when it is more likely than not that it will not realize a portion of the deferred tax assets. The Company has established a full valuation allowance for deferred tax assets due to the uncertainty that enough taxable income will be generated in the taxing jurisdiction to utilize the assets. Therefore, the Company has not reflected any benefit of such deferred tax assets in the accompanying financial statements.

As of March 31, 2017, there were no material changes to what the Company disclosed regarding tax uncertainties or penalties as of December 31, 2016.

10. Commitments and Contingencies

Litigation and Claims

Various legal actions, proceedings, and claims (generally, "matters") are pending or may be instituted or asserted against the Company. The Company accrues for matters when losses are deemed probable and reasonably estimable. Any resulting adjustments, which could be material, are recorded in the period the adjustments are identified. The Company has not identified any legal matters needing to be recorded or disclosed as of March 31, 2017.

Leases

The Company leases office space under a non-cancelable operating lease that expires in October, 2017. Rent expense is recognized using the straight-line method over the term of the lease. In addition to minimum lease payments, the office lease requires payment of a proportionate share of real estate taxes and building operating expenses. Total rent expense was $65 thousand and $74 thousand for three months ended March 31, 2017 and 2016, respectively.

Future minimum lease commitments are as follows as of March 31, 2017:

2017	$ 83
2018 and beyond	—
Total	$ 83

Parent Obligations

As of March 31, 2017 the Company had short-term Parent obligations of $2.1 million consisting of amounts owed under the intercompany management agreement, for certain services provided by Cellectis.

Forward Purchase Commitments

The Company has forward purchase commitments with growers to purchase seed and grain at a future date in the amount of approximately $677 thousand, which are not recorded in the financial statements because the company has not taken delivery of the seed and grain.

11. Employee Benefit Plan

The Company provides a 401(k) defined contribution plan (the Plan) for participation by all regular full-time employees who have completed three months of service. The Plan provides for a matching contribution equal to 100% of the amount of the employee's salary deduction up to 3% of the salary per employee and an additional 50% match from 3% to 5% of salary. Employees' rights to the Company's matching contributions vest immediately. Company contributions to the plan totaled $27 thousand and $18 thousand for the three months ended March 31, 2017 and 2016, respectively.

12. Segment and Geographic Information

The Company has one operating and reportable segment, R&D of plant gene editing. The Company derives substantially all of its revenue from R&D contracts related to plant gene editing.

13. Subsequent Events

On January 4, 2017, the Company signed a Letter of Intent with an unrelated third party (Lessor) for the sale and leaseback of the new Roseville, MN, Greenhouse and Warehouse Facility, and for the construction of the phase 2 expansion of the Roseville Facility, which includes R&D and administrative facilities and a demonstration kitchen. In the second quarter of 2017, the Company plans to enter into a purchase agreement with the Lessor to sell the company's land and constructed greenhouse facilities and lease said assets back over a 20-year period starting at the completion of phase 2. In addition, the Company plans to enter into a construction

agreement with the Lessor to build the remaining facility, consisting of R&D and administrative facilities, and a demonstration kitchen. At the end of the construction period, the Company plans to lease these R&D, administrative, and demonstration kitchen facilities from the Lessor over a 20-year life. The Company plans to occupy the entire facility in early 2018. There is no guarantee that the Company and the Lessor will consummate these agreements.

On June 15, 2017, the Company received a cash advance from the Parent of $3.0 million to fund ongoing operations.

Pursuant to the authorization provided in a written consent in lieu of a special meeting of the Company by the stockholder dated as of June 14, 2017, the Company effected a stock split of the Company's common stock at a ratio of 100-for-1 and increased the number of shares of common stock authorized for issuance to 30,000,000 by filing a Certificate of Amendment with the Secretary of State of the State of Delaware. As a result of the stock split, every share of issued and outstanding common stock was converted to 100 issued and outstanding shares of Common Stock, without any change in the par value per share. Since the par value of the common stock remained at $0.0001 per share, the value of "Common stock" recorded to the Company's balance sheets has been retroactively increased to reflect the par value of restated outstanding shares, with a corresponding decrease to "Additional paid-in capital." All share and per share data included in this report has been retroactively restated to reflect the stock split.

865,183 stock options were granted under the 2017 Incentive Omnibus Plan on June 14, 2017 with an exercise price of $32.57 per ordinary share, 546,343 of which were granted to our directors, director nominees and executive officers. The remainder of the options were granted to employees and non-employee consultants. In addition, 592,789 restricted stock units were granted under the 2017 Incentive Omnibus Plan on June 14, 2017, 364,229 of which were granted to our directors, director nominees and executive officers. The remainder of the restricted stock units were granted to employees and non-employee consultants.

The Company has evaluated subsequent events through June 15, 2017, the date the financial statements were available to be issued.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Calyxt, Inc.

We have audited the accompanying balance sheets of Calyxt, Inc. (the Company) as of December 31, 2016 and 2015, and the related statements of operations, stockholder's equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Calyxt, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles**.**

/s/ Ernst & Young LLP

Minneapolis, MN
May 15, 2017, except for the second paragraph of Note 1 and the third and fourth paragraphs of Note 14, as to which the date is June 15, 2017

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Balance Sheets
(Amounts in Thousands, Except Share Data and Per Share Data)

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 5,026	$ 24,687
Trade accounts receivable	110	217
Due from related parties	47	117
Prepaid expenses and other current assets	282	11
Total current assets	5,465	25,032
Property and equipment, net	10,994	915
Other long-term assets	164	48
Total assets	$ 16,623	$ 25,995
Liabilities and stockholder's equity (deficit)		
Current liabilities:		
Due to related parties	$ 1,712	$ 80
Accounts payable	357	304
Accrued salaries, wages, and other compensation	332	244
Accrued liabilities	363	226
Current deferred revenue	101	182
Total current liabilities	2,865	1,036
Other liabilities:		
Non-current deferred revenue	639	702
Total other liabilities	639	702
Total liabilities	3,504	1,738
Stockholder's equity:		
Common stock, $0.0001 par value; 30,000,000 shares authorized, 8,000,000 shares issued and outstanding as of December 31, 2016; 30,000,000 shares authorized, 8,000,000 shares issued and outstanding as of December 31, 2015.	1	1
Additional paid-in capital	41,686	40,738
Accumulated deficit	(28,568)	(16,482)
Total stockholder's equity	13,119	24,257
Total liabilities and stockholder's equity	$ 16,623	$ 25,995

See accompanying notes.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Statements of Operations
(Amounts in Thousands except Shares Outstanding and per share amounts)

	Year Ended December 31,	
	2016	2015
Revenue	$ 399	$ 1,272
Operating expenses:		
Cost of revenue	200	751
Research and development	5,638	2,766
Sales, general, and administrative	6,670	3,569
	12,508	7,086
Loss from operations	(12,109)	(5,814)
Interest expense	(5)	(261)
Foreign currency transaction gains	28	186
Loss before income taxes	(12,086)	(5,889)
Income tax expense	—	—
Net loss	$ (12,086)	$ (5,889)
Basic and diluted loss per share	$ (1.51)	$ (2.15)
Weighted average shares outstanding—basic and diluted	8,000,000	2,745,200

See accompanying notes.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Statements of Stockholder's Equity
(Amounts in Thousands except Shares Outstanding)

	Shares Outstanding	Common Stock	Additional Paid-In Capital	Accumulated Deficit	Total Stockholder's Equity (Deficit)
Balances at December 31, 2014	1,000,000	$—	$ 47	$(10,483)	$(10,436)
Stock-based compensation		—	692	—	692
Net loss		—	—	(5,889)	(5,889)
Dividend to Parent		—	—	(110)	(110)
Capital contribution from Parent	7,000,000	1	39,999	—	40,000
Balances at December 31, 2015	8,000,000	$ 1	$40,738	$(16,482)	$ 24,257
Net loss	—	—	—	(12,086)	(12,086)
Stock-based compensation	—	—	948	—	948
Balances at December 31, 2016	8,000,000	$ 1	$41,686	$(28,568)	$ 13,119

See accompanying notes.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Statements of Cash Flows
(Amounts in Thousands)

	Year Ended December 31,	
	2016	2015
Operating activities		
Net loss	$(12,086)	$ (5,889)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	345	147
Stock-based compensation	948	692
Changes in operating assets and liabilities:		
Trade accounts receivable	107	25
Due to/from related parties	1,702	(1,265)
Prepaid expenses and other assets	(387)	59
Accounts payable	53	(28)
Accrued salaries, wages, and other compensation	88	93
Accrued liabilities	137	40
Deferred revenue	(144)	(565)
Net cash used in operating activities	(9,237)	(6,691)
Investing activities		
Purchases of property and equipment	(10,424)	(665)
Net cash used in investing activities	(10,424)	(665)
Financing activities		
Capital contribution from Parent	—	30,000
Advances from Parent	—	2,050
Repayments of advances from Parent	—	(200)
Dividend to Parent	—	(110)
Net cash provided by financing activities	—	31,740
Net (decrease) increase in cash and cash equivalents	(19,661)	24,384
Cash and cash equivalents—beginning of year	24,687	303
Cash and cash equivalents—end of year	$ 5,026	$24,687
Supplemental cash flow information		
Interest paid	$ 5	$ 261
Income taxes paid	$ —	$ —
Supplemental schedule of non-cash activities		
Conversion of net payable due to Parent to equity	$ —	$10,000

See accompanying notes.

Calyxt, Inc.
(A Wholly Owned Subsidiary of Cellectis S.A.)

Notes to Financial Statements
December 31, 2016

1. Nature of Business

Calyxt, Inc., formerly known as Cellectis Plant Sciences, Inc. (the Company or Calyxt), was founded in 2010 and incorporated in Delaware. The Company is headquartered in New Brighton, Minnesota. The Company is an agriculture biotechnology company focused on creating healthier specialty food ingredients and agriculturally advantageous food crops through the use of gene editing technology for plants. The Company changed its name from Cellectis Plant Sciences, Inc. to Calyxt, Inc. on May 4, 2015. The Company is a wholly owned subsidiary of Cellectis (Parent).

Going Concern

During the years ended December 31, 2016 and 2015, the Company incurred losses from operations and net cash outflows from operating activities as disclosed in the statements of operation and cash flows, respectively. At December 31, 2016, the Company had an accumulated deficit of $28.6 million and expects to incur losses for the foreseeable future. To date, the Company has been funded primarily by various cash and equity infusions by the Parent. Although the Company believes that it will be able to successfully fund its operations through funding from its Parent, and cash on hand of $5.0 million at December 31, 2016, there can be no assurance the Company will be able to do so or that the Company will ever operate profitably. The Parent has guaranteed funding for the Company's operations through May 2018. At June 14, 2017, Cellectis extended the guaranteed funding through August 2018. The ability of the Company to continue as a going concern is subject to this guaranteed funding from its Parent and the ability of the Company to develop and successfully commercialize the Company's product candidates.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and term deposits with original maturities of three months or less. The carrying value of these instruments approximate fair value. The balances, at times, may exceed federally insured limits. The Company has not experienced any losses on its cash and cash equivalents.

Trade Accounts Receivable

Accounts receivable are unsecured, are recorded at net realizable value, and do not bear interest. The Company makes judgments as to its ability to collect outstanding receivables based upon patterns of uncollectability, historical experience, and management's evaluation of specific accounts and will provide an allowance for credit losses when collection becomes doubtful. The Company performs credit evaluations of its customers' financial condition on an as-needed basis. Payment is generally due 30 days from the invoice date, and accounts past 30 days are individually analyzed for collectability. When all collection efforts have been exhausted, the account is written off against the related allowance.

The Company considers its receivables to be fully collectible; accordingly, no allowance for doubtful accounts was considered necessary as of December 31, 2016 and 2015.

Other Current Assets

Other current assets represent prepayments and deposits made by the Company.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed based upon the estimated useful lives of the respective assets. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or the estimated useful life of the assets. Repairs and maintenance costs are expensed as incurred. The cost and accumulated depreciation of property and equipment retired, or otherwise disposed of, are removed from the related accounts, and any residual values are charged to expense. Depreciation expense has been calculated using the following estimated useful lives:

Buildings and other improvements	10–20 years
Leasehold improvements	Remaining lease period
Office furniture and equipment	5–7 years
Computer equipment and software	3–5 years

Long-Lived Assets

Management reviews for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. If the impairment tests indicate that the carrying value of the asset, or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, further analysis is performed to determine the fair value of the asset or asset group. To the extent the fair value of the asset or asset group is less than its carrying value, an impairment loss is recognized equal to the amount the carrying value exceeds the fair value of the asset or asset group. The Company generally measures fair value by considering sale prices for similar assets or asset groups, or by discounting estimated future cash flows from such assets or asset groups using an appropriate discount rate. Assets to be disposed of are carried at the lower of their carrying value or fair value less costs to sell.

There have been no impairment losses recognized for the years ended December 31, 2016 and 2015.

Fair Value of Financial Instruments

Pursuant to the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 820, *Fair Value Measurement* the Company's financial assets and liabilities measured at fair value on a recurring basis are classified and disclosed in one of the following three categories:

Level 1—Financial instruments with unadjusted quoted prices listed on active market exchanges.

Level 2—Financial instruments lacking unadjusted, quoted prices from active market exchanges, including over-the-counter traded financial instruments. The prices for the financial instruments are determined using prices for recently traded financial instruments with similar underlying terms as well as directly or indirectly observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3—Financial instruments that are not actively traded on a market exchange. This category includes situations where there is little, if any, market activity for the financial instrument. The prices are determined using significant unobservable inputs or valuation techniques.

The Company has derivative instruments which are classified as Level 2. The Company does not have any financial instruments classified as Level 3, and there were no movements between these categories during the years ended December 31, 2016 and 2015.

Forward Purchase Contracts and Derivatives

The company enters into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. We account for these derivative financial instruments utilizing the authoritative guidance in ASC 815, *Derivatives and Hedging*. Realized gains and losses from derivative contracts are recorded as research and development (R&D) expenses as a result of breeding contract activity. The fair value for forward purchase contracts is estimated based on exchange-quoted prices.

Unrealized gains and losses on all derivative contracts are recorded in other current assets or other current liabilities on the balance sheet at fair value. The gains and losses recorded by the Company are not significant for the year ended December 31, 2016.

The table below summarizes the carrying value of derivative instruments as of December 31, 2016. The company had no derivative instruments in 2015.

Derivatives not designated as hedging instruments under ASC 815	Asset Derivatives			Liability Derivatives		
		Fair Value			Fair Value	
	Balance Sheet Location	December 31, 2016	December 31, 2015	Balance Sheet Location	December 31, 2016	December 31, 2015
		(in thousands)	(in thousands)		(in thousands)	(in thousands)
Forward Purchase Contracts	Prepaid expenses and other current assets	9	—	Accrued liabilities—Current	19	—
Total Derivatives		9	—		19	—

Revenue Recognition

The Company enters into R&D agreements that may consist of nonrefundable up-front payments, milestone payments, royalties, and R&D Services. In addition, the Company may license its technology to third parties, which may be part of the R&D agreements.

For agreements that contain multiple elements, each element within a multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a stand-alone basis and, for an arrangement that includes a general right of return relative to the delivered products or services, delivery, or performance of the undelivered product or service is considered probable and is substantially controlled by the Company. The Company considers a deliverable to have stand-alone value if the product or service is sold separately by the Company or another vendor or could be resold by the customer. Further, the Company's revenue arrangements do not include a general right of return relative to the delivered products.

Nonrefundable up-front payments are deferred and recognized as revenue over the period of the R&D agreement.

Milestone payments represent amounts received from the Company's R&D partners, the receipt of which is dependent upon the achievement of certain scientific, regulatory, or commercial milestones. The Company

recognizes milestone payments when the triggering event has occurred, there are no further contingencies or services to be provided with respect to that event, and the counterparty has no right to refund of the payment. The triggering event may be scientific results achieved by the Company or another party to the arrangement, regulatory approvals, or the marketing of products developed under the arrangement.

Royalty revenues arise from the Company's contractual entitlement to receive a percentage of product sales revenues achieved by counterparties. Royalty revenues are recognized on an accrual basis in accordance with the terms of the agreement when sales can be determined reliably and there is reasonable assurance that the receivables from outstanding royalties will be collected.

Licenses revenues from licenses which were granted to third parties are recognized ratably over the period of the license agreements.

Revenues from R&D services are recognized over the duration of the service period.

Cost of Revenue

Cost of revenue relates to the performance of services or contract research and consists of direct external expenses relating to projects and internal costs, including overhead allocated on a full-time equivalent basis.

Research and Development

R&D expenses represent costs incurred for the development of various products using licensed gene editing technology. R&D expenses consist primarily of salaries and related costs of the Company's scientists, in-licensing of technology, consumables, property and equipment depreciation, and fees paid to third-party consultants. All research and development costs are expensed as incurred.

In the normal course of business, Calyxt enters into R&D arrangements with third parties where the arrangements are contractual agreements, whereby Calyxt performs R&D of certain gene traits for the outside party. The Company has entered into various multiyear arrangements where Calyxt performs the R&D of the gene technology and the third parties generally have primary responsibility for any commercialization of the technology. These arrangements are performed with no guarantee of either technological or commercial success.

The Company in-licenses certain technology from third-parties that is a component of ongoing research and product development. The Company expenses up-front license fees upon contracting due to the uncertainty of future commercial value as well as expensing any ongoing annual fees when incurred. Related-party in-licensing expenses were $44 thousand and $86 thousand for the years ended December 31, 2016 and 2015, respectively. Third-party in-licensing expenses were $539 thousand and $165 thousand for the years ended December 31, 2016 and 2015, respectively.

Foreign Currency Transactions

Transactions in foreign currencies are remeasured into the Company's functional currency, U.S. dollars, at the exchange rates effective at the transaction dates. Assets and liabilities denominated in foreign currencies at the reporting date are remeasured into the functional currency using the exchange rate effective at that date. The resulting exchange gains or losses are recorded in the statements of operations under sales, general, and administrative expenses. Transaction gains were $28 thousand and $186 thousand for the years ended December 31, 2016 and 2015, respectively.

Income Taxes

Current income taxes are recorded based on statutory obligations for the current operating period for the jurisdictions in which the Company has operations.

Deferred taxes are provided on an asset and liability method, whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

The tax effects from an uncertain tax position can be recognized in the financial statements only if the position is more likely than not to be sustained on audit, based on the technical merits of the position. Calyxt recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon settlement with the relevant tax authority. The Company is subject to income taxes in U.S. federal and state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal and state income tax examinations by tax authorities for years ending prior to 2013. In the event of any future tax assessments, the Company's accounting policy is to record the income taxes and any related interest or penalties as current income tax expense on the statements of operations.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers,* which creates ASC 606, *Revenue from Contracts with Customers,* and supersedes the revenue recognition requirements in ASC 605, *Revenue Recognition.* The guidance in ASU 2014-09 and subsequently issued amendments ASU 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net),* ASU 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing,* and ASU 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients,* outlines a comprehensive model for all entities to use in accounting for revenue arising from contracts with customers as well as required disclosures. Entities have the option of using either a full retrospective or modified approach to adopt the new guidance. For public entities, certain not-for-profit entities, and certain employee benefit plans, the new revenue standard is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. For all other entities, the new revenue standard is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern.* The guidance in ASU 2014-15 sets forth management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern as well as required disclosures. ASU 2014-15 indicates that, when preparing financial statements for interim and annual periods, management should evaluate whether conditions or events, in the aggregate, raise substantial doubt about the entity's ability to continue as a going concern one year from the date the financial statements are issued or are available to be issued. This evaluation should include consideration of conditions and events that are either known or are reasonably knowable at the

date the financial statements are issued or are available to be issued, as well as whether it is probable that management's plans to address the substantial doubt will be implemented and, if so, whether it is probable that the plans will alleviate the substantial doubt. ASU 2014-15 is effective for annual periods ending after December 15, 2016, for both public and non-public entities, and interim periods and annual periods thereafter. The Company adopted this guidance in the current fiscal year, and, accordingly, this is disclosed in Note 1 to these financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes.* The amendment simplifies the presentation of deferred income taxes. Instead of separating deferred income tax liabilities and assets into current and non-current amounts in a classified statement of financial position, the amendments in this update require that deferred tax liabilities and assets be classified as non-current in a classified statement of financial position. For public entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For non-public entities, ASU 2015-17 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. The Company does not expect the adoption of this standard to have a material impact on its financial statements, as all net deferred tax assets are fully reserved.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842).* The guidance requires that lessees will be required to recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. The amendment also will require disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative information. For public entities, not-for-profit entities, or employee benefit plans, ASU 2016-02 is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. For all other entities, ASU 2016-02 is effective for annual periods beginning after December 15, 2019, and interim periods within annual periods beginning after December 15, 2020. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

In March 2016, the FASB issued ASU 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This ASU eliminates the APIC (additional paid-in capital) pool concept and requires that excess tax benefits and tax deficiencies be recorded in the statement of operations when awards are settled. The ASU also addresses simplifications related to statement of cash flows classification, accounting for forfeitures, and minimum statutory tax withholding requirements. For public entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For all other entities, ASU 2016-09 is effective for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

3. Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, and trade accounts receivable, The Company also has concentrations of revenue with certain customers.

Cash and cash equivalents concentration—The Company places its cash at financial institutions with balances that, at times, may exceed federally insured limits. The Company evaluates the creditworthiness of these financial institutions in determining the risk associated with these deposits. Calyxt has not experienced any losses on such accounts.

Trade accounts receivable concentration—At December 31, 2016, one customer accounted for 100% of trade accounts receivable. At December 31, 2015, two customers accounted for 50% each of trade accounts receivable.

Revenue concentration—In 2016, four customers accounted individually for 33%, 28%, 19%, and 16% of revenue, respectively. In 2015, three different customers accounted individually for 38%, 26%, and 20% of revenue, respectively.

4. Property and Equipment

Property and equipment consists of the following as of December 31:

(Amounts in Thousands)	2016	2015
Land	$ 5,690	$ —
Buildings and other improvements	4,304	—
Leasehold improvements	169	161
Office furniture and equipment	1,506	1,109
Computer equipment and software	20	20
Assets under construction	37	12
	11,726	1,302
Less accumulated depreciation	(732)	(387)
Net property and equipment	$10,994	$ 915

On March 1, 2016, the Company purchased approximately 11 acres of land in Roseville, MN, for approximately $5.7 million to build its new headquarters facility. The Company completed construction of approximately $4.3 million for phase one of the corporate headquarter plan on this parcel of land, which consists of the Company's R&D green houses and storage facility. The Company began operations in the greenhouse facility on September 1, 2016.

Depreciation expense was $345 thousand and $147 thousand for the years ended December 31, 2016 and 2015, respectively.

5. Related-Party Transactions

Due to related parties consists of cash advances, license fees, amounts owing under the intercompany management agreement, and interest charged on outstanding amounts due. Amounts due to the Parent bear interest at a rate of the London Interbank Offered Rate plus 5% per annum. All interest expense in the statements of operations is related to interest accruing on amounts due to the Parent.

The Company has a management agreement with its Parent, in which the Company pays the Parent a monthly fee for certain services provided by the Parent, which include general sales and administration functions, accounting functions, legal advice, human resources, and information technology. The Company recorded expenses associated with the management agreement of $3.15 million and $1.88 million for the years ended

December 31, 2016 and 2015, respectively. The Company classified $2.97 million and $1.70 million, in 2016 and 2015, respectively, as a component of sales, general, and administrative expenses, while $0.18 million was classified as a component of R&D expenses in 2016 and 2015.

Due from related parties consists of receivables due from another subsidiary of the Parent Company related to employee benefit services provided by Calyxt to the other subsidiary.

TALEN technology was invented by researchers at the University of Minnesota and Iowa State University and exclusively licensed to Cellectis. Calyxt, as a wholly owned subsidiary of Cellectis, obtained an exclusive license to the technology in 2011 for the use in plants and this is the primary technology used by Calyxt. Calyxt seeks to leverage TALEN technology by creating plants and food products with consumer health benefits. TALEN technology works by enabling the Company to edit genes and overcoming many of the limitations of traditional trait-development techniques. The Company will be required to pay a royalty to Cellectis on future sales for the licensing of the technology.

6. Accrued Liabilities

Accrued liabilities of $363 thousand and $226 thousand for the years ended December 31, 2016 and 2015, respectively, consist of consultant bonuses and other miscellaneous operating expenses.

7. Equity Transactions

On August 1, 2015, the Parent made a $40 million capital contribution to the Company in the form of $30 million cash, and conversion of a $10 million net payable due to the Parent to equity. On October 1, 2015, the Company entered into an amended and restated contribution agreement with Cellectis and, in exchange for the capital contribution, Calyxt issued its Parent 7,000,000 shares of Common Stock.

8. Net Loss per Share

Basic earnings per share is computed based on the net loss allocable to common stockholders for each period, divided by the weighted average number of common shares outstanding. All outstanding stock options are excluded from the calculation since they are anti-dilutive.

9. Stock-Based Compensation

Calyxt, Inc. Equity Incentive Plan

The Company has adopted the Calyxt, Inc. Equity Incentive Plan, which allows for the grant of stock options to attract and retain highly qualified employees. The Company has reserved 831,500 shares of common stock to be issued upon the exercise of stock options under the plan. Option awards are granted with an exercise price equal to the estimated fair value of the Company's stock at the grant date.

The awards granted under the Calyxt, Inc. Equity Incentive Plan are only exercisable upon a triggering event or Initial Public Offering of the Company, as defined by the plan. These stock awards are accounted for as liability awards and are remeasured each reporting period. Because there were no triggering events that occurred during the years ended December 31, 2016 and 2015, no compensation expense was recognized in these respective periods. At December 31, 2016, the Company had 825,500 stock options outstanding. Of that total, 196,100 stock options were fully vested at December 31, 2016, and have total unrecognized stock-based

compensation expense of $1.12 million. The stock compensation expense related to the awards will be recorded upon either the triggering event or Initial Public Offering of the Company, and the amount recorded will be based upon the stock price at that time.

Valuation Assumptions: The fair value of each stock option is estimated using the Black-Scholes option pricing model at each measurement date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Company's stock price, and expected dividends. The awards were granted with vesting terms between two and four years. Certain awards contain a 25% acceleration vesting clause upon a triggering event or Initial Public Offering of the Company.

The Company has not historically paid cash dividends to its stockholders and currently does not anticipate paying any cash dividends in the foreseeable future. As a result, the Company has assumed a dividend yield of 0%. The risk-free interest rate is based upon the rates of U.S. Treasury bills with a term that approximates the expected life of the option. The Company uses the simplified method to reasonably estimate the expected life of its option awards. Expected volatility is based upon the volatility of comparable public companies.

The following table provides the assumptions used in the Black-Scholes model to measure the unrecognized compensation expense for the Calyxt option awards as of December 31, 2016:

Expected dividend yield	0%
Risk-free interest rate	0.64%
Expected volatility	30%
Expected life (in years)	5.75-6.25

Parent Awards

The Company's Parent grants stock options to employees of Calyxt. Compensation costs related to the grant of the Parent company awards to Calyxt's employees has been recognized in the statements of operations with a corresponding credit to stockholder's equity, representing the Parent Company's Capital contribution. The fair value of each stock option is estimated at the grant date using the Black-Scholes option pricing model. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Company's stock price, and expected dividends.

The following table provides the range of assumptions used in the Black-Scholes model for the Parent awards:

Expected dividend yield	0%
Risk-free interest rate	0.00-0.42%
Expected volatility	59.8%-63.2%
Expected life (in years)	6.11-6.12

The Company's Parent granted certain consultants of Calyxt non-employee warrants to purchase Cellectis stock in exchange for services provided to the Company. The Company recorded the fair value of the warrants as a dividend paid to the Parent in exchange for the warrants issued to them.

The Company recognized stock-based compensation expense related to its Parent's grants of stock options and warrants to Calyxt employees and consultants of $948 thousand and $692 thousand for the years ended

December 31, 2016 and 2015, respectively. The following table summarizes the stock-based compensation expense, which was recognized in the statements of operations for the years ended December 31:

(Amounts in Thousands)	2016	2015
Selling, general, and administrative	$ 20	$ 16
Research and development	928	676
Total	$948	$692

10. Income Taxes

Deferred income tax assets and liabilities are recognized for the differences between the financial statement and income tax reporting basis of assets and liabilities based on currently enacted rates and laws.

A reconciliation of statutory tax expense to actual tax expense is as follows:

	Year Ended December 31,	
(Amounts in Thousands)	2016	2015
Federal benefit at statutory rate of 34%	$(4,109)	$(2,002)
Nondeductible expenses	325	237
Recognized R&D tax credits	(418)	—
Other credits generated	(58)	—
Deferred rate change	—	66
Change in valuation allowance	4,260	1,699
Total income tax	$ —	$ —

The total valuation allowance increased by $4,260 thousand and $1,699 thousand for 2016 and 2015, respectively.

Deferred assets consist of the following:

(Amounts in Thousands)	2016	2015
Deferred tax assets:		
Current:		
Accrued expenses	$ 574	$ 83
Total current deferred tax asset	574	83
Non-current:		
Credits	592	—
Tax amortization	78	267
Other	11	—
Net operating loss and credit carryforwards	8,974	5,666
Total non-current deferred tax assets	9,655	5,933
Total deferred tax assets	$ 10,229	$ 6,016
Deferred tax liabilities:		
Current:		
Other	$ —	$ (72)
Total current deferred tax liabilities	—	(72)
Non-current:		
Property and equipment	(52)	(27)
Total deferred tax liabilities	$ (52)	$ (99)
Net deferred tax asset	10,177	5,917
Less: valuation allowance	(10,177)	(5,917)
Total	$ —	$ —

The cumulative net operating loss (NOLs) available to offset future income for federal and state reporting purposes was $24.7 million and $14.9 million at December 31, 2016 and 2015, respectively. Federal and state net operating loss and credit carryforwards will begin to expire in 2032. Due to potential ownership changes that may have occurred or would occur in the future, IRC Section 382 may place additional limitations on the Company's ability to utilize the net operating loss carryforward.

The net deferred tax assets have a valuation allowance to reserve against those deferred tax assets that Calyxt believes are more likely than not to be realized. In the event that the Company determines that a valuation allowance is no longer required, any benefits realized from the use of the NOLs and credits acquired will reduce its deferred income tax expense. In assessing the recoverability of the deferred tax assets, management considers whether it is more likely than not that a portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income in the periods in which those temporary differences become deductible. Management considers the scheduled reversals of future deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. As such, the Company has recorded a valuation allowance to offset all of its deferred tax assets.

11. Commitments and Contingencies

Litigation and Claims

Various legal actions, proceedings, and claims (generally, "matters") are pending or may be instituted or asserted against the Company. The Company accrues for matters when losses are deemed probable and reasonably estimable. Any resulting adjustments, which could be material, are recorded in the period the adjustments are identified. The Company has not identified any legal matters needing to be recorded, or disclosed as of December 31, 2016.

Leases

The Company leases office space under a non-cancelable operating lease that expires in October, 2017. Rent expense is recognized using the straight-line method over the term of the lease. In addition to minimum lease payments, the office lease requires payment of a proportionate share of real estate taxes and building operating expenses. Total rent expense was $271 thousand and $272 thousand for years ended December 31, 2016 and 2015, respectively.

Future minimum lease commitments are as follows for the years ended December 31:

2017	$121
2018 and beyond	—
Total	$121

Parent Obligations

The Company has short-term Parent obligations of $1.7 million consisting of amounts owed under the intercompany management agreement, for certain services provided by Cellectis.

Forward Purchase Commitments

The company has forward purchase commitments with growers to purchase seed and grain at a future date in the amount of approximately $383 thousand, which are not recorded in the financial statements because the company has not taken delivery of the seed and grain.

12. Employee Benefit Plan

The Company provides a 401(k) defined contribution plan (the Plan) for participation by all regular full-time employees who have completed three months of service. The Plan provides for a matching contribution equal to 100% of the amount of the employee's salary deduction up to 3% of the salary per employee and an additional 50% match from 3% to 5% of salary. Employees' rights to the Company's matching contributions vest immediately. Company contributions to the plan totaled $66 thousand and $47 thousand for the years ended December 31, 2016 and 2015, respectively.

13. Segment and Geographic Information

We have one operating and reportable segment, R&D of plant gene editing. The Company derives substantially all of its revenue from R&D contracts related to plant gene editing.

14. Subsequent Events

The Company has evaluated subsequent events through May 15, 2017, the date the financial statements were available to be issued.

On January 4, 2017, the Company signed a Letter of Intent with an unrelated third party (Lessor) for the sale and leaseback of the new Roseville, MN, Greenhouse and Warehouse Facility, and for the construction of the phase 2 expansion of the Roseville Facility, which includes R&D and administrative facilities and a demonstration kitchen. In the second quarter of 2017, the company plans to enter into a purchase agreement with the Lessor to sell the company's land and constructed greenhouse facilities and lease said assets back over a 20-year period starting at the completion of phase 2. In addition, the Company plans to enter into a construction agreement with the Lessor to build the remaining facility, consisting of R&D and administrative facilities, and a demonstration kitchen. At the end of the construction period, the Company plans to lease these R&D, administrative, and demonstration kitchen facilities from the Lessor over a 20-year life. The company plans to occupy the entire facility in early 2018. There is no guarantee that the Company and the Lessor will consummate these agreements.

The Company updated its evaluation of subsequent events through June 15, 2017, the date on which the December 31, 2016 financial statements were reissued. There are no additional significant events that require disclosure in these financial statements except as follows:

Pursuant to the authorization provided in a written consent in lieu of a special meeting of the Company by the stockholder dated as of June 14, 2017, the Company effected a stock split of the Company's common stock at a ratio of 100-for-1 and increased the number of shares of common stock authorized for issuance to 30,000,000 by filing a Certificate of Amendment with the Secretary of State of the State of Delaware. As a result of the stock split, every share of issued and outstanding common stock was converted to 100 issued and outstanding shares of Common Stock, without any change in the par value per share. Since the par value of the common stock remained at $0.0001 per share, the value of "Common stock" recorded to the Company's balance sheets has been retroactively increased to reflect the par value of restated outstanding shares, with a corresponding decrease to "Additional paid-in capital." All share and per share data included in this report has been retroactively restated to reflect the stock split.

Through and including , 2017 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

Shares

Calyxt, Inc.

Common Stock

PRELIMINARY PROSPECTUS

, 2017

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

	Amount to Be Paid
SEC registration fee	$5,795
FINRA filing fee	7,500
listing fee	*
Transfer agent's and registrar's fees	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue Sky fees and expenses	*
Miscellaneous	*
Total	$ *

* To be completed by amendment.

Each of the amounts set forth above, other than the registration fee and the FINRA filing fee, is an estimate.

Item 14. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the registrant. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. The registrant's By-laws provide for indemnification by the registrant of its directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law. The registrant also expects to enter into indemnification agreements with each of its directors at or prior to completion of the offering contemplated by this registration statement to provide these directors additional contractual assurances regarding the scope of the indemnification set forth in the registrant's Certificate of Incorporation and amended and restated By-laws and to provide additional procedural protections. There is no pending litigation or proceeding involving a director or executive officer of the registrant for which indemnification is sought.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions, or (iv) for any transaction from which the director derived an improper personal benefit. The registrant's Certificate of Incorporation provides for such limitation of liability.

The registrant maintains standard policies of insurance under which coverage is provided (a) to its directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act, and (b) to the registrant with respect to payments which may be made by the registrant to such officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

The proposed form of underwriting agreement to be filed as Exhibit 1.1 to this registration statement will provide for indemnification of directors and officers of the registrant by the underwriters against certain liabilities.

Item 15. Recent Sales of Unregistered Securities

We have not sold any securities, registered or otherwise, within the past three years, except for the following:

On October 1, 2015, we entered into an amended and restated contribution with Cellectis pursuant to which Cellectis contributed $40 million to us in exchange for shares of our common stock. The $40 million contribution consisted of $30 million of cash and the conversion to equity of $10 million of loans and outstanding obligations owed by us to Cellectis. The issuance of the shares was made pursuant to the exemption provided by Section 4(a)(2) of the Securities Act of 1933.

In fiscal year 2017, the Registrant granted to its director, employees and consultants options to purchase an aggregate of shares under its equity compensation plans at exercise prices ranging from $ to $ per share.

In fiscal year 2016, the Registrant granted to its director, employees and consultants options to purchase an aggregate of shares under its equity compensation plans at exercise prices ranging from $ to $ per share.

In fiscal year 2015, the Registrant granted to its director, employees and consultants options to purchase an aggregate of shares under its equity compensation plans at exercise prices ranging from $ to $ per share.

In fiscal year 2014, the Registrant granted to its director, employees and consultants options to purchase an aggregate of shares under its equity compensation plans at exercise prices ranging from $ to $ per share.

Option grants and the issuances of common stock upon exercise of such options were exempt pursuant to Rule 701 and Section 4(a)(2) of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules

Reference is herein made to the attached Exhibit Index, which is incorporated herein by reference.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(a) The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions referenced in Item 14 of this registration statement, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in

connection with the securities being registered hereunder, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(c) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New Brighton, State of Minnesota, on the 23rd day of June, 2017.

CALYXT, INC.

By: /s/ Federico A. Tripodi
Name: Federico A. Tripodi
Title: Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Bryan W. J. Corkal and Joseph B. Saluri each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any and all additional registration statements pursuant to Rule 462(b) of the Securities Act of 1933, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agents full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Federico A. Tripodi Federico A. Tripodi	Chief Executive Officer (principal executive officer)	June 23, 2017
/s/ Bryan W. J. Corkal Bryan W. J. Corkal	Chief Financial Officer (principal financial and accounting officer)	June 23, 2017
/s/ André Choulika André Choulika	Chairman	June 23, 2017

EXHIBIT INDEX

Exhibit Number	Description
1.1	Form of Underwriting Agreement
3.1	Form of Certificate of Incorporation
3.2	Form of By-laws
5.1*	Opinion of Davis Polk & Wardwell LLP
10.1	Management Services Agreement between Cellectis S.A., Cellectis, Inc. and Calyxt, Inc., dated as of January 1, 2016
10.2	Form of Management Services Agreement Amendment
10.3	Form of Separation Agreement between Cellectis S.A. and Calyxt, Inc.
10.4	Form of Stockholders Agreement
10.5	Form of License Agreement between Cellectis S.A. and Calyxt, Inc.
10.6#	Exclusive Patent License Agreement between Regents of the University of Minnesota and Calyxt Inc. (f.k.a. Cellectis Plant Sciences, Inc.), dated December 15, 2014
10.7#	Commercial License Agreement between Two Blades Foundation and Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.), dated December 9, 2014
10.8#	First Amendment to the Commercial License Agreement between Two Blades Foundation and Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.), dated December 1, 2016
10.9#	Letter Agreement between Two Blades Foundation and Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.), dated December 31, 2015
10.10#	Exclusive License Agreement between Plant Bioscience Limited and Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.), dated April 25, 2015
10.11	Calyxt, Inc. Equity Incentive Plan
10.12	Form of Stock Option Agreement pursuant to the Calyxt, Inc. Equity Incentive Plan
10.13	Offer Letter between Calyxt, Inc. and Federico A. Tripodi, dated May 6, 2016
10.14	Offer Letter between Calyxt, Inc. and Bryan W. J. Corkal, dated November 16, 2016
10.15	Consulting Agreement between Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.) and Daniel Voytas, dated January 1, 2010
10.16	Amendment 1 to Consulting Agreement between Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.) and Daniel Voytas, dated December 21, 2012
10.17	Composite Employment Agreement among Cellectis, S.A., Calyxt, Inc. (f.k.a. Cellectis Plant Sciences, Inc.) and Luc Mathis, dated January 1, 2006, as last amended July 1, 2016
10.18	Offer Letter between Calyxt, Inc. and Gregory Smith, dated April 24, 2015
10.19	Severance Agreement between Calyxt, Inc. and Gregory Smith, effective March 22, 2016
10.20	Calyxt, Inc. 2017 Omnibus Incentive Plan
10.21	Calyxt, Inc. 2017 Stock Option Sub-Plan for French Employees and Directors
10.22	Form of Stock Option Agreement pursuant to the Calyxt, Inc. 2017 Omnibus Incentive Plan

Exhibit Number	Description
10.23	Form of Restrictive Stock Unit Agreement pursuant to the Calyxt, Inc. 2017 Omnibus Incentive Plan
10.24	Form of Resolution with regard to the Grant of Warrants to purchase shares of Cellectis S.A.
23.1	Consent of Independent Registered Certified Public Accounting Firm
23.2*	Consent of Davis Polk & Wardwell LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)

* To be filed by amendment

\# Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from the registration statement and submitted separately to the United States Securities and Exchange Commission.

Exhibit 1.1

CALYXT, INC.

(a Delaware corporation)

[●] Shares of Common Stock

UNDERWRITING AGREEMENT

Dated: [●], 2017

CALYXT, INC.

(a Delaware corporation)

[●] Shares of Common Stock

UNDERWRITING AGREEMENT

[●], 2017

Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
Jefferies LLC
as Representatives of the several Underwriters
named on Schedule I hereto

c/o Citigroup Global Markets Inc.
388 Greenwich Street,
New York, New York 10013

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue,
New York, New York 10010

c/o Jefferies LLC
520 Madison Avenue
New York, New York 10022

Ladies and Gentlemen:

Calyxt, Inc. (the "Company"), a Delaware corporation and wholly owned subsidiary of Cellectis S.A., a *société anonyme* incorporated in the French Republic ("Parent") prior to the offering contemplated hereby, confirms its agreement with Citigroup Capital Markets Inc. ("Citigroup"), Credit Suisse Securities (USA) LLC ("Credit Suisse") and Jefferies LLC ("Jefferies") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom Citigroup, Credit Suisse and Jefferies are acting as representatives (in such capacity, the "Representatives"), with respect to (i) the sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of an aggregate of [●] shares of Common Stock, par value $0.0001 per share, of the Company ("Common Stock"), as set forth in Schedule A hereto, and (ii) the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of [●] additional shares of Common Stock from the Company. The aforesaid [●] shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the [●] shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are herein called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 (No. 333-●), including the related preliminary prospectus or prospectuses, covering the registration of the sale of the Securities under the Securities Act of 1933, as amended (the "1933 Act"). Promptly after execution and delivery of this Agreement, the Company will prepare and file a prospectus in accordance with the provisions of Rule 430A ("Rule 430A") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and Rule 424(b) ("Rule 424(b)") of the 1933 Act Regulations. The information included in such prospectus that was omitted from such registration statement at the time such registration statement became effective but that is deemed to be part of such registration statement at the time it became effective pursuant to Rule 430A(b) is herein called the "Rule 430A Information." Such registration statement, including the amendments thereto, the exhibits thereto and any schedules thereto, at the time it became effective, and including the Rule 430A Information, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein called the "Rule 462(b) Registration Statement" and, after such filing, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "preliminary prospectus." The final prospectus, in the form first furnished to the Underwriters for use in connection with the offering of the Securities is herein called the "Prospectus." For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval system or any successor system ("EDGAR").

As used in this Agreement:

"Applicable Time" means [__:00 P./A.M.], New York City time, on [●], 2017 or such other time as agreed by the Company and the Representatives.

"General Disclosure Package" means any Issuer General Use Free Writing Prospectuses issued at or prior to the Applicable Time, the most recent preliminary prospectus that is distributed to investors prior to the Applicable Time and the information included on Schedule B-1 hereto, all considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Issuer General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "*bona fide* electronic road show," as defined in Rule 433 (the "Bona Fide Electronic Road Show")), as evidenced by its being specified in Schedule B-2 hereto.

"Issuer Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"License Agreement" means the License Agreement by and between the Company and Parent, dated as of the Closing Time.

"Separation Agreement" means the Separation Agreement by and between the Company and Parent, dated as of the Closing Time.

"Stockholders Agreement" means the Stockholders Agreement by and among the Company, Parent and the Persons listed on Schedule A thereto, dated as of the Closing Time.

"Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the 1933 Act.

"Transition Agreements" means the License Agreement, the Separation Agreement and the Stockholders Agreement.

"Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the 1933 Act.

SECTION 1. Representations and Warranties.

(a) *Representations and Warranties by the Company*. The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time, the Closing Time (as defined below) and any Date of Delivery (as defined below), and agrees with each Underwriter, as follows:

(i) Registration Statement and Prospectuses. Each of the Registration Statement and any amendment thereto has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued by the Commission under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued by the Commission and no proceedings for any of those purposes have been instituted by the Commission or are pending or, to the knowledge of the Company, contemplated by the Commission. The Company has complied with each request (if any) from the Commission for additional information.

The Registration Statement and any post-effective amendment thereto, at the time it became effective, complied in all material respects with the applicable requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, complied in all material respects with the applicable requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus delivered to the Underwriters for use in connection with this offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) Accurate Disclosure. Neither the Registration Statement nor any amendment thereto, at its effective time, at the Closing Time or at any Date of Delivery, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. As of the Applicable Time, none of (A) the General Disclosure Package, (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package and (C) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto (including any prospectus wrapper), as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Time or at any Date of Delivery, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives expressly for use therein. For purposes of this Agreement, the only information so furnished shall be the information relating to concessions in the first paragraph under the heading "Underwriting–Commissions and Discounts," the information in the [●] paragraphs under the heading "Underwriting–Price Stabilization, Short Positions and Penalty Bids" and the information under the heading "Underwriting–Electronic Distribution" in each case contained in such Registration Statement, General Disclosure Package or the Prospectus] (collectively, the "Underwriter Information").

(iii) Forward-Looking Statements. Each financial or operational projection or other "forward-looking statement" (as defined by Section 27A of the 1933 Act or Section 21E of the 1934 Act) contained in the Registration Statement, the General Disclosure Package or the Prospectus (i) was so included by the Company in good faith and with reasonable basis after due consideration by the Company of the underlying assumptions, estimates and other applicable facts and circumstances and (ii) is accompanied by meaningful cautionary statements identifying those factors that could cause actual results to differ materially from those in such forward-looking statement.

(iv) Issuer Free Writing Prospectuses. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement or the Prospectus and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified. The Company has made available a Bona Fide Electronic Road Show in compliance with Rule 433(d)(8)(ii) such that no filing of any "road show" (as defined in Rule 433(h)) is required in connection with the offering of the Securities.

(v) Testing-the-Waters Materials. The Company (A) has not alone engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the 1933 Act or institutions that are accredited investors within the meaning of Rule 501 under the 1933 Act and (B) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms

that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed or approved for distribution any Written Testing-the-Waters Communications other than those listed on Schedule [●] hereto.

(vi) Company Not Ineligible Issuer. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

(vii) Emerging Growth Company Status. From the time of the initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any Person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the 1933 Act (an "Emerging Growth Company").

(viii) Independent Accountants. To the knowledge of the Company, the accountants who certified the financial statements and supporting schedules included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants as required by the 1933 Act, the 1933 Act Regulations and the Public Company Accounting Oversight Board.

(ix) Financial Statements; Non-GAAP Financial Measures. The financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules, if any, and notes present fairly in all material respects the financial position of the Company at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved. The supporting schedules, if any, present fairly in all material respects in accordance with GAAP the information required to be stated therein. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations.

(x) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company, other than those in the ordinary course of business, which are material with respect to the Company, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.

(xi) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the state of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to be so qualified or to be in good standing would not result in a Material Adverse Effect. The Company does not have any subsidiaries.

(xii) [Intentionally omitted].

(xiii) Capitalization. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of preemptive or other similar rights of any securityholder of the Company.

(xiv) Authorization of this Agreement. This Agreement has been duly authorized, executed and delivered by the Company.

(xv) Authorization and Description of Securities. The Securities to be purchased by the Underwriters from the Company have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to preemptive or other similar rights of any securityholder of the Company. The Common Stock conforms to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability by reason of being such a holder.

(xvi) Registration Rights. Except as disclosed in the General Disclosure Package and the Prospectus, there are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement.

(xvii) Absence of Violations, Defaults and Conflicts. The Company is not (A) in violation of its charter, by-laws or similar organizational document, (B) in default (or with the giving of notice or lapse of time would be in default) in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company is a party or by which it or any of them may be bound or to which any of the properties or assets of the Company is subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, reasonably be expected to result in a Material

Adverse Effect, or (C) in violation of any applicable law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its properties, products, product candidates, assets or operations, including the U.S. Food and Drug Administration ("FDA"), the United States Department of Agriculture ("USDA"), the United States Department of Health and Human Services ("HHS"), the European Commission, the European Medicines Agency (the "EMA"), the Competent Authorities of the Member States of the European Economic Area, or other comparable federal, state, local or foreign governmental and regulatory authorities (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties or assets of the Company pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect), nor will such action result in (A) any violation of the provisions of the charter, by-laws or similar organizational document of the Company or (B) the violation of any applicable law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity, except with respect to clause (B), such violations as would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company.

(xviii) Absence of Labor Dispute. No labor dispute with the employees of the Company exists or, to the knowledge of the Company, is imminent, and to the knowledge of the Company, there are no existing or imminent labor disturbances by the employees of any of its principal suppliers, manufacturers, customers or contractors, which, in either case, would reasonably be expected to result in a Material Adverse Effect.

(xix) Absence of Proceedings. There is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company, which would reasonably be expected to result in a Material Adverse Effect, or which would reasonably be expected to materially and adversely affect their respective properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company is a party or of which any of their respective properties or assets is the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, would not reasonably be expected to result in a Material Adverse Effect.

(xx) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described in all material respects and filed as required.

(xxi) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of the [New York Stock Exchange] [Nasdaq Global [Select] Market], state securities laws or the rules of Financial Industry Regulatory Authority, Inc. ("FINRA")

(xxii) Possession of Licenses and Permits. The Company possesses and is operating in compliance with such permits, licenses, franchises, exemptions, approvals, certifications, clearances, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by it and as described in the Registration Statement, the General Disclosure Package and the Prospectus. All such Government Licenses are in full force and effect, except where the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect. To the Company's knowledge, the Company has fulfilled and performed all of its material obligations with respect to the Governmental Licenses, and no event has occurred which allows, or after notice or lapse of time would allow, revocation or termination of such Governmental Licenses.

(xxiii) Compliance with Regulatory Laws. The Company: (A) is and at all times has been in material compliance with all applicable statutes, rules or regulations of the Governmental Entities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product candidate under development, manufactured or distributed by the Company ("Applicable Laws"), including, without limitation, the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.) and the Plant Protection Act (7 U.S.C. § 7701 et seq.); (B) has not received any correspondence or notice from any Governmental Entity or court of competent jurisdiction alleging or asserting material noncompliance with any Applicable Laws or any Governmental Licenses; (C) possesses all material Governmental Licenses and such Governmental Licenses are valid and in full force and effect and the Company is not in material violation of any term of any such Governmental Licenses; (D) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any Governmental Entity or third party alleging that any product development activity is in material violation of any Applicable Laws or Governmental Licenses and has no knowledge that any Governmental Entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received notice that any Governmental Entity has taken, is taking or intends to take action to suspend or revoke any material Governmental Licenses and has no knowledge that any Governmental Entity is considering such action; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Governmental Licenses and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(xxiv) Title to Property. The Company has good and marketable title to all real property owned by them and good title to all other properties owned by them (excluding for the purpose of this Section 1(a)(xxiv), Intellectual Property, as defined below), in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or (B) do not, singly or in the aggregate, materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company; and all of the leases and subleases material to the business of the Company, and under which the Company holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and the Company does not have any notice of any claim of any sort that has been asserted by anyone adverse to the rights of the Company under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company to the continued possession of the leased or subleased premises under any such lease or sublease, except to the extent that any claim or adverse effect on the Company's rights thereto would not reasonably be expected to have a Material Adverse Effect.

(xxv) Intellectual Property. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus (A) the Company owns or otherwise possesses, holds or has obtained valid and enforceable licenses or other rights or believes that it can on commercially reasonable terms obtain such licenses or other rights under patent applications, patents, inventions, copyrights, know how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks (both registered and unregistered), service marks, trade names, software, domain names and other intellectual property, including registrations and applications for registration thereof (collectively, "Intellectual Property") used in or necessary to carry on the business now operated by the Company and as currently proposed to be operated by it as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, except as such failure to own or obtain such licenses or other rights would not reasonably be expected to result in a Material Adverse Effect (B) to the knowledge of the Company, none of the Intellectual Property described in the Registration Statement, the General Disclosure Package and the Prospectus as owned by or licensed to the Company (collectively, the "Company Intellectual Property") has been adjudged invalid or unenforceable, in whole or in part, (C) there is no currently pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the validity, enforceability or scope of, or challenging the Company's ownership of or rights in or to, any Company Intellectual Property, and the Company is not aware of any facts or circumstances that would render any Company Intellectual Property invalid or unenforceable, or of inadequate scope to protect the interests of the Company in conducting its business, except in each case, as would not reasonably be expected to result in a Material Adverse Effect (D) there is no currently pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by a third party alleging that the Company infringes, misappropriates, or otherwise violates, or would, upon commercialization of any product candidate described in the Registration Statement, the General Disclosure Package and the Prospectus, infringe, misappropriate or otherwise violate, any Intellectual Property of third parties, and the Company has not received any notice alleging, or is otherwise aware of, any facts or circumstances that would give rise to such an action, proceeding or claim, except, in each case, where such infringement, misappropriation or other violation would not reasonably be expected to result in a Material Adverse Effect. (E) To the knowledge of the Company, no material technology employed by the Company has been obtained or is being used by the Company in violation of any contractual or legal obligation binding on the Company or any of its officers, directors or employees, which violation relates to the breach of a confidentiality obligation, obligation to assign Intellectual Property to a previous employer or obligation otherwise not to use the Intellectual Property of a third party.

(xxvi) Environmental Laws. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or as would not, singly or in the aggregate, reasonably be expected to result in a Material Adverse Effect, (A) the Company is not in violation of any applicable federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company has all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the knowledge of the Company, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company and (D) to the knowledge of the Company, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company relating to Hazardous Materials or any Environmental Laws.

(xxvii) Accounting Controls. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company maintains a system of internal accounting controls (as designed in Rule13a-15(f) of the 1934 Act) sufficient to provide reasonable assurance that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the Company's most recent audited fiscal year, there has been (1) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (2) no change in the Company's internal control over financial reporting that has materially adversely affected, or is reasonably likely to materially adversely affect, the Company's internal control over financial reporting.

(xxviii) Compliance with the Sarbanes-Oxley Act. The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act") that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement, and is actively taking steps to ensure that it will be in compliance with other provisions of the Sarbanes-Oxley Act not currently in effect, upon the effectiveness of such provisions, or which will become applicable to the Company at all times after the effectiveness of the Registration Statement.

(xxix) Payment of Taxes. All United States federal income tax returns of the Company required by law to be filed have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The Company has filed all other material tax returns that are required to have been filed by it pursuant to applicable national, provincial, local and non-U.S. tax law, and has paid all material taxes due pursuant to such returns or pursuant to any assessment received by the Company, including any interest, fees or penalties, except for such taxes or assessments, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not reasonably be expected to result in a Material Adverse Effect.

(xxx) Insurance. The Company carries or is entitled to the benefits of insurance, with reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute and of comparable size engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not reasonably be expected to result in a Material Adverse Effect. The Company has not been denied any insurance coverage which it has sought or for which it has applied.

(xxxi) ERISA Compliance. Each "employee benefit plan" (as defined under the Employee Retirement Income Security Act of 1974, as amended, and the regulations and published interpretations thereunder (collectively, "ERISA")) for which the Company or its "ERISA Affiliates" (as defined below) would have any liability (each, a "Plan") has been maintained in compliance in all material respects with its terms and with the requirements of all applicable statutes, rules and regulations, including ERISA and the Code. "ERISA Affiliate" means, with respect to the Company, any member of any group of organizations described in Sections 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended, and the regulations and published interpretations thereunder (collectively, the "Code") of which the Company is a member. No Plan is, and none of the Company or any of its ERISA Affiliates (as defined below) has within the past six years sponsored, maintained, participated in, contributed to, or had any obligation (contingent or otherwise) with respect to any (A) "multiemployer plan" within the meaning of Section 3(37) of ERISA, (B) pension plan subject to Title IV or Part 3 of Title I of ERISA or Section 412 of the Code, (C) "multiple employer plan" within the meaning of Section 413(c) of the Code or (D) multiple employer welfare arrangement within the meaning of Section 3(40) of ERISA. None of the Company or any of its ERISA Affiliates has incurred or reasonably expects to incur any liability under Sections 412, 4971, 4975 or 4980B of the Code. No prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred, excluding transactions effected pursuant to a statutory or administrative exemption. Each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified and nothing has occurred, whether by action or failure to act, which would cause the loss of such qualification. There is no pending audit or investigation by the Internal Revenue Service, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other governmental agency or any foreign regulatory agency with respect to any Plan that could reasonably be expected to result in material liability to the Company.

(xxxii) Investment Company Act. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended.

(xxxiii) Absence of Manipulation. Neither the Company nor, to the knowledge of the Company, any affiliate of the Company has taken, nor will the Company or any affiliate controlled by the Company take, directly or indirectly, any action which is designed, or would reasonably be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the 1934 Act.

(xxxiv) Foreign Corrupt Practices Act. None of the Company or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or authorized representative of the Company is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(xxxv) Money Laundering Laws. The operations of the Company are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company with respect to the Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(xxxvi) No Conflicts with Sanctions Laws. None of the Company or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or authorized representative of the Company is an individual or entity ("Person") currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council, the European Union, Her Majesty's Treasury, or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any joint venture partners or other Person, to fund any activities of or business with any Person, or in any country or territory, that, at the time of such funding, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxvii) Lending Relationship. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any Underwriter.

(xxxviii) No Finder's Fee. There are no contracts, agreements or understandings between the Company and any person (other than this Agreement) that would give rise to a valid claim against the Company or any Underwriter for a brokerage commission, finder's fee or other like payment in connection with the issuance and sale of the Securities.

(xxxix) Statistical and Market-Related Data. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(b) *Officer's Certificates*. Any certificate signed by any officer of the Company delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

SECTION 2. Sale and Delivery to Underwriters; Closing.

(a) *Initial Securities*. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule A, that number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof, subject, in each case, to such adjustments among the Underwriters as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(b) *Option Securities*. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the Underwriters, severally and not jointly, to purchase up to an additional [●] shares of Common Stock, at the price per share set forth in Schedule A. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time from time to time upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Representatives, but shall not be later than seven full business days after the exercise of said option, nor earlier than two full business days (unless delivery of the Option Securities is to occur concurrently with the delivery of the Initial Securities at the Closing Time (defined below), except as otherwise agreed by the Representatives and the Company, nor in any event prior to the Closing Time. If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(c) *Payment*. Payment of the purchase price for, and delivery of certificates or security entitlements for, the Initial Securities shall be made at the offices of Latham & Watkins LLP, 650 Town Center Drive, 20th Floor, Costa Mesa, California, 92626, or at such other place as shall be agreed upon by the Representatives and the Company, at 9:00 A.M. (New York City time) on the [third] ([fourth], if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time").

In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates or security entitlements for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representatives and the Company, on each Date of Delivery as specified in the notice from the Representatives to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representatives for the respective accounts of the Underwriters of certificates or security entitlements for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. The Representatives, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

(a) *Compliance with Securities Regulations and Commission Requests*. The Company, subject to Section 3(b), will comply with the requirements of Rule 430A, and will notify the Representatives as soon as practicable, and confirm the notice in writing (which may be in electronic form), (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems reasonably necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof as soon as practicable.

(b) *Continued Compliance with Securities Laws*. The Company will comply with the 1933 Act and the 1933 Act Regulations so as to permit the completion of the distribution of the Securities as contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations ("Rule 172"), would be) required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly (A) give the Representatives notice of such event, (B) prepare any amendment or supplement as may be necessary to correct such untrue statement or omission or to make the Registration Statement, the General Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representatives with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representatives or counsel for the Underwriters shall object. The Company will furnish to the Underwriters such number of copies of such amendment or supplement as the Underwriters may reasonably request. The Company will give the Representatives notice of its intention to make any filing pursuant to the 1934 Act or 1934 Act Regulations from the Applicable Time to the Closing Time and will furnish the Representatives with copies of any such documents a reasonable amount of time prior to such proposed filing, as the case may be, and will not file or use any such document to which the Representatives or counsel for the Underwriters shall reasonably object.

(c) *Delivery of Registration Statements*. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, without charge, copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and copies of all consents and certificates of experts, and will also deliver to the Representatives, without charge, a conformed copy of the Registration Statement as originally filed and each amendment thereto (without exhibits) for each of the Underwriters, in each case, if requested by the Representatives. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(d) *Delivery of Prospectuses*. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(e) *Blue Sky Qualifications*. The Company will use its reasonable best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may reasonably designate and to maintain such qualifications in effect so long as required to complete the distribution of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(f) *Rule 158*. The Company will timely file such reports pursuant to the 1934 Act as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

(g) *Use of Proceeds*. The Company will use the net proceeds received by it from the sale of the Securities in accordance with the use of proceeds specified in the Registration Statement, the General Disclosure Package and the Prospectus under the heading "Use of Proceeds."

(h) *Listing*. The Company will use its reasonable best efforts to effect and maintain the listing of the Common Stock (including the Securities) on the [New York Stock Exchange] [Nasdaq Global [Select] Market].

(i) *Restriction on Sale of Securities*. During a period of 180 days from the date of the Prospectus, the Company will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise of an option or warrant or the conversion of a security outstanding on the date hereof and referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (C) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to existing employee benefit plans of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (D) any shares of Common Stock issued pursuant to any non-employee director stock plan or dividend reinvestment plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (E) shares of Common Stock or other securities issued by the Company in connection with joint ventures, commercial relationships or other strategic transactions, *provided* that (x) the aggregate number of securities issued pursuant to this clause (E) shall not exceed [•]% of the total number of outstanding shares of Common Stock immediately following the issuance and sale of the shares of Common Stock at the Closing Time pursuant hereto and (y) such securities issued pursuant to this clause (E) during the 180-day restricted period described above shall be subject to the restrictions described in Exhibit B for the remainder of such restricted period and the recipient of any such securities shall enter into an agreement substantially in the form of Exhibit B attached hereto or (F) the filing by the Company of a registration statement on Form S-8 covering the registration of securities issued under existing employee benefit plans of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus.

(j) *Lock-up Waiver*. If the Representatives, in their sole discretion, agree to release or waive the restrictions set forth in a lock-up agreement described in Section 5(j) hereof for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit C hereto through a major news service at least two business days before the effective date of the release or waiver.

(k) *Reporting Requirements*. The Company, during the period when a Prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and 1934 Act Regulations.

(l) *Issuer Free Writing Prospectuses*. The Company agrees that, unless it obtains the prior written consent of the Representatives, it will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representatives will be deemed to have consented to the Issuer Free Writing Prospectuses listed on Schedule B-2 hereto and any "road show that is a written communication" within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representatives. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representatives as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(m) *Testing-the-Waters Materials*. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(n) *Emerging Growth Company Status*. The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Securities within the meaning of the 1933 Act and (ii) completion of the 180-day restricted period referred to in Section 3(i).

(o) *Copies of Reports and Communications*. During a period of five years from the effective date of the Registration Statement, the Company agrees to furnish to the Representatives and, upon request, to each of the other Underwriters a copy of its annual report to shareholders, and to deliver to the Representatives (i) as soon as they are available, copies of any reports and financial statements furnished to or filed with the Commission or mailed to shareholders and (ii) such additional information concerning the business and financial condition of the Company as the Representatives may from time to time reasonably request (such financial statements to be on a consolidated basis to the extent the accounts of

the Company are consolidated in reports furnished to its shareholders generally or to the Commission); provided, however, so long as the Company is subject to the reporting requirements of either Section 13 or Section 15(d) of the 1934 Act and is timely filing reports with the Commission on its EDGAR reporting system, it is not required to furnish such reports, statements or additional information to the Underwriters

SECTION 4. Payment of Expenses.

(a) *Expenses*. The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement, including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of copies of each preliminary prospectus, each Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and any costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (iii) the preparation, issuance and delivery of the certificates or security entitlements for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other duties payable upon the sale, issuance or delivery of the Securities to the Underwriters, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(e) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the fees and expenses of any transfer agent or registrar for the Securities, (vii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations, travel and lodging expenses of the representatives and officers of the Company and any such consultants, and the cost of aircraft and other transportation chartered in connection with the road show (*provided* that the travel and lodging expenses of any representatives of the Underwriters shall be paid by the Underwriters), (viii) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Underwriters in connection with, the review by FINRA of the terms of the sale of the Securities, *provided* that the amount payable by the Company pursuant to clause (v) above and this clause (viii), excluding requisite filing fees, shall not exceed $30,000, (ix) the fees and expenses incurred in connection with the listing of the Securities on the [New York Stock Exchange] [Nasdaq Global [Select] Market] and (x) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability, but without duplication of any such amounts paid pursuant to Section 6 hereof) associated with the reforming of any contracts for sale of the Securities made by the Underwriters caused by a breach of the representation contained in the third sentence of Section 1(a)(ii).

(b) *Termination of Agreement*. If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5, Section 9(a)(i) or (iii) or Section 10 hereof, the Company shall reimburse the Underwriters for all of their reasonable, documented out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters, provided however, that if this Agreement is terminated pursuant to Section 10, the Company shall only be required to reimburse such costs, expenses, fees and disbursements of the Underwriters that have not failed to purchase the Securities that they have agreed to purchase hereunder.

SECTION 5. Conditions of Underwriters' Obligations. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company delivered pursuant to the provisions hereof, to the performance by the Company of their covenants and other obligations hereunder, and to the following further conditions:

(a) *Effectiveness of Registration Statement; Rule 430A Information*. The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and, at the Closing Time, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued by the Commission and no proceedings for any of those purposes have been instituted by the Commission or are pending or, to the knowledge of the Company, contemplated by the Commission; and the Company has complied with each request (if any) from the Commission for additional information. A prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) without reliance on Rule 424(b)(8) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A.

(b) *Opinion of Counsel for Company*. At the Closing Time, the Representatives shall have received the opinion, dated the Closing Time, of Davis Polk & Wardwell LLP, counsel for the Company, in form and substance satisfactory to counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters to the effect set forth in Exhibit [●] hereto and to such further effect as counsel for the Underwriters may reasonably request.

(c) *Opinion of General Counsel of Company*. At the Closing Time, the Representatives shall have received the opinion, dated the Closing Time, of Joseph Saluri, as General Counsel of the Company, in form and substance reasonably satisfactory to counsel for the Underwriters, substantially in the form of Exhibit [●] hereto.

(d) *Opinion of Counsel for Underwriters.* At the Closing Time, the Representatives shall have received the opinion, dated the Closing Time, of Latham & Watkins LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters in form and substance satisfactory to the Representatives.

(e) *Officers' Certificate*. At the Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the Chief Executive Officer or the President of the Company and of the chief financial or chief accounting officer of the Company, dated the Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made at and as of the Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement under the 1933 Act has been issued by the Commission, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued by the Commission and no proceedings for any of those purposes have been instituted by the Commission or are pending or, to their knowledge, contemplated by the Commission.

(f) *Accountant's Comfort Letter*. At the time of the execution of this Agreement, the Representatives shall have received from Ernst & Young a letter, dated such date, in form and substance satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the

other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(g) *Bring-down Comfort Letter*. At the Closing Time, the Representatives shall have received from Ernst & Young a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (f) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Time.

(h) *Approval of Listing*. At the Closing Time, the Securities shall have been approved for listing on the [New York Stock Exchange] [Nasdaq Global [Select] Market], subject only to official notice of issuance.

(i) *No FINRA Objection*. FINRA has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements relating to the offering of the Securities.

(j) *Lock-up Agreements*. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit B hereto signed by the persons listed on Schedule C hereto.

(k) *Conditions to Purchase of Option Securities*. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company hereunder shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representatives shall have received:

(i) Officers' Certificate of the Company. A certificate, dated such Date of Delivery, of the President or a Vice President of Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(e) hereof remains true and correct as of such Date of Delivery.

(ii) Opinion of Counsel for Company. If requested by the Representatives, the opinion of Davis Polk & Wardwell LLP, counsel for Company, in form and substance satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(b) hereof.

(iii) Opinion of General Counsel for Company. If requested by the Representatives, the opinion of Joseph Saluri, as General Counsel of Company, in form and substance reasonably satisfactory to counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(c) hereof.

(iv) Opinion of Counsel for Underwriters. If requested by the Representatives, the opinion of Latham & Watkins LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(d) hereof.

(v) Bring-down Comfort Letter. If requested by the Representatives, a letter from Ernst & Young, in form and substance satisfactory to the Representatives and dated such

Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(f) hereof, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

(l) *Additional Documents*. At the Closing Time and at each Date of Delivery (if any) counsel for the Underwriters shall have been furnished with such additional customary documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be satisfactory in form and substance to the Representatives and counsel for the Underwriters. The Company will furnish the Representatives with such conformed copies of such documents as the Representatives reasonably request.

(m) *Termination of Agreement*. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7, 8, 14, 15 and 16 shall survive any such termination and remain in full force and effect.

(n) *Transition Agreements*. Each of the Transition Agreements shall be in full force and effect (or shall be effective as of the Closing Time).

SECTION 6. Indemnification.

(a) *Indemnification of Underwriters by Company*. The Company agrees to indemnify and hold harmless each Underwriter, its directors, officers, employees and affiliates (as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate")), its selling agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:

(i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430A Information, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities ("Marketing Materials"), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, Prospectus or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;

(ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company;

(iii) against any and all expense whatsoever, as incurred (including the reasonable fees and disbursements of counsel chosen by the Representatives), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(c) *Indemnification of Company, Directors and Officers*. Each Underwriter severally agrees to indemnify and hold harmless the Company, their directors, each of their respective officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

(d) *Actions against Parties; Notification*. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Sections 6(a) above, counsel to the indemnified parties shall be selected by the Representatives, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(e) *Settlement without Consent if Failure to Reimburse*. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

SECTION 7. Contribution. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and of the Underwriters, on the other hand, in connection with the statements or omissions, which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (before deducting expenses (other than underwriting discounts and commissions)) received by the Company, on the one hand, and the total underwriting discount received by the Underwriters, on the other hand, in each case as set forth on the cover of the Prospectus, bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by such Underwriter in connection with the Shares underwritten by it and distributed to the public.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

SECTION 8. Representations, Warranties and Agreements to Survive. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company and (ii) delivery of and payment for the Securities.

SECTION 9. Termination of Agreement.

(a) *Termination*. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (i) if there has been, in the judgment of the Representatives, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the completion of the offering or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the [New York Stock Exchange] [Nasdaq Global [Select] Market], or (iv) if trading generally on the NYSE MKT or the New York Stock Exchange or in the Nasdaq Global [Select] Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other governmental authority, or (v) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to Clearstream or Euroclear systems in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

(b) *Liabilities*. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7, 8, 14, 15 and 16 shall survive such termination and remain in full force and effect.

SECTION 10. Default by One or More of the Underwriters. If one or more of the Underwriters shall fail at the Closing Time or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have

the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:

(i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or

(ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase, and the Company to sell, the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the (i) Representatives or (ii) the Company shall have the right to postpone Closing Time or the relevant Date of Delivery, as the case may be, for a period not exceeding seven days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 10.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to [●]; notices to the Company shall be directed to it at 600 County Road D West, Suite 8, New Brighton, Minnesota 55112, attention of Chief Executive Officer; notices to Parent shall be directed to it at 8 rue de la Croix Jarry, Paris, Ile-de-France, 75013 France, Attn: General Counsel.

SECTION 12. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the initial public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering of the Securities and the process leading thereto, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, or its stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company on other matters) and no Underwriter has any obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

SECTION 13. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 14. Trial by Jury. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

SECTION 15. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

SECTION 16. Consent to Jurisdiction; Waiver of Immunity. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court, as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 17. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 18. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

SECTION 19. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with its terms.

Very truly yours,

CALYXT, INC.

By _____
Title:

CONFIRMED AND ACCEPTED,
as of the date first above written:

By: Citigroup Global Markets Inc.

By: _____
Name:
Title:

By: Credit Suisse Securities (USA) LLC

By: _____
Name:
Title:

By: Jefferies LLC

By: _____
Name:
Title:

For themselves and as Representatives of the other Underwriters named in Schedule A hereto.

SCHEDULE A

The initial public offering price per share for the Securities shall be $[●].

The purchase price per share for the Securities to be paid by the several Underwriters shall be $[●], being an amount equal to the initial public offering price set forth above less $[●] per share.

Name of Underwriter	Number of Initial Securities
Citigroup Global Markets Inc.	
Credit Suisse Securities (USA) LLC	
Jefferies LLC	
Wells Fargo Securities, LLC	
Ladenburg Thalmann & Co. Inc.	
Total	[●]

SCHEDULE B-1

Pricing Terms

1. The Company is selling [●] shares of Common Stock.

2. The Company has granted an option to the Underwriters, severally and not jointly, to purchase up to an additional [●] shares of Common Stock.

3. The initial public offering price per share for the Securities shall be $[●].

4. Net proceeds to the Company for the Initial Securities after underwriting discounts and commissions are $[●].

SCHEDULE B-2

Free Writing Prospectuses

[SPECIFY EACH ISSUER GENERAL USE FREE WRITING PROSPECTUS]

SCHEDULE C

List of Persons and Entities Subject to Lock-up

[To come]

FORMS OF OPINIONS OF COUNSEL
TO BE DELIVERED PURSUANT TO SECTION

[To come]

[Form of lock-up from directors, officers or other stockholders pursuant to Section 5(j)]

Exhibit B

LOCK-UP AGREEMENT

_____, 2017

Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
Jefferies LLC
as Representatives of the several Underwriters
named on Schedule I to the Underwriting Agreement

c/o Citigroup Global Markets Inc.
388 Greenwich Street,
New York, New York 10013

c/o Credit Suisse Securities (USA) LLC
Eleven Madison Avenue,
New York, New York 10010

c/o Jefferies LLC
520 Madison Avenue
New York, New York 10022

Re: Proposed Public Offering by Calyxt, Inc.

Dear Sirs:

The undersigned, a stockholder or officer and/or director of Calyxt, Inc., a Delaware corporation (the "Company"), understands that Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC and Jefferies LLC (collectively, the "Representatives") propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company providing for the public offering of shares of the Company's common stock, par value $0.0001 per share (the "Common Stock"). In recognition of the benefit that such an offering will confer upon the undersigned as a stockholder or officer and/or director of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and ending on the date that is 180 days from the date of the Underwriting Agreement, the undersigned will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of the Company's Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter

acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the "Lock-Up Securities"), or exercise any right with respect to the registration of any of the Lock-up Securities, or file or cause to be filed any registration statement in connection therewith, under the Securities Act of 1933, as amended, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Lock-Up Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed Lock-Up Securities the undersigned may purchase in the offering.

If the undersigned is an officer or director of the Company, (1) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of the Common Stock, the Representatives will notify the Company of the impending release or waiver, and (2) the Company has agreed in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (i) the release or waiver is effected solely to permit a transfer not for consideration and (ii) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities without the prior written consent of the Representatives, provided that (1) the Representatives receive a signed lock-up agreement for the balance of the lockup period from each donee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) such transfers are not required to be reported with the Securities and Exchange Commission on Form 4 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended, and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers:

(i) as a *bona fide* gift or gifts; or

(ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin); or

(iii) to a member of the immediate family of the undersigned; or

(iv) to a corporation, partnership, limited liability company or other entity of which the undersigned and the immediate family of the undersigned are the direct or indirect legal and beneficial owners of all the outstanding equity securities or similar interests of such corporation, partnership, limited liability company or other entity; or

(v) by will or intestate succession upon the death of the undersigned; or

(vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement; or

(vii) as a distribution to limited partners or stockholders of the undersigned; or

(viii) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by the undersigned; or

(ix) to a nominee or custodian of a person or entity to whom disposition or transfer would be permissible under (i) – (viii) above.

Notwithstanding anything to the contrary, nothing in this agreement shall prohibit the undersigned from:

(i) entering into a written plan meeting the requirements of Rule 10b5-1 under the Exchange Act of 1934, as amended, relating to the sale of securities of the Company, provided that the securities subject to such plan may not be sold and no public disclosure of any such action shall be required or shall be voluntarily made by any person until after the expiration of the 180-day lock-up period; or

(ii) exercising any stock option to purchase shares of Common Stock, or any securities convertible into or exercisable or exchangeable for Common Stock, or other similar awards granted on or prior to the date of the final prospectus relating to the Public Offering (the "Prospectus") or granted pursuant to the Company's equity incentive plans described in the Prospectus; *provided* that this lock-up agreement shall apply to any securities issued upon such exercise; or

(iii) transferring shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock from the undersigned to the Company (or the purchase and cancellation of the same by the Company) upon a vesting event of the Company's securities or upon the exercise of options to purchase shares of Common Stock that expire during the 180-day lock-up period by the undersigned, in each case on a "cashless" or "net exercise" basis, or to cover tax withholding obligations of the undersigned in connection with such vesting or exercise, whether by means of a "net settlement" or otherwise, in each case pursuant to employee benefit plans disclosed in the registration statement relating to the Public Offering; *provided* that in the case of any transfer or distribution pursuant to this clause, no filing under Section 16(a) of the Exchange Act (other than a filing on Form 5 after the expiration of the 180-day lock-up period) reporting a reduction in beneficial ownership of shares of Common Stock shall be required or shall be voluntarily made during the 180-day lock-up period; or

(iv) transferring shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock that occurs by any order or settlement resulting from any legal proceeding pursuant to a qualified domestic order or in connection with a divorce settlement; *provided* that in the case of any transfer or distribution pursuant to this clause, any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall state that such transfer is pursuant to an order of a court or a settlement resulting from a legal proceeding unless such a statement would be prohibited by any applicable law or order of a court; or

(v) if the undersigned is a corporation, partnership, limited liability company or other entity, transferring shares of Common Stock in connection with the sale or other bona fide transfer in a single transaction or all or substantially all of the undersigned's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the undersigned's assets, in any such case not

undertaken for the purpose of avoiding the restrictions imposed by this agreement; *provided* that each transferee shall sign and deliver a lock-up letter substantially in the form of this letter; or

(vi) transferring shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock pursuant to an order of a court or regulatory agency; *provided* that each transferee shall sign and deliver a lock-up letter substantially in the form of this letter, unless prohibited by any applicable law or order of a court; and *provided further* that any filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall state that such transfer is pursuant to an order of a court or a settlement resulting from a legal proceeding unless such a statement would be prohibited by any applicable law or order of a court; or

(vii) transferring shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock after the date of the Prospectus pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of the shares of Common Stock involving a change of control of the Company; *provided* that all of the undersigned's Common Stock subject to this lock-up agreement that are not so transferred, sold, tendered or otherwise disposed of remain subject to this lock-up agreement; *provided further* that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the shares of Common Stock owned by the undersigned shall remain subject to the restrictions contained in this letter agreement (for purposes hereof, "change of control" shall mean the transfer (whether by tender offer, merger, consolidation, or other similar transaction), in one transaction or a series of related transactions, to a person or a group of affiliated persons, of shares of capital stock if, after such transfer, such person or group of affiliated persons would hold more than 50% of the outstanding voting securities of the Company (or the surviving entity)).

Furthermore, the undersigned may sell shares of Common Stock of the Company purchased by the undersigned in the Public Offering on the open market following the Public Offering if and only if (i) such sales are not required to be reported in any public report or filing with the Securities and Exchange Commission, or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding such sales.

The undersigned agrees that, prior to engaging in any transaction or taking any other action that is subject to the terms of this lock-up agreement during the 180-day lock-up period, it will give notice thereof to the Company and will not consummate such transaction or take any such action unless it has received written confirmation from the Company that the 180-day lock-up period has expired.

Notwithstanding anything to the contrary contained herein, this agreement will automatically terminate and the undersigned will be released from all of his, her or its obligations hereunder upon the earliest to occur, if any, of (i) the Company advises the Representatives in writing that it has determined not to proceed with the Public Offering, (ii) the Company files an application with the U.S. Securities and Exchange Commission to withdraw the registration statement related to the Public Offering, (iii) the Underwriting Agreement is executed but is terminated (other than the provisions thereof which survive termination) prior to payment for and delivery of the Common Stock to be sold thereunder, or (iv) February 1, 2018, in the event that the Underwriting Agreement has not been executed by such date.

In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the registration or transfer of the securities described herein, are hereby authorized to decline to make any transfer of securities if such transfer would constitute a violation or breach of this letter agreement.

Very truly yours,

Signature:_____

Print Name:

FORM OF PRESS RELEASE
TO BE ISSUED PURSUANT TO SECTION 3(j)

Calyxt, Inc.
[Date]

Calyxt, Inc. (the "Company") announced today that [●], the lead book-running managers in the Company's recent public sale of [●] shares of common stock, are [waiving] [releasing] a lock-up restriction with respect to [●] shares of the Company's common stock held by [certain officers or directors] [an officer or director] of the Company. The [waiver] [release] will take effect on [●], and the shares may be sold on or after such date.

This press release is not an offer for sale of the securities in the United States or in any other jurisdiction where such offer is prohibited, and such securities may not be offered or sold in the United States absent registration or an exemption from registration under the United States Securities Act of 1933, as amended.

Exhibit 3.1

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION

OF

CALYXT, INC.

Calyxt, Inc. (the "**Corporation**") is a corporation organized and existing under the laws of the State of Delaware. The original certificate of incorporation of the Corporation (the "**Certificate of Incorporation**") was filed with the Secretary of State of the State of Delaware on January 8, 2010 under the name Cellectis Plant Sciences, Inc. Certificates of Amendment were filed on December 3, 2014, May 4, 2015 and June 14, 2017, and a Certificate of Amendment was attached as Exhibit A to a Certificate of Validation on April 11, 2017. This amended and restated certificate of incorporation, which restates, integrates and further amends the provisions of the Certificate of Incorporation (as the same was amended from time to time) in its entirety, was duly adopted by the board of directors of the Corporation (the "**Board of Directors**") and the stockholders of the Corporation in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware.

The certificate of incorporation of the corporation is hereby amended and restated to read in its entirety as follows:

ARTICLE 1
NAME

The name of the corporation is Calyxt, Inc.

ARTICLE 2
REGISTERED OFFICE AND AGENT

The address of its registered office in the State of Delaware is Corporation Trust Center, 2711 Centerville Road, Suite 400, City of Wilmington, County of New Castle, DE 19808. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE 3
PURPOSE

The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware as the same exists or may hereafter be amended ("**Delaware Law**").

ARTICLE 4
CAPITAL STOCK

Section 1. The total number of shares of stock which the Corporation shall have authority to issue is [●], consisting of [●] shares of common stock, par value $0.0001 per share (the "**Common Stock**"), and [●] shares of preferred stock, par value $0.0001 per share (the "**Preferred Stock**").

Section 2. The shares of Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby empowered to authorize by resolution or resolutions from time to time the issuance of one or more series of Preferred Stock and, by filing a certificate pursuant to Delaware Law (a "**Preferred Stock Designation**"), to establish from time to time the number of shares to be included in each such series, and to fix the designations, powers, preferences and relative, participating, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, with respect to each such series of Preferred Stock and the number of shares constituting each such series, and to increase or decrease the number of shares of any such series to the extent permitted by Delaware Law. The authority of the Board of Directors with respect to each series shall include, but not be limited to, determination of the following:

(a) the designation of the series, which may be by distinguishing number, letter or title;

(b) the number of shares of the series, which number the Board of Directors may thereafter (except where otherwise provided in the Preferred Stock Designation) increase or decrease (but not below the number of shares thereof then outstanding);

(c) the amounts payable on, and the preferences, if any, of shares of the series in respect of dividends, and whether such dividends, if any, shall be cumulative or noncumulative;

(d) dates on which dividends, if any, shall be payable in respect of shares of the series;

(e) the redemption rights and price or prices, if any, for shares of the series;

(f) the terms and amount of any sinking fund provided for the purchase or redemption of shares of the series;

(g) whether the shares of the series shall be convertible into or exchangeable for shares of any other class or series, or any other security, of the Corporation or any other corporation, and, if so, the specification of such other class or series of such other security, the conversion or exchange price or prices or rate or rates, any adjustments thereof, the date or dates at which such shares shall be convertible or exchangeable and all other terms and conditions upon which such conversion or exchange may be made;

(h) the rights of the holders of the shares of such series upon the dissolution of, or upon the subsequent distribution of assets of, the Corporation;

(i) restrictions on the issuance of shares of the same series or of any other class or series;

(j) the voting powers, full or limited, or no voting powers, of the holders of shares of the series; and

(k) the manner in which any facts ascertainable outside of this Restated Certificate or the resolution or resolutions providing for the issuance of such series shall operate upon the voting powers, designations, preferences, rights, and qualifications, limitations, or restrictions of such series.

Section 3. The shares of Common Stock shall be subject to the express terms of the shares of Preferred Stock and any series thereof. Except as may otherwise be provided in this certificate of incorporation or in a Preferred Stock Designation, the holders of shares of Common Stock shall be entitled to one vote for each such share upon all questions presented to the stockholders.

Section 4. Except as may otherwise be provided by law, in this certificate of incorporation or in a Preferred Stock Designation, the holders of shares of Common Stock shall have the exclusive right to vote for the election of directors and for all other purposes, and holders of shares of Preferred Stock and any series thereof shall not be entitled to receive notice of any meeting of stockholders at which they are not entitled to vote.

Section 5. The Corporation shall be entitled to treat the person in whose name any share of its stock is registered as the owner thereof for all purposes and shall not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person, whether or not the Corporation shall have notice thereof, except as expressly provided by applicable law.

ARTICLE 5
BOARD OF DIRECTORS

Section 1. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

Section 2. Subject to the terms of any series of Preferred Stock entitled to separately elect directors, the Board of Directors shall consist of not less than five nor more than 11 directors, with the exact number of directors to be determined from time to time solely by resolution adopted by the affirmative vote of a majority of the entire Board of Directors.

Section 3. (a) Until the Effective Date, all of the directors will be elected annually at the annual meeting of stockholders.

(b) From and after the Effective Date, except as otherwise provided in the terms of any series of Preferred Stock entitled to separately elect directors, the directors shall be divided into three classes, designated Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. Each director shall serve for a term ending on the date of the third annual meeting of stockholders next following the annual meeting at which such director was elected; *provided* that directors initially designated as Class I directors shall serve for a term ending on the date of the first annual meeting following the Effective Date, directors initially designated as Class II directors shall serve for a term ending on the second annual meeting following the Effective Date, and directors initially designated as Class III directors shall serve for a term ending on the date of the third annual meeting following the Effective Date. Immediately following the Effective Date, the Board of Directors is authorized to designate the members of the Board of Directors then in office as Class I directors, Class II directors or Class III directors. In the event of any change in the number of directors, the Board of Directors shall apportion any newly created directorships among, or reduce the number of directorships in, such class or classes as shall equalize, as nearly as possible, the number of directors in each class. In no event will a decrease in the number of directors shorten the term of any incumbent director.

(c) Each director shall hold office until such director's successor shall have been duly elected and qualified or until such director's earlier death, resignation or removal and for a term that shall coincide with the term of the class to which such director shall have been elected.

(d) There shall be no cumulative voting in the election of directors.

Section 4. Vacancies on the Board of Directors resulting from death, resignation, removal or otherwise and newly created directorships resulting from any increase in the number of directors shall, except as otherwise required by law, be filled solely by a majority of the directors then in office (although less than a quorum) or by the sole remaining director, and each director so elected shall hold office for a term that shall coincide with the term of the class to which such director shall have been elected.

Section 5. (a) Until the Effective Date, any director or the entire Board of Directors may be removed from office, with or without cause, by the affirmative vote of the holders of not less than a majority of the shares then entitled to vote generally in the election of directors, voting together as a single class.

(b) From and after the Effective Date, no director may be removed from office by the stockholders except for cause with the affirmative vote of the holders of not less than a majority of the shares then entitled to vote generally in the election of directors, voting together as a single class.

(c) Notwithstanding the foregoing, whenever the holders of one or more series of Preferred Stock shall have the right, voting separately as a series, to elect directors, the election, term of office, filling of vacancies, removal and other features of such

directorships shall be governed by the terms of the resolution or resolutions adopted by the Board of Directors pursuant to Article 4 applicable thereto, and such directors so elected shall not be subject to the provisions of this Article 5 unless otherwise provided therein.

ARTICLE 6
STOCKHOLDERS

Section 1. (a) Until the Effective Date, any action required or permitted to be taken at any annual or special meeting of stockholders may be taken (i) by a vote of stockholders at a meeting of stockholders duly noticed and called in accordance with Delaware Law or (ii) without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding capital stock of the Corporation having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) From and after the Effective Date, any action required or permitted to be taken at any annual or special meeting of stockholders may only be taken upon a vote of stockholders at an annual or special meeting of stockholders duly noticed and called in accordance with the Corporation's bylaws and Delaware Law and may not be taken by written consent of stockholders without a meeting.

Section 2. Special meetings of stockholders may be called only by the affirmative vote of a majority of the entire Board of Directors; *provided* that, until the Effective Date, special meetings of stockholders shall be called by the Secretary of the Corporation at the request of the holders of a majority of the then outstanding shares of Common Stock.

ARTICLE 7
LIMITATIONS ON LIABILITY AND INDEMNIFICATION

Section 1. A director of the Corporation shall not be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director to the fullest extent permitted by Delaware Law.

Section 2. (a) Each person (and the heirs, executors or administrators of such person) who was or is a party or is threatened to be made a party to, or is otherwise involved in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director or principal officer (as defined in the Corporation's bylaws) of the Corporation shall be indemnified and held harmless by the Corporation to the fullest extent permitted by Delaware Law; *provided* that the Corporation shall not be obligated to indemnify (or advance) expenses to such a director or principal officer with respect to a proceeding (or part thereof) initiated by such director or principal officer (other than a proceeding to enforce the rights granted under this Article 7) unless the Board of Directors approved the initiation of such proceeding (or part thereof). The right to

indemnification conferred in this Article 7 shall also include the right to be paid by the Corporation the expenses (including attorneys' fees) incurred in connection with any such proceeding in advance of its final disposition to the fullest extent authorized by Delaware Law. The right to indemnification conferred in this Article 7 shall be a contract right.

(b) The Corporation may, by action of its Board of Directors, provide rights to indemnification and to advancement of expenses to such other officers, employees and agents of the Corporation to such extent and to such effect as the Board of Directors shall determine to be appropriate and authorized by Delaware Law.

Section 3. The Corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such liability under Delaware Law.

Section 4. The rights and authority conferred in this Article 7 shall not be exclusive of any other right which any person may otherwise have or hereafter acquire.

Section 5. Neither the amendment nor repeal of this Article 7, nor the adoption of any provision of this certificate of incorporation or the bylaws of the Corporation, nor, to the fullest extent permitted by Delaware Law, any modification of law, shall adversely affect any right or protection of any person granted pursuant hereto existing at, or arising out of or related to any event, act or omission that occurred prior to, the time of such amendment, repeal, adoption or modification (regardless of when any proceeding (or part thereof) relating to such event, act or omission arises or is first threatened, commenced or completed).

ARTICLE 8
CORPORATE OPPORTUNITIES

To the fullest extent permitted by applicable law, the Corporation, on behalf of itself and any future subsidiaries, renounces any interest or expectancy of the Corporation and any future subsidiaries in, or in being offered an opportunity to participate in, business opportunities that are from time to time presented to the Parent or any of its officers, directors, agents, shareholders, members, partners, subsidiaries (other than the Corporation and any future subsidiaries) and affiliates (including, without limitation, their respective officers, directors, agents, shareholders, members, partners, subsidiaries and affiliates) (each, a "**Specified Party**"), even if the opportunity is one that the Corporation or any future subsidiaries might reasonably be deemed to have pursued or had the ability or desire to pursue if granted the opportunity to do so and each such Specified Party shall have no duty to communicate or offer such business opportunity to the Corporation and, to the fullest extent permitted by applicable law, shall not be liable to the Corporation or

any future subsidiaries for breach of any fiduciary or other duty, as a director or officer or otherwise, by reason of the fact that such Specified Party pursues or acquires such business opportunity, directs such business opportunity to another person or fails to present such business opportunity, or information regarding such business opportunity, to the Corporation or any future subsidiaries. Notwithstanding the foregoing, a Specified Party who is a director or officer of the Corporation and who is offered a business opportunity in his or her capacity as a director or officer of the Corporation (a "**Directed Opportunity**") shall be obligated to communicate such Directed Opportunity to the Corporation; *provided*, *however*, that all of the protections of this Article 8 shall otherwise apply to the Specified Parties with respect to such Directed Opportunity, including, without limitation, the ability of the Specified Parties to pursue or acquire such Directed Opportunity or to direct such Directed Opportunity to another person. In addition, to the fullest extent permitted by applicable law, none of the Parent or any of its affiliates or any director who is not employed by the Corporation or his or her affiliates will have any duty to refrain from (i) engaging in a corporate opportunity in the same or similar lines of business in which the Corporation or any future subsidiaries now engage or propose to engage or (ii) otherwise compete with the Corporation or any future subsidiaries. To the fullest extent permitted by applicable law, no business opportunity will be deemed to be a potential corporate opportunity for the Corporation unless the Corporation would be permitted to undertake the opportunity under this certificate of incorporation, the Corporation has sufficient financial resources to undertake the opportunity and the opportunity is in line with the business of the Corporation.

Neither the amendment nor repeal of this Article 8, nor the adoption of any provision of this certificate of incorporation or the bylaws of the Corporation, nor, to the fullest extent permitted by Delaware Law, any modification of law, shall adversely affect any right or protection of any person granted pursuant hereto existing at, or arising out of or related to any event, act or omission that occurred prior to, the time of such amendment, repeal, adoption or modification (regardless of when any proceeding (or part thereof) relating to such event, act or omission arises or is first threatened, commenced or completed).

If any provision or provisions of this Article 8 shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever: (a) the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article 8 (including, without limitation, each portion of any paragraph of this Article 8 containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and (b) to the fullest extent possible, the provisions of this Article 8 (including, without limitation, each such portion of any paragraph of this Article 8 containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to permit the Corporation to protect its directors, officers, employees and agents from personal liability in respect of their good faith service to or for the benefit of the Corporation to the fullest extent permitted by law.

This Article 8 shall not limit any protections or defenses available to, or indemnification rights of, any director or officer of the Corporation under this certificate of incorporation or applicable law.

Any person or entity purchasing or otherwise acquiring any interest in any securities of the Corporation shall be deemed to have notice of and to have consented to the provisions of this Article 8.

ARTICLE 9
EXCLUSIVE JURISDICTION

Unless the Corporation consents in writing to the selection of an alternative forum, the Chancery Court of the State of Delaware (the "**Court of Chancery**") shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Corporation, (b) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, employee or agent of the Corporation to the Corporation or the Corporation's stockholders, (c) any action asserting a claim arising pursuant to any provision of the DGCL or of this certificate of incorporation or the bylaws, or (d) any action asserting a claim against the Corporation or any director or officer of the Corporation governed by the internal affairs doctrine, in each such case subject to such Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the Corporation shall be deemed to have notice of and, to the fullest extent permitted by law, to have consented to the provisions of this Article 9.

ARTICLE 10
MISCELLANEOUS

The following provisions are inserted for the management of the business and the conduct of the affairs of the Corporation and for the further definition of the powers of the Corporation and of its directors and stockholders:

(a) The directors shall have the concurrent power with the stockholders to adopt, amend or repeal the bylaws of the Corporation.

(b) Elections of directors need not be by written ballot unless the bylaws of the Corporation so provide.

(c) The Corporation elects not to be governed by Section 203 of the Delaware Law, and the restrictions contained in Section 203 shall not apply to the Corporation, until the Effective Date. From and after the Effective Date, the Corporation shall be governed by Section 203 so long as Section 203 by its terms would apply to the Corporation.

For so long as that certain Stockholders Agreement, dated as of [●], 2017, between the Corporation and the Parent (as amended from time to time, the

"**Stockholders Agreement**"), is in effect, the provisions of the Stockholders Agreement shall be incorporated by reference into the relevant provisions hereof, and such provisions shall be interpreted and applied in a manner consistent with the terms of the Stockholders Agreement.

As used herein, the following terms shall have the following meanings:

"**Effective Date**" shall mean the first date on which the Parent and its affiliates no longer beneficially own more than 50% of the outstanding shares of Common Stock of the Corporation.

"**Initial Public Offering Date**" means [●], 2017.

"**Parent**" means Cellectis S.A.

ARTICLE 11
AMENDMENT OF CERTIFICATE OF INCORPORATION

The Corporation reserves the right from time to time to amend this certificate of incorporation in any manner permitted by Delaware Law, and all rights and powers conferred upon stockholders, directors and officers herein are granted subject to this reservation. Notwithstanding the foregoing, from and after the Effective Date, the provisions set forth in Articles 5, 6, 7, 8, 9 and 10 and this Article 11 may not be repealed or amended in any respect, and no other provision may be adopted, amended or repealed which would have the effect of modifying or permitting the circumvention of the provisions set forth in any of Articles 5, 6, 7, 8, 9 and 10 and this Article 11, unless such action is approved by the affirmative vote of the holders of not less than 66 2/3% of the total voting power of all outstanding securities of the Corporation generally entitled to vote in the election of directors, voting together as a single class.

IN WITNESS WHEREOF, the undersigned has executed this Amended and Restated Certificate of Incorporation this [●] day of [●], 2017.

CALYXT, INC.

By: _____

Name:Federico A. Tripodi
Title: Chief Executive Officer

Exhibit 3.2

AMENDED AND RESTATED BYLAWS

OF

CALYXT, INC.

ARTICLE 1
OFFICES

Section 1.01. *Registered Office*. The registered office of the Corporation shall be in the City of Wilmington, County of New Castle, State of Delaware.

Section 1.02. *Other Offices*. The Corporation may also have offices at such other places both within and without the State of Delaware as the board of directors may from time to time determine or the business of the Corporation may require.

Section 1.03. *Books*. The books of the Corporation may be kept within or without the State of Delaware as the board of directors may from time to time determine or the business of the Corporation may require.

ARTICLE 2
MEETINGS OF STOCKHOLDERS

Section 2.01. *Time and Place of Meetings*. All meetings of stockholders shall be held at such place, either within or without the State of Delaware, on such date and at such time as may be determined from time to time by the board of directors (or the chairman in the absence of a designation by the board of directors).

Section 2.02. *Annual Meetings*. Unless directors are elected by written consent in lieu of an annual meeting as permitted by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended ("**Delaware Law**"), and the certificate of incorporation, an annual meeting of stockholders, commencing with the fiscal year 2018, shall be held for the election of directors and to transact such other business as may properly be brought before the meeting.

Section 2.03. *Special Meetings*. (a) Except as otherwise provided in the certificate of incorporation, special meetings of stockholders (i) may be called at any time by the affirmative vote of a majority of the entire board of directors and (ii) until the Effective Date (as such term is defined in the certificate of incorporation), shall be called by the secretary of the Corporation at the request of the holders of a majority of the then outstanding shares of the Corporation's common stock (the "**Common Stock**"). Such request shall state the purpose or purposes of the proposed meeting.

(b) A special meeting shall be held at such date, time and place as may be fixed by the board of directors in accordance with these bylaws.

(c) Business conducted at a special meeting shall be limited to the matters described in the applicable request for such special meeting and any other matters as the board of directors shall determine.

Section 2.04. *Notice of Meetings and Adjourned Meetings; Waivers of Notice*. (a) Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining stockholders entitled to vote at such meeting, if such record date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise provided by Delaware Law, such notice shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder of record entitled to notice of such meeting. Unless these bylaws otherwise require, when a meeting is adjourned to another time or place (whether or not a quorum is present), notice need not be given of the adjourned meeting if the time, place, if any, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, or after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to notice of such adjourned meeting.

(b) Whenever notice is required to be given under any provision of Delaware Law or the certificate of incorporation or these bylaws, a written waiver signed by the person entitled thereto, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Neither the business to be transacted at, nor the purpose of, any regular or special meetings of stockholders need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice.

Section 2.05. *Notice of Nominations and Stockholder Business*.

(a) *Annual Meetings of Stockholders*.

(i) Nominations of persons for election to the board of directors of the Corporation or the proposal of other business to be transacted by the stockholders may be made at an annual meeting of stockholders only (A) pursuant to the Corporation's notice of meeting (or any supplement thereto), (B) by or at the direction of the board of directors or (C) by any stockholder of the Corporation

who is a stockholder of record at the time of giving of notice provided for in this Section 2.05(a), who shall be entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 2.05(a).

(ii) For nominations or other business to be properly brought before an annual meeting of stockholders by a stockholder pursuant to clause (C) of paragraph (a)(i) of this Section 2.05, the stockholder must have given timely notice thereof in writing to the secretary of the Corporation and any such proposed business (other than the nominations of persons for election to the board of directors) must constitute a proper matter for stockholder action. To be timely, a stockholder's notice shall be delivered to or mailed and received by the secretary of the Corporation at the principal executive offices of the Corporation not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting of stockholders; *provided*, *however*, that in the event that the date of the annual meeting is advanced more than 30 days prior to such anniversary date or delayed more than 30 days after such anniversary date then to be timely such notice must be received by the Corporation no earlier than 120 days prior to such annual meeting and no later than the later of 70 days prior to the date of the meeting or the 10th day following the day on which public announcement of the date of the meeting was first made by the Corporation. In no event shall the public announcement of an adjournment or postponement of an annual meeting commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above. For purposes of Sections 2.05(a)(ii) and 2.05(b) of these bylaws, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, the Associated Press or any comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended (including the rules and regulations promulgated thereunder, the "**Exchange Act**").

(iii) A stockholder's notice to the secretary shall set forth (A) as to each person whom the stockholder proposes to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected), (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend these bylaws, the text of the proposed amendment), the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the proposal is made:

(1) the name and address of such stockholder (as they appear on the Corporation's books) and any such beneficial owner;

(2) the class or series and number of shares of capital stock of the Corporation which are held of record or are beneficially owned by such stockholder and by any such beneficial owner;

(3) a description of any agreement, arrangement or understanding between or among such stockholder and any such beneficial owner, any of their respective affiliates or associates, and any other person or persons (including their names) in connection with the proposal of such nomination or other business;

(4) a description of any agreement, arrangement or understanding (including, regardless of the form of settlement, any derivative, long or short positions, profit interests, forwards, futures, swaps, options, warrants, convertible securities, stock appreciation or similar rights, hedging transactions and borrowed or loaned shares) that has been entered into by or on behalf of, or any other agreement, arrangement or understanding that has been made, the effect or intent of which is to create or mitigate loss to, manage risk or benefit of share price changes for, or increase or decrease the voting power of, such stockholder or any such beneficial owner or any such nominee with respect to the Corporation's securities (a "**Derivative Instrument**");

(5) to the extent not disclosed pursuant to clause (4) above, the principal amount of any indebtedness of the Corporation or any of its subsidiaries beneficially owned by such stockholder or by any such beneficial owner, together with the title of the instrument under which such indebtedness was issued and a description of any Derivative Instrument entered into by or on behalf of such stockholder or such beneficial owner relating to the value or payment of any indebtedness of the Corporation or any such subsidiary;

(6) a representation that the stockholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to bring such nomination or other business before the meeting; and

(7) a representation as to whether such stockholder or any such beneficial owner intends or is part of a group that

intends to (i) deliver a proxy statement and/or form of proxy to holders of at least the percentage of the voting power of the Corporation's outstanding capital stock required to approve or adopt the proposal or to elect each such nominee and/or (ii) otherwise to solicit proxies from stockholders in support of such proposal or nomination.

If requested by the Corporation, the information required under clauses (C)(2), (3), (4) and (5) of the preceding sentence of this Section 2.05 shall be supplemented by such stockholder and any such beneficial owner not later than 10 days after the record date for notice of the meeting to disclose such information as of such record date.

Notwithstanding anything to the contrary, the notice requirements set forth herein with respect to the proposal of any business pursuant to this Section 2.05 other than a nomination shall be deemed satisfied by a stockholder if such stockholder has submitted a proposal to the Corporation in compliance with Rule 14a-8 promulgated under the Exchange Act and such stockholder's proposal has been included in a proxy statement that has been prepared by the Corporation to solicit proxies for the meeting of stockholders.

(b) *Special Meetings of Stockholders*. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation's notice of meeting pursuant to Section 2.04. Nominations of persons for election to the board of directors of the Corporation at a special meeting of stockholders may be made by stockholders only if the election of directors is included as business to be brought before a special meeting in the Corporation's notice of meeting and then only by any stockholder of the Corporation who is a stockholder of record at the time of giving of notice provided for in this Section 2.05(b), who shall be entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 2.05(b). For nominations to be properly brought before a special meeting of stockholders by a stockholder pursuant to this Section 2.05(b), the stockholder must have given timely notice thereof in writing to the secretary of the Corporation. To be timely, a stockholder's notice shall be delivered to or mailed and received by the secretary of the Corporation at the principal executive offices of the Corporation (A) not earlier than 120 days prior to the date of the special meeting nor (B) later than the later of 90 days prior to the date of the special meeting or the 10th day following the day on which public announcement of the date of the special meeting was first made. A stockholder's notice to the secretary shall comply with the notice requirements of Section 2.05(a)(iii).

(c) *General*.

(i) At the request of the board of directors, any person nominated by the board of directors for election as a director shall furnish to the secretary of the Corporation the information that is required to be set forth in a stockholder's notice of nomination that pertains to the nominee. Subject to the provisions of the Stockholders Agreement (as defined herein), no person shall be eligible to be nominated by a stockholder to serve as a director of the Corporation unless

nominated in accordance with the procedures set forth in this Section 2.05. No business shall be conducted at a stockholder meeting except in accordance with the procedures set forth in Section 2.03 and this Section 2.05. The chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by these bylaws or that business was not properly brought before the meeting, and if he should so determine and declare, the defective nomination shall be disregarded or such business shall not be transacted, as the case may be. Notwithstanding the foregoing provisions of this Section 2.05, unless otherwise required by law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual or special meeting of stockholders of the Corporation to present a nomination or other proposed business, such nomination shall be disregarded or such proposed business shall not be transacted, as the case may be, notwithstanding that proxies in respect of such vote may have been received by the Corporation. For purposes of this Section 2.05, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders and such person must produce such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, at the meeting of stockholders.

(ii) Without limiting the foregoing provisions of this Section 2.05, a stockholder shall also comply with all applicable requirements of the Exchange Act with respect to the matters set forth in this Section 2.05; *provided*, *however*, that any references in these bylaws to the Exchange Act are not intended to and shall not limit any requirements applicable to nominations or proposals as to any other business to be considered pursuant to this Section 2.05, and compliance with Section 2.05(a) or (b) shall be the exclusive means for a stockholder to make nominations or submit other business (other than as provided in the last paragraph of Section 2.05(a)).

Section 2.06. *Quorum*. Unless otherwise provided in the certificate of incorporation or these bylaws and subject to Delaware Law, the presence, in person or by proxy, of the holders of a majority of the then outstanding capital stock of the Corporation entitled to vote at a meeting of stockholders shall constitute a quorum for the transaction of business. If, however, such quorum shall not be present at any meeting of the stockholders, either the chairman of the meeting or a majority of the stockholders present in person or represented by proxy shall adjourn the meeting, without notice other than announcement at the meeting, until a quorum shall be present. At such adjourned meeting at which a quorum shall be present any business may be transacted which might have been transacted at the meeting as originally notified.

Section 2.07. *Voting*. (a) Unless otherwise provided in the certificate of incorporation and subject to Delaware Law, each stockholder shall be entitled to one vote for each outstanding share of capital stock of the Corporation held by such stockholder.

Any share of capital stock of the Corporation held by the Corporation shall have no voting rights. Unless otherwise provided in the certificate of incorporation or these bylaws and subject to Delaware Law, in all matters other than the election of directors, the affirmative vote of the majority of the votes cast affirmatively or negatively at the meeting at which a quorum is present and entitled to vote on the subject matter shall be the act of the stockholders. Subject to the rights of the holders of any series of preferred stock to elect additional directors under specific circumstances, directors shall be elected by a plurality of the votes of the shares of capital stock of the Corporation present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

(b) Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to a corporate action in writing without a meeting may authorize another person or persons to act for such stockholder by proxy, appointed by an instrument in writing, subscribed by such stockholder or by his attorney thereunto authorized, or by proxy sent by cable, telegram or by any means of electronic communication permitted by law, which results in a writing from such stockholder or by his attorney, and delivered to the secretary of the meeting. No proxy shall be voted after three (3) years from its date, unless said proxy provides for a longer period.

(c) Votes may be cast by any stockholder entitled to vote in person or by his proxy. In determining the number of votes cast for or against a proposal or nominee, shares abstaining from voting on a matter (including elections) will not be treated as a vote cast.

Section 2.08. *Action by Consent*. (a) Until the Effective Date and unless otherwise provided in the certificate of incorporation, any action required to be taken at any annual or special meeting of stockholders, or any action which may be taken at any annual or special meeting of stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding capital stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the Corporation by delivery to its registered office in Delaware, its principal place of business or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders to take the action were delivered to the Corporation as provided in Section 2.08(b).

(b) Every written consent shall bear the date of signature of each stockholder who signs the consent, and no written consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated consent delivered in

the manner required by this section and Delaware Law to the Corporation, written consents signed by a sufficient number of holders to take action are delivered to the Corporation in the manner required by this Section 2.08 and Delaware Law.

Section 2.09. *Organization*. At each meeting of stockholders, the chairman of the board of directors, if one shall have been elected, or in the chairman's absence or if one shall not have been elected, the director or officer designated by the vote of the majority of the directors present at such meeting, shall act as chairman of the meeting. The secretary (or in the secretary's absence or inability to act, the person whom the chairman of the meeting shall appoint secretary of the meeting) shall act as secretary of the meeting and keep the minutes thereof.

Section 2.10. *Order of Business*. The order of business at all meetings of stockholders shall be as determined by the chairman of the meeting.

ARTICLE 3
BOARD OF DIRECTORS

Section 3.01. *General Powers*. Except as otherwise provided in Delaware Law or the certificate of incorporation, the business and affairs of the Corporation shall be managed by or under the direction of the board of directors.

Section 3.02. *Number, Election, Classes, Term of Office*. (a) Subject to the terms of any series of Preferred Stock entitled to separately elect directors, the board of directors shall consist of not less than five nor more than 11 directors, with the exact number of directors to be determined from time to time solely by resolution adopted by the affirmative vote of a majority of the entire board of directors.

(b) Until the Effective Date, all of the directors will be elected annually at the annual meeting of stockholders.

(c) From and after the Effective Date, except as otherwise provided in the terms of any series of Preferred Stock entitled to separately elect directors, the directors shall be divided into three classes, designated Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire board of directors. The Board of Directors is hereby authorized to assign members of the Board of Directors in office at the Effective Date to such classes. Except as otherwise provided in the certificate of incorporation, each director shall serve for a term ending on the date of the third annual meeting of stockholders next following the annual meeting at which such director was elected.

(d) Each director shall hold office until such director's successor shall have been duly elected and qualified or until such director's earlier death, resignation or removal and for a term that shall coincide with the term of the class to which such director shall have been elected. Directors need not be stockholders.

(e) There shall be no cumulative voting in the election of directors.

Section 3.03. *Quorum and Manner of Acting*. Unless the certificate of incorporation or these bylaws require a greater number, a majority of the total number of directors shall constitute a quorum for the transaction of business, and the affirmative vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the board of directors. When a meeting is adjourned to another time or place (whether or not a quorum is present), notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the board of directors may transact any business which might have been transacted at the original meeting. If a quorum shall not be present at any meeting of the board of directors, the directors present thereat shall adjourn the meeting, from time to time, without notice other than announcement at the meeting, until a quorum shall be present.

Section 3.04. *Time and Place of Meetings*. The board of directors shall hold its meetings at such place, either within or without the State of Delaware, and at such time as may be determined from time to time by the board of directors (or the chairman in the absence of a determination by the board of directors).

Section 3.05. *Annual Meeting*. The board of directors shall meet for the purpose of organization, the election of officers and the transaction of other business, as soon as practicable after each annual meeting of stockholders. Notice of such meeting need not be given. In the event such annual meeting is not held on the same day and at the same place as the annual meeting of stockholders, the annual meeting of the board of directors may be held at such place either within or without the State of Delaware, on such date and at such time as shall be specified in a notice thereof given as hereinafter provided in Section 3.07 or in a waiver of notice thereof signed by any director who chooses to waive the requirement of notice.

Section 3.06. *Regular Meetings*. After the place and time of regular meetings of the board of directors shall have been determined and notice thereof shall have been once given to each member of the board of directors, regular meetings may be held without further notice being given.

Section 3.07. *Special Meetings*. Special meetings of the board of directors may be called by the chairman of the board of directors or the chief executive officer and shall be called by the secretary on the written request of at least two directors. Notice of special meetings of the board of directors shall be given to each director at least 24 hours before the date of the meeting in such manner as is determined by the board of directors.

Section 3.08. *Committees*. (a) The board of directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified

member. Any such committee, to the extent provided in the resolution of the board of directors, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by Delaware Law to be submitted to the stockholders for approval or (ii) adopting, amending or repealing any bylaw of the Corporation. Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

(b) Unless otherwise provided in the certificate of incorporation, these bylaws or the resolution of the board of directors designating the committee, a committee may create one or more subcommittees consisting of one or more members of such committee and delegate to such subcommittee any or all of the powers and authority of the committee.

(c) Unless the board of directors otherwise provides, each committee designated by the board of directors may make, alter and repeal rules for the conduct of its business. In the absence of such rules, each committee shall conduct its business in the same manner as the board of directors conducts its business pursuant to this Article 3.

Section 3.09. *Action by Consent*. Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors or of any committee thereof may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions, are filed with the minutes of proceedings of the board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 3.10. *Telephonic Meetings*. Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or such committee, as the case may be, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 3.11. *Resignation*. Any director may resign at any time by giving notice in writing or by electronic transmission to the board of directors or to the secretary of the Corporation. The resignation of any director shall take effect upon receipt of notice thereof or at such later time as shall be specified in such notice; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 3.12. *Vacancies*. Prior to the Effective Date, vacancies on the board of directors resulting from death, resignation, removal or otherwise and newly created directorships resulting from any increase in the number of directors may be filled with the affirmative vote of the holders of not less than a majority of the shares then entitled to vote generally in the election of directors, voting together as a single class. From and after the Effective Date, vacancies on the board of directors resulting from death, resignation, removal or otherwise and newly created directorships resulting from any increase in the number of directors shall, except as otherwise required by law, be filled solely by a majority of the directors then in office (although less than a quorum) or by the sole remaining director, and each director so elected shall hold office for a term that shall coincide with the term of the class to which such director shall have been elected. Subject to the terms of any series of preferred stock entitled to separately elect directors, whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the certificate of incorporation, vacancies and newly created directorships of such class or classes or series may be filled by a majority of directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected. If there are no directors in office, then an election of directors may be held in accordance with Delaware Law.

Section 3.13. *Removal*. Directors may only be removed from office in the manner set forth in the certificate of incorporation. Any vacancies created by any such removal may be filled in accordance with Section 3.12 herein.

Section 3.14. *Compensation*. Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have authority to fix the compensation of directors, including fees and reimbursement of expenses.

ARTICLE 4
OFFICERS

Section 4.01. *Principal Officers*. The principal officers of the Corporation shall be a chief executive officer, a chief financial officer, one or more executive vice presidents and a secretary who shall have the duty, among other things, to record the proceedings of the meetings of stockholders and directors in a book kept for that purpose. Subject to Section 3.01, the chief executive officer shall conduct and direct generally all the day-to-day business and affairs of the Corporation. The Corporation may also have such other principal officers as the board of directors may in its discretion appoint. One person may hold the offices and perform the duties of any two or more of said offices, except that no one person shall hold the offices and perform the duties of chief executive officer and secretary.

Section 4.02. *Election, Term of Office and Remuneration*. The principal officers of the Corporation shall be elected annually by the board of directors at the annual meeting thereof. Each such officer shall hold office until his or her successor is elected and qualified, or until his or her earlier death, resignation or removal. The remuneration of all principal officers of the Corporation shall be fixed by the board of directors. Any vacancy in any office shall be filled in such manner as the board of directors shall determine.

Section 4.03. *Subordinate Officers*. In addition to the principal officers enumerated in Section 4.01, the Corporation may have one or more assistant secretaries and such other subordinate officers, agents and employees as the board of directors may deem necessary, each of whom shall hold office for such period as the board of directors may from time to time determine. The board of directors may delegate to any principal officer the power to appoint, fix the compensation of and remove any such subordinate officers, agents or employees.

Section 4.04. *Removal*. In addition to the authority granted pursuant to Section 4.03 with respect to subordinate officers, any officer may be removed, with or without cause, at any time, by resolution adopted by the board of directors.

Section 4.05. *Resignations*. Any officer may resign at any time by giving written notice to the board of directors (or to a principal officer if the board of directors has delegated to such principal officer the power to appoint and remove such officer). The resignation of any officer shall take effect upon receipt of notice thereof or at such later time as shall be specified in such notice; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 4.06. *Powers and Duties*. The officers of the Corporation shall have such powers and perform such duties incident to each of their respective offices and such other duties as may from time to time be conferred upon or assigned to them by the board of directors.

ARTICLE 5
CAPITAL STOCK

Section 5.01. *Certificates For Stock; Uncertificated Shares*. The shares of the Corporation shall be represented by uncertificated shares, *provided* that the board of directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be certificated shares. Except as otherwise provided by law, the rights and obligations of the holders of uncertificated shares and the rights and obligations of the holders of shares represented by certificates of the same class and series shall be identical. Every holder of stock represented by certificates shall be entitled to have a certificate signed by or in the name of the Corporation by the chairman or vice chairman of the board of directors, or any vice president, and by the treasurer, an assistant treasurer, the secretary or an assistant secretary of such Corporation, representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The Corporation shall not have power to issue a certificate in bearer form.

Section 5.02. *Transfer Of Shares*. Shares of the stock of the Corporation may be transferred on the record of stockholders of the Corporation by the holder thereof or by such holder's duly authorized attorney upon surrender of a certificate therefor properly endorsed or upon receipt of proper transfer instructions from the registered holder of uncertificated shares or by such holder's duly authorized attorney and upon compliance with appropriate procedures for transferring shares in uncertificated form, unless waived by the Corporation.

Section 5.03. *Authority for Additional Rules Regarding Transfer*. The board of directors shall have the power and authority to make all such rules and regulations, not inconsistent with these bylaws, as they may deem expedient concerning the issue, transfer and registration of certificated or uncertificated shares of the stock of the Corporation, as well as for the issuance of new certificates in lieu of those which may be lost or destroyed, and may require of any stockholder requesting replacement of lost or destroyed certificates, bond in such amount and in such form as they may deem expedient to indemnify the Corporation and the transfer agents and registrars of its stock against any claims arising in connection therewith.

ARTICLE 6
GENERAL PROVISIONS

Section 6.01. *Fixing the Record Date*. (a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors, and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If the board of directors so fixes a record date for notice of any meeting of stockholders, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the board of directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the board of directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided* that the board of directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting and in such case shall also fix as the record date for determining stockholders entitled to notice of such meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at such adjourned meeting in accordance with the foregoing provisions of this Section 6.01(a).

(b) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and shall not be more than 10 days

after the date upon which the resolution fixing the record date is adopted by the board of directors. If no record date has been fixed by the board of directors pursuant to this Section 6.01(b), the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the board of directors is required by Delaware Law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or any officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the board of directors and prior action by the board of directors is required by Delaware Law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the board of directors adopts the resolution taking such prior action.

(c) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

Section 6.02. *Dividends*. Subject to limitations contained in Delaware Law and the certificate of incorporation, if any, the board of directors may declare and pay dividends upon the shares of capital stock of the Corporation, which dividends may be paid either in cash, in property or in shares of the capital stock of the Corporation.

Section 6.03. *Year*. The fiscal year of the Corporation shall be fixed by resolution of the board of directors.

Section 6.04. *Corporate Seal*. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed, affixed or otherwise reproduced.

Section 6.05. *Voting of Stock Owned by the Corporation*. The board of directors may authorize any person, on behalf of the Corporation, to attend, vote at and grant proxies to be used at any meeting of stockholders of any corporation (except this Corporation) in which the Corporation may hold stock.

Section 6.06. *Amendments*. These bylaws or any of them, may be altered, amended or repealed, or new bylaws may be made, by the stockholders entitled to vote thereon at any annual or special meeting thereof or by the board of directors. Unless a

higher percentage is required by the certificate of incorporation as to any matter that is the subject of these bylaws, all such amendments must be approved by (i) the board of directors or (ii) the affirmative vote of the holders of not less than (x) a majority of the then outstanding capital stock of the Corporation entitled to vote at a meeting of stockholders, in the case of any such amendment prior to the Effective Date, and (y) 66 2/3% of the then outstanding capital stock of the Corporation entitled to vote at a meeting of stockholders, in the case of any such amendment on or after the Effective Date.

Section 6.07. *Stockholders Agreement*. For so long as that certain Stockholders Agreement, dated as of [●], 2017, by and among the Corporation and the Parent (as such term is defined in the certificate of incorporation) (as amended from time to time, the "**Stockholders Agreement**"), is in effect, the provisions of the Stockholders Agreement shall be incorporated by reference into the relevant provisions hereof, and such provisions shall be interpreted and applied in a manner consistent with the terms of the Stockholders Agreement.

Section 6.08. *Indemnification and Advancement of Expenses*. The Corporation hereby acknowledges that certain current and past directors, each of whom is affiliated with the Parent (each, a "**Cellectis Director**"), have certain rights to indemnification and advancement of expenses pursuant to Indemnification Agreements between the Corporation and such Cellectis Director (the "**Indemnification Agreements**") and Article 7 of the certificate of incorporation and to insurance provided by the Corporation and that the Cellectis Directors may have certain rights to indemnification, advancement of expenses and insurance from the Parent and certain of its affiliates. The Corporation hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to such person are primary and any obligation of the Parent and its affiliates to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such person are secondary) with respect to any actions, costs, charges, losses, damages or expenses incurred or sustained in connection with the execution by such person of his or her duties as a director of the Corporation, (ii) that it shall be required to advance the full amount of such expenses incurred by such person and shall be liable for the full amount of all such expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the certificate of incorporation and the Indemnification Agreements, without regard to any rights such person may have, or may be pursuing, against the Parent and its affiliates, and (iii) that it irrevocably waives, relinquishes and releases the Parent and its affiliates from any and all claims against the Parent and its affiliates for contribution, subrogation or any other recovery of any kind in respect thereof. The Corporation further agrees that no advancement or payment by the Parent and its affiliates on behalf of a Cellectis Director with respect to any claim for which such Cellectis Director is entitled to indemnification or advancement of expenses from the Corporation shall affect the foregoing and the Parent and its affiliates shall be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Cellectis Director against the Corporation. The Corporation and the Cellectis Directors agree that the Parent and its affiliates are express third-party beneficiaries of this Section 6.08.

Confidential
CLS-16186

MANAGEMENT SERVICES AGREEMENT

This Agreement is made by and between **CELLECTIS SA,** a French *Société Anonyme,* located at 8, rue de la Croix Jarry, 75013 Paris, France, (hereinafter "CLS"); **CELLECTIS, INC.,** a Delaware corporation, located at 430 East 29th Street, New York, New York, 10016, USA (hereinafter "CLI"); and **CALYXT, INC.,** a Delaware corporation, located at 600 County Road D West, Suite 8, New Brighton, MN 55112, USA, (hereinafter "CLX"). CLS, CLI, and CLX are thereafter named individually, a "Party" and together the "Parties".

WHEREAS:

The Parties are members of the same group of companies (the **"Group"**). CLS is the parent company of CLI and CLX (the **"Subsidiaries"**).

Because of its size and position in the global market, CLS has, within its corporate headquarters, a large number of staff that carries out a number of specialized functions. Through its headquarters' staff, CLS carries out a number of activities from which the Subsidiaries, directly or indirectly, benefit.

Because of its specificity, each Subsidiary has a qualified staff. Each Party wishes to benefit from other Subsidiaries capacity in particular domains.

For the purpose of the present agreement, each Party which provides the Services for the benefit of another Party is called the **"Provider"** and each Party which receives the Services from another Party is called the **"Beneficiary"**.

Each Party agrees that it is appropriate for a proportion of the costs incurred by the Provider which relate to activities carried out that directly or indirectly benefit the Beneficiary, either at the explicit request of the Beneficiary, or otherwise, to be charged by the Provider to the Beneficiary .

THE PARTIES AGREE AS FOLLOWS:

1. PURPOSE

The purpose of this agreement (the **"Agreement")** is to confirm in writing and to specify the terms and conditions of the provision by the Provider to the Beneficiary of the Services indicated below.

2. NATURE OF SERVICES

2.1 Each Party, as Provider, shall throughout the term of this Agreement, provide services as listed below (the **"Services")** that each of the other Parties, as Beneficiary, may require from time to time. The Subsidiaries shall act with the sole direction of Cellectis SA in providing the Services under this Agreement.

(i) Finances, including but not limited to investor relations, advices in structuring internal accounting, costs control; keeping of the mandatory books and accounts, support in structuring and developing internal administrative procedures; advice in conducting internal audit and assistance in internal audit, with the purpose of ensuring proper control; improving financial return on assets, assistance in the preparation of the budget and operating plans; assistance in compliance with fiscal obligations, such as filing tax returns, computing and paying taxes; management of local accounting function; assistance in evaluating financial needs; financial services and treasury; centralized foreign currency hedging and more generally centralized financial risks management in order to optimize costs.

(ii) Legal, including but not limited to legal advices on matters with domestic and international aspects and consequences; insurances; general tax and legal planning, including advice in reorganising and restructuring in order to optimize Beneficiary's performance; drafting and negotiation of agreements in accordance with applicable laws and regulations and the group standards.

(iii) Intellectual Property including but not limited filing, maintenance and prosecution of patent application and patents, defense of intellectual property rights.

(iv) Human Resources, including but not limited to contractual, administrative, social security and fiscal activities connected to the ordinary and extraordinary management of personnel; selection and hiring of personnel; assistance in defining career paths; assistance in defining compensations and benefit schemes (including stock option plans); definition of personnel evaluation process; training of personnel; supply of staff for limited period; coordination of the sharing of personnel on a temporary on a permanent basis; management of redundancies.

(v) Information Technology, including but not limited to building, development and management of the information system; study, development, installation and periodic/extraordinary maintenance of software; study, development, installation and periodic/extraordinary maintenance of hardware system; supply and transmission of data; backup services.

(vi) Research and Development, including but not limited to research and development activities.

(vii) Business Development, including but not limited to study, development and coordination of the marketing activities; study, development and coordination of the sale promotions; study, development and coordination of the advertising campaigns; providing industry forecast and/or market research; identifying of sales opportunities; providing representational and marketing services in overseas countries where a Beneficiary does not have a discrete presence of its own.

(viii) Communication, including but not limited to advice and support with respect to internal and external communications policy and techniques; providing a creditable, informative and continuing source of news material; publicising the activities as part of Group publicity; minimising the media impact of news stories which could adversely affect the Beneficiary's reputation; organising press briefings and interviews which demonstrate the Group' technology leadership in support of Beneficiary's marketing effort; providing guidance and direction in the development of Beneficiary's advertising campaigns; establishing and maintaining a Beneficiary's Internet site.

(ix) Strategy (General Management), including but not limited to assisting the Beneficiary in developing and implementing the strategic plan, including the identification of suitable acquisition targets; maintaining data on products, markets, competitors, forecasts ... necessary for the planning process or divestments; assisting in the preparation of, or reviewing justifications for, acquisitions, disposals, business expansion, capital expenditure etc... assisting a Beneficiary in negotiating with vendors of target companies or with purchasers for the sale of existing businesses and with potential joint venture partners; liaising with outside advisors for the above.

The Provider may subcontract to a third party any of the Services.

3. PERFORMANCE OF SERVICES

3.1 Information and collaboration of the Parties

Close collaboration between the Provider and the Beneficiary is necessary for the proper performance of the all or part of the Services.

The Provider and the Beneficiary undertake to meet regularly in order to review the performance of the Services for the past period and to define the services for the subsequent one, if applicable.

3.2 Liability

The liability of the Provider shall be limited to the breach in the performance of the Services, which has been established by the Beneficiary and will be limited to the amount of the remuneration received by the Provider under the Agreement.

3.3 Hierarchical and disciplinary powers

The personnel of the Provider shall in all circumstances remain under the disciplinary authority of the Provider.

The Provider shall, in its capacity of employer, ensure the administrative, accounting and employment management of its employees involved in the performance of the Services provided for in this agreement, as the case may be.

4. REMUNERATION

4.1 Management Fees. In consideration for the Services actually performed by the Provider to the Beneficiary, the Beneficiary shall pay to the Provider fees ("Management Fees") consisting of:

(i) Reimbursement of all costs and expenses reasonably incurred by the Provider in connection with the provision of the Services by the Provider to the Beneficiary for such calendar quarter ("Costs and Expenses"). Such Costs and Expenses correspond to an allocation of salary and social contribution and indirect costs incurred by the Provider, provided that the basis of such allocation is specified in Exhibit 1,

(ii) Payment of a mark-up corresponding to a percentage of certain of the Costs and Expenses, as specified in Exhibit 1, and

(iii) the Provider will recharge the Beneficiary of any actual costs and expenses of Services which have been subcontracted by the Provider on behalf of the Beneficiary (i.e. the direct costs)

4.2 Quarterly payments based on estimates. Non-final invoices and payments of the Management Fees shall be made by the Beneficiary on a quarterly basis, based on an estimate made by the Provider and provided to the Beneficiary as soon as practicable before the end of each calendar quarter.

4.3 Annual final payment. Within thirty (30) days following the end of each calendar year, the Provider shall deliver to the Beneficiary:

(i) a statement of the actual Costs and Expenses incurred in providing the Management Services during the past year, setting forth the basis for calculation in such detail as reasonably required (the "Final Costs and Expenses"),

(ii) a statement of the directs costs incurred during the past year,

(iii) the documentation supporting such statements, and

(iv) an invoice or a credit (as appropriate) corresponding to the difference between the actual costs declared by the Provider as per Section 4.3 (i), and the estimated costs initially paid as per Section 4.2. Such invoice or credit shall be paid within 30 days after receipt.

4.4 Audit Right. The Beneficiary shall have access to the relevant books and files of the Provider for the purposes of verifying the calculation of Costs and Expenses, and the true-up adjustment, during normal business hours at the Company's premises or as otherwise mutually agreed. The Company' staff shall provide assistance to the Beneficiary for such purposes.

4.5 Taxes. It is understood and agreed between the Parties that any payments made under this Agreement are exclusive of any value added or similar tax ("VAT"), which will be added thereon as applicable. Where VAT is properly added to a payment made under this Agreement, the Party making the payment (i.e. the Beneficiary) will pay the amount of VAT only on receipt of a valid tax invoice issued in accordance with the laws! and regulations of the country in which the VAT is chargeable. In addition, in the event any of the payments made by the Beneficiary pursuant to this Agreement become subject to withholding taxes under the laws of any jurisdiction, the Beneficiary will deduct and withhold the amount of such taxes for the account of the Provider, to the extent required by law, such amounts payable to the Provider will be reduced by the amount of taxes deducted and withheld, and the Beneficiary will pay the amounts of such taxes to the proper governmental authority in a timely manner and promptly transmit to the Provider an official tax certificate or other evidence of such tax obligations together with proof of payment from the relevant governmental authority of all amounts deducted and withheld sufficient to enable them to claim such payment of taxes. Any such withholding taxes required under applicable law to be paid or withheld will be an expense of, and borne solely by the Beneficiary, and the Provider will provide the Beneficiary with reasonable assistance to enable the Beneficiary to recover such taxes as permitted by law.

5. DURATION

5.1 This Agreement shall take effect as of 1st January 2016.

5.2 This agreement is entered into for an initial period ending 31 December 2016, and is automatically renewable for successive period(s) of one year, unless earlier terminated in accordance with Section 5.3 or Section 5.4.

5.3 Each Party has the right to terminate the Agreement at the anniversary date of Agreement, by giving three (3) months prior notice.

5.4 The Agreement may be terminated:

(a) by the board of directors of Cellectis SA upon thirty (30) days' written notice for any reason in its sole discretion, or

(b) by Cellectis SA upon sixty (60) days' written notice in the following event:

(i) change of control of a Party;

(ii) sale of all or a substantial part of the assets of a Party;

(iii) final judgment, order or decree which materially and adversely affects the ability of a Party to perform under this Agreement; or

(iv) Cellectis SA makes a general assignment for the benefits of its creditors, file a petition of bankruptcy or for liquidation, is adjudged insolvent or bankrupt, commences any proceedings for a reorganization or arrangements of debts, dissolution or liquidation.

5.5 Upon termination of this Agreement, the Beneficiary shall surrender to the Provider any and all books, records, documents and other property in the possession or control of the Beneficiary relating to this Agreement and to the business, finance, technology , trademark or affairs of the Provider, and except as required by law, shall not retain any copies of the same.

6. CONFIDENTIALITY

6.1 During the term of this Agreement and for a period of 10 years thereafter, each Party (the "Recipient") undertakes to treat as confidential all information disclosed directly or indirectly by the other Party ("the Discloser") and to hold such information in strict confidence and shall not disclose, communicate or in any way divulge to any other person or entity any such information. The Receiving Party shall only be entitled to disclose, on a need to know and permitted basis, information to its directors, employees, consultants, cocontractants (collectively the "Authorized Recipients"); provided that the Recipient has previously bound such Authorized Recipients by confidentiality and restricted use obligations at least as stringent than those set forth in this Section 6.1. The Recipient shall be responsible towards the Discloser for any breach by its Authorized Recipients of any such confidentiality and restricted use obligations.

6.2 For the purpose of this Agreement, shall not be deemed confidential, any information that the Recipient can demonstrate, by competent evidence, that:

(a) at the time of disclosure or acquisition is generally available to the public, or after the time of disclosure or acquisition is generally available to the public through no act or omission of the Recipient and its Authorized Recipients;

(b) was legally in the possession and at the free disposal of the Recipient prior to disclosure by the Discloser, as evidenced by written records then in the possession of the Recipient; or

(c) is rightfully made available to the Recipient by others without recourse to such information disclosed by the Discloser.

6.3 The Recipient is entitled to disclose the Discloser' information in order to comply with the requirements of applicable law or governmental regulation or definitive court order, provided that

the Recipient shall first notify the Discloser of such required disclosure and of each information concerned and shall limit such disclosure as far as possible under applicable law. Such disclosure shall, however, not relieve the Recipient of its other obligations contained herein.

7. MISCELLANEOUS

7.1 No amendment to this Agreement shall be valid unless embodied in a writing executed by each of the Parties hereto. No waiver of any of the provisions of this Agreement shall be valid unless embodied in a writing executed by the Party against whom the waiver is sought to be enforced.

7.2 This Agreement constitutes the entire understanding and agreement between the Parties with respect to the subject matter hereof and supersedes all prior agreement, general terms and conditions, understanding or arrangements, whether written or oral, including the Management Services Agreement signed by Cellectis SA and its subsidiaries on September 7, 2010 as amended.

7.3 Severability. In the event that any clause of this Agreement becomes void, avoidable, unenforceable, invalid, illegal or inapplicable, the validity of this Agreement shall not be affected nor shall any of the Parties be released from the performance of this Agreement. In such an event, the Parties will negotiate in good faith in order to substitute, if possible, the relevant unlawful clause with a lawful clause corresponding to the spirit and object of the original clause.

7.4 Independent Contractors. Both Parties are independent contractors under this Agreement. Nothing herein contained will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

7.5 Assignment. This Agreement is personal to the Subsidiaries. Therefore each Subsidiaries is neither entitled nor empowered to assign this Agreement or any part hereof, or have any third party substituting for itself in this Agreement or part of it, or be assisted by any third party in the performance of the obligations hereunder, without the prior written consent of CLS. This Agreement may be freely assigned by CLS as part of a business sale, merger, split-off or spin-off. In the event that this Agreement is assigned to any company, CLS agrees that all terms and clauses hereof shall have the same effects as if the Agreement had been originally made with said company.

8. APPLICABLE LAW

8.1 This Agreement is governed by and interpreted according to the French law.

8.2 Any litigation that may arise under this agreement, in particular in relation to its validity, interpretation, performance or termination, shall be submitted to the *Tribunal de Grande Instance* of Paris.

/s/ André Choulika

CELLECTIS, INC.
André CHOULIKA, CEO

/s/ Federico Tripodi

CALYXT, INC.
Federico TRIPODI, CEO

/s/ David Sourdive

CELLECTIS, SA
David SOURDIVE, Deputy CEO

EXHIBIT 1

The pricing methodology, identifies the cost centers and applies an allocation key generally specific for each service identified. Those allocations keys applied to the full cost of the cost centers, may depend on ratio of full time employees ("FTE"), ratio of active users, reasonable estimate of time spent, etc., depending on the specificities of each service provided.

We specifically identify the party that performs/incurs the service/cost and the party that benefits from such service/cost in the sections below as each service may or may not be subject to a different mark-up depending on the party that performs/incurs the service/cost.

The calculation should be made in the following order CLI to CLS and then CLS to CLX and CLI.

Out of pocket related to all services costs listed below are subject to a recharge of the costs incurred.

Services performed by Cellectis, Inc. (CLI) on behalf of Cellectis SA (CLS):

Types of Services	Costs and Expenses	Basis of Allocation of the Costs and Expenses	Mark-up
R&D – Pfizer collaboration	Salaries and social contribution costs	Time spent	8%
	Indirect costs		0%
R&D – internal products	Salaries and social contribution costs	Time spent	8%
		Indirect costs	0%
Communication	Salaries and social contributions costs	Time spent	10%
	Indirect costs		0%
Finance	Salaries and social contributions costs	Time spent	4%
	Indirect costs		0%
Business Development	Costs incurred	20% of costs incurred	0%

Services performed by Cellectis SA (CLS) on behalf of Calyxt, Inc. (CLX):

Types of Services	Costs and Expenses	Basis of Allocation of the Costs and Expenses	Mark-up
General Management	Salaries and social contribution costs of CLS CEO and his assistant	Time spent	10%
	Indirect costs		0%
Finances	Salaries and social contribution costs	Time spent	4%
	Indirect costs		0%
IT – LIMS use	Salaries and social contribution costs	Number of CLX's users of the LIMS	4%
	Indirect costs		0%
IT – internal support	Salary and social contribution costs	Number of CLX's FTE	4%
	Indirect costs		0%
Intellectual Property	Salaries and social contribution costs	Time spent	10%
	Indirect costs		0%
Human Resources	Salaries and social contribution costs	Number of CLX's FTE	10%
	Indirect costs		0%
Legal	Salaries and social contribution costs	Time spent	10%
	Indirect costs		0%
Communication	Salaries and social contribution costs	Time spent	10%
	Indirect costs		0%

Services performed by Cellectis SA (CLS) on behalf of Cellectis, Inc. (CLI):

Types of Services	Costs and Expenses	Basis of Allocation of the Costs and Expenses	Mark-up
General Management	Salaries and social contribution costs of CLS CEO and his assistant	Time spent	10%
	Indirect costs		0%
Finance	Salaries and social contribution costs	Time spent	4%
	Indirect costs		0%
IT – LIMS use	Salaries and social contribution costs	Number of CLl's users of the LIMS	4%
	Indirect costs		0%
IT – internal support	Salaries and social contribution costs	Number of CLl's FTE	4%
	Indirect costs		0%
Human Resources	Salaries and social contribution costs	Number of CLl's FTE	10%
	Indirect costs		0%
Legal	Salaries and social contribution costs	Time spent	10%
	Indirect costs		0%

Services performed by Cellectis, Inc. (CLI) on behalf of Calyxt, Inc. (CLX):

Types of Services	Costs and Expenses	Basis of Allocation of the Costs and Expenses	Mark-up
Business Development	Costs incurred	80%	0%

Exhibit 10.2

FIRST AMENDMENT TO THE
MANAGEMENT SERVICES AGREEMENT

This FIRST AMENDMENT TO THE MANAGEMENT SERVICES AGREEMENT (the "**Amendment**") is entered into and made effective as of [●], 2017 by and among Cellectis S.A. ("**CLS**"), Cellectis, Inc. ("**CLI**") and Calyxt, Inc. ("**CLX**"), each a Party and together the Parties.

WHEREAS, CLS, CLI and CLX entered into that certain Management Services Agreement (the "**Management Services Agreement**"), dated January 1, 2016; and

WHEREAS, the Parties have agreed to amend the Management Services Agreement to revise the termination provision.

NOW, THEREFORE, in consideration of the agreements and obligations set forth herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree that the Management Services Agreement is hereby amended as follows:

1. Section 2.1 is hereby amended to include the following at the end of the section:

Further, Provider shall not unilaterally increase the amount of Services provided to Beneficiary from the previous year without the Beneficiary's prior written consent. If the Provider decides to decrease the amount of Services, it shall notify such decision to the Beneficiary at least ninety (90) days before such change and the Provider and the Beneficiary shall act with its best business efforts to allow for the smooth transition of Services to Beneficiary without disruption of the Beneficiary's business and operations. Notwithstanding the foregoing, and subject to the prior written approval of Provider, Beneficiary may determine certain of the Services identified in Section 2.1((i)-(ix)) provided by Provider may become duplicative of those undertaken independently by Beneficiary and Beneficiary shall not be charged for any such Services that are deemed duplicative and identified as such in the Annual Budget as set forth in Section 4.2 below.

2. Section 4 **RENUMERATION** shall be amended as follows:

4.1 **Management Fees**. Shall remain as stated.

4.2 shall be replaced with the following new provision:

4.2. Annual Budget. Prior to December 15 of each calendar year, Provider will mutually agree on the Services to be provided to the Beneficiary in the next following calendar year ("Annual Budget"); provided, however, that Provider will not be able to unilaterally increase the amount of services provided on the previous year without Beneficiary's written consent. Provider will prepare an estimated budget of the Management Fees, Costs and Expenses, direct costs and mark-up provided and broken down by time and hourly cost by position and by month. The types of Services, Management Fees, Costs and Expenses, direct costs and mark-up provided or charged by Provider to Beneficiary in the Annual Budget shall be incorporated by December 15th annually into an amended Exhibit 1 to be attached hereto.

4.3 shall be replaced with the following new provision:

4.3. **Variances to Annual Budget**. The Parties acknowledge that from time-to-time additional services or purchases not contemplated in the Annual Budget and forecast may be required (including but not limited to: special projects, trait vetting, strategic analysis, additional support services, consulting and professional services, etc.) In the event that additional Services are requested or to be provided in excess of $50,000 that are not included in the then current Annual Budget, the CEO of the Provider and the CEO of the Beneficiary shall discuss the nature of the additional Services and the additional costs before any additional services are commenced. If approved, the costs of the additional Services shall be added to the Annual Budget and amend Exhibit 1 to include such additional services and be signed by both Parties.

4.4 shall be replaced with the following new provision new provision 4.4: [existing **4.4 Audit Rights** to remain unchanged but renumbered as **4.7**]

4.4 Semi-annual forecast. By June 15th of each calendar year, if the actual Services provided during the first half of the current year are materially different from the Services provided in the Annual Budget, Provider shall provide to Beneficiary a forecast of the Costs and Expenses of Management Services and direct costs for the remaining 6 months of the then current calendar year.

4.5 shall be replaced with the following new provision new provision 4.5: [existing **4.5 Taxes** to remain unchanged but renumbered as **4.8**]

4.5 Estimated quarterly payments. Non-final invoices and payments of the Management Fees, Costs and Expenses, direct costs and mark-up, performed by the Provider for the Beneficiary and as set forth on the quarterly estimates made by the Provider and provided to the Beneficiary per current Exhibit 1, shall be submitted and paid by the Beneficiary to Provider within five business days

under any bankruptcy law or consents to the filing of a petition seeking such reorganization or has a decree entered against it by a court of competent jurisdiction appointing a receiver liquidator, trustee or assignee in bankruptcy or in insolvency; or

(iv) CLI or CLX, as applicable, or substantially all of their respective assets, is acquired by an unrelated third party.

(b) by CLI, with respect to CLS or CLX, as applicable, effective upon written notice of termination to CLS or CLX, as applicable, if:

(i) CLS or CLX, as applicable, defaults in the performance or observance of any material term, condition or agreement contained in this Agreement and such default continues for a period of 30 days after written notice thereof specifying such default and requesting that the same be remedied in such 30-day period; provided, however, that if the fact, circumstance or condition that is the subject of such obligation cannot reasonably be remedied within such 30-day period and if, within such period, CLS or CLX, as applicable, provides reasonable evidence to CLI that it has commenced, and thereafter proceeds with all due diligence, to remedy the fact, circumstance or condition that is the subject of such obligation, such period shall be extended for a reasonable period satisfactory to CLI, acting reasonably, CLS or CLX, as applicable, to remedy the same;

(ii) CLS or CLX, as applicable, engages in any act of gross negligence, fraud or willful misconduct in performance of its obligations under this Agreement;

(iii) CLS or CLX, as applicable, makes a general assignment for the benefit of its creditors, institutes proceedings to be adjudicated voluntarily bankrupt, consents to the filing of a petition of bankruptcy against it, is adjudicated by a court of competent jurisdiction as being bankrupt or insolvent, seeks reorganization under any bankruptcy law or consents to the filing of a petition seeking such reorganization or has a decree entered against it by a court of competent jurisdiction appointing a receiver liquidator, trustee or assignee in bankruptcy or in insolvency; or

(iv) CLS or CLX, as applicable, or substantially all of their respective assets, is acquired by an unrelated third party.

(c) by CLX, with respect to CLS or CLI, as applicable, effective upon written notice of termination to CLS or CLI, as applicable, if:

(i) CLS or CLI, as applicable, defaults in the performance or observance of any material term, condition or agreement contained

in this Agreement and such default continues for a period of 30 days after written notice thereof specifying such default and requesting that the same be remedied in such 30-day period; provided, however, that if the fact, circumstance or condition that is the subject of such obligation cannot reasonably be remedied within such 30-day period and if, within such period, CLS or CLI, as applicable, provides reasonable evidence to CLX that it has commenced, and thereafter proceeds with all due diligence, to remedy the fact, circumstance or condition that is the subject of such obligation, such period shall be extended for a reasonable period satisfactory to CLX, acting reasonably, CLS or CLI, as applicable, to remedy the same;

(ii) CLS or CLI, as applicable, engages in any act of gross negligence, fraud or willful misconduct in performance of its obligations under this Agreement;

(iii) CLS or CLI, as applicable, makes a general assignment for the benefit of its creditors, institutes proceedings to be adjudicated voluntarily bankrupt, consents to the filing of a petition of bankruptcy against it, is adjudicated by a court of competent jurisdiction as being bankrupt or insolvent, seeks reorganization under any bankruptcy law or consents to the filing of a petition seeking such reorganization or has a decree entered against it by a court of competent jurisdiction appointing a receiver liquidator, trustee or assignee in bankruptcy or in insolvency; or

(iv) CLS or CLI, as applicable, or substantially all of their respective assets, is acquired by an unrelated third party."

4. Section 5.5 shall be amended and replaced with the following:

Upon termination of this Agreement pursuant to sections 5.3 and 5.4 above, the Beneficiary shall surrender to the Provider all books, records, documents, information and other property that is solely that of the Provider, and not subject to any other license or agreement between the parties at the time of termination, except if such books, records, documents, information and other property are necessary for the Beneficiary to operate its current activities or to comply with applicable laws and regulations. For sake of clarity, Section 6 of the Agreement (Confidentiality) shall apply to such books, records, documents, information and other property.

5. All other provisions of the Management Services Agreement not amended above shall remain in full force and effect.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first written above.

CELLECTIS S.A.

By: _____
Name:
Title:

CELLECTIS, INC.

By: _____
Name:
Title:

CALYXT, INC.

By: _____
Name:
Title:

[*Signature Page to First Amendment to Management Services Agreement*]

Exhibit 10.3

SEPARATION AGREEMENT

THIS SEPARATION AGREEMENT, dated as of [—], 2017, is by and between CELLECTIS S.A., a French *société anonyme* ("**Cellectis**") and CALYXT, INC., a Delaware corporation (the "**Company**" and each of Cellectis and the Company, a "**Party**" and, together, the "**Parties**"). Capitalized terms used herein shall have the respective meanings assigned to them in Article 1 hereof.

R E C I T A L S

WHEREAS, Cellectis is the owner of all of the issued and outstanding Common Stock of the Company prior to the proposed initial public offering by the Company; and

WHEREAS, the Parties wish to set forth certain agreements that will govern certain matters between them following the Effective Date.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained in this Agreement, the Parties, intending to be legally bound, hereby agree as follows:

ARTICLE 1
DEFINITIONS

Section 1.01. *Certain Definitions*. For the purpose of this Agreement the following terms shall have the following meanings:

"**Action**" means any demand, action, suit, countersuit, arbitration, inquiry, proceeding or investigation by or before any Governmental Authority or any federal, state, local, foreign or international arbitration or mediation tribunal.

"**Affiliate**" of any Person means a Person that, directly or indirectly, controls, is controlled by, or is under common control with such Person *provided*, *however*, that, for purposes of this Agreement, the Company shall not be considered an Affiliate of any of Cellectis and its Subsidiaries other than the Company, and each of Cellectis and its Subsidiaries other than the Company shall not be considered an Affiliate of the Company. As used herein, "**control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, whether through ownership of voting securities or other interests, by contract or otherwise. For purposes of this definition, "**controlling**," "**controlled by**," and "**under common control with**" have correlative meanings.

"**Agreement**" means this Separation Agreement, including all of the schedules hereto.

"**Ancillary Agreements**" means, collectively, the Shareholders Agreement, the Management Services Agreement, the License Agreement and other agreements related thereto.

"**Annual Financial Statements**" has the meaning set forth in Section 7.01(e).

"**Applicable Period**" has the meaning set forth in Section 7.02.

"**Business Day**" means any day other than a Saturday, Sunday or a day on which banking institutions are authorized or obligated by Law to be closed in New York, New York or Paris, France.

"**Cellectis**" has the meaning set forth in the preamble hereto.

"**Cellectis Accounts**" has the meaning set forth in Section 3.02(a).

"**Cellectis Annual Statements**" has the meaning set forth in Section 7.01(e).

"**Cellectis Auditors**" has the meaning set forth in Section 7.02(b).

"**Cellectis Books and Records**" means originals or true and complete copies thereof, including electronic copies (if available) of (a) minute books, corporate charters and bylaws or comparable constitutive documents, records of share issuances and related corporate records, of the Cellectis Group and (b) all books and records relating to (i) Cellectis employees, (ii) the purchase of materials, supplies and services for the Cellectis Business and (ii) dealings with customers of the Cellectis Business.

"**Cellectis Business**" means any business or operations of the Cellectis Group (whether conducted independently or in association with one or more third parties through a partnership, joint venture or other contractual arrangement or mutual enterprise) other than the Company Business.

"**Cellectis Group**" means Cellectis and each other Person that either (x) is controlled directly or indirectly by Cellectis immediately after the Effective Date or (y) becomes directly or indirectly controlled by Cellectis following the Effective Date; *provided*, however, that neither the Company nor any other member of the Company Group shall be members of the Cellectis Group.

"**Cellectis Indemnitees**" has the meaning set forth in Section 4.03.

"**Cellectis Public Filings**" has the meaning set forth in Section 7.01(l).

"**Commission**" means the U.S. Securities and Exchange Commission.

"**Common Stock**" means the common stock of the Company.

"**Company**" has the meaning set forth in the preamble hereto.

"**Company Accounts**" has the meaning set forth in Section 3.02(a).

"**Company Auditors**" has the meaning set forth in Section 7.02(a).

"**Company Books and Records**" means originals or true and complete copies thereof, including electronic copies (if available), of (a) all minute books, corporate charters and bylaws or comparable constitutive documents, records of share issuances and related corporate records of each member of the Company Group and (b) all books and records exclusively relating to (i) Company employees, (ii) the purchase of materials, supplies and services for the Company Business and (iii) dealings with customers of the Company Business.

"**Company Business**" means any business or operations of the Company Group (whether conducted independently or in association with one or more third party through a partnership, joint venture or other contractual arrangement or mutual enterprise), *provided* that the Company Business shall not include any Cellectis Business.

"**Company Group**" means the Company and each other Person that either (x) is controlled directly or indirectly by the Company immediately as of the Effective Date or (y) becomes directly or indirectly controlled by the Company following the Effective Date.

"**Company Indemnitees**" has the meaning set forth in Section 4.04.

"**Company Public Documents**" has the meaning set forth in Section 7.01(h).

"**Consents**" means any consents, waivers or approvals from, or notification requirements to, any third parties.

"**Contract**" means any written or oral commitment, contract, subcontract, agreement, lease, sublease, license, understanding, sales order, purchase order, instrument, indenture, note or other commitment that is binding on any Person or any part of its property under applicable Law.

"**Coverage End Date**" has the meaning set forth in Section 3.05(a).

"**Covered Claims**" has the meaning set forth in Section 3.05(b).

"**Disclosing Party**" has the meaning set forth in Section 6.06(a).

"**Disclosure Documents**" means (i) any form, statement, schedule or other material filed with or furnished to the Commission, any other Governmental Authority or any securities exchange by or on behalf of any Party or any of its Affiliates, including the IPO Registration Statement, and (ii) any information statement, prospectus, offering memorandum, offering circular or similar disclosure document, free writing prospectus, roadshow, testing-the-waters materials and any schedule thereto or amendment thereof or document incorporated by reference therein, whether or not filed with or furnished to the Commission, any other Governmental Authority or any securities exchange by or on behalf of any Party or any of its Affiliates.

"**Effective Date**" means the date of the closing of the IPO.

"**Escalation Notice**" has the meaning set forth in Section 8.02(a).

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, together with the rules and regulations promulgated thereunder.

"**Financial Statements**" means the Annual Financial Statements and Quarterly Financial Statements collectively.

"**Governmental Authority**" means any nation or government, any state, municipality or other political subdivision thereof, and any entity, body, agency, commission, department, board, bureau, court, tribunal or other instrumentality, whether federal, state, local, domestic, foreign or multinational, exercising executive, legislative, judicial, regulatory, administrative or other similar functions of, or pertaining to, government and any executive official thereof.

"**Group**" means either the Company Group or the Cellectis Group, as the context requires.

"**Guarantee**" has the meaning set forth in Section 3.04(a).

"**IFRS**" means the International Financial Reporting Standards issued by the International Accounting Standards Board and interpretations issued by the IFRS Interpretation Committee of the IASB and adopted by the Cellectis Group.

"**Indemnifying Party**" has the meaning set forth in Section 4.05(a).

"**Indemnitee**" has the meaning set forth in Section 4.05(a).

"**Indemnity Payment**" has the meaning set forth in Section 4.05(a).

"**Information**" means information in written, oral, electronic or other tangible or intangible forms, stored in any medium, including without limitation studies, reports, records, books, Contracts, instruments, surveys, discoveries, ideas, concepts, know-how, techniques, designs, specifications, drawings, blueprints, diagrams, models, prototypes, samples, flow charts, data, computer data, disks, diskettes, tapes, computer programs or other software, marketing plans, customer names, communications by or to attorneys (including, subject to the limitations contemplated by this Agreement, attorney-client privileged communications), memoranda and other materials prepared by attorneys or under their direction (including, subject to the limitations contemplated by this Agreement, attorney work product), and other technical, financial, employee or business information or data.

"**Insurance Policies**" or "**Insurance Policy**" means insurance policies and insurance contracts of any kind, including primary, excess and umbrella, comprehensive general liability, directors and officers, automobile, products, workers' compensation, employee dishonesty, property and crime insurance policies and self-insurance and captive insurance company arrangements, together with the rights, benefits and privileges thereunder.

"**Insurance Proceeds**" means those monies:

(a) received by an insured from a third party insurance carrier;

(b) paid by a third party insurance carrier on behalf of the insured; or

(c) received (including by way of setoff) from any third party in the nature of insurance, contribution or indemnification in respect of any Liability;

in each such case net of any applicable premium adjustments (including reserves and retrospectively rated premium adjustments) and net of any costs or expenses incurred in the collection thereof and excluding, for the avoidance of doubt, proceeds from any self-insurance, captive insurance or similar program.

"**Intercompany Accounts**" has the meaning set forth in Section 3.01(a).

"**IPO**" means the initial public offering of shares of Common Stock pursuant to the IPO Registration Statement.

"**IPO Registration Statement**" means the registration statement on Form S-l (File No. 333-[•]) filed under the Securities Act, pursuant to which issuances of the Common Stock in the IPO will be registered, together with all amendments thereto (including post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act).

"**Law**" means any United States or non-United States federal, national, supranational, state, provincial, local or similar law (including common law), statute, ordinance, regulation, rule, code, order, treaty, license, permit, authorization, registration, approval, consent, decree, injunction, judgment, notice of liability, request for information, binding judicial or administrative interpretation or other requirement, in each case, enacted, promulgated, issued, entered or otherwise put into effect by a Governmental Authority.

"**Liabilities**" means any and all indebtedness, claims, debts, taxes, liabilities, demands, causes of action, and obligations, whether accrued, fixed or contingent, mature or inchoate, known or unknown, reflected on a balance sheet or otherwise, including, without limitation, those arising under any Law, Action or any judgment of any court of any kind or any award of any arbitrator of any kind, and those arising under any Contract, commitment or undertaking.

"**License Agreement**" means that certain license agreement by and between Cellectis and the Company, dated as of the Effective Date.

"**Losses**" means any and all damages, losses, deficiencies, taxes, obligations, penalties, judgments, settlements, claims, payments, fines, charges, interest, costs and expenses, whether or not resulting from third party claims, including the costs and expenses of any and all Actions and demands, assessments, judgments, settlements and compromises relating thereto and the costs and expenses of attorneys', accountants', consultants' and other professionals' fees and expenses incurred in the investigation or defense thereof or the enforcement of rights hereunder.

"**Management Services Agreement**" means that certain Management Services Agreement, dated January 1, 2016, as amended from time to time, including pursuant to Amendment No. 1 thereto dated as of the Effective Date.

"**Party**" or "**Parties**" have the meanings set forth in the preamble hereto.

"**Person**" means an individual, a general or limited partnership, a corporation, a trust, a joint venture, an unincorporated organization, a limited liability entity, any other entity and any Governmental Authority.

"**Prime Rate**" means the Wall Street Journal Published Prime (if published in a range, the lowest number in the range will be used) in effect on the fourth (4^{th}) Tuesday of the month prior to the beginning of each calendar quarter.

"**Privilege**" has the meaning set forth in Section 6.08(a).

"**Quarterly Financial Statements**" has the meaning set forth in Section 7.01(d).

"**Receiving Party**" has the meaning set forth in Section 6.06(a).

"**Securities Act**" means the Securities Act of 1933, as amended, together with the rules and regulations promulgated thereunder.

"**Shared Insurance Policies**" means Insurance Policies in existence prior to the Coverage End Date where both the Company Business and the Cellectis Business are eligible for coverage and/or where the employees, directors or agents of both the Company Business and the Cellectis Business are eligible for coverage.

"**Subsidiary**" means, when used with respect to any Person, (a) a corporation in which such Person or one or more Subsidiaries of such Person, directly or indirectly, owns capital stock having a majority of the total voting power in the election of directors of all outstanding shares of all classes and series of capital stock of such corporation entitled generally to vote in such election; and (b) any other Person (other than a corporation) in which such Person or one or more Subsidiaries of such Person, directly or indirectly, has (i) a majority ownership interest or (ii) the power to elect or direct the election of a majority of the members of the governing body of such first-named Person.

"**Surviving Contract**" has the meaning set forth in Section 3.01(b).

"**Third Party Claim**" has the meaning set forth in Section 4.06(a).

"**U.S. GAAP**" means accounting principles generally accepted in the United States of America, applied on a consistent basis.

ARTICLE 2

THE IPO AND ACTIONS PENDING THE IPO; OTHER TRANSACTIONS

Section 2.01. *The IPO*. The Company shall cooperate with, and take all actions reasonably requested by, Cellectis in connection with the IPO. In furtherance thereof, to the extent not undertaken and completed prior to the execution of this Agreement:

(a) The Company shall file such amendments or supplements to the IPO Registration Statement as may be necessary in order to cause the same to remain effective as required by the underwriting agreement for the IPO. The Company shall also prepare, file with the Commission and cause to become effective any registration statements or amendments thereof that are required to reflect the establishment of, or amendments to, any employee benefit and other plans necessary or appropriate in connection with the IPO or the other transactions contemplated by this Agreement or the Ancillary Agreements.

(b) The Company shall use its best efforts to take all such action as may be necessary or appropriate under state securities and blue sky laws of the United States (and any comparable Laws under any foreign jurisdictions) in connection with the IPO; *provided that* the Company shall not be required to qualify as a foreign corporation in any state or jurisdiction or consent to service of process in any state or jurisdiction other than with respect to claims arising out of the IPO.

Section 2.02. *Termination of the IPO Process*. Notwithstanding anything to the contrary contained herein, prior to the Effective Date, as between the Company and Cellectis, Cellectis may in its sole discretion terminate or abandon the IPO or any aspect of the IPO and the other transactions contemplated hereby or by any Ancillary Agreement in connection with the IPO and the Company shall, subject to compliance with its obligations under the underwriting agreement for the IPO, take all actions directed by Cellectis in that regard.

ARTICLE 3

THE SEPARATION

Section 3.01. *Termination of Agreements*. (a) Except as set forth in Section 3.01(b), in furtherance of the releases and other provisions of Section 4.01 hereof, the Company and each Person in the Company Group, on the one hand, and Cellectis and each Person in the Cellectis Group, on the other hand, hereby terminate any and all agreements, arrangements, commitments or understandings (including all intercompany accounts payable or accounts receivable between a member of the Cellectis Group, on the one hand, and a member of the Company Group, on the other hand ("**Intercompany Accounts**") accrued as of the Effective Date), whether or not in writing, between or among the Company and any Person in the Company Group, on the one hand, and Cellectis and any Person in the Cellectis Group, on the other hand, effective as of the Effective Date. No such terminated agreement, arrangement, commitment, understanding or Intercompany Account (including any provision thereof which purports to survive termination) shall be of any further force or effect after the Effective Date. Each Party shall, at the reasonable request of any other Party, take, or cause to be taken, such other actions as may be necessary to effect the foregoing.

(b) The provisions of Section 3.01(a) shall not apply to any of the following agreements, arrangements, commitments, understandings or Intercompany Accounts (or to any of the provisions thereof): (i) this Agreement; (ii) the Ancillary Agreements (and each other agreement or instrument expressly contemplated by this Agreement, or any Ancillary Agreement to be entered into by any of the Parties or any Person in their respective Groups); (iii) any agreements, arrangements, commitments or understandings set forth or described on Schedule 3.01(b)(iii); (iv) any agreements, arrangements, commitments or understandings to which any Person other than solely the Parties and their respective Affiliates is a party; and (v) any other agreements, arrangements, commitments, understandings or Intercompany Accounts that this Agreement or any Ancillary Agreement expressly contemplates will survive the Effective Date (collectively, the "**Surviving Contracts**").

(c) Notwithstanding anything in this Agreement to the contrary, in the event the Parties agree in writing that an agreement, arrangement, commitment or understanding terminated pursuant to Section 3.01(a) should have remained in force or effect after the Effective Date, such agreement, arrangement, commitment or understanding shall pursuant to this Section 3.01(c) be deemed a Surviving Contract and each Party shall, at the reasonable request of any other Party, take, or cause to be taken, such other actions as may be necessary to effect the foregoing.

Section 3.02. *Bank Accounts; Cash Balances*. (a) Other than in respect of Surviving Contracts, to the extent not completed prior to the Effective Date, each of Cellectis and the Company agree to take, or cause the respective members of their respective Groups to take, as soon as practicable after the Effective Date, all actions necessary to amend all Contracts governing each bank and brokerage account owned by the Company or any other member of the Company Group (collectively, the "**Company Accounts**") so that such Company Accounts, if linked (whether by automatic withdrawal, automatic deposit or any other authorization to transfer funds from or to, hereinafter "**linked**") to any bank or brokerage account owned by Cellectis or any other member of the Cellectis Group (collectively, the "**Cellectis Accounts**") are de-linked from the Cellectis Accounts. The Company hereby agrees to repay promptly following the IPO all amounts outstanding in respect of the current account agreement signed between the Company and Cellectis on March 7, 2011.

(b) It is intended that, following consummation of the actions contemplated by Section 3.02(a), the Company and Cellectis will maintain separate bank accounts and separate cash management processes.

(c) With respect to any outstanding checks issued by Cellectis, the Company, or any of their respective Subsidiaries prior to the Effective Date, such outstanding checks shall be honored following the Effective Date by the Person or Group owning the account on which the check is drawn.

(d) Other than in connection with the Surviving Contracts, as between Cellectis and the Company (and the members of their respective Groups), all payments made and reimbursements received after the Effective Date by either Party (or member of its Group) that relate to a business, asset or Liability of the other Party (or member of its Group), shall be held by such Party in trust for the use and benefit of the Party entitled thereto and, promptly upon receipt by such Party of any such payment or reimbursement, such Party shall pay over, or shall cause the applicable member of its Group to pay over to the other Party the amount of such payment or reimbursement without right of set-off.

Section 3.03. *Other Ancillary Agreements*. Each of Cellectis and the Company will execute and deliver, and cause each of their applicable Subsidiaries to execute and deliver, as applicable, all Ancillary Agreements to which it is a party, in each case to be effective as of the Effective Date.

Section 3.04. *Guarantees*. (a) Other than in respect of the agreement(s) listed in Schedule 3.04 hereto, Cellectis and the Company shall each use their commercially reasonable efforts to cause a member of the Company Group to be substituted in all respects for all members of the Cellectis Group, as applicable, and for the members of the Cellectis Group, as applicable, to be otherwise removed or released, effective as of the Effective Date, in respect of all obligations of any member of the Company Group under each guarantee, indemnity, surety bond, letter of credit and letter of comfort (each, a "**Guarantee**"), given or obtained by any member of the Cellectis Group for the benefit of any member of the Company Group or the Company Business. If Cellectis and the Company have been unable to effect any such substitution, removal, release and termination with respect to any such Guarantee as of the Effective Date then, following the Effective Date, the Company shall effect such substitution, removal, release and termination as soon as reasonably practicable after the Effective Date; provided that from and after the Effective Date, the Company shall indemnify against, hold harmless and promptly reimburse the members of the Cellectis Group for any payments made by members of the Cellectis Group and for any and all Liabilities of the members of the Cellectis Group arising out of, or in performing, in whole or in part, any performance obligation in accordance with the underlying obligation under any such Guarantee (except to the extent the performance obligation under any such Guarantee shall have been triggered solely by an act or failure to act of the applicable guarantor (rather than the underlying obligor)).

(b) Cellectis and the Company shall each use their commercially reasonable efforts to cause a member of the Cellectis Group to be substituted in all respects for all members of the Company Group, as applicable, and for the members of the Company Group, as applicable, to be otherwise removed or released, effective as of the Effective Date, in respect of all obligations of any member of the Cellectis Group under each Guarantee, given or obtained by any member of the Company Group for the benefit of any member of the Cellectis Group or the Cellectis Business. If Cellectis and the Company have been unable to effect any such substitution, removal, release and termination with respect to any such Guarantee as of the Effective Date then, following the Effective Date, Cellectis shall effect such substitution, removal, release and termination as soon as reasonably practicable after the Effective Date; provided that from

and after the Effective Date, Cellectis shall indemnify against, hold harmless and promptly reimburse the members of the Company Group for any payments made by members of the Company Group and for any and all Liabilities of the members of the Company Group arising out of, or in performing, in whole or in part, any performance obligation in accordance with the underlying obligation under any such Guarantee (except to the extent the performance obligation under any such Guarantee shall have been triggered solely by an act or failure to act of the applicable guarantor (rather than the underlying obligor)).

Section 3.05. *Insurance Policies*

(a) As of the date at which Cellectis and its Affiliates cease to hold in excess of 50% of the outstanding shares of Common Stock, or at any time before Cellectis and its Affiliates cease to hold in excess of 50% of the outstanding shares of Common Stock, at Cellectis' request (the "**Coverage End Date**"), the coverage under all Shared Insurance Policies shall continue in force only for the benefit of Cellectis and other members of the Cellectis Group and not for the benefit of the Company or any other member of the Company Group. Effective from and after the Coverage End Date, the Company shall arrange for its own Insurance Policies with respect to the Company Business covering all periods (whether prior to or following the Coverage End Date) and agrees not to seek, through any means, benefit from any of Cellectis' or its Affiliates' Insurance Policies that may provide coverage for claims relating in any way to the Company Business following the Coverage End Date.

(b) Where Shared Insurance Policies with an unaffiliated third party insurer (and excluding, for the avoidance of doubt, any self-insurance, captive insurance or similar program) cover Company Liabilities reported after the Coverage End Date but are with respect to an occurrence prior to the Coverage End Date, under an occurrence-based Shared Insurance Policy (collectively, "**Covered Claims**"), then the members of the Company Group may notify Cellectis of such claim and Cellectis shall seek coverage for such Covered Claims under such Shared Insurance Policies, control the prosecution and defense of such Covered Claims and forward any insurance recoverables with respect thereto, without any prejudice or limitation to Cellectis seeking insurance under the Shared Insurance Policies for its own claims. After the Coverage End Date, Cellectis shall procure and administer the Shared Insurance Policies, provided that such administration shall in no way limit, inhibit or preclude the right of the members of the Company Group to insurance coverage thereunder in accordance with this Section 3.05(b), in each case, with respect to Covered Claims. The Company shall promptly notify Cellectis of any Covered Claims, and Cellectis agrees to reasonably cooperate with the Company concerning the pursuit by the Company of any such Covered Claim, in each case at the expense of the Company (to the extent such expenses are not covered by the applicable Shared Insurance Policies).

(c) The Company shall be responsible for complying with terms of the Shared Insurance Policies to obtain coverage for such Covered Claims, including if the Shared Insurance Policy requires any payments to be made in connection therewith (including self-insured retentions or deductibles), and the Company shall make any such required

payments and maintain any required or appropriate accruals or reserves for such Covered Claims. Any proceeds received by Cellectis from any insurance carrier that relate to Covered Claims shall be paid promptly to the Company. In the event that Covered Claims relate to the same occurrence for which Cellectis is seeking coverage under such Shared Insurance Policies and for which the Parties have a shared defense, the Company and Cellectis shall jointly defend any such claim and waive any conflict of interest necessary to conduct a joint defense, and shall bear any expenses in connection therewith on a pro rata basis in proportion to the assessed value of the claim or claims against such Party (to the extent such expenses are not covered by the applicable Shared Insurance Policies), including self-insured retentions or deductibles. In the event that policy limits under an applicable Shared Insurance Policy are not sufficient to fund all claims of Cellectis and members of the Cellectis Group and the Company and members of the Company Group, any amounts simultaneously due shall be paid to the respective entities in proportion to the assessed value of each respective entity's claim or claims.

Section 3.06. *Coverage End Date Determination*. Cellectis shall use commercially reasonable efforts to provide written confirmation informing the Company that the Coverage End Date has occurred. Cellectis shall use commercially reasonable efforts to provide such written confirmation promptly, but in any case within five Business Days after the Coverage End Date.

ARTICLE 4
MUTUAL RELEASES; INDEMNIFICATION; COOPERATION

Section 4.01. *Release of Pre-Effective Date Claims*. (a) Except as provided in Section 4.01(c) and Section 4.04, effective as of the Effective Date, the Company does hereby, for itself and for each Person in the Company Group as of the Effective Date and their respective successors and assigns and all Persons who at any time prior to the Effective Date, have been directors, officers, agents or employees of any Person in the Company Group (in each case, in their respective capacities as such), remise, release and forever discharge Cellectis and each Person in the Cellectis Group, and all Persons who at any time prior to the Effective Date have been stockholders, directors, officers, managers, members, agents or employees of any Person in the Cellectis Group (in each case, in their respective capacities as such), and their respective heirs, executors, administrators, successors and assigns, from any and all Liabilities whatsoever between or among the Company or any Person in the Company Group, on the one hand, and Cellectis or any Person in the Cellectis Group, on the other hand, whether at law or in equity (including any rights of contribution or recovery), whether arising under any Contract, by operation of Law or otherwise, existing or arising from any acts or events occurring or failing to occur or alleged to have occurred or to have failed to occur or any conditions existing or alleged to have existed in each case on or before the Effective Date.

(b) Except as provided in Section 4.01(c) and Section 4.03, effective as of the Effective Date, Cellectis does hereby, for itself and for each Person in the Cellectis Group as of the Effective Date and their respective successors and assigns and all Persons who at any time prior to the Effective Date, have been directors, officers, agents or employees

of any Person in the Cellectis Group (in each case, in their respective capacities as such), remise, release and forever discharge the Company and each Person in the Company Group, and all Persons who at any time prior to the Effective Date have been stockholders, directors, officers, managers, members, agents or employees of any Person in the Company Group (in each case, in their respective capacities as such), and their respective heirs, executors, administrators successors and assigns, from any and all Liabilities whatsoever between or among the Company or any Person in the Company Group, on the one hand, and Cellectis or any Person in the Cellectis Group, on the other hand, whether at law or in equity (including any rights of contribution or recovery), whether arising under any Contract, by operation of Law or otherwise, existing or arising from any acts or events occurring or failing to occur or alleged to have occurred or to have failed to occur or any conditions existing or alleged to have existed in each case on or before the Effective Date.

(c) Nothing contained in Section 4.01(a) or (b) shall (x) impair any right of any Person to enforce any Surviving Contract in accordance with its terms or (y) release any Person from:

(i) any Liability provided in or resulting from any Surviving Contract;

(ii) any Liability assumed or retained by, or transferred, assigned or allocated to the Group of which such Person is a member in accordance with, or any other Liability of any Person in any Group under, this Agreement or any Ancillary Agreement;

(iii) any Liability provided in or resulting from any Contract or understanding that is entered into after the Effective Date between a member of the Cellectis Group, on the one hand, and a member of the Company Group, on the other hand;

(iv) any Liability that the Parties may have with respect to claim for indemnification, recovery or contribution brought pursuant to this Agreement or any Ancillary Agreement, which Liability shall be governed by the provisions of this Article 4 or, if applicable, the appropriate provisions of the Ancillary Agreements; or

(v) any Liability the release of which would result in the release of any Person other than a Person released pursuant to this Section 4.01.

In addition, nothing contained in Section 4.01(a) shall release Cellectis from indemnifying any director, officer or employee of the Company who was a director, officer or employee of Cellectis or any of its Affiliates on or prior to the Effective Date, to the extent such director, officer or employee is or becomes a named defendant in any Action with respect to which he or she was entitled to such indemnification pursuant to obligations existing prior to the Effective Date, it being understood that if the underlying obligation giving rise to such Action is a Liability of the Company, the Company shall indemnify Cellectis for such Liability (including Cellectis' costs to indemnify the director, officer or employee) in accordance with the provisions set forth in this Article 4.

(d) The Company shall not make, and shall not permit any Person in the Company Group to make, any claim or demand, or commence any Action asserting any claim or demand, including any claim of contribution, recovery or any indemnification, against Cellectis or any Person in the Cellectis Group, or any other Person released pursuant to Section 4.01(a), with respect to any Liabilities released pursuant to Section 4.01(a). Cellectis shall not make, and shall not permit any Person in the Cellectis Group to make, any claim or demand, or commence any Action asserting any claim or demand, including any claim of contribution, recovery or any indemnification against the Company or any Person in the Company Group, or any other Person released pursuant to Section 4.01(b), with respect to any Liabilities released pursuant to Section 4.01(b).

(e) It is the intent of each of Cellectis and the Company, by virtue of the provisions of this Section 4.01, to provide for a full and complete release and discharge of all Liabilities existing or arising from all acts and events occurring or failing to occur or alleged to have occurred or to have failed to occur and all conditions existing or alleged to have existed in each case on or before the Effective Date, between or among the Company or any Person in the Company Group, on the one hand, and Cellectis or any Person in the Cellectis Group, on the other hand (including any contractual agreements or arrangements existing or alleged to exist between or among any such Persons on or before the Effective Date), except as expressly set forth in Section 4.01(c). At any time, at the request of the other Party, each Party shall cause each Person in its respective Group and to the extent practicable each other Person to execute and deliver releases reflecting the provisions hereof.

(f) If any Person associated with either Cellectis or the Company (including any of their respective directors, officers, agents or employees) initiates an Action with respect to claims released by this Section 4.01, the Party with which such Person is associated shall indemnify the other Party against such Action in accordance with the provisions set forth in this Article 4.

Section 4.02. *Pending, Threatened and Unasserted Claims*. The Company shall assume liability for all claims, including pending, threatened and unasserted claims, relating to actions or omissions relating to the Company Business and Cellectis shall assume liability for all pending, threatened and unasserted claims relating to actions or omissions relating to the Cellectis Business. In the event of any third-party claims that name both Parties as defendants, each Party will cooperate with the other Party to defend against such claims.

Section 4.03. *Indemnification by the Company*. Except as provided in Section 4.05, the Company shall indemnify, defend and hold harmless each member of the Cellectis Group and each of their Affiliates and each member of the Cellectis Group's and their respective Affiliates' directors, officers, employees and agents, and each of the heirs, executors, successors and assigns of any of the foregoing (collectively, the "**Cellectis Indemnitees**"), from and against any and all Losses of the Cellectis Indemnitees relating to, arising out of or resulting from (without duplication and including any such Losses arising by way of setoff, counterclaim or defense or enforcement of any lien):

(a) (x) any untrue statement or alleged untrue statement of a material fact contained in any Disclosure Document of any member of the Company Group or any omission or alleged omission to state a material fact in any such Disclosure Document required to be stated therein or necessary to make the statements therein not misleading, except insofar as any such Losses are caused by any untrue statement or alleged untrue statement of a material fact in such Disclosure Document or any omission or alleged omission to state a material fact in such Disclosure Document required to be stated therein or necessary to make the statements therein not misleading based upon information relating to Cellectis furnished to the Company in writing by Cellectis expressly for use therein, and (y) any untrue statement or alleged untrue statement of a material fact contained in any Disclosure Document of any member of the Cellectis Group or any omission or alleged omission to state a material fact in any such Disclosure Document required to be stated therein or necessary to make the statements therein not misleading that is based upon information relating to the Company furnished to Cellectis in writing by the Company expressly for use in such Disclosure Document;

(b) the Company Business, including the failure of the Company or any other member of the Company Group to pay, perform or otherwise promptly discharge any Liability relating to, arising out of or resulting from the Company Business in accordance with its terms, whether prior to or after the Effective Date or the date hereof; and

(c) any breach by the Company or any Person in the Company Group of this Agreement or any Ancillary Agreement, unless such Ancillary Agreement expressly provides for separate indemnification therein, in which case, any such indemnification claims with respect to a breach thereunder shall be made thereunder.

Section 4.04. *Indemnification by Cellectis*. Except as provided in Section 4.05, Cellectis shall indemnify, defend and hold harmless each member of the Company Group and each of their Affiliates and each member of the Company Group's and their respective Affiliates' directors, officers, employees and agents, and each of the heirs, executors, successors and assigns of any of the foregoing (collectively, the "**Company Indemnitees**"), from and against any and all Losses of the Company Indemnitees relating to, arising out of or resulting from (without duplication and including any such Losses arising by way of setoff, counterclaim or defense or enforcement of any lien):

(a) any untrue statement or alleged untrue statement of a material fact contained in any Disclosure Document of any member of the Company Group or any omission or alleged omission to state a material fact in any such Disclosure Document required to be stated therein or necessary to make the statements therein not misleading that is based upon information relating to Cellectis furnished to the Company in writing by Cellectis expressly for use in such Disclosure Document;

(b) the Cellectis Business, including the failure of Cellectis or any other member of the Cellectis Group to pay, perform or otherwise promptly discharge any Liability relating to, arising out of or resulting from the Cellectis Business in accordance with its terms, whether prior to or after the Effective Date or the date hereof; and

(c) any breach by Cellectis or any Person in the Cellectis Group of this Agreement or any Ancillary Agreement, unless such Ancillary Agreement expressly provides for separate indemnification therein, in which case, any such indemnification claims with respect to a breach thereunder shall be made thereunder.

Section 4.05. *Indemnification Obligations Net of Insurance Proceeds and Other Amounts*. (a) The Parties intend that any Loss subject to indemnification or reimbursement pursuant to this Article 4 will be net of Insurance Proceeds that actually reduce the amount of the Loss. Accordingly, the amount which any Party (an "**Indemnifying Party**") is required to pay to any Person entitled to indemnification hereunder (an "**Indemnitee**") will be reduced by any Insurance Proceeds theretofore actually recovered by or on behalf of the Indemnitee in respect of the related Loss. If an Indemnitee receives a payment (an "**Indemnity Payment**") required by this Agreement from an Indemnifying Party in respect of any Loss and subsequently receives Insurance Proceeds, then the Indemnitee will pay to the Indemnifying Party an amount equal to the excess of the Indemnity Payment received over the amount of the Indemnity Payment that would have been due if the Insurance Proceeds had been received, realized or recovered before the Indemnity Payment was made.

(b) An insurer that would otherwise be obligated to pay any claim shall not be relieved of the responsibility with respect thereto or, solely by virtue of the indemnification provisions hereof, have any subrogation rights with respect thereto, it being expressly understood and agreed that no insurer or any other third party shall be entitled to a "wind-fall" (i.e., a benefit such insurer or other third party would not be entitled to receive in the absence of the indemnification provisions) by virtue of the indemnification provisions hereof. Nothing contained in this Agreement or any Ancillary Agreement shall obligate any Person in any Group to seek to collect or recover any Insurance Proceeds.

(c) Any Indemnity Payment made by the Company shall be (i) increased as necessary so that after making all payments in respect to taxes imposed on or attributable to such Indemnity Payment, each Cellectis Indemnitee receives a net amount equal to the sum it would have received had no such taxes been imposed and (ii) reduced to take account of any net tax benefit actually realized by an Cellectis Indemnitee arising from the incurrence or payment of the Loss to which the Indemnity Payment relates. Any Indemnity Payment made by Cellectis shall be (i) increased as necessary so that after making all payments in respect to taxes imposed on or attributable to such Indemnity Payment, each Company Indemnitee receives a net amount equal to the sum it would have received had no such taxes been imposed and (ii) reduced to take account of any net tax benefit actually realized by a Company Indemnitee arising from the incurrence or payment of the Loss to which the Indemnity Payment relates.

(d) If an indemnification claim is covered by the indemnification provisions of an Ancillary Agreement, the claim shall be made under the Ancillary Agreement to the extent applicable and the provisions thereof shall govern such claim. In no event shall any Party be entitled to double recovery from the indemnification provisions of this Agreement and any Ancillary Agreement.

Section 4.06. *Procedures for Indemnification of Third Party Claims*. (a) If an Indemnitee shall receive notice or otherwise learn of the assertion by a Person (including any Governmental Authority) who is not a Person in the Cellectis Group or the Company Group of any claim or of the commencement by any such Person of any Action with respect to which an Indemnifying Party may be obligated to provide indemnification to such Indemnitee pursuant to Section 4.03 or Section 4.04, or any other Section of this Agreement (collectively, a "**Third Party Claim**"), such Indemnitee shall give such Indemnifying Party written notice thereof as promptly as practicable (and in any event within 45 days) after becoming aware of such Third Party Claim. Any such notice shall describe the Third Party Claim in reasonable detail. Notwithstanding the foregoing, the failure of any Indemnitee or other Person to give notice as provided in this Section 4.06(a) shall not relieve the related Indemnifying Party of its obligations under this Article 4, except to the extent, and only to the extent, that such Indemnifying Party is materially prejudiced by such failure to give notice.

(b) An Indemnifying Party may elect (but shall not be required) to defend, at such Indemnifying Party's own expense and by such Indemnifying Party's own counsel (which counsel shall be reasonably satisfactory to the Indemnitee), any Third Party Claim; provided that the Indemnifying Party shall not be entitled to defend and shall pay the reasonable fees and expenses of one separate counsel for all Indemnitees if the claim for indemnification relates to or arises in connection with any criminal action, indictment or allegation. Within 45 days after the receipt of notice from an Indemnitee in accordance with Section 4.06(a) (or sooner, if the nature of such Third Party Claim so requires), the Indemnifying Party shall notify the Indemnitee of its election whether the Indemnifying Party will assume responsibility for defending such Third Party Claim, which election shall specify any reservations or exceptions to its defense. After notice from an Indemnifying Party to an Indemnitee of its election to assume the defense of a Third Party Claim, such Indemnitee shall have the right to employ separate counsel and to participate in (but not control) the defense, compromise, or settlement thereof, but the fees and expenses of such counsel shall be the expense of such Indemnitee; provided, however, in the event that (i) the Indemnifying Party has elected to assume the defense of the Third Party Claim but has specified, and continues to assert, any reservations or exceptions in such notice or (ii) the Third Party Claim involves injunctive or equitable relief, then, in any such case, the reasonable fees and expenses of one separate counsel for all Indemnitees shall be borne by the Indemnifying Party.

(c) If an Indemnifying Party elects not to assume responsibility for defending a Third Party Claim, or fails to notify an Indemnitee of its election as provided in Section 4.06(b), such Indemnitee may defend such Third Party Claim at the cost and expense of the Indemnifying Party. Any legal fees and expenses actually incurred by the Indemnitee in connection with defending such claim shall be paid by the Indemnifying Party.

(d) Unless the Indemnifying Party has failed to assume the defense of the Third Party Claim in accordance with the terms of this Agreement, no Indemnitee may settle or compromise any Third Party Claim without the consent of the Indemnifying Party. If an Indemnifying Party has failed to assume the defense of the Third Party Claim within the time period specified in clause (b) above, it shall not be a defense to any obligation to pay any amount in respect of such Third Party Claim that the Indemnifying Party was not consulted in the defense thereof, that such Indemnifying Party's views or opinions as to the conduct of such defense were not accepted or adopted, that such Indemnifying Party does not approve of the quality or manner of the defense thereof or that such Third Party Claim was incurred by reason of a settlement rather than by a judgment or other determination of liability.

(e) In the case of a Third Party Claim, no Indemnifying Party shall consent to entry of any judgment or enter into any settlement of the Third Party Claim without the consent of the Indemnitee if the effect thereof is (i) to permit any injunction, declaratory judgment, other order or other non-monetary relief to be entered, directly or indirectly, against any Indemnitee or (ii) to ascribe any fault on any Indemnitee in connection with such defense.

(f) Notwithstanding the foregoing, the Indemnifying Party shall not, without the prior written consent of the Indemnitee, settle or compromise any Third Party Claim or consent to the entry of any judgment which does not include as an unconditional term thereof the delivery by the claimant or plaintiff to the Indemnitee of a written release from all Liability in respect of such Third Party Claim.

Section 4.07. *Additional Matters*. (a) Any claim on account of a Loss which does not result from a Third Party Claim shall be asserted by written notice given by the Indemnitee to the related Indemnifying Party. Such Indemnifying Party shall have a period of 30 days after the receipt of such notice within which to respond thereto. If such Indemnifying Party does not respond within such 30-day period, such Indemnifying Party shall be deemed to have refused to accept responsibility to make payment. If such Indemnifying Party does not respond within such 30-day period or rejects such claim in whole or in part, such Indemnitee shall be free to pursue such remedies as may be available to such Indemnitee as contemplated by this Agreement and the Ancillary Agreements.

(b) In the event of payment by or on behalf of any Indemnifying Party to any Indemnitee in connection with any Third Party Claim, such Indemnifying Party shall be subrogated to and shall stand in the place of such Indemnitee as to any events or circumstances in respect of which such Indemnitee may have any right, defense or claim relating to such Third Party Claim against any claimant or plaintiff asserting such Third Party Claim or against any other Person. Such Indemnitee shall cooperate with such Indemnifying Party in a reasonable manner, and at the cost and expense of such Indemnifying Party, in prosecuting any subrogated right, defense or claim.

(c) In the event of an Action in which the Indemnifying Party is not a named defendant, if either the Indemnitee or Indemnifying Party shall so request, the Parties shall endeavor to substitute the Indemnifying Party for the named defendant or otherwise hold the Indemnifying Party as party thereto, if at all practicable. If such substitution or addition cannot be achieved for any reason or is not requested, the named defendant shall allow the Indemnifying Party to manage the Action as set forth in this Section, and the Indemnifying Party shall fully indemnify the named defendant against all costs of defending the Action (including court costs, sanctions imposed by a court, attorneys' fees, experts fees and all other external expenses), the costs of any judgment or settlement, and the cost of any interest or penalties relating to any judgment or settlement with respect to such Third Party Claim.

Section 4.08. *Remedies Cumulative*. The remedies provided in this Article 4 shall be cumulative and, subject to the provisions of Article 6, shall not preclude assertion by any Indemnitee of any other rights or the seeking of any and all other remedies against any Indemnifying Party.

Section 4.09. *Survival of Indemnities*. The indemnity agreements contained in this Article 4 shall remain operative and in full force and effect, regardless of (i) any investigation made by or on behalf of any Indemnitee; and (ii) the knowledge by the Indemnitee of Liabilities for which it might be entitled to indemnification hereunder. The rights and obligations of each of Cellectis and the Company and their respective Indemnitees under this Article 4 shall survive the merger or consolidation of any Party, the sale or other transfer by any Party of any assets or businesses or the assignment by it of any Liabilities, or the change of form or change of control or corporate reorganization of any Party.

Section 4.10. *Special Damages*. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT OR ANY ANCILLARY AGREEMENT TO THE CONTRARY, IN NO EVENT WILL EITHER PARTY OR ANY OF ITS GROUP MEMBERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, COLLATERAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR LOST PROFITS SUFFERED BY AN INDEMNITEE, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, IN CONNECTION WITH ANY DAMAGES ARISING HEREUNDER OR THEREUNDER (INCLUDING IN RESPECT OF ANY LOSS IN THE VALUE OF COMMON STOCK); PROVIDED, HOWEVER, THAT TO THE EXTENT AN INDEMNIFIED PARTY IS REQUIRED TO PAY ANY SPECIAL, INCIDENTAL, INDIRECT, COLLATERAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR LOST PROFITS TO A PERSON WHO IS NOT A MEMBER OF EITHER GROUP IN CONNECTION WITH A THIRD PARTY CLAIM, SUCH DAMAGES WILL CONSTITUTE DIRECT DAMAGES AND NOT BE SUBJECT TO THE LIMITATION SET FORTH IN THIS SECTION 4.10.

ARTICLE 5
CERTAIN BUSINESS MATTERS

Section 5.01. *No Restriction on Competition*. It is the explicit intent of each of the Parties hereto that the provisions of this Agreement shall not include any non-competition or other similar restrictive arrangements with respect to the range of business

activities which may be conducted by the Parties. Accordingly, each of the Parties acknowledges and agrees that nothing set forth in this Agreement shall be construed to create any explicit or implied restriction or other limitation on (i) the ability of any Party to engage in any business or other activity which competes with the business of any other Party or (ii) the ability of any Party to engage in any specific line of business or engage in any business activity in any specific geographic area.

ARTICLE 6
EXCHANGE OF INFORMATION; CONFIDENTIALITY

Section 6.01. *Agreement for Exchange of Information; Archives*. (a) Each of Cellectis and the Company, on behalf of its respective Group, agrees to provide, or cause to be provided, to the other Group, at any time before or after the Effective Date, as soon as reasonably practicable after written request therefor, access to any Information in the possession or under the control of such respective Group that can be retrieved without unreasonable disruption to its business which the requesting Party reasonably needs (i) to comply with reporting, disclosure, filing, record retention or other requirements imposed on the requesting Party (including under applicable securities or tax Laws) by a Governmental Authority having jurisdiction over the requesting Party, (ii) for use in any other judicial, regulatory, administrative, tax or other proceeding or in order to satisfy audit, accounting, regulatory, litigation, environmental, tax or other similar requirements, in each case other than claims or allegations that one Party to this Agreement or any member of its Group has against the other Party or any member of its Group, or (iii) subject to the foregoing clause (ii), to comply with its obligations under this Agreement.

(b) After the Effective Date, each of the Cellectis Group on the one hand, and the Company Group on the other hand, shall provide to such other Group access during regular business hours (as in effect from time to time) to Information that relates to (i) the business and operations of such other Group, or (ii) the intellectual property covered by the License Agreement, in each case that are located in archives retained or maintained by such other Group (or, if such Information does not exclusively relate to a Party's business, to the portions of such Information that so exclusively relate), subject to the requirements of any applicable state and/or federal regulation such as a Code of Conduct or Standard of Conduct, to the personnel, properties and information of such Party and its Subsidiaries, and only insofar as such access is reasonably required by the other Party for legitimate business reasons, and only for the duration such access is required, and relates to such other Party or the conduct of the business prior to the Effective Date. The Company or Cellectis, as applicable, may obtain copies (but not originals) at their own expense of such Information for bona fide business purposes.

(c) After the Effective Date, each of Cellectis and the Company shall provide, or cause to be provided, to the other Party (in such form as the providing Party retains such Information for its own use) all financial and other data and Information in such Party's possession or control as such requesting Party determines necessary or advisable in order to prepare its financial statements and reports or filings with any Governmental Authority.

(d) After the Effective Date, upon reasonable written notice, the Parties shall furnish or cause to be furnished to each other and their employees, counsel, auditors and representatives reasonable access, during normal business hours, to such Information and reasonable assistance as is required by applicable Law, including Section 404 of the Sarbanes-Oxley Act of 2002, or is reasonably necessary for financial reporting and accounting matters (including with respect to the preparation of any financial statements), letters of representation, reports or forms, the preparation and filing of any tax returns or the defense of any tax claim or assessment. In the event any Party reasonably determines that any such provision of Information could be commercially detrimental, violate any Law or Contract, or result in the waiver any Privilege, the Parties shall take all commercially reasonable measures to permit the compliance with such obligations in a manner that avoids any such harm or consequence, and shall thereafter be deemed to have complied with such obligation.

Section 6.02. *Ownership of Information*. Any Information owned by one Group that is provided to a requesting Party pursuant to Section 6.01 shall be deemed to remain the property of the providing Party. Unless expressly set forth in this Agreement, nothing contained in this Agreement shall be construed as granting or conferring any right, title or interest (whether by license or otherwise) in, to or under any such Information.

Section 6.03. *Record Retention*. To facilitate the possible exchange of Information pursuant to this Article 6 and other provisions of this Agreement after the Effective Date, the Parties agree to use their commercially reasonable efforts to retain all Information in their respective possession or control on the Effective Date in accordance with the policies of Cellectis as in effect from time to time or such other policies as may be reasonably adopted by the appropriate Party after the Effective Date. For the avoidance of doubt, such policies shall be deemed to apply to any Information in a Party's possession or control on the Effective Date relating to the other Party or members of its Group.

Section 6.04. *Limitations of Liability*. Except as otherwise provided in this Article 6, no Party shall have any liability to any other Party in the event that any Information exchanged or provided pursuant to this Agreement is found to be inaccurate or the requested Information is not provided, in the absence of willful misconduct by the Party requested to provide such Information. No Party shall have any liability to any other Party if any Information is destroyed after commercially reasonable efforts by such Party to comply with the provisions of Section 6.03.

Section 6.05. *Production of Witnesses; Records; Cooperation*. (a) After the Effective Date, except in the case of any Action involving or relating to a conflict or dispute between any member of the Cellectis Group, on the one hand, and any member of the Company Group, on the other hand, each Party hereto will use its commercially reasonable efforts to make available to each other Party, upon written request, the then current directors, officers, employees, other personnel and agents of the Person in its respective Group as witnesses and any books, records or other documents within its control or which it otherwise has the ability to make available, to the extent that any such Person (giving consideration to business demands of such directors, officers, employees,

other personnel and agents) or books, records or other documents may reasonably be required in connection with any Action in which indemnification is or may reasonably be expected to be sought that the requesting Party may from time to time be involved. The requesting Party shall bear all costs and expenses in connection therewith.

(b) If an Indemnifying Party or Indemnitee chooses to defend or to seek to compromise or settle any Third Party Claim, the other Party shall make available to such Indemnifying Party or Indemnitee, as applicable, upon written request then current directors, officers, employees, other personnel and agents of the Persons in its respective Group as witnesses and any Information within its control or possession, to the extent that any such Person (giving consideration to business demands of such directors, officers, employees, other personnel and agents) or books, records or other documents may reasonably be required in connection with such defense, settlement or compromise, or such prosecution, evaluation or pursuit, as the case may be, and shall otherwise reasonably cooperate in such defense, settlement or compromise, or such prosecution, evaluation or pursuit, as the case may be.

(c) Without limiting the foregoing, the Parties shall cooperate and consult to the extent reasonably necessary with respect to any Actions in which indemnification is or may reasonably be expected to be sought.

(d) The obligation of the Parties to provide witnesses pursuant to this Section 6.05 is intended to be interpreted in a manner so as to facilitate cooperation and shall include the obligation to provide as witnesses employees and other officers without regard to whether the witness or the employer of the witness could assert a possible business conflict (subject to the exception set forth in the first sentence of Section 6.05(a)).

(e) In connection with any matter contemplated by this Section 6.05 the Parties will enter into a mutually acceptable joint defense agreement so as to maintain to the extent practicable any applicable attorney-client privilege or work product immunity of any Person in any Group.

Section 6.06. *Confidentiality*. (a) Subject to Section 6.07, each of Cellectis and the Company (each, a "**Receiving Party**"), on behalf of itself and each Person in its respective Group, agree to hold, and to cause its respective directors, officers, employees, agents, accountants, counsel and other advisors and representatives to hold in strict confidence, with at least the same degree of care that applies to the confidential and proprietary information of Cellectis pursuant to policies in effect as of the Effective Date, all Information with respect to Cellectis, solely concerning the Company Business (for which the Company shall be the "**Disclosing Party**") and with respect to the Company, concerning the Cellectis Business (for which Cellectis shall be the "**Disclosing Party**") that is accessible to it, in its possession (including Information in its possession prior to the Effective Date) or furnished by the Disclosing Party or any Person in its respective Group, or accessible to, in the possession of, or furnished to the Company's respective directors, officers, employees, agents, accountants, counsel and other advisors and representatives at any time pursuant to this Agreement or otherwise, except, in each case,

to the extent that such Information (i) is or becomes part of the public domain through no breach of this Agreement by the Receiving Party or any of its Group, its respective directors, officers, employees, agents, accountants, counsel and other advisors and representatives, (ii) information that was independently developed following the Effective Date by employees or agents of the Receiving Party or any Person in its respective Group, its respective directors, officers, employees, agents, accountants, counsel and other advisors and representatives who have not accessed or otherwise received the applicable Information; provided that such independent development can be demonstrated by competent, contemporaneous written records of the Receiving Party or any Person in its respective Group, or (iii) becomes available to the Receiving Party or any Person in its respective Group following the Effective Date on a non-confidential basis from a third party who is not bound directly or indirectly by a duty of confidentiality to the Disclosing Party.

(b) Each Party acknowledges that it and the other members of the other Party Group may have in their possession confidential or proprietary Information of third parties that was received under confidentiality or non-disclosure agreements with such third party prior to the Effective Date. Such Party will hold, and will cause the other members of its Group and their respective directors, officers, employees, agents, accountants, counsel, consultants and other advisors and representatives to hold, in strict confidence the confidential and proprietary information of third parties to which they or any other member of their respective Groups has access, in accordance with the terms of any agreements entered into prior to the Effective Date between one or more members of such Party's Group (whether acting through, on behalf of, or connection with, the separated businesses) and such third parties.

(c) Upon the written request of a Party, the other Party shall promptly destroy any copies of such confidential or proprietary Information (including any extracts therefrom) specifically identified by the requesting Party to be destroyed, except to the extent required by Cellectis policies (in the case of Cellectis holding more than 50% of the outstanding Common Stock of the Company) or prohibited by applicable Law. Upon the written request of such requesting Party, the other Party shall cause one of its duly authorized officers to certify in writing to such requesting Party that the requirements of the preceding sentence have been satisfied in full.

(d) Notwithstanding anything to the contrary in this Article 6, (i) to the extent that an Ancillary Agreement or other Contract pursuant to which a Party or a Person in its respective Group is bound or its confidential Information is subject provides that certain Information shall be maintained confidential on a basis that is more protective of such Information or for a longer period of time than provided for herein, then the applicable provisions contained in such Ancillary Agreement or other Contract shall control with respect thereto and (ii) a Party and the Persons in its respective Group shall have no right to use any Information of the Disclosing Party unless otherwise provided for in this Agreement, an Ancillary Agreement or Contract between the Parties or a Person in its respective Group.

Section 6.07. *Protective Arrangements*. In the event that the Receiving Party or any Person in its Group either determines on the advice of its counsel that it is required to disclose any Information pursuant to applicable Law (including the rules and regulations of the Commission or any national securities exchange) or receives any request or demand from any Governmental Authority to disclose or provide Information of the Disclosing Party (or any Person in the Disclosing Party's Group) that is subject to the confidentiality provisions hereof, such Party shall notify the other Party prior to disclosing or providing such Information and shall cooperate at the expense of such other Party in seeking any reasonable protective arrangements (including by seeking confidential treatment of such Information) requested by such other Party. Subject to the foregoing, the Person that received such a request or determined that it is required to disclose Information may thereafter disclose or provide Information to the extent required by such Law (as so advised by counsel) or requested or required by such Governmental Authority; provided, however, that such Person provides the other Party, to the extent legally permissible, upon request with a copy of the Information so disclosed.

Section 6.08. *Preservation of Legal Privileges*. (a) Cellectis and the Company recognize that the members of their respective Groups possess and will possess information and advice that has been previously developed but is legally protected from disclosure under legal privileges, such as the attorney-client privilege or work product exemption and other concepts of legal protection ("**Privilege**"). Each Party recognizes that they shall be jointly entitled to the Privilege with respect to such privileged information and that each shall be entitled to maintain, preserve and assert for its own benefit all such information and advice, but both Parties shall ensure that such information is maintained so as to protect the Privileges with respect to the other Party's interest. To that end, neither Party will knowingly waive or compromise any Privilege associated with such information and advice without the prior written consent of the other Party. In the event that privileged information is required to be disclosed to any arbitrator or mediator in connection with a dispute between the Parties, such disclosure shall not be deemed a waiver of Privilege with respect to such information, and any Party receiving it in connection with a proceeding shall be informed of its nature and shall be required to safeguard and protect it.

(b) Upon receipt by either Party of any subpoena, discovery or other request that may call for the production or disclosure of information that is the subject of a Privilege, or if a Party obtains knowledge that any current or former employee of a Party has received any subpoena, discovery or other request that may call for the production or disclosure of such information, such Party shall provide the other Party a reasonable opportunity to review the information and to assert any rights it may have under this Section 6.08 or otherwise to prevent the production or disclosure of such information. Absent receipt of written consent from the other Party to the production or disclosure of information that may be covered by a Privilege, each Party agrees that it will not produce or disclose any information that may be covered by a Privilege unless a court of competent jurisdiction has entered a final, nonappealable order finding that the information is not entitled to protection under any applicable Privilege.

(c) Cellectis' transfer of Company Books and Records and other Information to the Company, Cellectis' agreement to permit the Company to obtain Information existing prior to the Effective Date, the Company's transfer of Cellectis Books and Records and other Information and the Company's agreement to permit Cellectis to obtain Information existing prior to the Effective Date are made in reliance on Cellectis' and the Company's respective agreements, as set forth in Section 6.06, Section 6.07 and this Section 6.08, to maintain the confidentiality of such Information and to take the steps provided herein for the preservation of all Privileges that may belong to or be asserted by Cellectis or the Company, as the case may be. The access to Information being granted pursuant to Section 6.01 hereof, the agreement to provide witnesses and individuals pursuant to Section 6.06 hereof and the disclosure to Cellectis and the Company of Privileged Information relating to the Company Business or Cellectis Business (if any) pursuant to this Agreement shall not be asserted by Cellectis or the Company to constitute, or otherwise deemed, a waiver of any Privilege that has been or may be asserted under this Section 6.08 or otherwise. Nothing in this Agreement shall operate to reduce, minimize or condition the rights granted to Cellectis and the Company in, or the obligations imposed upon the Parties by, this Section 6.08.

ARTICLE 7
Financial and Other Covenants

Section 7.01. *Disclosure and Financial Controls*. The Company agrees that, for so long as Cellectis is required to consolidate the results of operations and financial position of the Company and any other members of the Company Group or to account for its investment in the Company under the equity method of accounting (determined in accordance with IFRS and consistent with reporting requirements under Cellectis policies applicable at the Effective Date and under applicable Law):

(a) Disclosure of Financial Controls. The Company will, and will cause each other member of the Company Group to, maintain, as of and after the Effective Date, disclosure controls and procedures and internal control over financial reporting as defined in Exchange Act Rule 13a-15; the Company will cause each of its principal executive and principal financial officers to sign and deliver certifications to the Company's periodic reports and will include the certifications in the Company's periodic reports, as and when required pursuant to Exchange Act Rule 13a-14 and Item 601 of Regulation S-K; the Company will cause its management to evaluate the Company's disclosure controls and procedures and internal control over financial reporting (including any change in internal control over financial reporting) as and when required pursuant to Exchange Act Rule 13a-15; the Company will disclose in its periodic reports filed with the Commission information concerning the Company management's responsibilities for and evaluation of the Company's disclosure controls and procedures and internal control over financial reporting (including, without limitation, the annual management report and attestation report of the Company's independent auditors relating to internal control over financial reporting) as and when required under Items 307 and 308 of Regulation S-K and other applicable Commission rules; and, without limiting the general application of the foregoing, the Company will, and will cause each other member of the Company Group to, maintain as of and after the Effective Date internal systems and procedures that will

provide reasonable assurance that (A) the Financial Statements are reliable and timely prepared in accordance with GAAP or IFRS (as applicable) and applicable Law, (B) all transactions of members of the Company Group are recorded as necessary to permit the preparation of the Financial Statements, (C) the receipts and expenditures of members of the Company Group are authorized at the appropriate level within the Company, and (D) unauthorized use or disposition of the assets of any member of the Company Group that could have a material effect on the Financial Statements is prevented or detected in a timely manner.

(b) Fiscal Year. The Company will, and will cause each member of the Company Group organized in the U.S. to maintain a fiscal year that commences and ends on the same calendar days as Cellectis' fiscal year commences and ends, and to maintain monthly accounting periods that commence and end on the same calendar days as Cellectis' monthly accounting periods commence and end. The Company will, and will cause each member of the Company Group organized outside the U.S. to maintain a fiscal year that commences and ends on the same calendar days as the fiscal year of the corresponding members of the Cellectis Group organized outside the U.S. commences and ends, and to maintain monthly accounting periods that commence and end on the same calendar days as the monthly accounting periods of the corresponding members of the Cellectis Group organized outside the U.S. commence and end.

(c) Monthly and Quarterly Financial Information. The Company and each of its Subsidiaries and Affiliates will deliver to Cellectis an income statement and balance sheet on a monthly basis for such period in such format and detail as Cellectis reasonably requests, including for purposes of Cellectis to prepare reconciliations with respect to its financial statements. The Company and each of its Subsidiaries and Affiliates will deliver to Cellectis an income statement and balance sheet and supplemental data related to cash flows and other necessary disclosures on a quarterly basis in such format and detail as Cellectis may reasonably request. The Company will be responsible for reviewing its results and data and for informing Cellectis immediately of any post-closing adjustments that come to its attention. The Company must provide final sign-off of its results, using Cellectis' materiality standards, no later than seven Business Days after the quarterly close period end for the income statement, for the balance sheet, cash flow and supplemental data. A certification will be provided by the Controller and Chief Financial Officer and Chief Executive Officer of the Company pertaining to the quarter financials and internal controls no later than five Business Days prior to Cellectis' filing or furnishing of its quarterly financial statements with the Commission.

(d) Quarterly Financial Statements. As soon as practicable and no later than 14 Business Days after the quarterly close period, the Company will deliver to Cellectis drafts of (A) the consolidated financial statements of the Company Group (and notes thereto) for such periods and for the period from the beginning of the current fiscal year to the end of such quarter, setting forth in each case in comparative form for each such fiscal quarter of the Company the consolidated figures (and notes thereto) for the corresponding quarter and periods of the previous fiscal year and all in reasonable detail and prepared in accordance with Article 10 of Regulation S-X and GAAP or IFRS (as applicable), and (B) a discussion and analysis by management of the Company Group's

financial condition and results of operations for such fiscal period, including, without limitation, an explanation of any material period-to-period change and any off-balance sheet transactions, all in reasonable detail and prepared in accordance with Item 303(b) of Regulation S-K; provided, however, that the Company will deliver such information at such earlier time upon Cellectis written request with 30 days' notice resulting from Cellectis' determination to accelerate the timing of the filing or furnishing of its financial statements with the Commission. The information set forth in (A) and (B) above is referred to in this Agreement as the "**Quarterly Financial Statements**." No later than five Business Days prior to the date the Company publicly files the Quarterly Financial Statements with the Commission or otherwise makes such Quarterly Financial Statements publicly available, the Company will deliver to Cellectis the final form of the Company Quarterly Financial Statements and certifications thereof by the principal executive and financial officers of the Company in substantially the forms required under Commission rules for periodic reports and in form and substance satisfactory to Cellectis, including for purposes of Cellectis to prepare reconciliations with respect to its financial statements; provided, however, that the Company may continue to revise such Quarterly Financial Statements prior to the filing thereof in order to make corrections and non-substantive changes which corrections and changes will be delivered by the Company to Cellectis as soon as practicable, and in any event within eight hours of making any such corrections or changes; provided, further, that Cellectis' and the Company's financial representatives will actively consult with each other regarding any changes (whether or not substantive) which the Company may consider making to its Quarterly Financial Statements and related disclosures during the five Business Days immediately prior to any anticipated filing by the Company with the Commission, with particular focus on any changes which would have an effect upon Cellectis' financial statements or related disclosures. In addition to the foregoing, no Quarterly Financial Statement or any other document which refers, or contains information not previously publicly disclosed with respect to the ownership of the Company by Cellectis or the IPO and transactions contemplated by this Agreement and the Ancillary Agreements following the Effective Date, will be filed with the Commission or otherwise made public by any Company Group member without the prior written consent of Cellectis, which consent shall not be unreasonably withheld. Notwithstanding anything to the contrary in this Section 7.01(d), the Company will not file its Quarterly Financial Statements with the Commission unless otherwise required by applicable Law or approved by Cellectis.

(e) Annual Financial Statements. On an annual basis, the Company will deliver to Cellectis an income statement and balance sheet and supplemental data related to cash flows and other necessary disclosures for such period in such format and detail as Cellectis may reasonably request, including for purposes of Cellectis to prepare reconciliations with respect to its financial statements. The Company will be responsible for reviewing its results and data and for informing Cellectis immediately of any post-closing adjustments within eight hours of its awareness. The Company must provide final sign-off of its results, using Cellectis' materiality standards, no later than seven Business Days after the annual close period end for the income statement, for the balance sheet, for the cash flow and supplemental data. A certification will be provided by the Controller and Chief Financial Officer and Chief Executive Officer of the Company pertaining to the financials and internal controls no later than seven Business Days prior to Cellectis'

filing of its audited annual financial statements (the "**Cellectis Annual Statements**") with the Commission. As soon as practicable, and in any event no later than 15 Business Days prior to the date on which Cellectis has notified the Company that Cellectis intends to file its annual report on Form 20-F or other document containing annual financial statements with the Commission, the Company will deliver to Cellectis any financial and other information and data with respect to the Company Group and its business, properties, financial position, results of operations and prospects as is reasonably requested by Cellectis in connection with the preparation of Cellectis' financial statements and annual report on Form 20-F. As soon as practicable, and in any event no later than fifteen Business Days prior to the date on which the Company is required to file an annual report on Form 10-K or other document containing its Annual Financial Statements (as defined below) with the Commission, the Company will deliver to Cellectis drafts of (A) the consolidated financial statements of the Company Group (and notes thereto) for such year, setting forth in each case in comparative form the consolidated figures (and notes thereto) for the previous fiscal years and all in reasonable detail and prepared in accordance with Regulation S-X and GAAP or IFRS (as applicable) and (B) a discussion and analysis by management of the Company Group's financial condition and results of operations for such year, including, without limitation, an explanation of any material period-to-period change and any off-balance sheet transactions, all in reasonable detail and prepared in accordance with Items 303(a) and 305 of Regulation S-K. The information set forth in (A) and (B) above is referred to in this Agreement as the "**Annual Financial Statements.**" The Company will deliver to Cellectis all revisions to such drafts as soon as any such revisions are prepared or made. No later than five Business Days prior to the date the Company publicly files the Annual Financial Statements with the Commission or otherwise makes such Annual Financial Statements publicly available, the Company will deliver to Cellectis the final form of its annual report on Form 10-K and certifications thereof by the principal executive and financial officers of the Company in substantially the forms required under Commission rules for periodic reports and in form and substance satisfactory to Cellectis; provided, however, that the Company may continue to revise such Annual Financial Statements prior to the filing thereof in order to make corrections and non-substantive changes which corrections and changes will be delivered by the Company to Cellectis as soon as practicable, and in any event within eight hours of making any such corrections or changes; provided, further, that Cellectis' and the Company's financial representatives will actively consult with each other regarding any changes (whether or not substantive) which the Company may consider making to its Annual Financial Statements and related disclosures during the five Business Days immediately prior to any anticipated filing with the Commission. In addition to the foregoing, no Annual Financial Statement or any other document which refers, or contains information not previously publicly disclosed with respect to the ownership of the Company by Cellectis or the IPO and transactions contemplated by this Agreement and the Ancillary Agreements following the Effective Date will be filed with the Commission or otherwise made public by any Company Group member without the prior written consent of Cellectis, which consent shall not be unreasonably withheld. Beginning with the 2017 fiscal year, the Company will use its reasonable best efforts to deliver to Cellectis, no later than five Business Days prior to the date on which Cellectis has notified the Company that Cellectis intends to file the

Cellectis Annual Statements with the Commission, the final form of the Annual Financial Statements accompanied by an opinion thereon by the Company's independent certified public accountants. Notwithstanding anything to the contrary in this Section 7.01(e), the Company will not file its Annual Financial Statements with the Commission unless otherwise required by applicable Law or approved by Cellectis.

(f) Affiliate Financial Statements. The Company will deliver to Cellectis all quarterly financial statements and annual financial statements of each Company Affiliate which is itself required to file financial statements with the Commission or otherwise make such financial statements publicly available, with such financial statements to be provided in the same manner and detail and on the same time schedule as Quarterly Financial Statements and Annual Financial Statements required to be delivered to Cellectis pursuant to this Section 7.01.

(g) Conformity with Cellectis Financial Presentation. All information provided by any Company Group member to Cellectis or filed with the Commission pursuant to Section 7.01(c) through (f) inclusive will be consistent in terms of format and detail and otherwise with the financial presentation in the prospectus for the IPO and as otherwise presently presented in financial reports to the Board of Directors of Cellectis, with such changes therein as may be requested by Cellectis from time to time consistent with changes in such accounting principles and practices.

(h) Company Reports Generally. The Company shall, and shall cause each Company Group member that files information with the Commission, to deliver to Cellectis: (A) substantially final drafts, as soon as the same are prepared, of (x) all reports, notices and proxy and information statements to be sent or made available by such Company Group member to its respective security holders, (y) all regular, periodic and other reports to be filed or furnished under Sections 13, 14 and 15 of the Exchange Act (including reports on Forms 10-K, 10-Q and 8-K and annual reports to shareholders), and (z) all registration statements and prospectuses to be filed by such Company Group member with the Commission or any securities exchange pursuant to the listed company manual (or similar requirements) of such exchange (collectively, the documents identified in clauses (x), (y) and (z) are referred to in this Agreement as "**Company Public Documents**"), and (B) as soon as practicable, but in no event later than five Business Days (other than with respect to Form 8-Ks) prior to the earliest of the dates the same are printed, sent or filed, current drafts of all such Company Public Documents and, with respect to Form 8-Ks, as soon as practicable, but in no event later than three Business Days prior to the earliest of the dates the same are printed, sent or filed in the case of planned Form 8-Ks and as soon as practicable, but in no event less than two hours in the case of unplanned Form 8-Ks; provided, however, that the Company may continue to revise such Company Public Documents prior to the filing thereof in order to make corrections and non-substantive changes which corrections and changes will be delivered by the Company to Cellectis as soon as practicable, and in any event within eight hours of making any such corrections or changes; provided, further, that Cellectis and the Company financial representatives will actively consult with each other regarding any changes (whether or not substantive) which the Company may consider making to any of its Company Public Documents and related disclosures prior to any anticipated filing

with the Commission, with particular focus on any changes which would have an effect upon Cellectis' financial statements or related disclosures. In addition to the foregoing, no Company Public Document or any other document which refers, or contains information not previously publicly disclosed with respect to the ownership of the Company by Cellectis or the IPO and transactions contemplated by this Agreement and the Ancillary Agreements following the Effective Date will be filed with the Commission or otherwise made public by any Company Group member without the prior written consent of Cellectis.

(i) Budgets and Financial Projections. The Company will, as promptly as practicable, deliver to Cellectis copies of all annual budgets and financial projections (including initial annual budgets and reforecasts after the first and third quarters of each fiscal year, each consistent in terms of format and detail mutually agreed upon by the Parties) relating to the Company on a consolidated basis and will provide Cellectis an opportunity to meet with management of the Company to discuss such budgets and projections.

(j) Other Information. With reasonable promptness, the Company will deliver to Cellectis such additional financial and other information and data with respect to the Company Group and their business, properties, financial positions, results of operations and prospects as from time to time may be reasonably requested by Cellectis.

(k) Press Releases and Similar Information. The Company and Cellectis will consult with each other as to the timing of their annual and quarterly earnings releases and any interim financial guidance for a current or future period and will give each other the opportunity to review the information therein relating to the Company Group and to comment thereon. Cellectis and the Company will make reasonable efforts to issue their respective annual and quarterly earnings releases at approximately the same time on the same date. Company shall coordinate the timing of its respective earnings release conference calls with Cellectis earning calls timing, such that the Company shall issue its annual and quarterly earnings release no later than five days before the Cellectis' annual and quarterly earnings release, provided that Cellectis will inform the Company of its next financial year agenda quarterly releases not later than December 15 of the preceding year. No later than eight hours prior to the time and date that a Party intends to publish its regular annual or quarterly earnings release or any financial guidance for a current or future period, such Party will deliver to the other Party copies of substantially final drafts of all related press releases and other statements to be made available by any member of that Party's Group to employees of any member of that Party's Group or to the public concerning any matters that could be reasonably likely to have a material financial impact on the earnings, results of operations, financial condition or prospects of any Company Group member. In addition, prior to the issuance of any such press release or public statement that meets the criteria set forth in the preceding two sentences, the issuing Party will consult with the other Party regarding any changes (other than typographical or other similar minor changes) to such substantially final drafts. Immediately following the issuance thereof, the issuing Party will deliver to the other Party copies of final drafts of all press releases and other public statements. Prior to the Effective Date, the Company shall consult with Cellectis prior to issuing any press releases or otherwise making public

statements with respect to the IPO and transactions contemplated by this Agreement and the Ancillary Agreements following the Effective Date or any of the other transactions contemplated hereby and prior to making any filings with any Governmental Authority with respect thereto.

(l) Cooperation on Cellectis Filings. The Company will cooperate fully, and cause Company Auditors to cooperate fully, with Cellectis to the extent requested by Cellectis in the preparation of Cellectis' public earnings or other press releases, quarterly reports, annual reports to shareholders, annual reports on Form 20-F, any current reports on Form 6-K and any other proxy, information and registration statements, reports, notices, prospectuses and any other filings or furnishings made by Cellectis with the Commission, any national or non-U.S. securities exchange or otherwise made publicly available (collectively, the "**Cellectis Public Filings**"). The Company agrees to provide to Cellectis all information that Cellectis reasonably requests in connection with any Cellectis Public Filings or that, in the judgment of Cellectis' legal counsel, is required to be disclosed or incorporated by reference therein under any Law, rule or regulation. The Company will provide such information in a timely manner on the dates requested by Cellectis (which may be earlier than the dates on which the Company otherwise would be required hereunder to have such information available) to enable Cellectis to prepare, print and release all Cellectis Public Filings on such dates as Cellectis will determine but in no event later than as required by applicable Law. The Company will use its commercially reasonable efforts to cause Company Auditors to consent to any reference to them as experts in any Cellectis Public Filings required under any Law, rule or regulation. If and to the extent requested by Cellectis, the Company will diligently and promptly review all drafts of such Cellectis Public Filings and prepare in a diligent and timely fashion any portion of such Cellectis Public Filing pertaining to the Company. Prior to any printing or public release of any Cellectis Public Filing, an appropriate executive officer of the Company will, if requested by Cellectis, certify that the information relating to any Company Group member or the Company Business in such Cellectis Public Filing is accurate, true, complete and correct in all material respects. Unless required by Law, rule or regulation, the Company will not publicly release any financial or other information which conflicts with the information with respect to any Company Group member or the Company Business that is included in any Cellectis Public Filing without Cellectis' prior written consent. Prior to the release or filing thereof, Cellectis will provide the Company with a draft of any portion of a Cellectis Public Filing containing information relating to the Company Group and will give the Company an opportunity to review such information and comment thereon; provided that Cellectis will determine in its sole and absolute discretion the final form and content of all Cellectis Public Filings.

(m) The Company must comply with Cellectis policies including without limitation the policies regarding the reporting requirements (such as the use of internal IT reporting tools like SAP, or other Cellectis internal IT systems).

Section 7.02. *Auditors and Audits; Annual Statements and Accounting*. The Company agrees that for so long as Cellectis is required to consolidate the results of operations and financial position of the Company and any other members of the Company Group or to account for its investment in the Company under the equity method of accounting (determined in accordance with GAAP or IFRS (as applicable) and consistent with reporting requirements under applicable Law) (an "**Applicable Period**"); provided that the Company's obligations pursuant to Section 7.02(e) and (f) shall continue beyond an Applicable Period to the extent any amendments to, or restatements or modifications of, Cellectis Public Filings are necessary with respect to any such Applicable Period:

(a) Selection of Company Auditors. Unless required by Law, the Company will not select a different accounting firm than Ernst & Young (or its affiliate accounting firms) (unless so directed by Cellectis in accordance with a change by Cellectis in its accounting firm) to serve as its (and the Company Affiliates') independent certified public accountants ("**Company Auditors**") without Cellectis' prior written consent; provided, however, that, to the extent any such Company Affiliates are currently using a different accounting firm to serve as their independent certified public accountants, such Company Affiliates may continue to use such accounting firm provided such accounting firm is reasonably satisfactory to Cellectis.

(b) Audit Timing. Beginning with the 2017 fiscal year, the Company will use its best efforts to enable Company Auditors to complete their audit such that they will date their opinion on the Annual Financial Statements on the same date that Cellectis' independent certified public accountants ("**Cellectis Auditors**") date their opinion on the Cellectis Annual Statements, and to enable Cellectis to meet its timetable for the printing, filing and public dissemination of the Cellectis Annual Statements, all in accordance with Section 7.01(a) hereof and as required by applicable Law, *provided* that, if the Cellectis Annual Statements shall be dated as of a date such that compliance with this Section 7.02(b) would cause the Company to fail to timely comply with any filing requirement of the Commission, then the Company shall be permitted to cause the Company Auditors to date their opinion on such earlier date as may be required to achieve such compliance.

(c) Quarterly Review. Beginning with the first fiscal quarter after the Effective Date, the Company shall use its best efforts to enable Cellectis' Auditors to complete their quarterly review procedures on the Quarterly Financial Statements on the same date that Cellectis Auditors complete their quarterly review procedures on Cellectis' quarterly financial statements.

(d) Information Needed by Cellectis. The Company will provide to Cellectis on a timely basis all information that Cellectis reasonably requires to meet its schedule for the preparation, printing, filing, and public dissemination of the Cellectis Annual Statements in accordance with Section 7.01(a) hereof and as required by applicable Law. Without limiting the generality of the foregoing, the Company will provide all required financial information with respect to the Company Group to the Company's Auditors in a sufficient and reasonable time and in sufficient detail to permit Company Auditors to take all steps and perform all reviews necessary to provide sufficient assistance to Cellectis' Auditors with respect to information to be included or contained in the Cellectis Annual Statements.

(e) Access to Company Auditors. The Company will authorize Company's Auditors to make available to Cellectis' Auditors both the personnel who performed, or are performing, the annual audit and quarterly reviews of the Company and work papers related to the annual audit and quarterly reviews of the Company, in all cases within a reasonable time prior to Company Auditors' opinion date, so that Cellectis' Auditors are able to perform the procedures they consider necessary to take responsibility for the work of Company's Auditors as it relates to Cellectis Auditors' report on Cellectis' financial statements, all within sufficient time to enable Cellectis to meet its timetable for the printing, filing and public dissemination of the Cellectis Annual Statements.

(f) Access to Records. At Cellectis' request, for so long as Cellectis and its Affiliates beneficially own, in the aggregate, at least 50% of the outstanding shares of Common Stock of the Company, Cellectis and its employees and other representatives and potential transferees of its Common Stock and their representatives shall have the right to consult with and advise senior management of the Company and to review the Company's books and records so that Cellectis may conduct audits relating to Company business, including without limitation the financial statements or other financial information provided by the Company under this Agreement as well as to the internal accounting controls, operations and Contracts of the Company Group upon reasonable advance notice, provided that such parties, potential transferees and their respective representatives agree to keep any such confidential, non-public information about the Company confidential (except as may be required by law or applicable listing standards then in effect) and agree to comply with all applicable securities laws in connection therewith.

(g) Notice of Changes. Subject to Section 7.01(g), the Company will give Cellectis as much prior notice as reasonably practicable of any proposed determination of, or any significant changes in, the Company's accounting estimates or accounting principles from those in effect on the Effective Date. The Company will consult with Cellectis and, if requested by Cellectis, the Company will consult with Cellectis' Auditors with respect thereto. The Company will not make any such determination or changes without Cellectis' prior written consent if such a determination or a change would be required to be disclosed in the Company's or Cellectis' financial statements as filed with the Commission or otherwise publicly disclosed therein.

(h) Accounting Changes Requested by Cellectis. Notwithstanding clause (g) above, the Company will make any changes in its accounting estimates or accounting principles that are requested by Cellectis in order for the Company's accounting practices and principles to be consistent with those of Cellectis.

(i) Special Reports of Deficiencies or Violations. The Company will report in reasonable detail to Cellectis the following events or circumstances promptly after any executive officer of the Company or any member of the Board of Directors of the Company becomes aware of such matter: (A) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting; (B) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting; (C) any illegal act within the meaning of Section 10A(b) and (f) of the Exchange Act; and (D) any report of a material violation of Law that an attorney representing any Company Group member has formally made to any officers or directors of the Company pursuant to the SEC's attorney conduct rules (17 C.F.R. Part 205).

Section 7.03. *Retention of Certain Services*. As long as Cellectis and its Affiliates beneficially own at least 50% of the outstanding shares of Common Stock of the Company, Cellectis shall continue to provide the services as defined in the Management Services Agreement, pursuant to the terms as agreed between the Parties from time to time.

ARTICLE 8
DISPUTE RESOLUTION

Section 8.01. *Disputes*. Except as otherwise specifically provided in any Ancillary Agreement, the procedures for discussion, negotiation and mediation set forth in this Article 8 shall apply to all disputes, controversies or claims (whether arising in contract, tort or otherwise) between or among any Person in the Cellectis Group and the Company Group that may arise out of or relate to, or arise under or in connection with this Agreement, or the transactions contemplated hereby or thereby (including all actions taken in furtherance of the transactions contemplated hereby on or prior to the Effective Date.

Section 8.02. *Escalation; Mediation*. (a) It is the intent of the Parties to use their respective commercially reasonable efforts to resolve expeditiously any dispute, controversy or claim between or among them with respect to the matters covered by this Agreement or any Ancillary Agreement that may arise from time to time on a mutually acceptable negotiated basis. In furtherance of the foregoing, any Party involved in a dispute, controversy or claim with respect to such matters may deliver a notice (an "**Escalation Notice**") demanding an in person meeting involving representatives of the Parties at a senior level of management of the Parties (or if the Parties agree, of the appropriate strategic business unit or division within such entity). A copy of any such Escalation Notice shall be given to the General Counsel, or like officer or official, of each Party involved in the dispute, controversy or claim (which copy shall state that it is an Escalation Notice pursuant to this Agreement). Any agenda, location or procedures for such discussions or negotiations between the Parties may be established by the Parties from time to time; provided, however, that the Parties shall use their commercially reasonable efforts to meet within 30 days of the delivery of the Escalation Notice.

(b) If the Parties are not able to resolve the dispute, controversy or claim through the escalation process referred to above, then the matter shall be referred to mediation. The Parties shall retain a mediator to aid the Parties in their discussions and negotiations by informally providing advice to the Parties. Any opinion expressed by the mediator shall be strictly advisory and shall not be binding on the Parties, nor shall any opinion expressed by the mediator be admissible in any other proceeding. The mediator may be chosen from a list of mediators previously selected by the Parties or by other agreement of the Parties. Costs of the mediation shall be borne equally by the Parties involved in the matter, except that each Party shall be responsible for its own expenses. Mediation shall be a prerequisite to the commencement of any Action by either Party.

Section 8.03. *Court Actions*. (a) In the event that any Party, after complying with the provisions set forth in Section 8.02 above, desires to commence an Action, such Party, subject to Section 11.18, may submit the dispute, controversy or claim (or such series of related disputes, controversies or claims) to any court of competent jurisdiction as set forth in Section 11.18.

(b) Unless otherwise agreed in writing, the Parties will continue to provide service and honor all other commitments under this Agreement during the course of dispute resolution pursuant to the provisions of this Article 8, except to the extent such commitments are the subject of such dispute, controversy or claim.

ARTICLE 9
FURTHER ASSURANCES

Section 9.01. *Further Assurances*. (a) In addition to the actions specifically provided for elsewhere in this Agreement, each of the Parties will cooperate with each other and shall use its (and will cause their respective Subsidiaries and Affiliates to use) commercially reasonable efforts, prior to, on and after the Effective Date, to take, or cause to be taken, all actions, and to do, or cause to be done, all things, reasonably necessary, proper or advisable under applicable Laws, regulations and agreements to consummate and make effective the transactions contemplated by this Agreement and the Ancillary Agreements.

(b) Without limiting the foregoing, prior to, on and after the Effective Date, each Party shall cooperate with the other Party, and without any further consideration, at the expense of such other Party, to execute and deliver, or use its commercially reasonable efforts to cause to be executed and delivered, all instruments, including instruments of conveyance, assignment and transfer, and to make all filings with, and to obtain all consents, approvals or authorizations of, any Governmental Authority or any other Person under any permit, license, agreement, indenture, order, decree, financial assurance (including letter of credit) or other instrument (including any Consents or governmental approvals), and to take all such other actions as such Party may reasonably be requested to take by such other Party hereto from time to time, consistent with the terms of this Agreement, in order to effectuate the provisions and purposes of this Agreement and the Ancillary Agreements and the other transactions contemplated hereby and thereby.

(c) On or prior to the Effective Date, Cellectis and the Company in their respective capacities as direct and indirect stockholders of their respective Subsidiaries, shall each ratify any actions which are reasonably necessary or desirable to be taken by Cellectis, the Company or any other Subsidiary of the Company or Cellectis, as the case may be, to effectuate the transactions contemplated by this Agreement.

ARTICLE 10
TERMINATION

Section 10.01. *Termination*. This Agreement may be terminated in whole or in part at any time after the consummation of the IPO upon the earlier of (i) mutual written consent of Cellectis and the Company and (ii) the date on which Cellectis and its Affiliates cease to hold at least 15% of the outstanding shares of Common Stock of the Company.

Section 10.02. *Effect of Termination*. In the event of any termination of this Agreement in whole or in part, no Party (or any of its directors, officers, members or managers) shall have any Liability or further obligation to any other Party with respect to the portions of the Agreement so terminated.

ARTICLE 11
MISCELLANEOUS

Section 11.01. *Counterparts; Entire Agreement; Conflicting Agreements*. (a) This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party. Execution of this Agreement or any other documents pursuant to this Agreement by facsimile or other electronic copy of a signature shall be deemed to be, and shall have the same effect as, executed by an original signature.

(b) This Agreement, the Ancillary Agreements, the Surviving Contracts, the exhibits, the schedules and appendices hereto and thereto contain the entire agreement between the Parties with respect to the subject matter hereof, supersede all previous agreements, negotiations, discussions, writings, understandings, commitments and conversations with respect to such subject matter and there are no agreements or understandings between the Parties with respect to such subject matter other than those set forth or referred to herein or therein.

(c) In the event of any inconsistency between this Agreement and any Schedule hereto, the Schedule shall prevail. Subject to Section 4.05(d), in the event and to the extent that there shall be a conflict between the provisions of this Agreement and the provisions of any Ancillary Agreement, the Ancillary Agreement shall control with respect to the subject matter thereof, and this Agreement shall control with respect to all other matters.

Section 11.02. *No Construction Against Drafter*. The Parties acknowledge that this Agreement and all the terms and conditions contained herein have been fully reviewed and negotiated by the Parties. Having acknowledged the foregoing, the Parties agree that any principle of construction or rule of law that provides that, in the event of any inconsistency or ambiguity, an agreement shall be construed against the drafter of the agreement shall have no application to the terms and conditions of this Agreement.

Section 11.03. *Governing Law*. This Agreement shall be governed by and construed and interpreted in accordance with the Laws of the State of New York, without regard to the conflict of laws principles thereof that would result in the application of any Law other than the Laws of the State of New York.

Section 11.04. *Assignability*. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and permitted assigns; *provided, however*, that no Party hereto may assign its respective rights or delegate its respective obligations under this Agreement without the express prior written consent of the other Party or Parties hereto.

Section 11.05. *Third Party Beneficiaries*. Except for the indemnification rights under this Agreement of any Cellectis Indemnitee or Company Indemnitee in their respective capacities as such (a) the provisions of this Agreement are solely for the benefit of the Parties and are not intended to confer upon any Person (including employees of the Parties hereto) except the Parties any rights or remedies hereunder, and (b) there are no third party beneficiaries of this Agreement and this Agreement shall not provide any third person (including employees of the Parties hereto) with any remedy, claim, liability, reimbursement, claim of action or other right in excess of those existing without reference to this Agreement.

Section 11.06. *Notices*. All notices or other communications under this Agreement shall be in writing and shall be deemed to be duly given when (a) delivered in person, (b) deposited in the United States mail or private express mail, postage prepaid, addressed or (c) sent via email, in each case as follows:

If to Cellectis, to:

Cellectis S.A.
8, rue de la Croix Jarry
75013 Paris, France
Attention: Chief Executive Officer
Facsimile: +33 (0)1 81 69 16 06
E-mail: andre.choulika@cellectis.com

If to the Company to:

Calyxt, Inc.
600 County Road D West
Suite 8
New Brighton, MN 55112
Attention: Chief Executive Officer
E-mail: Federico.tripodi@calyxt.com

Any Party may, by notice to the other Party, change the physical or email address to which such notices are to be given. Any notice that is required under Article 7 to be given by a Party within a time period measured in hours, where the specified deadline to give such notice would fall between the hours of midnight to 7:00 a.m. local time for such Party on a particular day will be considered to have been given in a timely manner if the notice is delivered before 9:00 a.m. local time on such day.

Section 11.07. *Severability*. If any provision of this Agreement or the application thereof to any Person or circumstance is determined by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions hereof or the application of such provision to Persons or circumstances or in jurisdictions other than those as to which it has been held invalid or unenforceable, shall remain in full force and effect and shall in no way be affected, impaired or invalidated thereby, so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner adverse to any Party. Upon such determination, the Parties shall negotiate in good faith in an effort to agree upon such a suitable and equitable provision to effect the original intent of the Parties.

Section 11.08. *Force Majeure*. No Party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations under this Agreement results from any cause beyond its reasonable control and without its fault or negligence, such as acts of God, acts of civil or military authority, embargoes, epidemics, war, riots, insurrections, fires, explosions, earthquakes, floods, unusually severe weather conditions, labor problems or unavailability of parts, or, in the case of computer systems, any failure in electrical or air conditioning equipment. In the event of any such excused delay, the time for performance shall be extended for a period equal to the time lost by reason of the delay.

Section 11.09. *Late Payments*. Except as expressly provided to the contrary in this Agreement or in any Ancillary Agreement, any amount not paid when due pursuant to this Agreement (and any amounts billed or otherwise invoiced or demanded and properly payable that are not paid within 30 days of such bill, invoice or other demand) shall accrue interest at a rate per annum equal to the Prime Rate plus 2%.

Section 11.10. *Expenses*. Except as otherwise specified in this Agreement or the Ancillary Agreements or as otherwise agreed in writing between Cellectis and the Company, Cellectis and the Company shall each be responsible for its own fees, costs and expenses paid or incurred in connection with the IPO.

Section 11.11. *Headings*. The article, section and paragraph headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

Section 11.12. *Survival of Covenants*. The covenants contained in this Agreement, indemnification obligations and liability for the breach of any obligations contained herein, shall survive the Effective Date and the other transactions contemplated by this Agreement shall remain in full force and effect.

Section 11.13. *Waivers of Default*. Waiver by any Party of any default by the other Party of any provision of this Agreement shall not be deemed a waiver by the waiving Party of any subsequent or other default, nor shall it prejudice the rights of the other Party.

Section 11.14. *Specific Performance*. In the event of any actual or threatened default in, or breach of, any of the terms, conditions and provisions of this Agreement, the Party or Parties who are or are to be thereby aggrieved shall have the right to specific performance and injunctive or other equitable relief of its rights under this Agreement, in addition to any and all other rights and remedies at law or in equity, and all such rights and remedies shall be cumulative.

Section 11.15. *Amendments*. No provisions of this Agreement shall be deemed waived, amended, supplemented or modified by any Party, unless such waiver, amendment, supplement or modification is in writing and signed by the authorized representative of the Party against whom it is sought to enforce such waiver, amendment, supplement or modification.

Section 11.16. *Interpretation*. Words in the singular shall be held to include the plural and vice versa and words of one gender shall be held to include the other genders as the context requires. The terms “hereof”, “herein” and “herewith” and words of similar import shall, unless otherwise stated, be construed to refer to this Agreement as a whole (including all of the schedules, exhibits and appendices hereto) and not to any particular provision of this Agreement. Article, Section, Exhibit, Schedule and Appendix references are to the Articles, Sections, Exhibits, Schedules and Appendices to this Agreement unless otherwise specified. The word “including” and words of similar import when used in this Agreement means “including, without limitation”, unless the context otherwise requires or unless otherwise specified.

Section 11.17. *Waiver of Jury Trial*. EACH OF THE PARTIES HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY COURT PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF AND PERMITTED UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT. EACH OF THE PARTIES HEREBY (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 11.17.

Section 11.18. *Submission to Jurisdiction; Waivers*. With respect to any Action relating to or arising out of this Agreement, subject to the provisions of Article 8, each Party to this Agreement irrevocably (a) consents and submits to the exclusive jurisdiction of the courts of the State of New York and any court of the United States located in the Borough of Manhattan in New York City; (b) waives any objection which such Party

may have at any time to the laying of venue of any Action brought in any such court, waives any claim that such Action has been brought in an inconvenient forum and further waives the right to object, with respect to such Action, that such court does not have jurisdiction over such Party; and (c) consents to the service of process at the address set forth for notices in Section 11.06 herein; provided, however, that such manner of service of process shall not preclude the service of process in any other manner permitted under applicable Law.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the date set forth above.

CELLECTIS S.A.

By: _____
Name:
Title:

CALYXT, INC.

By: _____
Name:
Title:

[*Signature Page to the Separation Agreement*]

Schedule 3.01(b)(iii)

Stockholders Agreement by and among Calyxt, Inc., Cellectis S.A. and the Persons listed on Schedule A thereto, dated as of [•], 2017

Current account agreement between Calyxt, Inc. and Cellectis S.A., dated March 7, 2011

Schedule 3.04

Letter of Credit with Société Générale to cover the New Brighton offices

Exhibit 10.4

STOCKHOLDERS AGREEMENT

by and among

CALYXT, INC.,

CELLECTIS S.A.

and

the Persons listed on Schedule A hereto

Dated as of [●], 2017

STOCKHOLDERS AGREEMENT

THIS STOCKHOLDERS AGREEMENT (as it may be amended from time to time in accordance with the terms hereof, this "**Agreement**"), dated as of [●], 2017, is made by and among Calyxt, Inc., a Delaware corporation (the "**Company**"), Cellectis S.A., a French *société anonyme* ("**Cellectis**") and the Persons listed on Schedule A hereto (each, a "**Non-Cellectis Holder**" and collectively, the "**Non-Cellectis Holders**").

RECITALS

WHEREAS, Cellectis beneficially owned all of the outstanding Company Shares (as defined below) prior to the consummation of the Company's proposed initial public offering (the "**IPO**"); and

WHEREAS, in connection with the IPO, the Company, Cellectis and the Non-Cellectis Holders desire to provide for certain rights and obligations of Cellectis, the Company and the Non-Cellectis Holders upon and after the consummation of the IPO.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises, covenants and agreements of the Parties, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

ARTICLE 1

DEFINITIONS

Section 1.01. *Definitions*. As used in this Agreement, the following terms shall have the following meanings:

"**Additional Piggyback Rights**" has the meaning set forth in Section 4.02(c).

"**Affiliate**" of any Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such Person; *provided*, *however*, that, for purposes of this Agreement, the Company shall not be considered an "**Affiliate**" of any of Cellectis and its Subsidiaries other than the Company, and each of Cellectis and its Subsidiaries other than the Company shall not be considered an "**Affiliate**" of the Company. As used herein, "**control**" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such entity, whether through ownership of voting securities or other interests, by contract or otherwise. For purposes of this definition, "**Affiliated**," "**controlling**," "**controlled by**," and "**under common control with**" have correlative meanings.

"**Agreement**" has the meaning set forth in the preamble.

"**Automatic Shelf Registration Statement**" has the meaning set forth in Section 4.04.

"**Beneficially Owned**" has the meaning set forth in Rule 13d-3 under the Exchange Act, but without reference to clause (d)(1) of such Rule.

"**Board of Directors**" means the board of directors of the Company.

"**Business Day**" means any day other than a Saturday, Sunday or day on which banking institutions in New York, New York are authorized or obligated by law or executive order to close.

"**Cellectis**" has the meaning set forth in the preamble.

"**Claims**" has the meaning set forth in 4.09(a).

"**Company**" has the meaning set forth in the preamble.

"**Company Shares**" means common stock of the Company and any and all securities of any kind whatsoever of the Company that may be issued by the Company after the date hereof in respect of, in exchange for, or in substitution of, Company Shares, pursuant to any stock dividends, stock splits, reverse stock splits, combinations, reclassifications, recapitalizations, share exchange, consolidation or other reorganizations and the like occurring after the date hereof.

"**Company Shares Equivalents**" means all options, warrants and other securities convertible into, or exchangeable or exercisable for (at any time or upon the occurrence of any event or contingency and without regard to any vesting or other conditions to which such securities may be subject) Company Shares or other equity securities of the Company (including any note or debt security convertible into or exchangeable for Company Shares or other equity securities of the Company).

"**Demand Exercise Notice**" has the meaning set forth in Section 4.01(a).

"**Demand Registration**" has the meaning set forth in Section 4.01(a).

"**Demand Registration Request**" has the meaning set forth in Section 4.01(a).

"**Director**" means a member of the Board of Directors.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and any successor thereto, and any rules and regulations promulgated thereunder, all as the same shall be in effect from time to time.

"**Expenses**" means any and all fees and expenses incident to the Company's performance of or compliance with Article 4, including: (i) SEC, stock exchange and FINRA registration and filing fees and all listing fees and fees with respect to the inclusion of securities on the [New York Stock Exchange / NASDAQ] or on any other securities market on which the Company Shares are listed or quoted, (ii) fees and expenses of compliance with state securities or "blue sky" laws and in connection with the preparation of a "blue sky" survey, including reasonable fees and expenses of outside "blue sky" counsel, (iii) printing and copying expenses, (iv) messenger and delivery expenses, (v) expenses incurred in connection with any road show, (vi) fees and disbursements of counsel for the Company, (vii) with respect to each registration, the fees

and disbursements of one counsel for the Participating Holder(s) (selected by the Majority Participating Holders), (viii) fees and disbursements of all independent public accountants (including the expenses of any audit and/or comfort letter and updates thereof) and fees and expenses of other Persons, including special experts, retained, or authorized to be retained, by the Company, (ix) fees and expenses payable to any qualified independent underwriter required under applicable FINRA rules, (x) any other fees and disbursements of underwriters, if any, customarily paid by issuers or sellers of securities (excluding, for the avoidance of doubt, any underwriting commission, discount or spread), (xi) any rating agency fees, and (xii) expenses for securities law liability insurance.

"**FINRA**" means the Financial Industry Regulatory Authority.

"**Governing Documents**" means (i) with respect to the Company, the certificate of incorporation of the Company, as amended or modified from time to time, and the by-laws of the Company, as amended or modified from time to time and (ii) with respect to any other Person, such Person's certificate of incorporation, by-laws or other similar constitutive documents.

"**Governmental Authority**" means any nation or government, any state, municipality or other political subdivision thereof, and any entity, body, agency, commission, department, board, bureau, court, tribunal or other instrumentality, whether federal, state, local, domestic, foreign or multinational, exercising executive, legislative, judicial, regulatory, administrative or other similar functions of, or pertaining to, government and any executive official thereof.

"**Holder**" means (i) Cellectis so long as it holds any Registrable Securities and (ii) any Person owning Registrable Securities who is a Permitted Transferee and becomes party to this Agreement.

"**Independent Director**" means a Director who qualifies, as of the date of such Director's election or appointment to the Board of Directors and as of any other date on which the determination is being made, as an "independent director" pursuant to SEC rules and applicable listing standards, as amended from time to time, as determined by the Board of Directors without the vote of such Director.

"**Initiating Holder**" has the meaning set forth in Section 4.01(a).

"**IPO**" has the meaning set forth in the recitals.

"**Litigation**" means any action, proceeding or investigation in any court or before any Governmental Authority.

"**Majority Participating Holders**" means (i) Cellectis if it is participating in an offering of Registrable Securities pursuant to Sections 4.01 or Section 4.02 or (ii) otherwise, the Participating Holders holding more than 50% of the Registrable Securities proposed to be included in such offering.

"**Manager**" has the meaning set forth in Section 4.01(c).

Any "**Necessary Action**" means, with respect to a specified result, all actions (to the extent such actions are permitted by law and by the Governing Documents) necessary to cause such result, including (i) voting or providing a written consent or proxy with respect to the Company Shares, (ii) causing the adoption of stockholders' resolutions and amendments to the Governing Documents, (iii) causing Directors (to the extent such Directors were nominated or designated by the Person obligated to undertake the Necessary Action, and subject to any fiduciary duties that such Directors may have as Directors) to act in a certain manner or causing them to be removed in the event they do not act in such a manner, (iv) executing agreements and instruments, and (v) making, or causing to be made, with governmental, administrative or regulatory authorities, all filings, registrations or similar actions that are required to achieve such result.

"**Non-Cellectis Holder**" and "**Non-Cellectis Holders**" have the meaning set forth in the preamble.

"**Participating Holders**" means all Holders of Registrable Securities which are proposed to be included in any registration or offering of Registrable Securities pursuant to Section 4.01 or Section 4.02.

"**Party**" means the Company, Cellectis, the Non-Cellectis Holders and any Permitted Transferee who becomes a Party pursuant to Article 5.

"**Permitted Transferee**" means in the case of any Holder, (i) any Affiliate of such Holder that executes a customary joinder agreement to this Agreement or (ii) a Person or Affiliated Persons to whom such Holder transferred a number of Company Shares such that after giving effect to such transfer such Person or Affiliated Persons Beneficially Owns or Own, in the aggregate, at least 10% of the then outstanding Company Shares.

"**Person**" means an individual, partnership, limited liability company, corporation, trust, other entity, association, estate, unincorporated organization or a government or any agency or political subdivision thereof.

"**Piggyback Shares**" has the meaning set forth in Section 4.03(a)(iv).

"**Registrable Securities**" means any Company Shares held by the Holders at any time (including those held as a result of the conversion or exercise of Company Shares Equivalents); *provided* that, as to any Registrable Securities held by a particular Holder, such securities shall cease to be Registrable Securities when (A) a registration statement with respect to the sale of such securities shall have been declared effective under the Securities Act and such securities shall have been disposed of in accordance with such registration statement, or (B) (x) such securities are eligible to be sold by such Holder in a single transaction in compliance with the requirements of Rule 144 under the Securities Act, as such Rule 144 may be amended (or any successor provision thereto) without volume limitations under Rule 144 and (y) such Holder no longer Beneficially Owns in the aggregate a number of Company Shares equal to at least 10% of the then outstanding Company Shares.

"**Rule 144**" and "**Rule 144A**" have the meaning set forth in Section 4.12.

"**SEC**" means the U.S. Securities and Exchange Commission.

"**Section 4.03(a) Sale Number**" has the meaning set forth in Section 4.03(a).

"**Section 4.03(b) Sale Number**" has the meaning set forth in Section 4.03(b).

"**Section 4.03(c) Sale Number**" has the meaning set forth in Section 4.03(c).

"**Securities Act**" means the U.S. Securities Act of 1933, as amended, and any successor thereto, and any rules and regulations promulgated thereunder, all as the same shall be in effect from time to time.

"**Subsidiary**" means, when used with respect to any Person, (a) a corporation in which such Person or one or more Subsidiaries of such Person, directly or indirectly, owns capital stock having a majority of the total voting power in the election of directors of all outstanding shares of all classes and series of capital stock of such corporation entitled generally to vote in such election; and (b) any other Person (other than a corporation) in which such Person or one or more Subsidiaries of such Person, directly or indirectly, has (i) a majority ownership interest or (ii) the power to elect or direct the election of a majority of the members of the governing body of such first-named Person.

"**Valid Business Reason**" has the meaning set forth in Section 4.01(a)(iv).

"**WKSI**" has the meaning set forth in Section 4.04.

Section 1.02. *Other Interpretive Provisions*.

(a) The meanings of defined terms are equally applicable to the singular and plural forms of the defined terms.

(b) The words "**hereof**," "**herein**," "**hereunder**" and similar words refer to this Agreement as a whole and not to any particular provision of this Agreement; and any subsection and Section references are to this Agreement unless otherwise specified.

(c) The term "**including**" is not limiting and means "**including without limitation**."

(d) The captions and headings of this Agreement are for convenience of reference only and shall not affect the interpretation of this Agreement.

(e) Whenever the context requires, any pronouns used herein shall include the corresponding masculine, feminine or neuter forms.

ARTICLE 2

Representations and Warranties

Each of the Parties hereby represents and warrants, solely with respect to itself (and, in each case to the extent applicable in the case of Parties who are natural persons), to each other Party that:

Section 2.01. *Existence; Authority; Enforceability*. Such Party has the power and authority to enter into this Agreement and to carry out its obligations hereunder. Such Party is duly organized and validly existing under the laws of its jurisdiction of organization, and the execution of this Agreement, and the performance of its obligations hereunder, have been authorized by all Necessary Action, and no other act or proceeding on its part is necessary to authorize the execution of this Agreement or the performance of its obligations hereunder. This Agreement has been duly executed by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms except as the same may be affected by bankruptcy, insolvency, moratorium or similar laws, or by legal or equitable principles relating to or limiting the rights of contracting parties generally.

Section 2.02. *Absence of Conflicts*. The execution and delivery by such Party of this Agreement and the performance of its obligations hereunder does not (a) conflict with, or result in the breach of any provision of the constitutive documents of such Party; (b) result in any violation, breach, conflict, default or event of default (or an event which with notice, lapse of time, or both, would constitute a default or event of default), or give rise to any right of acceleration or termination or any additional payment obligation, under the terms of any contract, agreement or permit to which such Party is a party or by which such Party's assets or operations are bound or affected; or (c) violate any law applicable to such Party, except, in the case of clause (b), as would not have a material adverse effect on such Party's ability to perform its obligations hereunder.

Section 2.03. *Consents*. Other than as has already been obtained, no consent, waiver, approval, authorization, exemption, registration, license or declaration is required to be made or obtained by such Party in connection with the execution, delivery or performance of this Agreement, except in each case, as would not have a material adverse effect on such Party's ability to perform its obligations hereunder.

ARTICLE 3

Governance

Section 3.01. *Board of Directors*.

(a) Effective as of the date of this Agreement, the Board of Directors shall be composed of five Directors, each of whom shall be a designee of Cellectis and two of whom shall be "independent directors" pursuant to applicable listing standards, in each case in accordance with the Company's Governing Documents.

(b) From and after the date of this Agreement, so long as Cellectis and its Affiliates Beneficially Own, in the aggregate, a number of Company Shares equal to at least 15% of the then outstanding Company Shares, Cellectis shall have the right, but not the obligation, to nominate for the Board of Directors a number of designees equal to the greater of: (i) three designees and (ii) a majority of the Directors. In the event that at any time the number of designees of Cellectis who are members of the Board of Directors is fewer than the total number of designees Cellectis is entitled to nominate pursuant to this Section 3.01(b), Cellectis shall have the right, at any time, to nominate such additional designees to which it is entitled, in which case the Company shall take, or cause to be taken, all Necessary Action to, (A) increase the size of the Board of Directors as required to enable Cellectis to so nominate such additional designees and (B) appoint such additional designees nominated by Cellectis to such newly created directorships. So long as Cellectis and its Affiliates Beneficially Own, in the aggregate, a number of Company Shares equal to at least 15% of the then outstanding Company Shares, no change shall be made to the number of Directors on the Board of Directors without the prior approval of Cellectis.

(c) The Company shall take all Necessary Action to cause the Board of Directors to be constituted as set forth in this Section 3.01 (including appointing or removing designees nominated by Cellectis and filling any vacancies created by reason of death, disability, retirement, removal or resignation of the Cellectis' designees with a new designee of Cellectis). The Company agrees to include in the slate of nominees recommended by the Board of Directors and in the Company's proxy statement or notice of each meeting at which Directors are to be elected those persons designated pursuant to this Section 3.01 and to use its best efforts to cause the election or appointment of each such designee to the Board of Directors, including nominating such designees to be elected as Directors.

(d) Any nominee designated by Cellectis pursuant to this Section 3.01 may be removed (with or without cause) from time to time and at any time by Cellectis upon notice to the Company, and may otherwise only be removed for cause (subject to Cellectis' rights under this Section 3.01 with respect to any vacancy created thereby).

(e) The Company shall enter into indemnification agreements and maintain Directors and Officers liability insurance for the benefit of each nominee of Cellectis elected or appointed to the Board of Directors with respect to all periods during which such individual is a member of the Board of Directors, on terms, conditions and amounts substantially similar to the terms, conditions and amounts of the Company's current Directors and Officers liability insurance policy, and shall use commercially reasonable efforts to cause such indemnification and insurance to be maintained in full force and effect. The Company shall provide each such nominee with all benefits (including all fees and entitlements) on substantially the same terms and conditions as are provided to other members of the Board of Directors performing similar roles.

(f) The Company shall reimburse the designees of Cellectis for all reasonable out-of-pocket expenses incurred in connection with their attendance at meetings of the Board of Directors and any committees thereof.

Section 3.02. *Chairman; Committees*.

(a) For so long as Cellectis is entitled to nominate Directors for election to the Board of Directors pursuant to Section 3.01(b), Cellectis shall have the right to designate the Director to serve in the role of Chairman of the Board of Directors and to have at least one of their designated Directors serve on each committee of the Board of Directors, to the extent such Directors are permitted to serve on such committees under SEC rules and applicable listing standards then in effect.

(b) The Company agrees to use its best efforts to cause the appointment of the Director designated by Cellectis to serve in the role of Chairman and the Directors designated by Cellectis to the committees of the Board of Directors in accordance with this Section 3.02.

Section 3.03. *Information; Duties*.

(a) For so long as Cellectis and its Affiliates Beneficially Own, in the aggregate, a number of Company Shares equal to at least 15% of the then outstanding Company Shares, the Company agrees that (i) the Directors designated by Cellectis may share confidential, non-public information about the Company with Cellectis and its Affiliates and (ii) Cellectis and its employees and other representatives and potential transferees of its Company Shares and their representatives shall have the right to consult with and advise senior management of the Company and to review the Company's books and records upon reasonable advance notice, in each case only to the extent reasonably necessary in connection with their investment in the Company, including any potential sales thereof, provided that such parties, potential transferees and their respective representatives agree to keep any such confidential, non-public information about the Company confidential (except as may be required by law or applicable listing standards then in effect) and agree to comply with all applicable securities laws in connection therewith.

(b) At any time during which the Company does not file reports with the SEC that contain (a) audited annual financial statements of the Company and (b) unaudited interim quarterly financial statements of the Company, the Company shall deliver to Cellectis, within 10 days after the Company would have been required to file the relevant report with the SEC (as if the Company were a non-accelerated filer), consolidated balance sheets of the Company and the related consolidated statements of income, cash flows and stockholders equity, including footnotes, as of the end of each fiscal year and the end of each of the first three fiscal quarters in each fiscal year of the Company.

(c) The Company agrees that, notwithstanding anything to the contrary in any other agreement or at law or in equity, when Cellectis or its Affiliates take any action under this Agreement (including in their respective capacities as Holders) to give or withhold consent, Cellectis and such Affiliates shall, to the fullest extent permitted by law, have no duty to consider the interests of the Company or other Holders, if any, or any other stockholder of the Company and may act exclusively in their and their Affiliates' respective own interests; *provided*, *however*, that the foregoing shall in no way affect the obligations of the Parties to comply with the provisions of this Agreement.

Section 3.04. *Controlled Company*.

(a) For so long as the Company qualifies as a "controlled company" under the applicable listing standards then in effect, the Company will elect to be a "controlled company" for purposes of such applicable listing standards, and will disclose in its annual meeting proxy statement that it is a "controlled company" and the basis for that determination. The Company and Cellectis acknowledge and agree that, as of the date of this Agreement, the Company is a "controlled company." If the Company ceases to qualify as a "controlled company" under applicable listing standards then in effect, Cellectis and the Company will take whatever action may be reasonably necessary, if any, to cause the Company to comply with SEC rules and applicable listing standards then in effect.

(b) After the Company ceases to qualify as a "controlled company" under applicable listing standards then in effect, Cellectis shall cause a sufficient number of their designees to qualify as "independent directors" to ensure that the Board of Directors complies with such applicable listing standards in the time periods required by the applicable listing standards then in effect.

Section 3.05. *Cellectis Reserved Matters*.

(a) For so long as Cellectis and its Affiliates Beneficially Own, in the aggregate, a number of Company Shares equal to at least 50% of the then outstanding Company Shares, the following matters shall require the prior approval of Cellectis:

(i) any modification to the Company's or any future Subsidiary of the Company's share capital (e.g., share capital increase or decrease) the creation of any Subsidiary, any grant of stock-based compensation, any distributions or public or private offering, merger, spin-off, liquidation, winding up or carve-out transactions;

(ii) the annual business plan and annual budget of the Company and any modification thereof;

(iii) any external growth transactions by the Company exceeding $500,000 and not included in the approved annual business plan and annual budget of the Company;

(iv) any investment and disposition decisions of the Company exceeding $500,000 and not included in the approved annual business plan and annual budget of the Company (it being understood that this excludes the purchase and sale of inventory as a part of the normal course of business);

(v) any related-party agreement or any agreement or transaction between the executives or stockholders of the Company, on the one hand, and the Company or any of its Subsidiaries, on the other hand;

(vi) any decision pertaining to the recruitment, dismissal or removal, or increase of the compensation of executives and corporate officers of the Company;

(vii) any material decision of the Company relating to material litigation of the Company;

(viii) any decision of the Company relating to the opening of a social or restructuring plan or pre-insolvency proceedings of the Company;

(ix) any buyback by the Company of Company Shares;

(x) any new borrowings or debts of the Company exceeding $500,000 and early repayment of loans of the Company, if any (it being understood that Cellectis will approve the entering into of contracts for revolving loans and other short-term loans and the repayment of such for financing general operating activities, such as revolving loans for inventory or factoring of receivables);

(xi) grants by the Company of any pledges on securities of the Company;

(xii) development of any new activities and businesses not described in the annual business plan and annual budget of the Company;

(xiii) entry by the Company into any material agreement or partnership; and

(xiv) any offshore and relocation activities.

(b) For so long as Cellectis and its Affiliates Beneficially Own, in the aggregate, a number of Company Shares equal to at least 15% of the then outstanding Company Shares, the following matters shall require the prior approval of Cellectis:

(i) any amendment to the Company's Governing Documents that would change:

(A) the name of the Company;

(B) the jurisdiction of incorporation of the Company;

(C) the location of the Company's principal executive offices;

(D) the purpose or purposes for which the Company is incorporated; or

(E) this Article 3;

(ii) any regular or special dividends to holders of the Company Shares;

(iii) the commencement of any voluntary, or the Company's consent to any, proceeding for the dissolution, winding up or bankruptcy of the Company or a material Subsidiary (or group of Subsidiaries that are collectively material) of the Company;

(iv) any public or private offering, merger, amalgamation or consolidation of the Company or the spinoff of a business of the Company or any sale, conveyance, transfer or other disposition of the Company's assets; and

(v) any appointment to the Board of Directors contrary to this Agreement or the Governing Documents.

ARTICLE 4

REGISTRATION RIGHTS

Section 4.01. *Registration*.

(a) *Demand Registrations*. If the Company shall receive from either Cellectis or any other Holder or group of Holders holding at least 10% of the then outstanding Company Shares, in either case at any time beginning 180 days after the effective date of the registration statement filed in connection with the IPO (or such earlier time as agreed by the Company) a written request that the Company file a registration statement with respect to Registrable Securities (a "**Demand Registration Request**," and the registration so requested is referred to herein as a "**Demand Registration**," and the sender(s) of such request pursuant to this Agreement shall be known as the "**Initiating Holder(s)**"), then the Company shall, within five days of the receipt thereof, give written notice (the "**Demand Exercise Notice**") of such request to all other Holders, and subject to the limitations of this Section 4.01, use its reasonable best efforts to effect, as soon as practicable, the registration under the Securities Act (including by means of a shelf registration pursuant to Rule 415 thereunder if so requested and if the Company is then eligible to use such a registration) of all Registrable Securities that the Holders request to be registered. There is no limitation on the number of Demand Registrations pursuant to this Section 4.01 which the Company is obligated to effect. However, the Company shall not be obligated to take any action to effect any Demand Registration:

(i) within three months after a Demand Registration pursuant to this Section 4.01 that has been declared, ordered or become automatically effective;

(ii) during the period starting with the date 15 days prior to its good faith estimate of the date of filing of, and ending on a date 90 days after the effective date of, a Company-initiated registration (other than a registration relating solely to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or to an SEC Rule 145 transaction), *provided* that the Company is actively employing in good faith all reasonable efforts to cause such registration statement to become effective;

(iii) where the anticipated offering price, before any underwriting discounts or commissions, is equal to or less than $25,000,000;

(iv) if the Company shall furnish to such Holders a certificate signed by the Chief Executive Officer of the Company stating that in the good faith judgment of the

Board of Directors, any registration of Registrable Securities should not be made or continued (or sales under a shelf registration statement should be suspended) because (i) such registration (or continued sales under a shelf registration statement) would materially interfere with a material financing, acquisition, corporate reorganization or merger or other material transaction or event involving the Company or any of its subsidiaries or (ii) the Company is in possession of material non-public information, the disclosure of which has been determined by the Board of Directors to not be in the Company's best interests (in either case, a "**Valid Business Reason**"), then (x) the Company may postpone filing a registration statement relating to a Demand Registration Request or suspend sales under an existing shelf registration statement until five Business Days after such Valid Business Reason no longer exists, but in no event for more than 90 days after the date the Board of Directors determines a Valid Business Reason exists and (y) in case a registration statement has been filed relating to a Demand Registration Request, if the Valid Business Reason has not resulted from actions taken by the Company, the Company may cause such registration statement to be withdrawn and its effectiveness terminated or may postpone amending or supplementing such registration statement until five Business Days after such Valid Business Reason no longer exists, but in no event for more than 90 days after the date the Board of Directors determines a Valid Business Reason exists; and the Company shall give written notice to the Participating Holders of its determination to postpone or withdraw a registration statement or suspend sales under a shelf registration statement and of the fact that the Valid Business Reason for such postponement, withdrawal or suspension no longer exists, in each case, promptly after the occurrence thereof; *provided*, *however*, that the Company shall not defer its obligation in this manner for more than a total of 90 days in any 12 month period; or

(v) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

If the Company shall give any notice of postponement, withdrawal or suspension of any registration statement pursuant to clause (iv) of this Section 4.01(a), the Company shall not, during the period of postponement, withdrawal or suspension, register any Company Shares, other than pursuant to a registration statement on Form S-4 or S-8 (or an equivalent registration form then in effect). Each Holder of Registrable Securities agrees that, upon receipt of any notice from the Company that the Company has determined to withdraw or suspend any registration statement pursuant to clause (iv) of this Section 4.01(a), such Holder will discontinue its disposition of Registrable Securities pursuant to such registration statement and, if so directed by the Company, will deliver to the Company (at the Company's expense) all copies, other than permanent file copies, then in such Holder's possession of the prospectus covering such Registrable Securities that was in effect at the time of receipt of such notice. If the Company shall have withdrawn or prematurely terminated a registration statement filed pursuant to a Demand Registration (whether pursuant to clause (iv) of this Section 4.01(a) or as a result of any stop order, injunction or other order or requirement of the SEC or any other governmental agency or court), the Company shall not be considered to have effected an effective registration for the purposes of this Agreement until the Company shall have filed a new

registration statement covering the Registrable Securities covered by the withdrawn registration statement and such registration statement shall have been declared effective and shall not have been withdrawn. If the Company shall give any notice of withdrawal, suspension or postponement of a registration statement, the Company shall, not later than five Business Days after the Valid Business Reason that caused such withdrawal, suspension or postponement no longer exists (but in no event later than 90 days after the date of the postponement, suspension or withdrawal), use its reasonable best efforts to effect the registration under the Securities Act of the Registrable Securities covered by the withdrawn, suspended or postponed registration statement in accordance with this Section 4.01 unless the Initiating Holders shall have withdrawn such request, in which case the Company shall not be considered to have effected an effective registration for the purposes of this Agreement), and such registration shall not be withdrawn, suspended or postponed pursuant to clause (iv) of this Section 4.01(a).

(b)

(i) The Company, subject to Sections 4.03 and 4.06, shall include in a Demand Registration (x) the Registrable Securities of the Initiating Holders and (y) the Registrable Securities of any other Holder of Registrable Securities, which shall have made a written request to the Company for inclusion in such registration pursuant to Section 4.02 (which request shall specify the maximum number of Registrable Securities intended to be disposed of by such Participating Holder) within 5 days after the receipt of the Demand Exercise Notice.

(ii) The Company shall, as expeditiously as possible, but subject to the limitations set forth in this Section 4.01, use its reasonable best efforts to (x) effect such registration under the Securities Act (including by means of a shelf registration pursuant to Rule 415 under the Securities Act if so requested and if the Company is then eligible to use such a registration) of the Registrable Securities which the Company has been so requested to register, for distribution in accordance with such intended method of distribution and (y) if requested by the Majority Participating Holders, obtain acceleration of the effective date of the registration statement relating to such registration.

(c) In connection with any Demand Registration, the Majority Participating Holders shall have the right to designate the lead managing underwriter (any lead managing underwriter for the purposes of this Agreement, the "**Manager**") in connection with such registration and each other managing underwriter for such registration, in each case subject to consent of the Company, not be unreasonably withheld.

(d) If so requested by the Initiating Holder(s), the Company (together with all Holders proposing to distribute their securities through such underwriting) shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting in accordance with the terms of this Agreement.

(e) Any Holder that intends to sell Registrable Securities by means of a shelf registration pursuant to Rule 415 thereunder, shall give the Company two days' prior notice of any such sale.

Section 4.02. *Piggyback Registrations*.

(a) If, at any time or from time to time the Company will register or commence an offering of any of its securities for its own account or otherwise (other than pursuant to registrations on Form S-4 or Form S-8 or any similar successor forms thereto) (including but not limited to the registrations or offerings pursuant to Section 4.01), the Company will:

(i) promptly give to each Holder written notice thereof (in any event within five Business Days after the determination to pursue such offering); and

(ii) include in such registration and in any underwriting involved therein (if any), all the Registrable Securities specified in a written request or requests, made within 5 days after mailing or personal delivery of such written notice from the Company, by any of the Holders, except as set forth in Sections 4.02(b) and 4.02(f), with the securities which the Company at the time proposes to register or sell to permit the sale or other disposition by the Holders (in accordance with the intended method of distribution thereof) of the Registrable Securities to be so registered or sold, including, if necessary, by filing with the SEC a post-effective amendment or a supplement to the registration statement filed by the Company or the prospectus related thereto. There is no limitation on the number of such piggyback registrations pursuant to the preceding sentence which the Company is obligated to effect. No registration of Registrable Securities effected under this Section 4.02(a) shall relieve the Company of its obligations to effect Demand Registrations under Section 4.01 hereof.

(b) If the registration in this Section 4.02 involves an underwritten offering, the right of any Holder to include its Registrable Securities in a registration or offering pursuant to this Section 4.02 shall be conditioned upon such Holder's participation in the underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their Registrable Securities through such underwriting shall (together with the Company) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting (i) in the case of a primary offering, by the Company or (ii) in the case of an offering pursuant to Section 4.01, pursuant to Section 4.01(c).

(c) The Company, subject to 4.03 and 4.06, may elect to include in any registration statement and offering pursuant to any Demand Registration by any Holder, (i) authorized but unissued shares of Company Shares or Company Shares held by the Company as treasury shares and (ii) any other Company Shares which are requested to be included in such registration pursuant to the exercise of piggyback registration rights granted by the Company after the date hereof and which are not inconsistent with the rights granted in, or otherwise conflict with the terms of, this Agreement ("**Additional**

Piggyback Rights"); *provided*, *however*, that such inclusion shall be permitted only to the extent that it is pursuant to, and subject to, the terms of the underwriting agreement or arrangements, if any, entered into by the Initiating Holders.

(d) If, at any time after giving written notice of its intention to register or sell any equity securities and prior to the effective date of the registration statement filed in connection with such registration or sale of such equity securities, the Company shall determine for any reason not to register or sell or to delay registration or sale of such equity securities, the Company may, at its election, give written notice of such determination to all Holders of record of Registrable Securities and (i) in the case of a determination not to register or sell, shall be relieved of its obligation to register or sell any Registrable Securities in connection with such abandoned registration or sale, without prejudice, however, to the rights of Holders under Section 4.01, and (ii) in the case of a determination to delay such registration or sale of its equity securities, shall be permitted to delay the registration or sale of such Registrable Securities for the same period as the delay in registering such other equity securities.

(e) Notwithstanding anything contained herein to the contrary, the Company shall, at the request of any Holder, file any prospectus supplement or post-effective amendments and otherwise take any action necessary to include therein all disclosure and language deemed necessary or advisable by such Holder if such disclosure or language was not included in the initial registration statement, or revise such disclosure or language if deemed necessary or advisable by such Holder including filing a prospectus supplement naming the Holders, partners, members and shareholders to the extent required by law.

Section 4.03. *Allocation of Securities Included in Registration Statement or Offering*

(a) Subject to subsection (e) of this Section 4.03, but notwithstanding any other provision of this Agreement, in connection with an underwritten offering initiated by a Demand Registration Request, if the Manager advises the Initiating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten (such number, the "**Section 4.03(a) Sale Number**") within a price range acceptable to the Majority Participating Holders, the Initiating Holders shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the Company shall use its reasonable best efforts to include in such registration or offering, as applicable, the number of shares of Registrable Securities in the registration and underwriting as follows:

(i) first, all Registrable Securities requested to be included in such registration or offering by the Holders thereof (including pursuant to the exercise of piggyback rights pursuant to Section 4.02); *provided*, *however*, that if such number of Registrable Securities exceeds the Section 4.03(a) Sale Number, the number of such Registrable Securities (not to exceed the Section 4.03(a) Sale Number) to be included in such registration shall be allocated among all such Holders requesting inclusion thereof in proportion, as nearly as practicable, to the respective amounts of Registrable Securities held by such Holders at the time of filing of the registration statement or the time of the offering, as applicable;

(ii) second, if by the withdrawal of Registrable Securities by a Participating Holder, a greater number of Registrable Securities held by other Holders, may be included in such registration or offering (up to the Section 4.03(a) Sale Number), then the Company shall offer to all Holders who have included Registrable Securities in the registration or offering the right to include additional Registrable Securities in the same proportions as set forth in Section 4.03(a)(i);

(iii) third, to the extent that the number of Registrable Securities to be included pursuant to clause (i) and (ii) of this Section 4.03(a) is less than the Section 4.03(a) Sale Number, and if the underwriter so agrees, any securities that the Company proposes to register or sell, up to the Section 4.03(a) Sale Number; and

(iv) fourth, to the extent that the number of securities to be included pursuant to clauses (i), (ii) and (iii) of this Section 4.03(a) is less than the Section 4.03(a) Sale Number, the remaining securities to be included in such registration or offering shall be allocated on a pro rata basis among all Persons requesting that securities be included in such registration or offering pursuant to the exercise of Additional Piggyback Rights (**"Piggyback Shares**"), based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 4.03(a) Sale Number.

(b) Subject to subsection (e) of this Section 4.03, but notwithstanding any other provision of this Agreement, in a registration involving an underwritten offering on behalf of the Company, which was initiated by the Company, if the managing underwriter determines that marketing factors require a limitation of the number of shares to be underwritten (such number, the "**Section 4.03(b) Sale Number**") the Company shall so advise all Holders whose securities would otherwise be registered and underwritten pursuant hereto, and the number of shares of Registrable Securities that may be included in the registration and underwriting shall be allocated as follows:

(i) first, all equity securities that the Company proposes to register for its own account;

(ii) second, to the extent that the number of securities to be included pursuant to clause (i) of this Section 4.03(b) is less than the Section 4.03(b) Sale Number, among all Holders in proportion, as nearly as practicable, to the respective amounts of Registrable Securities requested for inclusion in such registration by Holders pursuant to Section 4.02 up to the Section 4.03(b) Sale Number; and

(iii) third, to the extent that the number of securities to be included pursuant to clauses (i) and (ii) of this Section 4.03(b) is less than the Section 4.03(b) Sale Number, the remaining securities to be included in such registration shall be allocated on a pro rata basis among all Persons requesting that securities be included in such

registration pursuant to the exercise of Additional Piggyback Rights, based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 4.03(b) Sale Number.

(c) Subject to subsection (e) of this Section 4.03, if any registration pursuant to Section 4.02 involves an underwritten offering by any Person(s) (other than a Holder) to whom the Company has granted registration rights which are not inconsistent with the rights granted in, or otherwise conflict with the terms of, this Agreement, the managing underwriter (as selected by the Company or such other Person) shall advise the Company that, in its view, the number of securities requested to be included in such registration exceeds the number (the "**Section 4.03(c) Sale Number**") that can be sold in an orderly manner in such registration within a price range acceptable to the Company, the Company shall include shares in such registration as follows:

(i) first, the shares requested to be included in such registration shall be allocated on a pro rata basis among such Person(s) requesting the registration and all Holders requesting that Registrable Securities be included in such registration pursuant to the exercise of piggyback rights pursuant to Section 4.02, based on the aggregate number of securities or Registrable Securities, as applicable, then owned by each of the foregoing requesting inclusion in relation to the aggregate number of securities or Registrable Securities, as applicable, owned by all such Holders and Persons requesting inclusion, up to the Section 4.03(c) Sale Number;

(ii) second, to the extent that the number of securities to be included pursuant to clause (i) of this Section 4.03(c) is less than the Section 4.03(c) Sale Number, the remaining shares to be included in such registration shall be allocated on a pro rata basis among all Persons requesting that securities be included in such registration pursuant to the exercise of Additional Piggyback Rights, based on the aggregate number of Piggyback Shares then owned by each Person requesting inclusion in relation to the aggregate number of Piggyback Shares owned by all Persons requesting inclusion, up to the Section 4.03(c) Sale Number; and

(iii) third, to the extent that the number of securities to be included pursuant to clauses (i) and (ii) of this Section 4.03(c) is less than the Section 4.03(c) Sale Number, the remaining shares to be included in such registration shall be allocated to shares the Company proposes to register for its own account, up to the Section 4.03(c) Sale Number.

(d) If any Holder of Registrable Securities disapproves of the terms of the underwriting, or if, as a result of the proration provisions set forth in clauses (a), (b) or (c) of this Section 4.03, any Holder shall not be entitled to include all Registrable Securities in a registration or offering that such Holder has requested be included, such Holder may elect to withdraw such Holder's request to include Registrable Securities in such registration or offering or may reduce the number requested to be included; *provided*, *however*, that (x) such request must be made in writing, to the Company, Manager and, if applicable, the Initiating Holder(s), prior to the execution of the underwriting agreement

with respect to such registration and (y) such withdrawal or reduction shall be irrevocable and, after making such withdrawal or reduction, such Holder shall no longer have any right to include such withdrawn Registrable Securities in the registration as to which such withdrawal or reduction was made to the extent of the Registrable Securities so withdrawn or reduced.

Section 4.04. *Registration Procedures*. If and whenever the Company is required by the provisions of this Agreement to use its reasonable best efforts to effect or cause the registration of any Registrable Securities under the Securities Act as provided in this Agreement, the Company shall, as expeditiously as possible (but, in any event, within 60 days after a Demand Registration Request in the case of Section 4.04(a) below), in connection with the Registration of the Registrable Securities and, where applicable, a takedown off of a shelf registration statement:

(a) prepare and file with the SEC a registration statement on an appropriate registration form of the SEC for the disposition of such Registrable Securities in accordance with the intended method of disposition thereof, which registration form (i) shall be selected by the Company and (ii) shall, in the case of a shelf registration, be available for the sale of the Registrable Securities by the selling Holders thereof and such registration statement shall comply as to form in all material respects with the requirements of the applicable registration form and include all financial statements required by the SEC to be filed therewith, and the Company shall use its reasonable best efforts to cause such registration statement to become effective and remain continuously effective from the date such registration statement is declared effective until the earliest to occur (i) the first date as of which all of the Registrable Securities included in the registration statement have been sold or (ii) a period of 90 days in the case of an underwritten offering effected pursuant to a registration statement other than a shelf registration statement and a period of three years in the case of a shelf registration statement (*provided*, *however*, that before filing a registration statement or prospectus or any amendments or supplements thereto, or comparable statements under securities or state "blue sky" laws of any jurisdiction, or any free writing prospectus related thereto, the Company will furnish to one counsel for the Holders participating in the planned offering (selected by the Majority Participating Holders) and to one counsel for the Manager, if any, copies of all such documents proposed to be filed (including all exhibits thereto), which documents will be subject to the reasonable review and reasonable comment of such counsel (*provided* that the Company shall be under no obligation to make any changes suggested by the Holders), and the Company shall not file any registration statement or amendment thereto, any prospectus or supplement thereto or any free writing prospectus related thereto to which the Majority Participating Holders or the underwriters, if any, shall reasonably object);

(b) prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement continuously effective for the period set forth in Section 4.04(a) and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all Registrable Securities covered by such registration statement in accordance with the intended methods of disposition by the

seller or sellers thereof set forth in such registration statement (and, in connection with any shelf registration statement, file one or more prospectus supplements covering Registrable Securities upon the request of one or more Holders wishing to offer or sell Registrable Securities whether in an underwritten offering or otherwise);

(c) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the Manager of such offering;

(d) furnish, without charge, to each Participating Holder and each underwriter, if any, of the securities covered by such registration statement such number of copies of such registration statement, each amendment and supplement thereto (in each case including all exhibits), the prospectus included in such registration statement (including each preliminary prospectus and any summary prospectus), any other prospectus filed under Rule 424 under the Securities Act and each free writing prospectus utilized in connection therewith, in each case, in conformity with the requirements of the Securities Act, and other documents, as such seller and underwriter may reasonably request in order to facilitate the public sale or other disposition of the Registrable Securities owned by such seller (the Company hereby consenting to the use in accordance with all applicable law of each such registration statement (or amendment or post-effective amendment thereto) and each such prospectus (or preliminary prospectus or supplement thereto) or free writing prospectus by each such Participating Holder and the underwriters, if any, in connection with the offering and sale of the Registrable Securities covered by such registration statement or prospectus);

(e) use its reasonable best efforts to register or qualify the Registrable Securities covered by such registration statement under such other securities or state "blue sky" laws of such jurisdictions as any sellers of Registrable Securities or any managing underwriter, if any, shall reasonably request in writing, and do any and all other acts and things which may be reasonably necessary or advisable to enable such sellers or underwriter, if any, to consummate the disposition of the Registrable Securities in such jurisdictions (including keeping such registration or qualification in effect for so long as such registration statement remains in effect), except that in no event shall the Company be required to qualify to do business as a foreign corporation in any jurisdiction where it would not, but for the requirements of this paragraph (e), be required to be so qualified, to subject itself to taxation in any such jurisdiction or to consent to general service of process in any such jurisdiction;

(f) promptly notify each Participating Holder and each managing underwriter, if any: (i) when the registration statement, any pre-effective amendment, the prospectus or any prospectus supplement related thereto, any post-effective amendment to the registration statement or any free writing prospectus has been filed and, with respect to the registration statement or any post-effective amendment, when the same has become effective; (ii) of any request by the SEC or state securities authority for amendments or supplements to the registration statement or the prospectus related thereto or for additional information; (iii) of the issuance by the SEC of any stop order suspending the effectiveness of the registration statement or the initiation of any proceedings for that

purpose; (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification of any Registrable Securities for sale under the securities or state "blue sky" laws of any jurisdiction or the initiation of any proceeding for such purpose; (v) of the existence of any fact of which the Company becomes aware which results in the registration statement or any amendment thereto, the prospectus related thereto or any supplement thereto, any document incorporated therein by reference, any free writing prospectus or the information conveyed to any purchaser at the time of sale to such purchaser containing an untrue statement of a material fact or omitting to state a material fact required to be stated therein or necessary to make any statement therein not misleading; and (vi) if at any time the representations and warranties contemplated by any underwriting agreement, securities sale agreement, or other similar agreement, relating to the offering shall cease to be true and correct in all material respects; and, if the notification relates to an event described in clause (v), the Company shall promptly prepare and furnish to each such seller and each underwriter, if any, a reasonable number of copies of a prospectus supplemented or amended so that, as thereafter delivered to the purchasers of such Registrable Securities, such prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein in the light of the circumstances under which they were made not misleading;

(g) comply (and continue to comply) with all applicable rules and regulations of the SEC (including maintaining disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) and internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) in accordance with the Exchange Act), and make generally available to its security holders, as soon as reasonably practicable after the effective date of the registration statement (and in any event within 45 days, or 90 days if it is a fiscal year, after the end of such 12 month period described hereafter), an earnings statement (which need not be audited) covering the period of at least 12 consecutive months beginning with the first day of the Company's first fiscal quarter after the effective date of the registration statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(h) (i)(A) cause all such Registrable Securities covered by such registration statement to be listed on the principal securities exchange on which similar securities issued by the Company are then listed (if any), if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (B) if no similar securities are then so listed, to cause all such Registrable Securities to be listed on a national securities exchange and, without limiting the generality of the foregoing, take all actions that may be required by the Company as the issuer of such Registrable Securities in order to facilitate the managing underwriter's arranging for the registration of at least two market makers as such with respect to such shares with FINRA, and (ii) comply (and continue to comply) with the requirements of any self-regulatory organization applicable to the Company, including all corporate governance requirements;

(i) provide and cause to be maintained a transfer agent and registrar for all such Registrable Securities covered by such registration statement not later than the effective date of such registration statement;

(j) enter into such customary agreements (including, if applicable, an underwriting agreement) and take such other actions as the Majority Participating Holders or the underwriters shall reasonably request in order to expedite or facilitate the disposition of such Registrable Securities (it being understood that the Holders of the Registrable Securities which are to be distributed by any underwriters shall be parties to any such underwriting agreement and may, at their option, require that the Company make to and for the benefit of such Holders the representations, warranties and covenants of the Company which are being made to and for the benefit of such underwriters);

(k) use its reasonable best efforts (i) to obtain an opinion from the Company's counsel and a comfort letter and updates thereof from the Company's independent public accountants who have certified the Company's financial statements included or incorporated by reference in such registration statement, in each case, in customary form and covering such matters as are customarily covered by such opinions and comfort letters (including, in the case of such comfort letter, events subsequent to the date of such financial statements) delivered to underwriters in underwritten public offerings, which opinion and letter shall be dated the dates such opinions and comfort letters are customarily dated and otherwise reasonably satisfactory to the underwriters, if any, and to the Majority Participating Holders, and (ii) furnish to each Holder participating in the offering and to each underwriter, if any, a copy of such opinion and letter addressed to such underwriter;

(l) deliver promptly to counsel for each Participating Holder and to each managing underwriter, if any, copies of all correspondence between the SEC and the Company, its counsel or auditors and all memoranda relating to discussions with the SEC or its staff with respect to the registration statement, and, upon receipt of such confidentiality agreements as the Company may reasonably request, make reasonably available for inspection by counsel for each Participating Holder, by counsel for any underwriter, participating in any disposition to be effected pursuant to such registration statement and by any accountant or other agent retained by any Participating Holder or any such underwriter, all pertinent financial and other records, pertinent corporate documents and properties of the Company, and cause all of the Company's officers, directors and employees to supply all information reasonably requested by any such counsel for a Participating Holder, counsel for an underwriter, accountant or agent in connection with such registration statement;

(m) use its reasonable best efforts to obtain the prompt withdrawal of any order suspending the effectiveness of the registration statement, or the prompt lifting of any suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction;

(n) provide a CUSIP number for all Registrable Securities, not later than the effective date of the registration statement;

(o) use its best efforts to make available its employees and personnel for participation in "road shows" and other marketing efforts and otherwise provide reasonable assistance to the underwriters (taking into account the needs of the Company's businesses and the requirements of the marketing process) in marketing the Registrable Securities in any underwritten offering;

(p) prior to the filing of any document which is to be incorporated by reference into the registration statement or the prospectus (after the initial filing of such registration statement), and prior to the filing of any free writing prospectus, provide copies of such document to counsel for each Participating Holder and to each managing underwriter, if any, and make the Company's representatives reasonably available for discussion of such document and make such changes in such document concerning the Participating Holders prior to the filing thereof as counsel for the Participating Holders or underwriters may reasonably request;

(q) furnish to counsel for each Participating Holder and to each managing underwriter, without charge, at least one signed copy of the registration statement and any post-effective amendments or supplements thereto, including financial statements and schedules, all documents incorporated therein by reference, the prospectus contained in such registration statement (including each preliminary prospectus and any summary prospectus), any other prospectus filed under Rule 424 under the Securities Act and all exhibits (including those incorporated by reference) and any free writing prospectus utilized in connection therewith;

(r) cooperate with the Participating Holders and the managing underwriter, if any, to facilitate the timely preparation and delivery of certificates not bearing any restrictive legends representing the Registrable Securities to be sold, and cause such Registrable Securities to be issued in such denominations and registered in such names in accordance with the underwriting agreement at least three Business Days prior to any sale of Registrable Securities to the underwriters or, if not an underwritten offering, in accordance with the instructions of the Participating Holders at least three Business Days prior to any sale of Registrable Securities and instruct any transfer agent and registrar of Registrable Securities to release any stop transfer orders in respect thereof;

(s) cooperate with any due diligence investigation by any Manager, underwriter or Participating Holder and make available such documents and records of the Company and its Subsidiaries that they reasonably request (which, in the case of the Participating Holder, may be subject to the execution by the Participating Holder of a customary confidentiality agreement in a form which is reasonably satisfactory to the Company);

(t) take no direct or indirect action prohibited by Regulation M under the Exchange Act;

(u) take all such other commercially reasonable actions as are necessary or advisable in order to expedite or facilitate the disposition of such Registrable Securities;

(v) take all reasonable action to ensure that any free writing prospectus utilized in connection with any registration covered by Section 4.01 or 4.02 complies in all material respects with the Securities Act, is filed in accordance with the Securities Act

to the extent required thereby, is retained in accordance with the Securities Act to the extent required thereby and, when taken together with the related prospectus, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and

(w) in connection with any underwritten offering, if at any time the information conveyed to a purchaser at the time of sale includes any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, promptly file with the SEC such amendments or supplements to such information as may be necessary so that the statements as so amended or supplemented will not, in light of the circumstances, be misleading.

To the extent the Company is a well-known seasoned issuer (as defined in Rule 405 under the Securities Act) (a "**WKSI**") at the time any Demand Registration Request is submitted to the Company, and such Demand Registration Request requests that the Company file an automatic shelf registration statement (as defined in Rule 405 under the Securities Act) (an "**automatic shelf registration statement**") on Form S-3, the Company shall file an automatic shelf registration statement which covers those Registrable Securities which are requested to be registered. The Company shall use its reasonable best efforts to remain a WKSI (and not become an ineligible issuer (as defined in Rule 405 under the Securities Act)) during the period during which the Registrable Securities remain Registrable Securities. If the Company does not pay the filing fee covering the Registrable Securities at the time the automatic shelf registration statement is filed, the Company agrees to pay such fee at such time or times as the Registrable Securities are to be sold. If the automatic shelf registration statement has been outstanding for at least three years, at the end of the third year the Company shall refile a new automatic shelf registration statement covering the Registrable Securities. If at any time when the Company is required to re-evaluate its WKSI status the Company determines that it is not a WKSI, the Company shall use its reasonable best efforts to refile the shelf registration statement on Form S-3 and, if such form is not available, Form S-1 and keep such registration statement effective during the period during which such registration statement is required to be kept effective.

If the Company files any shelf registration statement for the benefit of the holders of any of its securities other than the Holders, the Company agrees that it shall include in such registration statement such disclosures as may be required by Rule 430B under the Securities Act (referring to the unnamed selling security holders in a generic manner by identifying the initial offering of the securities to the Holders) in order to ensure that the Holders may be added to such shelf registration statement at a later time through the filing of a prospectus supplement rather than a post-effective amendment.

It shall be a condition precedent to the obligations of the Company to take any action pursuant to Sections 4.01, 4.02 or 4.04 that each Participating Holder shall furnish to the Company such information regarding themselves, the Registrable Securities held by them, and the intended method of disposition of such securities as the Company may from time to time reasonably request so long as such information is necessary for the Company to consummate such registration and shall be used only in connection with such registration.

If any such registration statement or comparable statement under state "blue sky" laws refers to any Holder by name or otherwise as the Holder of any securities of the Company, then such Holder shall have the right to require (i) the insertion therein of language, in form and substance satisfactory to such Holder and the Company, to the effect that the holding by such Holder of such securities is not to be construed as a recommendation by such Holder of the investment quality of the Company's securities covered thereby and that such holding does not imply that such Holder will assist in meeting any future financial requirements of the Company, or (ii) in the event that such reference to such Holder by name or otherwise is not in the judgment of the Company, as advised by counsel, required by the Securities Act or any similar federal statute or any state "blue sky" or securities law then in force, the deletion of the reference to such Holder.

Section 4.05. *Registration Expenses*. All Expenses incurred in connection with any registration, filing, qualification or compliance pursuant to Article 4 shall be borne by the Company, whether or not a registration statement becomes effective. All underwriting discounts and all selling commissions relating to securities registered by the Holders shall be borne by the holders of such securities pro rata in accordance with the number of shares sold in the offering by such Participating Holder.

Section 4.06. *Certain Limitations on Registration Rights*. In the case of any registration under Section 4.01 pursuant to an underwritten offering, or, in the case of a registration under Section 4.02, all securities to be included in such registration shall be subject to the underwriting agreement and no Person may participate in such registration or offering unless such Person (i) agrees to sell such Person's securities on the basis provided therein and completes and executes all reasonable questionnaires, and other documents (including custody agreements and powers of attorney) which must be executed in connection therewith; *provided*, *however*, that all such documents shall be consistent with the provisions hereof, and (ii) provides such other information to the Company or the underwriter as may be necessary to register such Person's securities.

Section 4.07. *Limitations on Sale or Distribution of Other Securities*.

(a) Each Holder and Non-Cellectis Holder agrees, (i) to the extent requested in writing by a managing underwriter, if any, of any registration effected pursuant to Section 4.01, not to sell, transfer or otherwise dispose of, including any sale pursuant to Rule 144 under the Securities Act, any Company Shares, or any other equity security of the Company or any security convertible into or exchangeable or exercisable for any equity security of the Company (other than as part of such underwritten public offering) during the time period reasonably requested by the managing underwriter, not to exceed 90 days, and (ii) to the extent requested in writing by a managing underwriter of any underwritten public offering effected by the Company for its own account, not to sell any Company Shares (other than as part of such underwritten public offering) during the time

period reasonably requested by the managing underwriter, which period shall not exceed 90 days; and, if so requested, each Holder and Non-Cellectis Holder agrees to enter into a customary lock-up agreement with such managing underwriter.

(b) The Company hereby agrees that, if it shall previously have received a request for registration pursuant to Section 4.01 or 4.02, and if such previous registration shall not have been withdrawn or abandoned, the Company shall not sell, transfer, or otherwise dispose of, any Company Shares, or any other equity security of the Company or any security convertible into or exchangeable or exercisable for any equity security of the Company (other than as part of such underwritten public offering, a registration on Form S-4 or Form S-8 or any successor or similar form which is (x) then in effect or (y) shall become effective upon the conversion, exchange or exercise of any then outstanding Company Shares Equivalent), until a period of 90 days shall have elapsed from the effective date of such previous registration; and the Company shall (i) so provide in any registration rights agreements hereafter entered into with respect to any of its securities and (ii) use its reasonable best efforts to cause each holder of any equity security or any security convertible into or exchangeable or exercisable for any equity security of the Company purchased from the Company at any time other than in a public offering to so agree.

Section 4.08. *No Required Sale*. Nothing in this Agreement shall be deemed to create an independent obligation on the part of any Holder to sell any Registrable Securities pursuant to any effective registration statement.

Section 4.09. *Indemnification*.

(a) In the event of any registration and/or offering of any securities of the Company under the Securities Act pursuant to this Article 4, the Company will, and hereby agrees to, and hereby does, indemnify and hold harmless, to the fullest extent permitted by law, each Holder, its directors, officers, fiduciaries, employees, shareholders, members or general and limited partners (and the directors, officers, fiduciaries, employees, shareholders, members or general and limited partners thereof), any underwriter (as defined in the Securities Act) for such Holder and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or Exchange Act, from and against any and all losses, claims, damages or liabilities, joint or several, actions or proceedings (whether commenced or threatened) and expenses (including reasonable fees of counsel and any amounts paid in any settlement effected with the Company's consent, which consent shall not be unreasonably withheld or delayed) to which each such indemnified party may become subject under the Securities Act or otherwise in respect thereof (collectively, "**Claims**"), insofar as such Claims arise out of or are based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement under which such securities were registered under the Securities Act or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary or final prospectus or any amendment or supplement thereto, together with the documents incorporated by reference therein, or any free

writing prospectus utilized in connection therewith, or the omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iii) any untrue statement or alleged untrue statement of a material fact in the information conveyed by the Company to any purchaser at the time of the sale to such purchaser, or the omission or alleged omission to state therein a material fact required to be stated therein, or (iv) any violation by the Company of any federal, state or common law rule or regulation applicable to the Company and relating to action required of or inaction by the Company in connection with any such registration, and the Company will reimburse any such indemnified party for any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such Claim as such expenses are incurred; *provided*, *however*, that the Company shall not be liable to any such indemnified party in any such case to the extent such Claim arises out of or is based upon any untrue statement or alleged untrue statement of a material fact or omission or alleged omission of a material fact made in such registration statement or amendment thereof or supplement thereto or in any such prospectus or any preliminary or final prospectus or free writing prospectus in reliance upon and in conformity with written information furnished to the Company by or on behalf of such indemnified party specifically for use therein. Such indemnity and reimbursement of expenses shall remain in full force and effect regardless of any investigation made by or on behalf of such indemnified party and shall survive the transfer of such securities by such seller.

(b) Each Participating Holder shall, severally and not jointly, indemnify and hold harmless (in the same manner and to the same extent as set forth in paragraph (a) of this Section 4.09) to the extent permitted by law the Company, its officers and directors, each Person controlling the Company within the meaning of the Securities Act, each underwriter (within the meaning of the Securities Act) of the Company's securities covered by such a registration statement, any Person who controls such underwriter, and any other Holder selling securities in such registration statement and each of its directors, officers, partners or agents or any Person who controls such Holder with respect to any untrue statement or alleged untrue statement of any material fact in, or omission or alleged omission of any material fact from, such registration statement, any preliminary or final prospectus contained therein, or any amendment or supplement thereto, or any free writing prospectus utilized in connection therewith, if such statement or alleged statement or omission or alleged omission was made in reliance upon and in conformity with written information furnished to the Company or its representatives by or on behalf of such Participating Holder, specifically for use therein and reimburse such indemnified party for any legal or other expenses reasonably incurred in connection with investigating or defending any such Claim as such expenses are incurred; *provided*, *however*, that the aggregate amount which any such Participating Holder shall be required to pay pursuant to this Sections 4.09(b), 4.09(c) and 4.09(e) shall in no case be greater than the amount of the net proceeds actually received by such Participating Holder upon the sale of the Registrable Securities pursuant to the registration statement giving rise to such Claim. The Company and each Participating Holder hereby acknowledge and agree that, unless otherwise expressly agreed to in writing by such Participating Holders to the contrary, for all purposes of this Agreement, the only information furnished or to be furnished to the Company for use in any such registration statement, preliminary or final prospectus or

amendment or supplement thereto or any free writing prospectus are statements specifically relating to (a) the beneficial ownership of Company Shares by such Participating Holder and its Affiliates and (b) the name and address of such Participating Holder. Such indemnity and reimbursement of expenses shall remain in full force and effect regardless of any investigation made by or on behalf of such indemnified party and shall survive the transfer of such securities by such Holder.

(c) Indemnification similar to that specified in the preceding paragraphs (a) and (b) of this Section 4.09 (with appropriate modifications) shall be given by the Company and each Participating Holder with respect to any required registration or other qualification of securities under any applicable securities and state "blue sky" laws.

(d) Any Person entitled to indemnification under this Agreement shall notify promptly the indemnifying party in writing of the commencement of any action or proceeding with respect to which a claim for indemnification may be made pursuant to this Section 4.09, but the failure of any indemnified party to provide such notice shall not relieve the indemnifying party of its obligations under the preceding paragraphs of this Section 4.09, except to the extent the indemnifying party is materially and actually prejudiced thereby and shall not relieve the indemnifying party from any liability which it may have to any indemnified party otherwise than under this Article 4. In case any action or proceeding is brought against an indemnified party, the indemnifying party shall be entitled to (x) participate in such action or proceeding and (y) unless, in the reasonable opinion of outside counsel to the indemnified party, a conflict of interest between such indemnified and indemnifying parties may exist in respect of such claim, assume the defense thereof jointly with any other indemnifying party similarly notified, with counsel reasonably satisfactory to such indemnified party. The indemnifying party shall promptly notify the indemnified party of its decision to assume the defense of such action or proceeding. If, and after, the indemnified party has received such notice from the indemnifying party, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense of such action or proceeding other than reasonable costs of investigation; *provided*, *however*, that (i) if the indemnifying party fails to take reasonable steps necessary to defend diligently the action or proceeding within 20 days after receiving notice from such indemnified party that the indemnified party believes it has failed to do so; (ii) if such indemnified party who is a defendant in any action or proceeding which is also brought against the indemnifying party reasonably shall have concluded that there may be one or more legal or equitable defenses available to such indemnified party which are not available to the indemnifying party or which may conflict with those available to another indemnified party with respect to such Claim; or (iii) if representation of both parties by the same counsel is otherwise inappropriate under applicable standards of professional conduct, then, in any such case, the indemnified party shall have the right to assume or continue its own defense as set forth above (but with no more than one firm of counsel for all indemnified parties in each jurisdiction, except to the extent any indemnified party or parties reasonably shall have made a conclusion described in clause (ii) or (iii) above) and the indemnifying party shall be liable for any expenses therefor. No indemnifying party shall, without the written consent of the indemnified party, effect the settlement or compromise of, or consent to the entry

of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the indemnified party is an actual or potential party to such action or claim), unless such settlement or compromise (i) includes an unconditional release of such indemnified party from all liability on any claims that are the subject matter of such action or claim and (ii) does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of an indemnified party. The indemnity obligations contained in Sections 4.09(a) and 4.09(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the indemnified party which consent shall not be unreasonably withheld.

(e) If for any reason the foregoing indemnity is held by a court of competent jurisdiction to be unavailable to an indemnified party under Section 4.09(a), (b) or (c), then each applicable indemnifying party shall contribute to the amount paid or payable to such indemnified party as a result of any Claim in such proportion as is appropriate to reflect the relative fault of the indemnifying party, on the one hand, and the indemnified party, on the other hand, with respect to such Claim as well as any other relevant equitable considerations. The relative fault shall be determined by a court of law by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the indemnifying party or the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. If, however, the allocation provided in the second preceding sentence is not permitted by applicable law, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party in such proportion as is appropriate to reflect not only such relative faults but also the relative benefits of the indemnifying party and the indemnified party as well as any other relevant equitable considerations. The parties hereto agree that it would not be just and equitable if any contribution pursuant to this Section 4.09(e) were to be determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the preceding sentences of this Section 4.09(e). The amount paid or payable in respect of any Claim shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such Claim. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11 (f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation. Notwithstanding anything in this Section 4.09(e) to the contrary, no indemnifying party (other than the Company) shall be required pursuant to this Section 4.09(e) to contribute any amount greater than the amount of the net proceeds actually received by such indemnifying party upon the sale of the Registrable Securities pursuant to the registration statement giving rise to such Claim, less the amount of any indemnification payment made by such indemnifying party pursuant to Sections 4.09(b) and 4.09(c).

(f) The indemnity and contribution agreements contained herein shall be in addition to any other rights to indemnification or contribution which any indemnified party may have pursuant to law or contract (except as set forth in subsection (h) below) and shall remain operative and in full force and effect regardless of any investigation

made or omitted by or on behalf of any indemnified party and shall survive the transfer of the Registrable Securities by any such party and the completion of any offering of Registrable Securities in a registration statement.

(g) The indemnification and contribution required by this Section 4.09 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or expense, loss, damage or liability is incurred; *provided*, *however*, that the recipient thereof hereby undertakes to repay such payments if and to the extent it shall be determined by a court of competent jurisdiction that such recipient is not entitled to such payment hereunder.

(h) If a customary underwriting agreement shall be entered into in connection with any registration pursuant to Section 4.01 or 4.02, the indemnity, contribution and related provisions set forth therein shall supersede the indemnification and contribution provisions set forth in this Section 4.09.

Section 4.10. *Underwritten Offerings*.

(a) *Requested Underwritten Offerings*. If the Initiating Holders request an underwritten offering pursuant to a registration under Section 4.01 (pursuant to a request for a registration statement to be filed in connection with a specific underwritten offering or a request for a shelf takedown in the form of an underwritten offering), the Company shall enter into a customary underwriting agreement with the underwriters. Such underwriting agreement shall (i) be satisfactory in form and substance to the Majority Participating Holders, (ii) contain terms not inconsistent with the provisions of this Agreement and (iii) contain such representations and warranties by, and such other agreements on the part of, the Company and such other terms as are generally prevailing in agreements of that type, including indemnities and contribution agreements on substantially the same terms as those contained herein (it being understood that an underwriting agreement in substantially the form of the underwriting agreement for the IPO shall be deemed to satisfy the foregoing requirements). Any Participating Holder shall be a party to such underwriting agreement and may, at its option, require that any or all of the representations and warranties by, and the other agreements on the part of, the Company to and for the benefit of such underwriters shall also be made to and for the benefit of such Participating Holder and that any or all of the conditions precedent to the obligations of such underwriters under such underwriting agreement be conditions precedent to the obligations of such Participating Holder; *provided*, *however*, that the Company shall not be required to make any representations or warranties with respect to written information specifically provided by a Participating Holder for inclusion in the registration statement (as set forth in the penultimate sentence of Section 4.09(b) of this Agreement). Each such Participating Holder shall not be required to make any representations or warranties to or agreements with the Company or the underwriters other than customary representations, warranties or agreements regarding such Participating Holder, its ownership of, and title to, the Registrable Securities, any written information specifically provided by such Participating Holder for inclusion in the registration statement and its intended method of distribution; and any liability of such Participating Holder to the Company, any underwriter or other Person under such underwriting agreement shall be

limited to the amount of the net proceeds received by such Holder upon the sale of the Registrable Securities pursuant to the registration statement and shall be limited to liability for written information specifically provided by such Participating Holder (as set forth in the penultimate sentence of Section 4.09(b) of this Agreement).

(b) *Piggyback Underwritten Offerings*. In the case of a registration pursuant to Section 4.02 which involves an underwritten offering, the Company shall enter into an underwriting agreement in connection therewith and all of the Participating Holders' Registrable Securities to be included in such registration shall be subject to such underwriting agreement. Any Participating Holder may, at its option, require that any or all of the representations and warranties by, and the other agreements on the part of, the Company to and for the benefit of such underwriters shall also be made to and for the benefit of such Participating Holder and that any or all of the conditions precedent to the obligations of such underwriters under such underwriting agreement be conditions precedent to the obligations of such Participating Holder; *provided*, *however*, that the Company shall not be required to make any representations or warranties with respect to written information specifically provided by a Participating Holder for inclusion in the registration statement. Each such Participating Holder shall not be required to make any representations or warranties to or agreements with the Company or the underwriters other than customary representations, warranties or agreements regarding such Participating Holder, its ownership of, and title to, the Registrable Securities, any written information specifically provided by such Participating Holder for inclusion in the registration statement (as set forth in the penultimate sentence of Section 4.09(b) of this Agreement) and its intended method of distribution; and any liability of such Participating Holder to any underwriter or other Person under such underwriting agreement shall be limited to the amount of the net proceeds received by such Participating Holder upon the sale of the Registrable Securities pursuant to the registration statement and shall be limited to liability for written information specifically provided by such Participating Holder (as set forth in the penultimate sentence of Section 4.09(b) of this Agreement).

Section 4.11. *Adjustments Affecting Registrable Securities*. The provisions of this Article 4 shall apply, to the full extent set forth herein with respect to the Registrable Securities, to any and all shares of capital stock of the Company or any successor or assign of the Company (whether by merger, share exchange, consolidation, sale of assets or otherwise) or any Subsidiary of the Company which may be issued in respect of, in exchange for or in substitution of, Registrable Securities and shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof.

Section 4.12. *Rule 144 and Rule 144A*. If the Company shall have filed a registration statement pursuant to the requirements of Section 12 of the Exchange Act or a registration statement pursuant to the requirements of the Securities Act in respect of the Company Shares or Company Shares Equivalents, the Company covenants that (i) so long as it remains subject to the reporting provisions of the Exchange Act, it will timely file the reports required to be filed by it under the Securities Act or the Exchange Act (including, but not limited to, the reports under Sections 13 and 15(d) of the Exchange Act referred to in subparagraph (c)(1) of Rule 144 under the Securities Act, as such Rule

may be amended ("**Rule 144**")) or, if the Company is not required to file such reports, it will, upon the request of any Holder, make publicly available other information so long as necessary to permit sales by such Holder under Rule 144, Rule 144A under the Securities Act, as such Rule may be amended ("**Rule 144A**"), or any similar rules or regulations hereafter adopted by the SEC, and (ii) it will take such further action as any Holder may reasonably request, all to the extent required from time to time to enable such Holder to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by (A) Rule 144, (B) Rule 144A or (C) any similar rule or regulation hereafter adopted by the SEC. Upon the request of any Holder of Registrable Securities, the Company will deliver to such Holder a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form.

Section 4.13. *Limitations on Subsequent Registration Rights*. From and after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public, the Company may, without the prior written consent of the Holders or the Non-Cellectis Holders, enter into any agreement with any holder or prospective holder of any securities of the Company which provides such holder or prospective holder of securities of the Company comparable, but not more favorable or conflicting (including conflicting with any priorities set forth in Section 4.03), information and registration rights granted to the Holders hereby.

ARTICLE 5

TRANSFERS OF SHARES

Section 5.01. *Rights and Obligations of Permitted Transferees*.

(a) Any Permitted Transferee of a Holder may elect to become party to this Agreement and, upon execution and delivery of a customary joinder agreement, shall be considered a Party hereto and be treated as a Holder for all purposes of this Agreement.

(b) Notwithstanding the foregoing, Section 5.01(a) shall not apply to any Transfer of Company Shares to a Permitted Transferee completed pursuant to (i) a registration statement, (ii) an underwritten registered public offering or (iii) a bona fide sale pursuant to a brokers' transaction, transaction directly with a market maker or riskless principal transaction in each case in accordance with Rule 144 under the Securities Act (including block trades), in each case for which the transferor does not have knowledge that such Company Shares are being transferred to a Permitted Transferee.

ARTICLE 6

General Provisions

Section 6.01. *Further Assurances*. The Parties shall take all Necessary Action in order to give full effect to this Agreement and every provision hereof. Each of the Company, the Holders and the Non-Cellectis Holders shall take or cause to be taken all lawful action necessary to ensure at all times that the Company's Governing Documents are not at any time inconsistent with the provisions of this Agreement. In addition, each Party shall do and perform or cause to be done and performed all such further acts and things and shall execute and deliver all such other agreements, certificates, instruments, and documents as any other Party reasonably may request in order to carry out the intent and accomplish the purposes of this Agreement.

Section 6.02. *Assignment; Benefit*. The rights and obligations hereunder of the Parties shall not be assigned without the prior written consent of Cellectis, Calyxt and any Permitted Transferee who becomes a Party pursuant to Article 5, except in connection with a transfer of Company Shares in compliance with Article 5. In addition, the registration rights set forth in Article 4 may only be assigned in connection with a transfer of at least 10% of the then outstanding Company Shares. Any assignment of rights or obligations in violation of this Section 6.02 shall be null and void. This Agreement shall be binding upon and shall inure to the benefit of the Parties, and their respective successors and permitted assigns.

Section 6.03. *Pledges*. Upon the request of Cellectis to pledge, hypothecate or grant security interests in any or all of the Company Shares held by it, including to banks or financial institutions as collateral or security for loans, advances or extensions of credit, the Company agrees to cooperate with Cellectis in taking action reasonably necessary to consummate any such pledge, hypothecation or grant, including delivery of letter agreements to lenders in form and substance reasonably satisfactory to such lenders (which may include agreements by the Company in respect of the exercise of remedies by such lenders) and instructing the transfer agent to transfer any such Company Shares subject to the pledge, hypothecation or grant into the facilities of The Depository Trust Company without restricted legends.

Section 6.04. *Termination*. This Agreement shall terminate on the date on which Cellectis and its Affiliates no longer Beneficially Own, in the aggregate, a number of Company Shares equal to at least 10% of the then outstanding Company Shares, unless Cellectis has made a transfer of Company Shares to a Person satisfying the definition of Permitted Transferee who has become a party to this Agreement, in which case this Agreement shall terminate on the date on which such Person no longer Beneficially Owns in the aggregate a number of Company Shares equal to at least 10% of the then outstanding Company Shares.

Section 6.05. *Severability*. In the event that any provision of this Agreement shall be invalid, illegal or unenforceable, such provision shall be construed by limiting it so as to be valid, legal and enforceable to the maximum extent provided by law and the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

Section 6.06. *Entire Agreement*. This Agreement, the Governing Documents and the other agreements referenced herein and therein constitute the entire agreement among the Parties with respect to the subject matter hereof, and supersede any prior agreement or understanding among them with respect to the matters referred to herein.

Section 6.07. *Amendment*. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions of this Agreement may not be given without the written consent of the Company and holders of a majority of the Registrable Securities; *provided*, *however*, that in no event shall the obligations of any holder of Registrable Securities be increased or the rights of any Holder be adversely affected (without similarly increasing or adversely affecting the rights of all Holders), except upon the written consent of such Holder. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of Holders of Registrable Securities whose securities are being sold pursuant to a registration statement and that does not directly or indirectly affect the rights of other Holders of Registrable Securities may be given by holders of at least a majority of the Registrable Securities being sold by such Holders pursuant to such registration statement.

Section 6.08. This Agreement may not be amended, modified, supplemented, waived or terminated (other than pursuant to Section 6.04) except with the written consent of Cellectis; *provided* that, any amendment, modification, supplement, waiver or termination that adversely affects the rights of the Company under this Agreement, imposes additional obligations on the Company, or amends or modifies Section 3.01, Section 3.02, Article 6, and any corresponding definitions in Article 1, will require both (i) the written consent of Cellectis and (ii) the written consent of the Company with the approval of the "independent directors" of the Company.

Section 6.09. *Waiver*. Except as set forth in Section 6.08, no waiver of any breach of any of the terms of this Agreement shall be effective unless such waiver is expressly made in writing and executed and delivered by the Party against whom such waiver is claimed. Waiver by any Party of any breach or default by any other Party of any of the terms of this Agreement shall not operate as a waiver of any other breach or default, whether similar to or different from the breach or default waived. No waiver of any provision of this Agreement shall be implied from any course of dealing between the Parties or from any failure by any Party to assert its or his or her rights hereunder on any occasion or series of occasions.

Section 6.10. *Counterparts*. This Agreement may be executed in any number of separate counterparts each of which when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement.

Section 6.11. *Notices*. Unless otherwise specified herein, all notices, consents, approvals, reports, designations, requests, waivers, elections and other communications

authorized or required to be given pursuant to this Agreement shall be in writing and shall be given, made or delivered (and shall be deemed to have been duly given, made or delivered upon receipt) by personal hand-delivery, by facsimile transmission, by electronic mail, by mailing the same in a sealed envelope, registered first-class mail, postage prepaid, return receipt requested, or by air courier guaranteeing overnight delivery, addressed as follows:

If to Calyxt, Inc., to:

Calyxt, Inc.
600 County Road D West
Suite 8
New Brighton, MN 55112
Attention: Joseph Saluri, General Counsel
E-mail: joseph.saluri@calyxt.com

If to Cellectis S.A., to:

Cellectis S.A.
8, rue de la Croix Jarry
75013 Paris, France
Attention: Marie-Bleuenn Terrier, General Counsel
Facsimile: +33 (0)1 81 69 16 06
E-mail: marie-bleuenn.terrier@cellectis.com

Section 6.12. *Governing Law*. This Agreement is governed by and will be construed in accordance with the laws of the State of Delaware, excluding any conflict-of-laws rule or principle (whether of Delaware or any other jurisdiction) that might refer the governance or the construction of this Agreement to the law of another jurisdiction.

Section 6.13. *Jurisdiction*. Each of the Parties (a) consents to submit itself to the personal jurisdiction of the Court of Chancery of the State of Delaware in the event any dispute arises out of this Agreement, (b) agrees that it will not attempt to deny or defeat such personal jurisdiction by motion or other request for leave from such court and (c) agrees that it will not bring any action relating to this Agreement or any of the transactions contemplated by this Agreement in any court other than the Court of Chancery of the State of Delaware. Each Party hereby agrees that, to the fullest extent permitted by law, service of any process, summons, notice or document by U.S. registered mail to the respective addresses set forth in Section 6.11 shall be effective service of process for any suit or proceeding in connection with this Agreement.

Section 6.14. *Waiver of Jury Trial*. EACH OF THE PARTIES HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF THE PARTIES IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT THEREOF. The Company or any Holder may file an original counterpart or a copy of this Section 6.14 with any court as written evidence of the consent of any of the Parties to the waiver of their rights to trial by jury.

Section 6.15. *Specific Performance*. It is hereby agreed and acknowledged that it will be impossible to measure the money damages that would be suffered if the Parties fail to comply with any of the obligations imposed on them by this Agreement and that, in the event of any such failure, an aggrieved Party will be irreparably damaged and will not have an adequate remedy at law. Each Party shall, therefore, be entitled (in addition to any other remedy to which such Party may be entitled at law or in equity) to seek injunctive relief, including specific performance, to enforce such obligations, without the posting of any bond, and if any action should be brought in equity to enforce any of the provisions of this Agreement, none of the Parties shall raise the defense that there is an adequate remedy at law.

Section 6.16. *Adjustments*. All references in this Agreement to Company Shares shall be appropriately adjusted for any stock dividends, splits, reverse splits, combinations, reclassifications, recapitalizations, reorganizations and the like occurring after the date hereof.

Section 6.17. *No Third Party Beneficiaries*. This Agreement is not intended to confer upon any Person, except for the Parties, any rights or remedies hereunder.

* * *

IN WITNESS WHEREOF, the parties set forth below have duly executed this Agreement as of the day and year first above written.

CALYXT, INC.

By: _____

Name:

Title:

CELLECTIS S.A.

By: _____
Name:
Title:

By: _____
Name: André Choulika

By: _____
Name: [_____]

By: _____
Name: [_____]

By: _____
Name: [_____]

By: _____
Name: [_____]

By: _____
Name: Federico A. Tripodi

By: _____
Name: Bryan W. J. Corkal

By: _____
Name: Dan Voytas

By: _____
Name: Feng Zhang

By: _____
Name: Manoj Sahoo

By: _____
Name: Glenn Bowers

By: _____
Name: Michel Arbadji

By: _____
Name: Joseph B. Saluri

Schedule A

Directors:
André Choulika
[_____]
[_____]
[_____]
[_____]

Executive Officers:
Federico A. Tripodi
Bryan W. J. Corkal
Dan Voytas
Feng Zhang
Manoj Sahoo
Glenn Bowers
Michel Arbadji
Joseph B. Saluri

LICENSE AGREEMENT

This LICENSE AGREEMENT (this "**Agreement**"), dated as of [•], 2017 (the "**Effective Date**"), is entered into by and between Cellectis S.A., a corporation existing and registered under the laws of France, located at 8 rue de la Croix Jarry, 75013 Paris, France ("**Cellectis**"), and Calyxt, Inc., a corporation existing and registered under the laws of Delaware, located at 600 County Road D West, Suite 8, New Brighton, MN 55112, USA ("**Calyxt**") (each a "**Party**" and collectively, the "**Parties**").

W I T N E S S E T H :

WHEREAS, Cellectis owns or otherwise controls certain Intellectual Property Rights and desires to grant to Calyxt, and Calyxt desires to receive from Cellectis, a license to use and otherwise exploit such Intellectual Property Rights, in each case upon the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

ARTICLE 1
DEFINITIONS

Section 1.01. *Definitions*. (a) For purposes of this Agreement, the following terms shall have the following meanings:

"**Affiliate**" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with such other Person, whether now or in the future. For purposes of this definition, (i) "**control**" when used with respect to any Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise, and the terms "**controlling**" and "**controlled**" have correlative meanings and (ii) neither Cellectis nor any of its Subsidiaries shall be considered to be an Affiliate of Calyxt or any of its Subsidiaries (and vice versa).

"**Applicable Law**" means, with respect to any Person, any transnational, domestic or foreign federal, state or local law (statutory, common or otherwise), constitution, treaty, convention, ordinance, code, rule, regulation, order, injunction, judgment, decree, ruling or other similar requirement enacted, adopted, promulgated or applied by a Governmental Authority that is binding upon or applicable to such Person, as amended unless expressly specified otherwise.

"**Bare Sublicense Revenue**" means any and all consideration, payments and revenue received by Calyxt pursuant to any sublicense of the Calyxt License and/or TALEN Mark License granted by Calyxt (*e.g.*, license fees, distribution fees, milestone and similar payments), but excluding any payments in respect of Net Sales of Calyxt Licensed Products to the extent that such Net Sales are subject to Section 4.01(a).

"**Business Day**" means a day, other than Saturday, Sunday or other day on which commercial banks in Paris, France are authorized or required by Applicable Law to close.

"**Calyxt Field**" means the field of researching, developing and commercializing seeds and food ingredients (excluding animal-derived ingredients) for agricultural, feed and food applications.

"**Calyxt Improvement Patents**" means any Patents owned or controlled by Calyxt or any of its Affiliates Covering any Calyxt Improvements.

"**Calyxt Licensed Products**" means any product or service Covered by any of the Licensed Cellectis Patents.

"**Confidential Information**" means any and all non-public, proprietary or other confidential information disclosed by a Party ("**disclosing party**") to the other Party ("**receiving party**") and includes all information licensed hereunder without the need for any further notice or marking, excluding any information that: (i) the receiving party independently develops without reference to the disclosed information; (ii) the receiving party independently receives on a non-confidential and authorized basis from a source other than the disclosing party; (iii) becomes public knowledge through no fault of the receiving party; or (iv) is in the public domain at the time the receiving party receives the disclosed information.

"**Cover**" means, with respect to any product or service and any Intellectual Property Right, that the manufacture, use, offer for sale, sale, distribution, importation, development or other commercialization of such product or service would, but for any ownership of or license under such Intellectual Property Right, constitute an infringement, misappropriation or other violation of any of such Intellectual Property Right. "**Covered**" and "**Covering**" have correlative meanings.

"**Exclusively Licensed Cellectis Patents**" means any and all Licensed Cellectis Patents other than the I-CreI Patents.

"**Governmental Authority**" means any transnational, domestic or foreign federal, state or local governmental, regulatory or administrative authority, department, court, agency or official, including any political subdivision thereof.

"**I-CreI Patents**" means any and all Licensed Cellectis Patents that are related to the making, use, transfer or commercialization (including the leasing, sale, exportation and importation) of a modified or mutated I-CreI homing endonuclease that is a homodimer, heterodimer or single chain endonuclease.

"**Improvement**" means any and all improvements, modifications, enhancements or derivatives of any Intellectual Property Rights.

"**Intellectual Property Rights**" means any and all intellectual property rights or similar proprietary rights throughout the world, including all (i) national and multinational statutory invention registrations and similar statutory rights, patents and patent applications, including all provisionals, non-provisionals, divisionals, continuations, continuations-in-part, reissues, renewals, reexaminations, extensions, supplemental protection certificates and the equivalents of any of the foregoing in any jurisdiction, and all inventions disclosed in any of the foregoing ("**Patents**"); (ii) trademarks, service marks, certification marks, logos, trade names, trade dress, domain names and other indications of origin, including all registrations and applications for registration of, and all goodwill associated with, any of the foregoing ("**Trademarks**"); (iii) copyrights and registrations and applications for registration thereof, including all derivative works, moral rights, renewals, extensions, reversions or restorations associated with such copyrights, regardless of the medium of fixation or means of expression; (iv) trade secrets, know-how and other confidential or proprietary information (including processes, techniques and research and development information); and (v) mask works, industrial designs (whether or not registered), database rights, publicity rights and privacy rights.

"**Licensable**" means, with respect to any Intellectual Property Right, that a Person has the power and authority to grant a license (or sublicense, as the case may be), on the applicable terms and conditions of this Agreement, to such Intellectual Property Right without any of the following: (i) the consent of any third party (unless such consent can be obtained without providing any additional consideration to such third party); (ii) impairing such Person's existing rights in respect of such Intellectual Property Right (it being understood that the grant of any license hereunder, in and of itself, shall not be construed as an impairment of any of such Person's rights); (iii) imposing any additional obligations on such Person under any preexisting agreement relating to such Intellectual Property Right; and/or (iv) the payment of royalties or other consideration on or after the Effective Date by such Person to any third party under any preexisting agreement relating to such Intellectual Property Right (other than to the University of Minnesota pursuant to the UMinn License). For the avoidance of doubt, in no event shall any Intellectual Property Right be "**Licensable**" if any of the foregoing conditions in clauses (i)-(iv) apply.

"**Licensed Cellectis IP**" means the (i) Licensed Cellectis Patents; and (ii) Other Licensed Intellectual Property Rights.

"**Licensed Cellectis Patents**" means any and all Patents that (i) are Licensable by Cellectis and related to the Calyxt Field; and (ii) have a first effective filing date on or prior to the Effective Date.

"**Licensed TALEN Mark**" means the trademark "TALEN" and the registration set forth on Schedule A, in each case as owned by Cellectis as of the Effective Date.

"**Net Sales**" means

"**Other Licensed Intellectual Property Rights**" means any and all Intellectual Property Rights (excluding any Patents and Trademarks) related to the Calyxt Field that are Licensable by Cellectis and existing as of the Effective Date.

"**Patent-Related Expenses**" means any and all costs and expenses (including out-of-pocket attorneys' fees, patent agent fees and governmental filing fees) that Cellectis or any of its Affiliates incurs in connection with prosecuting and maintaining the Licensed Cellectis Patents.

"**Person**" means an individual, corporation, partnership, limited liability company, association, trust or other entity or organization, including a Governmental Authority.

"**Royalty Term**" means, with respect to any Calyxt Licensed Product in any jurisdiction, the period commencing on the Effective Date and ending upon the expiration of the last-to-expire Valid Claim Covering such Calyxt Licensed Product in such jurisdiction.

"**Sublicense Revenue Term**" means the period commencing on the Effective Date and ending upon the expiration of the last-to-expire Valid Claim.

"**Subsidiary**" means, with respect to any Person, any entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other Persons performing similar functions are at the time directly or indirectly owned by such Person.

"**UMinn License**" means the Exclusive Patent License Agreement between the University of Minnesota and Cellectis dated as of January 10, 2011 (as amended, including by the First Amendment to the Exclusive Patent License Agreement, dated as of May 24, 2012, Second Amendment to the Exclusive Patent License Agreement, dated as of April 1, 2014, and Third Amendment to the Exclusive Patent License Agreement, dated as of December 16, 2015).

"**University of Minnesota**" means the Regents of the University of Minnesota.

"**Valid Claim**" means any (i) claim in any unexpired and issued Patent included in the Licensed Cellectis Patents that has not been (A) disclaimed, revoked or held invalid or unenforceable by a decision of a court or other Governmental Authority of competent jurisdiction from which no appeal (other than an appeal to the highest appellate court of such jurisdiction) can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, or (B) irretrievably abandoned, disclaimed or admitted to be invalid or unenforceable by Cellectis through reissue, disclaimer or otherwise, or (ii) pending claim in a pending Patent application included in the Licensed Cellectis Patents that has not been abandoned or finally rejected without the possibility of appeal or refiling.

(b) Each of the following terms is defined in the Section set forth opposite such term:

Term	Section
Agreement	Preamble
Calyxt	Preamble
Calyxt Improvements	2.04
Calyxt License	2.01
Cellectis	Preamble
Controlling Party	8.02
Effective Date	Preamble
Indemnified Party	7.03
Indemnifying Party	7.03
Infringement	8.02
Losses	7.01
Non-Controlling Party	8.02
Parties	Preamble
Party	Preamble
Remainder	8.02
TALEN Mark License	2.01
Third Party Claim	7.03
UMinn IP	2.03

Section 1.02. *Other Definitional and Interpretative Provisions*. The words "hereof", "herein" and "hereunder" and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. References to Articles, Sections and Schedules are to Articles, Sections and Schedules of this Agreement unless otherwise specified. All Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein. Any capitalized terms used in any Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement. Any singular term in this Agreement shall be deemed to include the plural, and any plural term the singular. Whenever the words "include", "includes" or "including" are used in this Agreement, they shall be deemed to be followed by the words "without limitation", whether or not they are in fact followed by those words or words of like import. "Writing", "written" and comparable terms refer to printing, typing and other means of reproducing words (including electronic media) in a visible form. References to any agreement or contract are to that agreement or contract as amended, modified or supplemented from time to time in accordance with the terms hereof and thereof. References to any Person include the successors and permitted assigns of that Person. References from or through any date mean, unless otherwise specified, from and including or through and including, respectively. References to "law", "laws" or to a particular statute or law shall be deemed also to include any and all Applicable Law.

ARTICLE 2
GRANT OF LICENSE

Section 2.01. *License Grants.* (a) Subject to the terms and conditions of this Agreement, Cellectis hereby grants to Calyxt a worldwide, non-sublicensable (except as set forth in Section 2.02), non-transferable (except as set forth in Section 10.01) license under the Licensed Cellectis IP to (i) use, make, have made, sell, offer for sale, import and otherwise exploit any and all Calyxt Licensed Products and (ii) use, reproduce, perform, display, create derivative works from and otherwise exploit such Licensed Cellectis IP, in the case of clauses (i) and (ii), within the Calyxt Field (the "**Calyxt License**"). The Calyxt License shall be (A) non-exclusive within the Calyxt Field with respect to the I-CreI Patents and (B) exclusive within the Calyxt Field with respect to all other Licensed Cellectis IP.

(b) Subject to the terms and conditions of this Agreement, Cellectis hereby grants to Calyxt a worldwide, non-exclusive, non-sublicensable (except as set forth in Section 2.02), non-transferable (except as set forth in Section 10.01) license to use the Licensed TALEN Mark in connection with the use, making, having made, sale, offer for sale, importation and other exploitation of any and all Calyxt Licensed Products in the Calyxt Field (the "**TALEN Mark License**").

Section 2.02. *Sublicense Rights.* The Calyxt License and the TALEN Mark License shall include the right of Calyxt to grant sublicenses to any Person; *provided* that (a) any such sublicense shall be in writing and automatically terminate upon any termination of this Agreement (it being understood that any such sublicense shall include express terms and conditions to effect such automatic termination); (b) sublicensees of the Calyxt License shall not be permitted to grant further sublicenses thereunder with respect to any UMinn IP (as defined below); (c) Calyxt shall cause each of its sublicensees to abide by all applicable terms and conditions of this Agreement, enforce such terms and conditions and the provisions of any sublicense against each such sublicensee; and (d) Calyxt shall remain responsible and liable to Cellectis for the performance of each such sublicensee's obligations and for all acts or omissions of such sublicensee as if they were acts of Calyxt under this Agreement.

Section 2.03. *UMinn License.* The Parties acknowledge and agree that (a) Calyxt has received a copy of the UMinn License and (b) certain Licensed Cellectis IP is owned by the University of Minnesota ("**UMinn IP**") and the Calyxt License with respect to the UMinn IP is granted as a sublicense under, and subject to the terms and conditions of, the UMinn License. Accordingly, in exercising its rights under the Calyxt License, Calyxt shall comply with any and all terms and conditions of the UMinn License applicable to Cellectis or its sublicensees with respect to any UMinn IP. Without limiting the generality of the foregoing, promptly following receipt of written notice thereof, Calyxt shall reimburse Cellectis for any and all payments made by Cellectis to the University of Minnesota pursuant to Sections 11.6.4 (Milestone Payments), 11.11 (Annual Fee), and 11.12 (Commercialization Fee) of the UMinn License, but only to the extent that any such payments are required as a result of the applicable activities of Calyxt hereunder. Without the prior written consent of Calyxt, Cellectis shall not (i) terminate the UMinn License, or (ii) amend or waive any rights under the UMinn License in any manner that would reasonably be expected to have a material adverse effect on any of Calyxt's rights under this Agreement.

Section 2.04. *Calyxt Improvements.* (a) As between the Parties, any and all Improvements to any Licensed Cellectis IP made by Calyxt or any of its Affiliates after the Effective Date, and all Intellectual Property Rights therein ("**Calyxt Improvements**"), shall be solely and exclusively owned by Calyxt.

(b) Subject to the terms and conditions of this Agreement, Calyxt, on behalf of itself and its Affiliates, hereby grants to Cellectis an exclusive, worldwide, non-sublicensable (except as set forth in this Section 2.04), non-transferable (except as set forth in Section 10.01), to use and otherwise exploit such Calyxt Improvements for any purpose outside of the Calyxt Field. The foregoing license granted to Cellectis pursuant to this Section 2.04 shall include the right of Cellectis to grant sublicenses to any Person; *provided* that (i) any such sublicense shall be in writing and automatically terminate upon any termination of this Agreement (it being understood that any such sublicense shall include express terms and conditions to effect such automatic termination); (ii) except for any license granted to any third party by Cellectis before the execution of this Agreement and which includes all or any part of the Calyxt Improvements, Cellectis shall cause each of its sublicensees to abide by all applicable terms and conditions of this Agreement, enforce such terms and conditions and the provisions of any sublicense against each such sublicensee, and (iii) Cellectis shall remain responsible and liable to Calyxt for the performance of each such sublicensee's obligations and for all acts or omissions of such sublicensee as if they were acts of Cellectis under this Agreement.

Section 2.05. *No Other Licenses*. Except as expressly provided in this Agreement, no other licenses are granted to either Party under this Agreement. Calyxt acknowledges and agrees that any use by it or any of its sublicensees of the Licensed Cellectis IP outside of the Calyxt License or the Licensed TALEN Mark outside of the TALEN Mark License is expressly prohibited.

ARTICLE 3
LICENSED TALEN MARK; QUALITY CONTROL

Section 3.01. *Quality Control*. Cellectis reserves the right to practice reasonable quality control with regard to the use of the Licensed TALEN Mark by Calyxt or any of its sublicensees and Calyxt shall, and shall cause its sublicensees to, adhere to such quality, appearance, reputational, distinctiveness and other standards with respect to the use of the Licensed TALEN Mark and with respect to the goods and services sold or rendered under the Licensed TALEN Mark as Cellectis may require from time to time. Calyxt shall, and shall cause its sublicensees to, (a) not take any action or make any statement which would reasonably be expected to damage the reputation or goodwill associated with Cellectis, any of its Affiliates, or the Licensed TALEN Mark and (b) comply with all Applicable Law governing the use of the Licensed TALEN Mark, including all services performed under the Licensed TALEN Mark and all goods to which the Licensed TALEN Mark is applied. At Calyxt's sole expense, Calyxt shall supply, and shall cause its sublicensees to supply, Cellectis with specimens of all uses of the Licensed TALEN Mark upon the reasonable request of Cellectis.

Section 3.02. *Reservation of Rights; Ownership.* (a) Calyxt, on behalf of itself and its sublicensees, acknowledges and agrees that (i) Cellectis is the sole and exclusive owner of all right, title and interest in and to the Licensed TALEN Mark; (ii) Cellectis shall have the sole and exclusive right to prosecute and maintain the Licensed TALEN Mark; and (iii) neither Calyxt nor any of its sublicensees has acquired, and shall not acquire, any right, title or interest in or to the Licensed TALEN Mark other than the rights expressly set forth in this Agreement.

(b) Calyxt shall not, and shall cause its sublicensees not to, (i) challenge the validity, enforceability or ownership of the Licensed TALEN Mark or claim adversely or assist in any claim adverse to Cellectis concerning any right, title or interest in the Licensed TALEN Mark or (ii) do or permit any act which may directly or indirectly impair or prejudice Cellectis' title to the Licensed TALEN Mark or be detrimental to the reputation and goodwill of Cellectis or any of its Affiliates, including any act which might assist or give rise to any application to remove or de-register any of the Licensed TALEN Mark. All use of the Licensed TALEN Mark by Calyxt and any of its sublicensees, and all goodwill associated with such use, shall inure to the benefit of Cellectis.

Section 3.03. *Trademark Notice*. In connection with the use of the Licensed TALEN Mark, Calyxt and its sublicensees shall mark each use with the registered trademark symbol, "®," or such other trademark notice symbol as designated by Cellectis.

ARTICLE 4
ROYALTIES AND BARE SUBLICENSE REVENUE

Section 4.01. *Royalties and Bare Sublicense Revenue.* As consideration for the Calyxt License and TALEN Mark License, Calyxt shall pay to Cellectis the following amounts during the following periods:

(a) With respect to each Calyxt Licensed Product in any jurisdiction, percent (%) of all Net Sales of such Calyxt Licensed Product in such jurisdiction during the Royalty Term for such Calyxt Licensed Product; and

(b) percent (%) of all Bare Sublicense Revenue during the Sublicense Revenue Term.

Section 4.02. *Reimbursement of Patent-Related Expenses*. Calyxt shall pay all invoices issued by Cellectis or any of its Affiliates for any Patent-Related Expenses under this Agreement within thirty (30) days of its receipt of each such invoice.

Section 4.03. *Reporting; Audit Rights.* Calyxt shall render to Cellectis, on a calendar quarterly basis, commencing with the first calendar quarter after the Effective Date, a detailed written report of the royalties and Bare Sublicense Revenue due to Cellectis. Such report shall be accompanied by a remittance of such royalties and Bare Sublicense Revenue as shown to be due hereunder. Each report shall be rendered within forty-five (45) days following the end of each calendar quarterly period. Calyxt shall keep books and records in sufficient detail to enable the royalty payments and Bare Sublicense Revenue due hereunder to be adequately determined. Once per calendar year, upon reasonable written notice, Cellectis shall have the right at its sole cost and expense to cause a nationally recognized independent certified public accountant reasonably acceptable to Calyxt to examine and inspect such books and records during Calyxt's normal business hours, but only to the extent necessary to verify the computation of royalties and Bare Sublicense Revenue payable hereunder. Such books and records shall be deemed Confidential Information of Calyxt hereunder, and such nationally recognized independent certified public accountant shall disclose to Cellectis only the royalties and Bare Sublicense Revenue payable and the percentage under/overpayment by Calyxt. In the event that such examination determines that Calyxt has underpaid royalties and Bare Sublicense Revenue by more than percent (%), Calyxt shall reimburse Cellectis for its reasonable costs in conducting such examination. At Calyxt's expense, Calyxt shall also provide Cellectis with all reasonably requested cooperation in connection with complying with any audit regarding the activities of Calyxt hereunder that is conducted by or on behalf of the University of Minnesota pursuant to the UMinn License.

Section 4.04. *Method of Payment*. Each payment by Calyxt hereunder shall be made by electronic transfer in immediately available funds, at Calyxt's election, via either a bank wire transfer or any other means of electronic funds transfer to a bank account specified in writing by Cellectis to Calyxt. Cellectis may change such account by written notice at least five (5) Business Days before any payment is due. All royalties and Bare Sublicense Revenue of Calyxt shall be computed and paid in U.S. dollars. For the purposes of determining the amount of any royalties or Bare Sublicense Revenue due for any relevant calendar quarter, the amount of Net Sales or Bare Sublicense Revenue in any foreign currency shall be converted into U.S. dollars in a manner consistent with Calyxt's customary practices used to prepare its audited financial reports. No more than once per calendar year, upon written request of Cellectis, Calyxt shall provide Cellectis with an explanation of such customary practices of Calyxt.

Section 4.05. *Withholding Taxes.* To the extent either Party is required by Applicable Law to withhold or deduct any amounts from any payments to be made under this Agreement, such Party shall be entitled to withhold or deduct such amounts and such amounts shall be treated for all purposes of this Agreement as having been paid to the Party in respect of which such deduction and withholding were made. Promptly after the execution of this Agreement, Cellectis shall provide to Calyxt a valid Form W-8BEN-E establishing Cellectis' right to a zero percent rate of withholding tax with respect to the amounts payable by Calyxt under this Article 4 under Article 12 of the United States – France income tax treaty.

ARTICLE 5
REPRESENTATIONS AND WARRANTIES; DISCLAIMERS; LIMITATION OF LIABILITY

Section 5.01. *Mutual Representations and Warranties*. As of the Effective Date, each Party hereby represents and warrants to the other Party that (a) the execution, delivery and performance by such Party of this Agreement are within such Party's corporate powers and have been duly authorized by all necessary corporate action on the part of such Party and (b) this Agreement constitutes a valid and binding agreement of such Party enforceable against such Party in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

Section 5.02. *Disclaimers and Limitation of Liability*. EXCEPT FOR THE REPRESENTATIONS AND WARRANTIES IN SECTION 5.01, ALL LICENSES AND RIGHTS GRANTED HEREIN ARE MADE ON AN "AS IS" BASIS, AND THE PARTIES EACH HEREBY DISCLAIM ANY EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES OF ANY KIND, INCLUDING WITHOUT LIMITATION, THOSE REGARDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF NON-INFRINGEMENT. NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, CALYXT ACKNOWLEDGES AND AGREES THAT ALL RIGHTS

GRANTED TO CALYXT UNDER THIS AGREEMENT ARE SUBJECT IN ALL RESPECTS TO ANY AND ALL LICENSES OR OTHER RIGHTS GRANTED BY CELLECTIS OR ANY OF ITS AFFILIATES TO ANY THIRD PARTIES WITH RESPECT TO ANY LICENSED CELLECTIS IP AND/OR THE LICENSED TALEN MARK AS OF OR PRIOR TO THE EFFECTIVE DATE. TO THE EXTENT PERMITTED BY APPLICABLE LAW, NEITHER PARTY SHALL BE LIABLE UNDER ANY LEGAL OR EQUITABLE THEORY FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING OUT OF OR OTHERWISE RELATED TO THIS AGREEMENT, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Section 5.03. *University of Minnesota Disclaimer; Limitation of Liability; and Release.*

(a) Calyxt acknowledges and agrees that the disclaimer and exclusion of representations and warranties by, and the limitation of liability applicable to, the University Minnesota, set forth in Sections 10.2, 11.1 and 11.2 of the UMinn License shall apply with respect to Calyxt's rights and remedies under this Agreement and such Sections are hereby incorporated by reference herein, *mutatis mutandis.*

(b) Calyxt, on behalf of itself and its Affiliates and its and their respective employees, hereby releases the University of Minnesota and its regents, employees and agents forever from any and all suits, actions, claims, liabilities, demands, damages, losses, and expenses (including reasonable attorneys' and investigative expenses) relating to or arising out of the manufacture, use, lease, sale, or other disposition of any Calyxt Licensed Product.

ARTICLE 6
CONFIDENTIALITY

Section 6.01. *Confidentiality*. (a) The receiving party shall keep confidential the disclosing party's Confidential Information, and shall not use any of the disclosing party's Confidential Information for any purpose other than the exercise of the receiving party's rights, or as otherwise permitted, under this Agreement. The receiving party shall preserve the confidentiality of the disclosing party's Confidential Information as it would customarily take to preserve the confidentiality of its own similar type of confidential information and shall not disclose the disclosing party's Confidential Information to any third party without the prior written consent of the disclosing party, except as expressly permitted hereunder. The receiving party may disclose the Confidential Information to (i) any of its employees, agents, independent contractors and sublicensees who need it in connection with this Agreement and are bound in writing by restrictions regarding disclosure and use of the Confidential Information comparable to and no less restrictive than those set forth herein or (ii) the extent it is in response to a valid order of a court or other Governmental Authority or to otherwise comply with Applicable Law; *provided* that, in the case of clause (ii), the receiving party shall first provide written notice to the disclosing party and reasonably cooperate with the disclosing party to obtain a protective order or other measures preserving the confidential treatment of such Confidential Information and requiring that the information or documents so disclosed be used only for the purposes for which the order was issued or is otherwise required by Applicable Law.

(b) The terms and conditions of this Agreement shall be deemed Confidential Information for the purposes of this Agreement; *provided* that each Party may disclose the terms and conditions of this Agreement: (i) in confidence, to its accountants, banks and present and prospective financing sources and their advisors; (ii) in connection with the enforcement of this Agreement or rights under this Agreement; (iii) in confidence, in connection with an actual or proposed merger, acquisition or similar transaction involving such Party; (iv) in confidence, to its Affiliates; (v) in confidence, to its third party independent contractors who have a need to know, solely in connection with their provision of services to such Party; (vi) as required by applicable securities laws or the rules of any stock exchange on which securities of such Party are traded or any other Applicable Law; or (vii) as mutually agreed upon by the Parties in writing.

ARTICLE 7
INDEMNIFICATION

Section 7.01. *Indemnification by Calyxt*. Calyxt shall defend Cellectis and its Affiliates and their respective officers, directors, employees, contractors, customers and agents against any action, suit, proceeding or other claim, and indemnify and hold each of them harmless from any and all damages, liabilities, expenses, and other losses (including reasonable attorneys' fees and court costs) ("**Losses**") to the extent arising from any (a) breach of this Agreement by Calyxt; (b) breach of the UMinn License caused by any activities of Calyxt or its sublicensees; (c) use, making, having made, sale, offer for sale, importation or any other exploitation of any Calyxt Licensed Products or any exploitation of the Licensed Cellectis IP or Licensed TALEN Mark by Calyxt or any of its sublicensees; (d) gross negligence or willful misconduct by Calyxt; and/or (e) violation of Applicable Law by Calyxt.

Section 7.02. *Indemnification by Cellectis*. Cellectis shall defend Calyxt and its Affiliates and their respective officers, directors, employees, contractors, customers and agents against any action, suit, proceeding or other claim, and indemnify and hold each of them harmless from any and all Losses to the extent arising from any (a) breach of this Agreement by Cellectis; (b) gross negligence or willful misconduct by Cellectis; and/or (c) violation of Applicable Law by Cellectis.

Section 7.03. *Third Party Claim Procedures*. (a) The Party seeking indemnification under Section 7.01 or 7.02 (the "**Indemnified Party**") shall give prompt notice in writing to the Party against whom indemnity is to be sought (the "**Indemnifying Party**") of the assertion of any claim or the commencement of any action, suit, proceeding or other claim by any third party ("**Third Party Claim**") in respect of which indemnity may be sought under such Section. Such notice shall set forth in reasonable detail such Third Party Claim and the basis for indemnification (taking into account the information then available to the Indemnified Party). The failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of its obligations hereunder, except to the extent such failure shall have actually prejudiced the Indemnifying Party.

(b) The Indemnifying Party shall be entitled to participate in the defense of any Third Party Claim and, subject to the limitations set forth in this Section, shall be entitled to control and appoint lead counsel for such defense, in each case at its own expense; provided that prior to assuming control of such defense, the Indemnifying Party must acknowledge that it would have an indemnity obligation for the Losses resulting from such Third Party Claim as provided under this Article 7.

(c) The Indemnifying Party shall not be entitled to assume or maintain control of the defense of any Third Party Claim and shall pay the fees and expenses of counsel retained by the Indemnified Party if (i) the Indemnifying Party does not deliver the acknowledgment referred to in Section 7.03(b) within thirty (30) days of receipt of notice of the Third Party Claim pursuant to Section 7.03(a); (ii) the Third Party Claim relates to or arises in connection with any criminal action, proceeding or claim; (iii) the Third Party Claim seeks an injunction or equitable relief against the Indemnified Party or any of its Affiliates; or (iv) the Indemnifying Party has failed or is failing to prosecute or defend vigorously the Third Party Claim.

(d) If the Indemnifying Party shall assume the control of the defense of any Third Party Claim in accordance with the provisions of this Section 7.03, the Indemnifying Party shall obtain the prior written consent of the Indemnified Party before entering into any settlement of such Third Party Claim.

(e) In circumstances where the Indemnifying Party is controlling the defense of a Third Party Claim in accordance with paragraphs (b) and (c) above, the Indemnified Party shall be entitled to participate in the defense of any Third Party Claim and to employ separate counsel of its choice for such purpose, in which case the fees and expenses of such separate counsel shall be borne by the Indemnified Party; *provided* that in such event the Indemnifying Party shall pay the fees and expenses of such separate counsel (i) incurred by the Indemnified Party prior to the date the Indemnifying Party assumes control of the defense of the Third Party Claim or (ii) if representation of both the Indemnifying Party and the Indemnified Party by the same counsel would create a conflict of interest.

(f) Each Party shall cooperate, and cause their respective Affiliates to cooperate, in the defense or prosecution of any Third Party Claim and shall furnish or cause to be furnished such records, information and testimony, and attend such conferences, discovery proceedings, hearings, trials or appeals, as may be reasonably requested in connection therewith.

Section 7.04. *Direct Claim Procedures*. In the event that an Indemnified Party has a claim for indemnity under Section 7.01 or 7.02 against an Indemnifying Party that does not involve a Third Party Claim, the Indemnified Party shall give prompt notice in writing of such claim to the Indemnifying Party. Such notice shall set forth in reasonable detail such claim and the basis for indemnification (taking into account the information then available to the Indemnified Party). The failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of its obligations hereunder, except to the extent such failure shall have actually prejudiced the Indemnifying Party.

ARTICLE 8
PROSECUTION, MAINTENANCE; LITIGATION

Section 8.01. *Prosecution and Maintenance*. (a) As between the Parties, Cellectis shall have the sole and exclusive right to prosecute and maintain the Licensed Cellectis IP and Licensed TALEN Mark (it being understood that, and Calyxt acknowledges and agrees that, pursuant to the UMinn License, the University of Minnesota has the sole and exclusive right to prosecute and maintain the UMinn IP). Subject to any rights granted to any third parties prior to the date hereof with respect to any Exclusively Licensed Cellectis Patents, Cellectis shall (i) keep Calyxt reasonably informed of all steps to be taken in connection with the prosecution and maintenance of the Exclusively Licensed Cellectis Patents, and (ii) consider in good faith (or, in the case of any Exclusively Licensed Cellectis Patents being prosecuted by the University of Minnesota, use commercially reasonable efforts to cause the University of Minnesota to consider in good faith) all reasonable comments and suggestions by Calyxt regarding such matters, including in respect of any actions, decisions, applications, amendments, submissions or correspondence related thereto. Notwithstanding the foregoing, subject to any rights granted to any third parties prior to the date hereof with respect to any Exclusively Licensed Cellectis Patents, in the event that the University of Minnesota or Cellectis elects to abandon or otherwise cease prosecuting and maintaining any Exclusively Licensed Cellectis Patent, prior to any such abandonment, (A) in the case of the University of Minnesota as the abandoning party, Cellectis shall use commercially reasonable efforts to acquire such Exclusively Licensed Cellectis Patent from the University of Minnesota and assume the responsibility for the prosecution and maintenance therefor, or secure Calyxt's right to acquire from the University of Minnesota such Exclusively Licensed Cellectis Patent (it being understood that, in the event that Cellectis elects to secure Calyxt's right to acquire such Exclusively Licensed Cellectis Patent from the University of Minnesota, Cellectis shall use commercially reasonable efforts to cause the University of Minnesota to execute and deliver any documents and perform any other acts, in each case as may be reasonably necessary to effect the foregoing), and (B) in the case of Cellectis as the abandoning party, Calyxt shall have the option to acquire at no cost any such Exclusively Licensed Cellectis Patent and assume the responsibility for the prosecution and maintenance of such Exclusively Licensed Cellectis Patent (it being understood that, in the event that Calyxt exercises such option to acquire such Exclusively Licensed Cellectis Patent, (x) Cellectis shall execute and deliver any documents and perform any other acts, in each case as may be reasonably necessary to effect the foregoing and (y) effective as of Calyxt acquiring ownership of such Exclusively Licensed Cellectis Patent, such Exclusively Licensed Cellectis Patent shall thereafter be automatically deemed to be licensed to Cellectis under the license granted to Cellectis pursuant to Section 2.04).

(b) As between the Parties, Calyxt shall have the sole and exclusive right to prosecute and maintain all Intellectual Property Rights owned or otherwise controlled by Calyxt or any of its Affiliates, including all Intellectual Property Rights in or to any Calyxt Improvements. To the extent that any Calyxt Improvement Patents relate to any subject matter outside of the Calyxt Field, Calyxt shall (i) keep Cellectis reasonably informed of all steps to be taken in connection with the prosecution and maintenance of such Calyxt Improvement Patents, and (ii) consider in good faith all reasonable comments and suggestions by Cellectis regarding such matters, including in respect of any actions, decisions, applications, amendments, submissions or

correspondence related thereto. Notwithstanding the foregoing, in the event that Calyxt elects to abandon or otherwise cease prosecuting or maintaining any such Calyxt Improvement Patent related to any subject matter outside of the Calyxt Field, prior to any such abandonment, Cellectis shall have the option to acquire at no cost any such Calyxt Improvement Patent and assume the responsibility for the prosecution and maintenance of such Calyxt Improvement Patent (it being understood that, in the event that Cellectis exercises such option to acquire such Calyxt Improvement Patent, (x) Calyxt shall execute and deliver any documents and perform any other acts, in each case as may be reasonably necessary to effect the foregoing and (y) effective as of Cellectis acquiring ownership of such Calyxt Improvement Patent, such Calyxt Improvement Patent shall thereafter be automatically deemed to be licensed to Calyxt under the Calyxt License).

Section 8.02. *Litigation.* (a) If either Party becomes aware of any actual or threatened infringement or other violation by any third party of any Licensed Cellectis Patent or Calyxt Improvement Patent, or any challenge to any Licensed Cellectis Patent or Calyxt Improvement Patent by any third party, then such Party shall promptly notify the other Party in writing thereof.

(b) Cellectis shall have the first right, but not the obligation, at its expense and using counsel of its choice, to enforce any Licensed Cellectis Patent against any Person or defend any challenge with respect to any such Licensed Cellectis Patent. Cellectis shall have sole and exclusive control of any decisions or other aspects of any such enforcement or defense; *provided* that if Cellectis elects to not (i) enforce any Exclusively Licensed Cellectis Patent against any infringement or other violation thereof in the Calyxt Field or (ii) defend any such Exclusively Licensed Cellectis Patent from any challenge that would be reasonably expected to have a material adverse effect on Calyxt's rights under the Calyxt License, then in either case (but only to the extent that prior to the date hereof Cellectis has not granted any third party any right to enforce or defend any such Exclusively Licensed Cellectis Patent), Cellectis shall promptly provide Calyxt with written notice of such election and, following receipt of such notice, Calyxt may, at its sole option and expense, enforce its rights under or defend any challenge to such Exclusively Licensed Cellectis Patent, as applicable.

(c) Calyxt shall have the first right, but not the obligation, at its expense and using counsel of its choice, to enforce any Calyxt Improvement Patent against any Person or defend any challenge with respect to any such Calyxt Improvement Patent. Calyxt shall have sole and exclusive control of any decisions or other aspects of any such enforcement or defense; *provided* that if Calyxt elects to not (i) enforce any such Calyxt Improvement Patent against any infringement or other violation thereof outside of the Calyxt Field or (ii) defend any such Calyxt Improvement Patent from any challenge that would be reasonably expected to have a material adverse effect on Cellectis's rights under the license granted to Cellectis pursuant to Section 2.04, then in either case, Calyxt shall promptly provide Cellectis with written notice of such election and, following receipt of such notice, Cellectis may, at its sole option and expense, enforce its rights under or defend any challenge to such Calyxt Improvement Patent, as applicable.

(d) The Party controlling any enforcement or defense under Section 8.02 (b) or 8.02(c) (the "**Controlling Party**") shall keep the other Party (the "**Non-Controlling Party**") reasonably and regularly informed of the status and progress of such enforcement or defense efforts, and shall reasonably consider the Non-Controlling Party's comments on any such efforts. The Non-Controlling Party shall provide the Controlling Party with all reasonable assistance in the enforcement or defense of any Exclusively Licensed Cellectis Patents or Calyxt Improvement Patents, as applicable, as the Controlling Party may reasonably request, including by signing or executing any necessary documents and consenting to it being named a party to any applicable proceedings. The Non-Controlling Party shall have the right to be represented in any enforcement or defense of any Exclusively Licensed Cellectis Patents or Calyxt Improvement Patents, as applicable, by counsel of its choice and at its own expense. Neither Party shall settle any action, suit, proceeding or other claim involving any Exclusively Licensed Cellectis Patent or Calyxt Improvement Patent in any manner without the prior written consent of the other Party, such consent not to be unreasonably withheld, conditioned or delayed.

(e) Any recoveries resulting from an action, suit, proceeding or other claim brought by a Party under Section 8.02(b) or 8.02(c) shall be first applied against payment of each Party's costs and expenses in connection therewith. Any such recoveries in excess of such costs and expenses (the "**Remainder**") shall be retained by the Controlling Party; *provided* that if Calyxt is the Controlling Party, the Remainder with respect to any enforcement of the Exclusively Licensed Cellectis Patents shall be included in Net Sales and Bare Sublicense Revenue, as applicable, for purposes of calculating royalties and payments owed to Cellectis hereunder.

(f) For the avoidance of doubt, as between the Parties, (i) Cellectis shall have the sole and exclusive right, but not the obligation, to bring and control any legal action in connection with any actual, alleged, or threatened infringement of (A) any I-CreI Patents and (B) any other Licensed Cellectis Patents outside of the Calyxt Field, in each case at Cellectis' own expense as it reasonably determines appropriate and (ii) Calyxt shall have the sole and exclusive right, but not the obligation, to bring and control any legal action in connection with any actual, alleged, or threatened infringement of any Calyxt Improvement Patents within the Calyxt Field at its own expense as it reasonably determines appropriate.

Section 8.03. *Marking*. Calyxt shall, and shall require its sublicensees, to mark all Calyxt Licensed Products with appropriate patent numbers or indicia to the extent permitted by Applicable Law.

ARTICLE 9
TERM AND TERMINATION

Section 9.01. *Term.* This Agreement shall remain in full force and effect in perpetuity unless earlier terminated, in whole or in part, pursuant to Section 9.02 or 9.03.

Section 9.02. *Mutual Agreement.* This Agreement may be terminated in its entirety at any time upon the mutual written agreement of the Parties.

Section 9.03. *For Cause.* Either Party may, by written notice to the other Party, immediately terminate this Agreement (a) if such other Party is in material breach of any provision of this Agreement (it being understood that if such breach is capable of being cured, such other Party shall have the right to cure such breach within sixty (60) days of receiving written notice thereof) and (b) upon the bankruptcy, dissolution or winding up of such other

Party, or the making or seeking to make or arrange an assignment for the benefit of creditors of such other Party, or the initiation of proceedings in voluntary or involuntary bankruptcy, or the appointment of a receiver or trustee of such other Party's property that is not discharged within ninety (90) days.

Section 9.04. *Survival*. Notwithstanding anything in this Agreement to the contrary, Sections 2.04(a), 2.05, 3.02, 4.03, 5.02, 5.03, 8.02(f) and 9.04, and Articles 6, 7 and 10 shall survive any expiration or termination of this Agreement.

ARTICLE 10
MISCELLANEOUS

Section 10.01. *Assignment.* Neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either Party, in whole or in part, whether voluntarily or by operation of Applicable Law, without the prior written consent of the other Party; *provided* that either Party may, without the consent of the other Party, assign this Agreement to (a) any of its Affiliates or (b) any successor to all or substantially all of the assets or business of such Party to which this Agreement relates. Any attempted assignment in contravention of this Section 10.01 shall be void *ab initio*.

Section 10.02. *Notices.* All notices, requests and other communications to either Party hereunder shall be in writing (including facsimile transmission and electronic mail transmission, so long as a receipt of such electronic mail is requested and received) and shall be given,

if to Cellectis, to:

Cellectis S.A.
8 rue de la Croix Jarry
75013 Paris, France
Attention: Marie-Bleuenn Terrier
E-mail: marie-bleuenn.terrier@cellectis.com

if to Calyxt, to:

Calyxt, Inc.
600 County Road D West, Suite 8
New Brighton, MN 55112
Attention: Federico A. Tripodi
E-mail: Federico.tripodi@calyxt.com

or such other address or facsimile number as such Party may hereafter specify for the purpose by notice to the other Party. All such notices, requests and other communications shall be deemed received on the date of receipt by the recipient thereof if received prior to 5:00 p.m. in the place of receipt and such day is a Business Day in the place of receipt. Otherwise, any such notice, request or communication shall be deemed not to have been received until the next succeeding Business Day in the place of receipt.

Section 10.03. *Amendments and Waivers*. (a) Any provision of this Agreement may be amended or waived if, but only if, such amendment or waiver is in writing and is signed, in the case of an amendment, by each Party, or in the case of a waiver, by the Party against whom the waiver is to be effective.

(b) No failure or delay by any Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by Applicable Law.

Section 10.04. *Expenses*. Except as otherwise provided herein, all costs and expenses incurred in connection with this Agreement shall be paid by the Party incurring such cost or expense.

Section 10.05. *Governing Law*. This Agreement shall be governed by and construed in accordance with the laws of .

Section 10.06. *Jurisdiction*. The Parties agree that any suit, action or proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement or the transactions contemplated hereby shall be brought in a court of competent jurisdiction sitting in , and each of the Parties hereby irrevocably consents to the exclusive jurisdiction of such court (and of the appropriate appellate courts therefrom) in any such suit, action or proceeding and irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such suit, action or proceeding in any such court or that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum. Process in any such suit, action or proceeding may be served on any Party anywhere in the world, whether within or without the jurisdiction of any such court. Without limiting the foregoing, each Party agrees that service of process on such Party as provided in Section 10.02 shall be deemed effective service of process on such Party.

Section 10.07. *WAIVER OF JURY TRIAL*. EACH OF THE PARTIES HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 10.08. *Counterparts; Effectiveness; Third Party Beneficiaries*. This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement shall become effective when each Party shall have received a counterpart hereof signed by the other Parties. Until and unless each Party has received a counterpart hereof signed by the other Party, this Agreement shall have no effect and neither Party shall have any right or obligation hereunder (whether by virtue of any other oral or written agreement or other communication). No provision of this Agreement is intended to confer any rights, benefits, remedies, obligations, or liabilities hereunder upon any Person other than the Parties and their respective successors and assigns; *provided* that the University of Minnesota shall be a third party beneficiary of Section 5.03.

Section 10.09. *Entire Agreement*. This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and thereof and supersedes all prior agreements and understandings, both oral and written, between the Parties with respect to the subject matter hereof and thereof.

Section 10.10. *Relationship of the Parties.* Nothing contained in this Agreement is intended or shall be deemed to make either Party the agent, employee, partner or joint venturer of the other Party or be deemed to provide such Party with the power or authority to act on behalf of the other Party or to bind the other Party to any contract, agreement or arrangement with any other individual or entity.

Section 10.11. *Severability.* If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other Governmental Authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to either Party. Upon such a determination, the Parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the Parties as closely as possible in an acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the fullest extent possible.

Section 10.12. *Specific Performance.* The Parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the Parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement or to enforce specifically the performance of the terms and provisions hereof in any court set forth in Section 10.06, in addition to any other remedy to which they are entitled at law or in equity.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the date first written above.

CELLECTIS S.A.

By: _____
Name:
Title:

CALYXT, INC.

By: _____
Name:
Title:

Schedule A

Licensed TALEN Mark

Mark	Serial No.	Registration No.	Filing Date	Registration Date	Country
TALEN	79/107519	4,729,507	October 27, 2011	May 5, 2015	U.S.

Exhibit 10.6

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

Internal University Use Only
OTC Agreement No.: A20150013
OTC Case No.(s): 20130204
Document Revision Date: 2014-12-01

UNIVERSITY OF MINNESOTA

EXCLUSIVE PATENT LICENSE AGREEMENT

THIS EXCLUSIVE PATENT LICENSE AGREEMENT (this "Agreement") is made by and between Regents of the University of Minnesota, a constitutional corporation under the laws of the state of Minnesota, having a place of business at [*****] (the "University"), and the Licensee identified below. The University and the Licensee agree that:

The Terms and Conditions of Exclusive Patent License attached hereto as Exhibit A (the "Terms and Conditions") are incorporated herein by reference in their entirety. In the event of a conflict between provisions of this Agreement and the Terms and Conditions, the provisions in this Agreement shall govern. Capitalized terms used in this Agreement without definition shall have the meanings given to them in the Terms and Conditions. The section numbers used in the parentheses below correspond to the section numbers in the Terms and Conditions.

1. Licensee (§1.7): Cellectis Plant Sciences a Corporation under the laws of the Delaware, having a place of business at [*****] and its Affiliates.

2. Field(s) of Use (§1.2): All

3. Territory (§1.15): Any country or territory where issued and unexpired Licensed Patents and/or Licensed Patent Applications exist.

4. Effective Date (§2): Date of the last signature of the Agreement.

5. Licensed Technology:

5.1 Licensed Patent: None

5.2 Licensed Patent Applications (§1.4):

[*****]

6. Patent-Related Expenses (§§1.9 & 6.3): [Select one of the following]

☐ The Licensee has no obligation under this Agreement to reimburse the University for Patent-Related Expenses.

☒ The Licensee shall reimburse the University for Patent-Related Expenses incurred before and during the Term as provided in section 6.3 of the attached Terms and Conditions. **Patent Related Expenses incurred before the Term are** [*****].

☐ The Licensee shall reimburse the University for Patent-Related Expenses incurred during the Term as provided in section 6.3 of the Terms and Conditions. The Licensee shall have no obligation to reimburse the University for Patent-Related Expenses incurred before the Effective Date.

☐ The Licensee shall reimburse the University for Patent-Related Expenses incurred before the Effective Date, payable as follows: . The Licensee shall have no obligation to reimburse the University for Patent-Related Expenses during the Term.

7. Sublicense Rights (§3.1.2): [Select one of the following]

☒ Yes

☐ No

8. Federal Government Rights (§3.2): [Select one of the following]

☒ Yes

☐ No

9. Performance Milestones (§5.1): The Licensee shall achieve the following milestones:

[*****]

[*****]

10. Payments (§6.1). All amounts are non-refundable, and payable as defined below or as specified in the University's invoice.

10.1 **Upfront Payment**: [*****], payable within ten (10) business days after the Effective Date.

10.2 **Annual License Fee**:

[*****]

10.3 Running Royalties and Annual Minimums.

10.3.1 Intentionally left blank.

10.3.2 Intentionally left blank.

10.4 10.4.1 Sublicense Royalties. Intentionally left blank.

10.4.2 Sublicense Revenues. Licensee shall pay the University [*****] of all Sublicense Revenues in accordance with the payment schedule set forth below.

Within sixty (60) days after January 10 and July 10, each year during the Term and Post termination Period, the Licensee shall deliver to the University a written report recounting the Sublicense Revenues (expressed in U.S. dollars). The Licensee shall deliver along with such sales reports its payment owed on all Sublicense Revenues by the Licensee during such period.

10.5 Other Payments: None

10.6 Equity: None

10.7 Transfer Payment: [*****], payable as provided in section 12.5 of the Terms and Conditions.

10.8 Administrative Handling Fee: [*****], payable as provided in subsection 8.1.1 of the Terms and Conditions.

10.9 Interest Rate: [*****] per annum.

10.10 Other: None

11. Licensee's Address for Notice (§12.13). Notices will be sent to the licensee at:

Cellectis Plant Sciences
[*****]

With a copy to Cellectis, SA
[*****]

12. Licensee's Contact Person for Patent Prosecution Consultation (§4.2.1). The University will, as set forth in this Agreement, communicate with the contact person named below with respect to patent prosecution and maintenance: (Upon ten (10) days prior written notice to the University, the Licensee may change the person designated below.)

CELLECTIS SA
[*****]

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

IN WITNESS THEREOF, the parties hereto have caused their duly authorized representatives to execute this Agreement.

Regents of the University of Minnesota

By: /s/ Richard Huebsch
Richard Huebsch
Associate Director
Office for Technology Commercialization

Date: 12-2-14

Cellectis Plant Sciences, Inc.

By: /s/ Luc Mathis
Name: Luc Mathis
Title: CEO

Date: 12-15-14

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

UNIVERSITY OF MINNESOTA

EXHIBIT A
Terms and Conditions
Exclusive Patent License Agreement

These terms and conditions to the Exclusive Patent License Agreement ("Terms and Conditions") govern the grant of license by Regents of the University of Minnesota ("University") to the Licensee identified in the Exclusive Patent License Agreement (the "EPLA"). These Terms and Conditions are incorporated by reference into the EPLA. All section references in these Terms and Conditions refer to provisions in these Terms and Conditions unless explicitly stated otherwise.

1. Definitions. For purposes of interpreting this Agreement, the following terms have the following meanings:

1.1 "Affiliate" means an entity that controls the Licensee or the sublicensee, as the case may be, is controlled by the Licensee or sublicensee, or along with the Licensee or sublicensee, is under the common control of a Third Party. An entity shall be deemed to have control of the controlled entity if it (i) owns, directly or indirectly, fifty percent (50%) or more of the outstanding voting securities of the controlled entity, or (ii) has the right, power or authority, directly or indirectly, to direct or cause the direction of the policy decisions of the controlled entity, whether by ownership of securities, by representation on the controlled entity's governing body, by contract, or otherwise.

1.2 "Commercial Sale" means a bona fide sale, use, lease, transfer or other disposition for value of a Licensed Product by the Licensee or a sublicensee to a Third Party that is not an Affiliate of the Licensee.

1.3 "Field of Use" means the field(s) of use described in section 2 of the EPLA.

1.4 "Licensed Patent" means the patent(s) described in section 5.1 of the EPLA, along with any issued and unexpired patent(s) issued during the Term that arose out of a Licensed Patent Application. "Licensed Patent" also means any reissues or reexaminations of a Licensed Patent that contain one or more claims directed to Licensed Technology.

1.5 "Licensed Patent Application" means the pending patent application(s) described in section 5.2 of the EPLA. "Licensed Patent Application" also means any related applications, including, continuations, continuations-in-part, and divisionals of a Licensed Patent Application.

1.6 "Licensed Product" means any product or good in the Field of Use that is made by, made for, sold, transferred, or otherwise disposed of by the Licensee or its sublicensees during the Term and the Post-termination Period and that, but for the granting of the rights set forth in this Agreement, would (i) infringe (including under the doctrine of equivalents) one or more claims in a Licensed Patent; or (ii) is covered by one or more claims in a Licensed Patent Application, or any product or good that is made using a process or method that, but for the granting of rights set forth in this Agreement, would (i) infringe (including under the doctrine of equivalents) one or more claims in a Licensed Patent; or (ii) is covered by one or more claims in a Licensed Patent Application. For purposes of this Agreement, claims in a Licensed Patent Application are to be treated as if they were allowed as proposed. "Licensed Product" also means any service provided by or for the Licensee or its sublicensees, but for the granting of the rights set forth in this Agreement, would (i) infringe (including under the doctrine of equivalents) one or more claims in a Licensed Patent; or (ii) is covered by one or more claims in a Licensed Patent Application.

1.7 "Licensed Technology" means collectively the inventions claimed in each Licensed Patent and each Licensed Patent Application.

1.8 "Licensee" means the entity identified in section 1 of the EPLA.

1.9 "Patent-Related Expenses" means costs and expenses (including out-of-pocket attorneys' fees, patent agent fees and governmental filing fees) that the University incurs in prosecuting and maintaining the Licensed Technology.

1.10 "Performance Milestone" means an act or event specified in section 5.1 and described in section 9 of the EPLA.

1.11 "Post-termination Period" means the one hundred eighty (180) day period commencing on the date of termination or expiration of the Term.

1.12 "Sublicense Revenues" means all revenue, in whatever form but excluding sublicense royalties, earned by the Licensee in consideration of its granting a Third Party a sublicense to make a Licensed Product including, without limitation, receipt of annual milestone attainment, sublicense issuance, maintenance or up-front payments, or technology access fee; and issuance of securities or real, personal or intangible property.

1.13 "Territory" means the geographical area described in section 3 of the EPLA.

1.14 "Third Party" means any party other than the University or Licensee or Affiliates' Licensee.

1.15 "Transfer Payment" means the payment to be made by the Licensee to the University specified in section 12.5 and described in section 10 of the EPLA.

2. Term. The term of this Agreement commences on the Effective Date as defined in section 4 of the EPLA and, unless terminated earlier as provided in section 8, expires on the date on which both no Licensed Patent is active in the Territory and no Licensed Patent Application is pending in the Territory (the "Term").

3. Grant of License.

3.1 The Licensee's Rights.

3.1.1 Subject to the terms and conditions of this Agreement, the University hereby grants to the Licensee, and the Licensee hereby accepts, an exclusive license under the Licensed Technology, the Licensed Patents and the Licensed Patent Applications to make (including to have made on its behalf), use, offer to sell or sell (including to have sold on its behalf), offer to lease or lease (including to have leased on its behalf), import, or otherwise offer to dispose or dispose of Licensed Products in the Field of Use in the Territory. No provision of this Agreement is to be construed to grant the Licensee, by implication, estoppel or otherwise, any rights (other than the rights expressly granted it in this Agreement) to the Licensed Technology, a Licensed Patent or Licensed Patent Application, or to any other University-owned technology, patent applications, or patents.

3.1.2 The Licensee shall not sublicense its rights under this Agreement, unless otherwise provided in section 7 of the EPLA. If so provided, the Licensee may sublicense its rights under this Agreement only as follows: the Licensee shall deliver to the University a true, correct, and redacted copy (provided that all rights, obligations, and financial provisions relating to the Licensed Patents and Licensed Patent Applications shall not be redacted) of the sublicense agreement or other agreement under which the Licensee purports or intends to grant such sublicense rights within ten (10) days after the entry into force of such agreement. The Licensee shall not enter into such agreement if the terms of the agreement are inconsistent in any respect with the terms of this Agreement, including without limitation, sections 5.2—5.5, 6.5, 8.3, 9.5, 10.4, and 11.3. Any sublicense made in violation of this subsection is void and constitutes an event of default under subsection 8.1.1.

For the avoidance of doubt, the Licensee may grant to sublicensees the right to grant further sublicenses to use the Licensed Technology but only for the purpose of breeding and/or manufacturing and/or selling Licensed Products.

3.2 The United States Government's Rights. If the University indicated in section 8 of the EPLA that the United States federal government funded the development, in whole or in part, of the Licensed Technology, then, (i) the federal government may have certain rights in and to the Licensed Technology as those rights are described in Chapter 18, Title 35 of the United States Code and accompanying regulations, including Part 401, Chapter 37 of the Code of Federal Regulations. (ii) the parties' rights and obligations with respect to the Licensed Technology, including the grant of license set forth in subsection 3.1.1, are subject to the applicable terms of these laws and regulations.

3.3 The University's Rights. The University retains an irrevocable, world-wide, royalty-free, non-exclusive right to use the licensed Technology for teaching, research and educational purposes. The University shall have the right to sublicense its rights under this section to one or more non-profit academic or research institutions.

4. Applications and Patents.

4.1 Pre-EPLA Patent Filings. The Licensee acknowledges that it has reviewed each Licensed Patent and each Licensed Patent Application and that it will not dispute the inventorship, validity, or enforceability of any of the claims made in a Licensed Patent or a Licensed Patent Application. The Licensee further represents that up to the Effective Date, it has

not and does not manufacture, have manufactured, offer to sell, sell, offer to lease, lease, or import (a) any product or good that infringes (including under the doctrine of equivalents) a claim in any Licensed Patent or Licensed Patent Application, or (b) any product or good that is made using a process or machine that infringes (including under the doctrine of equivalents) a claim in a Licensed Patent or Licensed Patent Application.

4.2 Patent Application Filings during the Term of this Agreement.

4.2.1 The University, in consultation with the Licensee, shall determine in which countries patent application(s) will be filed and prosecuted with respect to the Licensed Technology. The University shall retain counsel of its choice to file and prosecute such patent applications. The University shall inform the Licensee of the status of the prosecution of the patent application, including delivering to the Licensee pertinent notices, written and oral communications with governmental officials, and documents, and shall consult with the Licensee on the prosecution of the patent application. The Licensee shall cooperate with the University in the filing and prosecution of all patent applications with respect to the Licensed Technology. In furtherance of the foregoing, the Licensee shall notify the University, in writing, of the individual whom the Licensee has designated to consult and cooperate as provided in this subsection and is identified in section 12 of the EPLA. The Contact Person shall respond to the University's request for consultation and cooperation on a pending matter within five business days or sooner as may be required under the circumstances. If the Contact Person fails to respond in such time period, the University, exercising its own judgment and discretion, may respond to the matter as it deems appropriate. Except as provided in subsection 4.2.2, the Licensee shall reimburse the University for all Patent-Related Expenses as provided in section 6.3 and in section 6 of the EPLA. Additionally, Licensee shall reimburse the University for Patent Related Expenses for prioritized patent examination (Track One) if the University, after consultation with Licensee, decides to pursue Track One.

4.2.2 The grant of license in section 3.1 and the definition of Territory in section 1.16 shall not extend to or include any country in which licensee elects, in writing to the University, not to pay or reimburse the payment of the cost, in whole or in part, to seek or maintain intellectual property protection.

4.2.3 No provision of this Agreement limits, conditions, or otherwise affects the University's right to prosecute a patent application with respect to the Licensed Technology in any country. The University retains the sole and exclusive right to file or otherwise prosecute a patent application with respect to the Licensed Technology. In no event shall the Licensee file a patent application with respect to the Licensed Technology. The Licensee shall cooperate with the University in the filing and prosecution of all patent applications with respect to the Licensed Technology.

4.3 Rights in the Licensed Patents and Licensed Patent Applications. No provision of this Agreement grants the Licensee any rights, titles, or interests (except for the grant of license in subsection 3.1.1) in the Licensed Patents or Licensed Patent Applications, notwithstanding the Licensee's payment of all or any portion of the patent prosecution, maintenance, and related costs.

5. Commercialization.

5.1 Commercialization and Performance Milestones. The Licensee shall use its commercially reasonable efforts, consistent with sound and reasonable business practices and judgment, to commercialize the Licensed Technology and to manufacture and offer to sell and sell Licensed Products as soon as practicable and to maximize sales thereof. The Licensee shall perform, or shall cause to happen or be performed, as the case may be, all the performance milestones described in section 9 of the EPLA.

In case of non-achievement by the Licensee of the Performance Milestone indicated in the section 9 of the EPLA, the Parties will meet at the University of Minnesota or by telephone to discuss this Agreement.

5.2 Covenants Regarding the Manufacture of Licensed Products. The Licensee hereby covenants and agrees that (i) the manufacture, use, sale, or transfer of Licensed Products shall comply with all applicable federal and state laws, including all federal export laws and regulations; and (ii) it will make commercially reasonable efforts such that the Licensed Products shall not be defective in design or manufacture. The Licensee hereby further covenants and agrees that, pursuant to 35 United States Code Section 204, it shall, and it shall cause each sublicensee, to substantially manufacture in the United States of America all products embodying or produced through the use of an invention that is subject to the rights of the federal government of the United States of America, provided that the University will use reasonable efforts (i.e. contact the competent governmental authority, by phone call and e-mail, with Licensee administrative support) to obtain a waiver on behalf of Licensee. If the University anticipates that its efforts will exceed two hours of administrative time, the University will notify Licensee and will provide further efforts at Licensee's expense to the extent administrative support is available.

5.3 Export and Regulatory Compliance. The Licensee understands that the Arms Export Control Act (AECA), including its implementing International Traffic In Arms Regulations (ITAR,) and the Export Administration Act (EAA), including its Export Administration Regulations (EAR), are some (but not all) of the laws and regulations that comprise the U.S. export laws and regulations. Licensee further understands that the U.S. export laws and regulations include (but are not limited to): (i) ITAR and EAR product/service/data-specific requirements; (ii) ITAR and EAR ultimate destination-specific requirements; (iii) ITAR and EAR end user-specific requirements; (iv) Foreign Corrupt Practices Act; and (v) antiboycott laws and regulations. The Licensee shall comply with all then-current applicable export laws and regulations of the U.S. Government (and other applicable U.S. laws and regulations) pertaining to the Licensed Products (including any associated products, items, articles, computer software, media, services, technical data, and other information). The Licensee certifies that it shall not, directly or indirectly, export (including any deemed export), nor re-export (including any deemed re-export) the Licensed Products (including any associated products, items, articles, computer software, media, services, technical data, and other information) in violation of U.S. export laws and regulations or other applicable U.S. laws and regulations. The Licensee shall include an appropriate provision in its agreements with its authorized sublicensees to assure that these parties comply with all then-current applicable U.S. export laws and regulations and other applicable U.S. laws and regulations.

5.4 Commercialization Reports. Throughout the Term and during the Post- termination Period, and within thirty (30) days of the date specified in the schedule set forth in section 10 of the EPLA, the Licensee shall deliver to the University written reports of the Licensee's and sublicensees' (or any further sublicensees') efforts and plans to commercialize the Licensed Technology and to manufacture, offer to sell, or sell Licensed Products.

5.5 Use of the University's Name and Trademarks or the Names of University Faculty, Staff, or Students. No provision of this Agreement grants the Licensee or sublicensee any right or license to use the name, logo, or any marks owned by or associated with the University or the names, or identities of any member of the faculty, staff, or student body of the University. The Licensee shall not use and shall not permit a sublicensee to use any such logos, marks, names, or identities without the University's and, as the case may be, such member's prior written approval.

5.6 Governmental Markings.

5.6.1 The Licensee may mark all Licensed Products, where feasible, with patent notice appropriate under Title 35, United States Code.

5.6.2 The Licensee is responsible for obtaining all necessary governmental approvals for the development, production, distribution, sale, and use of any Licensed Product, at the Licensee's expense, including, without limitation, any safety studies. The Licensee is responsible for including with the Licensed Product any warning labels, packaging and instructions as to the use and the quality control for any Licensed Product.

5.6.3 The Licensee agrees to register this Agreement with any foreign governmental agency that requires such registration, and the Licensee shall pay all costs and legal fees in connection with such registration. The Licensee shall comply with all foreign laws affecting this Agreement or the sale of licensed Products.

6. Payments, Reimbursements, Reports, and Records.

6.1 Payments. The Licensee shall pay all amounts due under this Agreement by check (payable to the "Regents of the University of Minnesota" and sent to the address specified in section 12.13), wire transfer, or any other mutually agreed-upon method of payment, within thirty (30) days following the receipt by the Licensee of the University's relevant and undisputed invoice.

6.2 Interest. All amounts due under this Agreement shall bear interest as provided in section 10.10 of the EPLA on the entire unpaid balance computed from the due date until the amount is paid.

6.3 Reimbursement of Patent-Related Expenses. The Licensee shall pay invoices for Patent-Related Expenses under this Agreement within thirty (30) days of its receipt of the University's invoice. With respect to each invoice, the University shall use reasonable efforts to specify the date on which the Patent-Related Expense was incurred and the purpose of the expense (including, as applicable, a summary of patent attorney services giving rise to the expense); provided, however, the University is not required to disclose to the Licensee any information that is protected by the University's attorney-client privilege. Patent-Related Expenses incurred as of the Effective Date are set forth in section 6 of the EPLA. The University reserves the right to require that Licensee provide and maintain a reasonable advance deposit with the University or some other form of security to ensure payment of Patent-Related Expenses.

6.4 Records Retention and Audit Rights.

6.4.1 Throughout the Term and the Post-termination Period and for five (5) years thereafter, the Licensee, at its expense, shall keep and maintain and shall cause each sublicensee and each non-affiliated Third Party that manufactures, sells, leases, or otherwise disposes of Licensed Products on behalf of the Licensee to keep and maintain complete and accurate records of all sales, leases, and other dispositions of Licensed Products during the Term and the Post-termination Period and all other records related to this Agreement.

6.4.2 In connection with an audit, the Licensee, upon written request, shall deliver to the University and its representatives true, correct and complete copies of all documents and materials (including electronic records) reasonably relevant to the Licensee's and sublicensees' performance of this Agreement, including, without limitation, all sublicenses granted.

6.4.3 To determine the Licensee's compliance with the terms of this Agreement, the University, at its expense (except as set forth in this subsection), may inspect and audit the Licensee's records referred to in subsection 6.5.1 at the Licensee's address as set forth in this Agreement or such other location(s) as the parties mutually agree during the Licensee's normal business hours. The Licensee shall cooperate in the audit, including providing at no cost, commodious space in the Licensee's place of business for the auditor. The Licensee shall reimburse the University for all its out-of-pocket expenses to inspect and audit such records if the University, in accordance with the results of such inspection and audit, determines that the Licensee has underpaid amounts owed to the University by at least [*****], whichever is smaller, in a reporting period. The Licensee shall cause each sublicensee and each non-affiliated Third Party that manufactures, sells, leases, or otherwise disposes of Licensed Products on behalf of the Licensee to grant the University a right to inspect and audit the sublicensee's or Third Party's records substantially similar to the rights granted the University in this subsection, if requested by University, but no more frequently than once every two years. In connection with, and

before the commencement of, an audit, if the Licensee requests in writing to the University, then prior to conducting such audit, the Licensee, the University and the auditor must enter into an agreement prohibiting the auditor and the University from disclosing the Licensee's nonpublic, proprietary information to any Third Party without the Licensee's prior written consent; provided, however, that consistent with generally accepted auditing standards and the auditor's professional judgment, the auditor may disclose such information to the University and its agents, counsel, or consultants. The Licensee acknowledges that such an agreement is adequate to protect its legitimate interests, and the parties agree that there shall be no additional nondisclosure agreement demanded as a condition to the commencement of an audit and the University's exercising its rights under this subsection.

6.5 Currency and Checks. All computations and payments made under this Agreement shall be in United States dollars. To determine the dollar value of transactions conducted in non-United States dollar currencies, the parties shall use the exchange rate for the currency into dollars as reported in the *Wall Street Journal* as the New York foreign exchange mid-range rate on the last business day of the month in which the transaction occurred.

7. Infringement.

7.1 If a party learns of substantial, credible evidence that a Third Party is making, using, or selling a product in the Field of Use in the Territory that infringes a Licensed Patent, such party shall promptly notify the other party in writing of the possible infringement and in such notice describe in detail the information suggesting infringement of the Licensed Patent. Prior to commencing any action to enforce a Licensed Patent, the parties shall enter into good faith negotiations on the desirability of bringing suit, the parties to the action, the selection of counsel, and such other matters as the parties may agree to discuss. No provision of this Agreement limits, conditions, or otherwise affects a party's statutory and common-law rights to commence an action to enforce a Licensed Patent. In any such action, the parties agree to cooperate fully with each other and will use reasonable efforts to permit access to relevant personnel, records, papers, information, samples and specimens during regular business hours. Any amounts recovered (less amounts actually paid for reasonable attorney's fees and legal expenses) by Licensee in any such action or settlement that constitute compensation for lost profits or sales will be considered subject to the royalty rate in subsection 10.3.1 of the EPLA. All other amounts recovered (less amounts actually paid for reasonable attorney's fees and legal expenses) by Licensee in such action or settlement shall be considered subject to the rate for Sublicense Revenues in subsection 10.4.2 of the EPLA.

7.2. If any suit, action or proceeding is brought or commenced against the Licensee alleging the infringement of a patent or other intellectual property right owned by a Third Party by reason of the manufacture, use or sale of Licensed Products, the Licensee shall give the University prompt notice thereof. If the validity of a Licensed Patent is questioned in such suit, action or proceeding, the Licensee shall have no right to make any settlement or compromise which affects the scope, validity, enforceability or otherwise the Licensed Patent without the University's prior written approval. University shall provide reasonable assistance to Licensee in the defense of the Licensed Patent at Licensee's expense.

8. Termination.

8.1. By the University.

8.1.1 If the Licensee breaches or fails to perform one or more of its obligations under this Agreement, the University may deliver a written notice of default to the Licensee. Without further action by a party, this Agreement shall terminate if (a) the University has not been paid the full amount of the Administrative Handling Fee set forth in section 10.9 of the EPLA, and (b) the default has not been cured in full within either sixty (60) days after the delivery to the Licensee of the notice of default if the default relates to a payment or reimbursement obligation under this Agreement, or ninety (90) days after the delivery to the Licensee of the notice of default if the default relates to any other matter.

8.1.2 The University may terminate this Agreement by delivering to the Licensee a written notice of termination at least ten (10) days before the date of termination if the Licensee (i) becomes insolvent; (ii) voluntarily files or has filed against it a petition under applicable bankruptcy or insolvency laws that the Licensee fails to have released within thirty (30) days after filing; (iii) proposes any dissolution, composition, or financial reorganization with creditors or if a receiver, trustee, custodian, or similar agent is appointed; or (iv) makes a general assignment for the benefit of creditors.

8.1.3 The University may terminate this Agreement immediately by delivering to the Licensee a written notice of termination if the Licensee or its agents or representatives commences or maintains an action in any court of competent jurisdiction or a proceeding before any governmental agency asserting or alleging, in any respect, the invalidity or unenforceability of any of the Licensed Technology. The Licensee shall notify the University, in writing, at least thirty (30) days prior to the commencement of any such action or the institution of any such proceeding.

8.2 By the Licensee.

8.2.1 If the University breaches or fails to perform one or more of its duties under this Agreement, the Licensee may deliver to the University a written notice of default. The Licensee may terminate this Agreement by delivering to the University a written notice of termination if the default has not cured in full within ninety (90) days of the delivery to the University of the notice of default.

8.2.2 The Licensee may terminate this Agreement at any time by giving sixty (60) days written notice to the University.

8.3 Effect of termination.

8.3.1 Notwithstanding anything contained herein, in case of termination of this Agreement by the University pursuant to the terms herein, any sublicensee (each an "Exclusive Sublicensee" as further defined hereinafter) that has been granted exclusive rights under the Licensed Technology by Licensee, within a certain field (the "Exclusive Field"), shall have the right to substitute itself to licensee under this Agreement with respect to such Exclusive Field; provided Licensee has delivered to University written notice of the existence of the Exclusive Sublicensee prior to receipt of University's notice of termination under Section 8 of the terms and Conditions, except that no prior written notice is required if such sublicensee became an Exclusive Sublicensee as a result of any change in the control of Licensee's Affiliates. For any avoidance of doubt, (i) the terms and conditions applicable to Licensee with respect to such an Exclusive Field shall survive any termination and apply to such Exclusive Sublicensee which will be substituted under the Agreement; and (ii) substitution of an Exclusive Sublicensee with respect to rights and obligations of Licensee will not impact Licensee's liability, rights and obligations accrued to Licensee up to the date of substitution. An "Exclusive Sublicensee" means any sublicensee that has been granted exclusive rights within an Exclusive Field by Licensee under the Licensed Technology prior to Licensee's receipt of University's notice of termination under Section 8 of the Terms and Conditions.

8.3.2 Further, in addition to the rights conferred upon Exclusive Sublicensees in the previous paragraph, other sublicensees, upon termination of the Agreement by the University or by the Licensee, will have the right to obtain a direct license from the University (comparable in scope, grant and the same financial terms as the sublicense then held by such sublicensee with respect to the Licensed Technology) under the terms and conditions (other than with respect to the scope, grant and financial terms) of this Agreement; provided (i) the University consents to providing such a direct license, which consent shall not be unreasonably withheld, (ii) any such sublicensee is not then in default of its contractual obligations under the relevant sublicense agreement, (iii) any such sublicensee provides the University written notice of its desire to obtain a direct license within thirty (30) days following termination of this Agreement, and (iv) such sublicensee obtained a sublicense from Cellectis or its Affiliates before Licensee received a notice of termination pursuant to Section 8 of the Terms and Conditions.

8.3.3 Post-termination Period. The Licensee shall not use, or permit others to use, the Licensed Technology or manufacture or have manufactured Licensed Products after this Agreement terminates. If the Licensee terminates this Agreement under section 8.2, the Licensee may continue to offer to sell and sell, offer to lease and lease, and otherwise offer to dispose of or dispose of Licensed Products in the Territory that were manufactured before such termination. The Commercial Sales of Licensed Products during the Post-termination Period shall be governed by the terms of this Agreement, including the obligation to pay royalties on such Commercial Sales as provided in this Agreement. If the University terminates this Agreement under section 8.1, after the date of termination, the Licensee shall not offer to sell or sell, offer to lease or lease, or otherwise offer to dispose of or dispose of a Licensed Product in the Territory.

8.3.4 In case of termination, as mentioned in Section 8.2.2 of the Terms and Conditions (i) Licensee will pay to the University the amounts due under Section 10.2 and 10.4.2, within thirty (30) days by of the termination date under Section 8.2.2; and (ii) Licensee will pay the University the Annual License Fee for the succeeding year, within thirty (30) days of the termination date under Section 8.2.2.

9.Release, Indemnification, and Insurance.

9.1 The Licensee's Release. For itself and its employees, the Licensee hereby releases the University and its regents, employees, and agents forever from any and all suits, actions, claims, liabilities, demands, damages, losses, or expenses (including reasonable attorneys' and investigative expenses) relating to or arising out of the manufacture, use, lease, sale, or other disposition of a Licensed Product.

9.2 The Licensee's Indemnification. Throughout the Term and thereafter, the Licensee shall indemnify, defend, and hold the University and its regents, employees, and agents harmless from all suits, actions, claims, liabilities, demands, damages, losses, or expenses (including reasonable attorneys' and investigative expenses), relating to or arising out of the Licensee's exercises or attempt to exercise any of the rights or Licenses granted it under this Agreement, including without limitation, the manufacture, use, lease, sale, or other disposition of a licensed Product or the licensee's breach of any term of this Agreement.

9.3 The University's Indemnification. Subject to the limitations on liability set forth in section 11, throughout the Term and thereafter, the University shall indemnify, defend, and hold the Licensee and its directors, employees, and agents harmless from all suits, actions, claims, liabilities, demands, damages, losses, or expenses (including reasonable attorneys' and investigative expenses) relating to or arising out of the University's breach of any term of this Agreement.

9.4 The Licensee's Insurance.

9.4.1 Throughout the Term, or during such other period as the parties agree in writing, the Licensee shall maintain, and shall cause each sublicensee to maintain, in full force and effect comprehensive general liability ("CGL") insurance, with single claim limits acceptable to the University. Such insurance policy shall include coverage for claims that may be asserted by the University against the licensee under section 9.2 and for claims by a Third Party against the Licensee or the University arising out of the purchase or use of a Licensed Product. Such insurance policy must (i) name the University as an additional insured if the University so requests in writing and (ii) require the insurer to deliver written notice to the University at the address set forth in section 12.13, at least thirty (30) days before the termination of the policy. Upon receipt of the University's written request, the Licensee shall deliver to the University a copy of the certificate of insurance for such policy.

9.4.2 The provisions of subsection 9.4.1 do not apply if the University agrees in writing to accept the Licensee's or a sublicensee's, as the case may be, self-insurance plan as adequate insurance.

9.5 Sublicensees - Release. The Licensee shall cause each sublicensee to grant the University a release from liabilities substantially similar to the release granted in favor of the University in section 9.1.

10. Warranties.

10.1 Authority. Each party represents and warrants to the other party that it has full corporate power and authority to execute, deliver, and perform this Agreement, and that no other corporate proceedings by such party are necessary to authorize the party's execution or delivery of this Agreement.

10.2 The University represents and warrants that (i) it is the sole owner of the Licensed Patent Application; (ii) the University's Office for Technology Commercialization has not entered into an agreement granting to a Third Party the right to use the Licensed Technology for commercial purposes.

10.3 Disclaimers.

10.3.1 **EXCEPT FOR THE EXPRESS WARRANTY SET FORTH ABOVE IN SECTION 10.1, THE UNIVERSITY DISCLAIMS AND EXCLUDES ALL WARRANTIES, EXPRESS AND IMPLIED, CONCERNING THE LICENSED TECHNOLOGY, EACH LICENSED PATENT, EACH LICENSED PATENT APPLICATION, AND EACH LICENSED PRODUCT, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF NON-INFRINGEMENT, OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE.**

10.3.2 The University expressly disclaims any warranties concerning and makes no representations:

(i) that the Licensed Patent Applications will be allowed or granted or that a patent will issue from any Licensed Patent Application;

(ii) concerning the validity, enforceability, interpretation of claims or scope of any Licensed Patent; or

(iii) that the exercise of the rights or licenses granted to the Licensee under this Agreement will not infringe a Third Party's patent or violate its intellectual property rights.

10.4 Sublicensees - Warranties. The Licensee shall cause each sublicensee to give the University warranties and disclaimers and exclusions of warranties substantially similar to the warranty and disclaimers and exclusions of warranties in favor of the University in section 10.1 and subsections 10.3.1 and 10.3.2.

11. Damages.

11.1 Remedy Limitation. **EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, THE UNIVERSITY SHALL NOT BE LIABLE FOR (A) PERSONAL INJURY OR PROPERTY DAMAGES (EXCEPT TO THE EXTENT OF THE UNIVERSITY'S WILLFUL, WANTON, OR INTENTIONAL ACTS) OR (B) LOST PROFITS, LOST BUSINESS OPPORTUNITY, INVENTORY LOSS, WORK STOPPAGE, LOST DATA OR ANY OTHER RELIANCE OR EXPECTANCY, DIRECT OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OF ANY KIND.**

11.2 Damage Cap. **THE UNIVERSITY'S TOTAL LIABILITY FOR THE BREACH OR NONPERFORMANCE OF THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT OF PAYMENTS PAID TO THE UNIVERSITY UNDER SECTION 6.4 IN THE SIX (6) MONTHS IMMEDIATELY PRECEDING THE COMMENCEMENT OF ANY SUIT OR ACTION. THIS LIMITATION APPLIES TO CONTRACT, TORT, AND ANY OTHER CLAIM OF WHATEVER NATURE.**

11.3 Sublicensees - Damages. The Licensee shall cause each sublicensee to agree to limitations of remedies and damages substantially similar to the limitations of remedies and damages set forth in sections 11.1 and 11.2.

12. General Terms

12.1 Access to University Information.

12.1.1 Data Practices Act. The parties acknowledge that the University is subject to the terms and provisions of the Minnesota Government Data Practices Act, Minnesota Statutes §13.01 et seq. (the "Act"), and that the Act requires, with certain exceptions, the University to permit the public to inspect and copy any information that the University collects, creates, receives, maintains, or disseminates.

12.1.2 Confidentiality. To the extent permitted by law, including as provided in the Act, the University shall hold in confidence and disclose only to University employees, agents and contractors who need to know the reports described in section 6.4 and the records inspected in accordance with section 6.5 of the Terms and Conditions. No provision of this Agreement is to be construed to further prohibit, limit, or condition the University's right to use and disclose any information in connection with enforcing this Agreement, in court or elsewhere.

12.2 Amendment and Waiver. The Agreement may be amended from time to time only by a written instrument signed by the parties. No term or provision of this Agreement may be waived and no breach excused unless such waiver or consent is in writing and signed by the party claimed to have waived or consented. No waiver of a breach is to be deemed a waiver of a different or subsequent breach.

12.3 Applicable law and Forum Selection. The internal laws of the state of Minnesota, without giving effect to its conflict of laws principles, govern the validity, construction, and enforceability of this Agreement. A suit, claim, or other action to enforce the terms of this Agreement may be brought only in the state courts of Hennepin County, Minnesota. The Licensee hereby submits to the jurisdiction of that court and waives any objections it may have to that court asserting jurisdiction over the Licensee or its assets and property.

12.4 Assignment and Sublicense. Except as permitted under subsection 3.1.2 and section 12.5 of the Terms and Conditions, the Licensee shall not assign or sublicense its interest or delegate its duties under this Agreement. Any assignment, sublicense, or delegation attempted to be made in violation of this section is void. Absent the consent of all the parties, an assignment or delegation will not release the assigning or delegating party from its obligations. The Agreement inures to the benefit of the licensee and the University and their respective permitted sublicensees and trustees.

12.5 Change of Control. Notwithstanding section 12.4, the Licensee, without the prior approval of the University, may assign all, but no less than all, its rights and delegate all its duties under this Agreement to another if (i) the Licensee delivers to the University written notice of the proposed assignment (along with pertinent information about the terms of the assignment and assignee) at least thirty (30) days before the effective date of the event described in part (iii) of this paragraph, (ii) pay to the University the Transfer Payment prior to the effective date of the event described in part (iii) of this paragraph, and (iii) the assignment is made as a part of and in

connection with (a) the sale by the Licensee of all or substantially all of its assets to a single purchaser, (b) the sale, transfer, or exchange by the shareholders, partners, or equity owners of the licensee of a majority interest in the Licensee to a single purchaser, or (c) the merger of the Licensee into another corporation or other business entity that is not an Affiliate. Any assignment attempted to be made or made in violation of this subsection is void.

12.6 Collection Costs and Attorneys' Fees. If a party fails to perform an obligation or otherwise breaches one or more of the terms of this Agreement, the other party may recover from the non-performing breaching party all its reasonable costs (including actual attorneys' and investigative fees) to enforce the terms of this Agreement.

12.7 Consent and Approvals. Except as otherwise expressly provided, in order to be effective, all consents or approvals required under this Agreement must be in writing.

12.8 Construction. The headings preceding and labeling the sections of this Agreement are for the purpose of identification only and are not to be employed or used for the purpose of construction or interpretation of any portion of the EPLA. As used herein and where necessary, the singular includes the plural and vice versa, and masculine, feminine, and neuter expressions are interchangeable.

12.9 Enforceability. If a court of competent jurisdiction adjudges a provision of this Agreement to be unenforceable, invalid, or void, such determination is not to be construed as impairing the enforceability of any of the remaining provisions hereof and such provisions will remain in full force and effect.

12.10 Entire Agreement. The parties intend this Agreement (including all attachments, exhibits, and amendments hereto) to be the final and binding expression of their contract and agreement and the complete and exclusive statement of the terms thereof. The Agreement cancels, supersedes, and revokes all prior negotiations, representations and agreements among the parties, whether oral or written, relating to the subject matter of this Agreement.

12.11 Language and Currency. Unless otherwise expressly provided in this Agreement and in order to be effective, all notices, reports, and other documents and instruments that a party elects or is required to deliver to the other party must be in English, and all notices, reports, and other documents and instruments detailing revenues and earned under this Agreement or expenses chargeable to a party must be United States dollar denominated.

12.12 No Third-Party Beneficiaries. No provision of this Agreement, express or implied, is intended to confer upon any person other than the parties to this Agreement and their Affiliates any rights, remedies, obligations, or liabilities hereunder. No sublicensee may enforce or seek damages under this Agreement.

12.13 Notices. In order to be effective, all notices, requests, and other communications that a party is required or elects to deliver must be in writing and must be delivered personally, or by facsimile or electronic mail (provided such delivery is confirmed), or by a recognized overnight courier service or by United States mail, first-class, certified or registered, postage prepaid, return receipt requested, to the other party at its address set forth below or to such other address as such party may designate by notice given under this section:

If to the University: University of Minnesota

[*****]

For notices sent under section 8, with a copy to: University of Minnesota
[*****]

If to the Licensee: As indicated in section 11 of the EPL.

12.14 Relationship of Parties. In entering into, and performing their duties under this Agreement, the parties are acting as independent contractors and independent employers. No provision of this Agreement creates or is to be construed as creating a partnership, joint venture, or agency relationship between the parties. No party has the authority to act for or bind the other party in any respect.

12.15 Security Interest. In no event may the Licensee grant, or permit any person to assert or perfect, a security interest in the Licensee's rights under this Agreement.

12.16 Survival. Immediately upon the termination or expiration of this Agreement, except for certain rights granted for the Post-termination Period, all the Licensee's rights under this Agreement terminate; provided, however, the Licensee's obligations that have accrued before the effective date of termination or expiration (e.g., the obligation to report and make payments on sales, leases, or dispositions of Licensed Products and to reimburse the University for costs) and the obligations specified in section 6.1 survive. The obligations and rights set forth in sections 6.4 and 8.3 and sections 9, 10, and 11 also survive the termination or expiration of this Agreement.

Exhibit 10.7

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406 UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

Confidential **Execution Copy**

COMMERCIAL LICENSE AGREEMENT **CPS-14033**

THIS COMMERCIAL LICENSE AGREEMENT (this "**Agreement**") is made and entered into as of December 9, 2014 (the "**Effective Date**"), by and between Cellectis Plant Sciences, Inc. a corporation organized and existing under the laws of the State of Delaware with its principal place of business at [*****] ("**CPS**"), and Two Blades Foundation, a not-for-profit corporation organized and existing under the laws of the State of Delaware with its principal place of business at [*****] ("**2 Blades**"; CPS and 2 Blades, each a "**Party**" and collectively, the "**Parties**").

RECITALS

WHEREAS, 2 Blades is a not-for-profit foundation, established to support (i) the development of technologies enabling durable disease resistance in crop production, (ii) the general deployment of such environmentally beneficial agricultural technologies in a sustainable manner, and (iii) the delivery of such technologies at no charge for crop production by non-commercial subsistence farmers in Developing Countries (defined below);

WHEREAS, 2 Blades is the exclusive licensee of certain patents and/or patent applications related to transcription factors with modular DNA-binding domains and their use, methods to determine DNA-binding specificity, and design and construction of DNA-binding domains with desired specificity for commercial applications in plants (as further defined herein, "**TAL Nucleases**" and "**TAL Nuclease Activities**");

WHEREAS, CPS possesses knowledge, know-how, technical information, and expertise with respect to the development and commercialization of plant products;

WHEREAS, CPS desires to obtain a non-exclusive commercial sublicense under 2 Blades' rights related to the patents and/or patent applications described above, and 2 Blades is willing to grant such license upon the terms and conditions hereinafter set forth;

WHEREAS, CPS or its Affiliate, Cellectis SA, is owner or the exclusive licensee of certain other patents and/or patent applications related to TAL Nucleases and TAL Nuclease Activities; and

WHEREAS, 2 Blades desires to obtain a non-exclusive commercial license and sublicense under CPS' rights related to the patents and/or patent applications described above, and CPS is willing to grant such license upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual covenants, promises and agreements hereinafter set forth, the Parties hereto agree as follows:

ARTICLE 1 DEFINITIONS

As used in this Agreement, the following words shall have the following meanings:

1.1 "**2 Blades Licensed Patents**" means, to the extent Controlled by 2 Blades : (a) the patents and patent applications listed in Exhibit A hereto; (b) all amendments, divisionals, continuations, continuations in part, substitutions and supplemental disclosures corresponding to the foregoing; (c) all patents that issue with respect to any of the foregoing patent applications or patent applications claiming priority therefrom, including supplementary certificates, patents of addition, regrants, renewals, reissues, re-examinations, extensions and restorations of any of the foregoing; (d) all United States, International Patent Convention Treaty and other foreign counterparts to any of the foregoing; and (e) all patents and patent applications covering any Improvements.

1.2 "**2 Blades—[*****]**" means the License Agreement dated [*****] among 2 Blades, [*****] the patents and patent applications listed in Exhibit A.

1.3 "**2 Blades Commercial Licensed Field**" means any use or application of a TAL Nuclease to [*****], in each case in a Plant.

1.4 "**Affiliate**" means any entity controlling, controlled by, or under common control with the referenced entity, where "**control**" for purposes of this definition only means (a) direct or indirect ownership of more than fifty percent (50%) (or such lesser percentage as is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) of the voting interests or other ownership interests in the entity in question, or (b) the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of an entity, whether through the ownership of voting securities, by contract, or otherwise.

1.5 "**Confidential Information**" means, with respect to a Party hereto, subject to the limitations set forth in Section 9.1 hereof, any information, including all trade secrets, technical, economic, financial and marketing information, which is disclosed by such Party to the other Party pursuant to this Agreement and all information so disclosed prior to the Effective Date pursuant to that certain Confidentiality Agreement between the Parties dated May 30, 2014.

1.6 "**Control**" or "**Controlled**" means as to intellectual property that is owned by a Party or licensed by a Third Party to a Party, the possession of the ability to grant licenses or sublicenses (including, where applicable, as provided for herein) without violating the terms of any agreement or other arrangement with any Third Party.

1.7 "**CPS Licensed Patents**" means, to the extent Controlled by CPS, Cellectis SA or any of their Affiliates: (a) the patents and patent applications listed in Exhibit B hereto; (b) all amendments, divisionals, continuations, continuations in part, substitutions and supplemental disclosures corresponding to the foregoing; (c) all patents that issue with respect to any of the foregoing patent applications or patent applications claiming priority therefrom, including supplementary certificates, patents of addition, regrants, renewals, reissues, re-examinations, extensions and restorations of any of the foregoing; (d) all United States, International Patent Convention Treaty and other foreign counterparts to any of the foregoing; and (e) all patents and patent applications covering any Improvements.

1.8 "**Developing Countries**" means any of those countries indicated on the list of Least Developed Countries issued by the Food and Agriculture Organization of the United Nations (FAO) cited at the website http://www.unohrlls.org/about-ldcs/, as updated from time to time, any other country characterized by a low-level of material well-being or any other country mutually agreed by 2 Blades and CPS in writing.

1.9 "**Exempted Research Collaboration**" means a contractual relationship between CPS and a Third Party who, under a separate license agreement with 2 Blades, is also a sublicensee under the 2 Blades Licensed Patents with respect to applications or uses in or for Plants (a "**Collaboration Partner**"), where such relationship involves the use of TAL Nucleases or TAL Nuclease Activities for Research Purposes and either or both of CPS or such Collaboration Partner are making such TAL Nucleases or performing such TAL Nuclease Activities for each other as part of a bona fide collaboration (other than any relationship that is limited to the provision of TAL Nucleases or TAL Nuclease Activities on a fee-for-service basis).

1.10 "**Improvement**" means any improvement, modification or refinement to, or any new use or application of, any invention disclosed or claimed in the Licensed Patents, in each case that is conceived, reduced to practice, made or developed by either Party or its permitted Sublicensees or Subcontractors (or, in the case of CPS, its Subsidiaries) during the term of this Agreement, and all intellectual property rights related thereto. For clarity, Improvements shall not include any intellectual property rights that claim a particular Trait in a Plant.

1.11 "Licensed Crops" means [*****], as well as the crop Plants added under Section 2.1(c).

1.12 "**Licensed Field**" means any use or application of a TAL Nuclease (a) to create a cleavage event at a DNA target site in a Plant or (b) that is performed for the use or application of a TAL Nuclease to create a cleavage event at a DNA target site in a Plant, in each case including for the purposes of manufacturing or otherwise producing products in such Plants, but excluding Plant-Made Therapeutics.

1.13 "**Licensed Patents**" means the 2 Blades Licensed Patents and the CPS Licensed Patents.

1.14 "**Licensed Plant Product**" means any Plant, breeding material, seed product or other Plant material (including progeny thereof), or any material derived therefrom, in each case that has been produced or modified through application or use of a TAL Nuclease or through a TAL Nuclease Activity.

1.15 **[*****]** means the period beginning on the Effective Date and ending on the date that [*****]. 2 Blades shall provide CPS with written notice specifying such ending date promptly upon becoming aware of the occurrence thereof.

1.16 **[*****]** means that [*****] has requested in writing that [*****] provide a particular [*****] and [*****] is unable or unwilling to supply such [*****] at [*****] standard pricing [*****] that is functionally equivalent to the requested [*****] at a substantially similar price) within [*****] after [*****] receipt of such request. It shall be deemed a [*****] if a [*****] occurs [*****] with respect to requests for different [*****] and such requested [*****] are each of the same general type as other [*****] offered for sale by [*****] at the time of the requests.

1.17 "**Non-Profit Activity**" means any activity undertaken for charitable, scientific, educational or testing for public safety purposes, no part of the net earnings of which inures to the benefit of any private entity or individual. For clarity, "Non-Profit Activity" specifically includes Subsistence Farming.

1.18 "**Other Activity**" means any activity that is not a Non-Profit Activity.

1.19 "**Pending Claim**" means a claim in a patent application that has not been (a) abandoned and not continued; or (b) finally rejected by an appropriate administrative agency or court of competent jurisdiction from which no appeal can be or is taken.

1.20 "**Plant-Made Therapeutic**" means a human therapeutic pharmaceutical product incorporating as its active ingredient a protein or other compound produced in and purified (directly or indirectly) from a Plant, wherein: (a) such product would require approval or clearance from the United States Food & Drug Administration under Section 501 et seq. of the Federal Food, Drug and Cosmetic Act or Section 351 of the Public Health Service Act (or any successor laws or regulations) (the "**Pharmaceutical Laws**") as a "drug" or "biological

product" if marketed in the United States for use in humans; (b) such product meets applicable standards of purity for therapeutic products under the Pharmaceutical Laws and the regulations promulgated thereunder; (c) such product, at the time of its first sale in the United States, may not be sold to a consumer in the United States without a prescription from a physician; and (d) such product does not contain or comprise a Plant, Plant tissue or Plant cells. However, and for the avoidance of doubt, Plant-Made Therapeutics do not include products resulting from the modification of Plants for improving or promoting health, nutrition, well-being, performance, processing and the like for human and/or animal uses, such as modification of protein, carbohydrate, oil (including but not limited to long chain fatty acids such as omega-3 or omega-6 fatty acids), vitamin, amino acid, secondary metabolite or allergen content of Plants, if such products do not satisfy all of the criteria set forth in the immediately preceding sentence. For further clarity, Plant-Made Therapeutics excludes dietary supplements and nutraceuticals.

1.21 "**Plants**" means eukaryotic organisms belonging to the plant kingdom defined as Viridiplantae, but excluding non-vascular photosynthetic plants such as green algae. For clarification, Plants does not include fungi or blue-green algae.

1.22 "**Research Purposes**" means internal research activities, but specifically excludes: (a) any activity in any agricultural field trial; (b) any activity directed towards the submission of data generating using a product or service to the United States Food and Drug Administration, the United States Department of Agriculture, the United States Environmental Protection Agency, or any equivalent regulatory agency outside of the United States, in support of an application for clearance, approval or deregulation by such agency; (c) any scale-up activities, the primary focus of which is to increase from small-scale to production-scale; and (d) any activity performed or provided for consideration. For clarity, Research Purposes includes activities up to and including IND enabling toxicological studies or equivalents thereof, provided that such activities do not fall within any of the foregoing categories (a) through (d).

1.23 "**Subsistence Farming**" means farming and associated activities which together form a livelihood strategy where a significant portion of the output is consumed directly. A "**Subsistence Farmer**" is one who engages in such a livelihood strategy.

1.24 "**TAL Nucleases**" means a synthetic DNA, RNA, or polypeptide encoding a non-naturally occurring fusion protein comprising a transcription activator-like effector repeat binding domain, and an endonuclease domain (either functional or non-functional) or a portion of such endonuclease domain, wherein (i) the binding domain is engineered for recognition of a nucleotide sequence, (ii) the endonuclease domain or portion thereof is capable of cleaving or nicking DNA either as a monomer (e.g. Tev) or as a dimer (e.g. Fokl), and (iii) the manufacture, use, import and/or sale of the DNA, RNA or polypeptide is covered by one or

more: (a) Valid Claims in a patent within Licensed Patents; or (b) Pending Claims in an application within Licensed Patents (interpreted as if such claim had issued). For clarity, "TAL Nucleases" does not include a transcription activator-like effector repeat binding domain joined to or provided in combination with an activator, repressor, or any functional domain other than an endonuclease domain as specified in the preceding sentence. For further clarity, an "endonuclease" is an enzyme that cleaves a phosphodiester bond within a polynucleotide chain.

1.25 "**TAL Nuclease Activity**" means any activity: (a) the performance or sale of which in a particular country is covered by one or more: (i) Claims in a patent within Licensed Patents, or (ii) Pending Claims in an application within Licensed Patents (interpreted as if such claim had issued); and (b) that uses or consumes a TAL Nuclease.

1.26 "**Territory**" means every country of the world.

1.27 "**Third Party**" means any person or entity that is not a Party to this Agreement.

1.28 "**Trait**" means any particular genetic modification of a Plant seed or a Plant that relates to enhanced field performance, production, output, maintenance or protection or quality of a Plant, which modification has been conferred through application or use of a TAL Nuclease or through a TAL Nuclease Activity, in each case in the Licensed Field.

1.29 "**Valid Claim**" means a claim in an issued patent that has not lapsed, or an issued, unexpired patent that has not been held to be invalid by a final judgment of a court of competent jurisdiction from which no appeal can be or is taken or that has not been disclaimed.

ARTICLE 2 GRANT OF LICENSE

2.1 **License Grants.**

(a) License Grant to CPS. Subject to the terms and conditions of this Agreement, 2 Blades hereby grants to CPS a fee-bearing, non-transferable, non-sublicensable (except as set forth in Section 2.3), non-exclusive sublicense under the 2 Blades Licensed Patents to make, have made, use, have used, sell, have sold, offer to sell, import and have imported Licensed Plant Products of Licensed Crops in the Licensed Field in the Territory. CPS' rights under the license granted in this Section 2.1 include the non-exclusive rights, subject to the terms and conditions of this Agreement, to make, have made, use, have used, import and have imported TAL Nucleases and to perform and have performed TAL Nuclease Activities in the Licensed Field in the Territory, in each case solely in furtherance of the foregoing license.

(b) License Grant to 2 Blades**.** Subject to the terms and conditions of this Agreement, CPS hereby grants to 2 Blades a royalty-free (subject to Section 3.3), non transferable, non-sublicensable (except as set forth in Section 2.3), non-exclusive license under the CPS Licensed Patents to (i) make, have made, use, have used, sell, have sold, offer to sell, import and have imported Licensed Plant Products in the Licensed Field in the Territory for any Non-Profit Activity, and (ii) make, have made, use, have used, sell, have sold, offer to sell, import and have imported Licensed Plant Products in the 2 Blades Commercial Licensed Field in the Territory for any Other Activity. 2 Blades' rights under the license granted in this Section 2.1 include the non-exclusive rights, subject to the terms and conditions of this Agreement, to make, have made, use, have used, import and have imported TAL Nucleases and to perform and have performed TAL Nuclease Activities in the Licensed Field and the 2 Blades Commercial Licensed Field in the Territory, in each case solely in furtherance of the foregoing licenses.

(c) Addition of crops into Licensed Crops. Within the [*****] of this Agreement, CPS is granted an option (the "**Option**") to add [*****] crop Plants of its choice to the "**Licensed Crops**" subject to payments under Section 3.1(c), provided, however, if [*****] are added under the Option, the Licensed Field for purposes of CPS' license under Section 2.1(a) with respect to [*****], as applicable, will exclude the 2 Blades Commercial Licensed Field. In order to exercise the option, CPS shall provide 2 Blades with written notice of such exercise, together with the payment required under Section 3.1(c).

2.2 **Certain Restrictions.**

(a) 2 Blades has granted to [*****] rights under the Licensed Patents in the Territory to sell, have sold and offer to sell TAL Nucleases and TAL Nuclease Activities for Research Purposes in or for Plants. The license granted to CPS in Section 2.1 does not include the right to conduct or have conducted, any such activities.

(b) [*****]. During [*****] notwithstanding any other provision of this Agreement to the contrary, [*****] may not [*****] by any persons or entities other than [*****] in each case for [*****] except:

(i) with respect to [*****];

(ii) in the event of a [*****], in which case [*****] will be relieved of such restriction with respect to [*****] that is the subject of such [*****];

(iii) in the event of a [*****];

(iv) as part of an [*****] (solely by the [*****]); or

(v) where such activities do not directly involve the practice of the [*****] (*e.g.*, conduct of [*****] that have previously been modified through the practice of the [*****]).

For clarity, this Section 2.2(b) shall not restrict CPS from: (x) making TAL Nucleases, using TAL Nucleases made by CPS or performing TAL Nuclease Activities; (y) using any TAL Nuclease that was acquired by CPS from any person or entity other than [*****] after the expiration of the [*****], provided that such person or entity did not make the TAL Nucleases or perform any TAL Nuclease Activities during [*****]; or (z) obtaining and using products that do not constitute TAL Nucleases and are not made through the performance of TAL Nuclease Activities. Also, nothing in this Section 2.2(b) shall be interpreted to mean that CPS has an affirmative obligation to [*****] to obtain TAL Nucleases or TAL Nuclease Activities.

For further clarity, nothing in this Section 2.2(b) shall expand the license granted to CPS in Section 2.1.

(c) CPS' license rights under this Agreement do not extend to any Plant or Plant materials that have been produced or modified by a Third Party through application or use of a TAL Nuclease or through a TAL Nuclease Activity unless such Plant or Plant materials have been produced or modified in the Licensed Crops in the Licensed Field by (i) a Subcontractor on behalf of CPS in accordance with this Agreement, (ii) a Third Party who has an active commercial license from 2 Blades that permits such Third Party to sell such Plant or Plant materials to other Third Parties, (iii) a Collaboration Partner as part of an Exempted Research Collaboration, or (iv) an academic research group.

(d) The license granted to CPS in Section 2.1 and the license fee set forth in Section 3.1(a) shall include the right to have CPS' Subsidiaries practice under the license for so long as they remain Subsidiaries, provided that CPS shall be responsible for the performance of all of the obligations, and for compliance with all of the terms and conditions, of this Agreement by such Subsidiaries (which responsibility shall continue even if such entities cease to be Subsidiaries, but only with respect to obligations accrued in the period where such entities were Subsidiaries); and provided further that CPS first pays to 2 Blades the Sublicense Fee set forth in Section 3.1(b) for each such Subsidiary that is not wholly-owned by CPS. Except Subsidiaries that are wholly owned by CPS, all other Subsidiaries practicing under the license granted to CPS in Section 2.1 shall be considered Sublicensees for purposes of this Agreement. For clarity, at such time as an entity ceases to be CPS' Subsidiary, such entity shall no longer be entitled to practice under the license granted in Section 2.1, but such entity may still be granted a separate sublicense by CPS pursuant to Section 2.3(a), including with respect to any Licensed Plant Products that were previously generated by or for such entity under the license granted in Section 2.1.

For the purpose of this Section, "**Subsidiary**" means any entity controlled by CPS, where "**control**" for purposes of this definition only means (a) direct or indirect ownership at least fifty percent (50%) (or such lesser percentage as is the maximum allowed to be owned by a foreign corporation in particular jurisdiction) of the voting interests or other ownership interests in the entity in question, or (b) the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of an entity, whether through the ownership of voting securities, by contract, or otherwise.

2.3 **Sublicenses.**

(a) Subject to the terms and conditions of this Agreement (including Section 3.1(b)), CPS may sublicense to a Third Party (each such party holding a sublicense under this Agreement, a "**Sublicensee**") CPS' rights under the 2 Blades. Licensed Patents to use and sell Licensed Plant Products of Licensed Crops that have been generated by or on behalf of CPS as breeding material or reproductive seed or other Plant material to further develop such Licensed Plant Products for planting as commercial crops and preparing derivatives therefrom in the Licensed Field in the Territory. Notwithstanding the foregoing or anything to the contrary in this Agreement, CPS shall not (except as set forth in Section 2.2(d)) sublicense CPS' rights under the 2 Blades Licensed Patents to produce or modify any Plant or Plant materials through application or use of a TAL Nuclease or through a TAL Nuclease Activity.

(b) Subject to the terms and conditions of this Agreement, 2 Blades may sublicense to a Third Party (each such party holding a sublicense under this Agreement, also a "**Sublicensee**") 2 Blades' rights under the CPS Licensed Patents to use and sell Licensed Plant Products that have been generated by or on behalf of 2 Blades as breeding material or reproductive seed or other Plant material to further develop such Licensed Plant Products for planting as commercial crops and preparing derivatives therefrom in the Licensed Field for any Non-Profit Activity or in the 2 Blades Commercial Licensed Field for any Other Activity, in each case in the Territory.

(c) Subject to the terms and conditions of this Agreement, 2 Blades may sublicense to a Third Party (each such party holding under this Agreement, also a "**Sublicensee**") 2 Blades' rights under the CPS Licensed Patents to produce or modify any Plant or Plant materials through application or use of a TAL Nuclease or through a TAL Nuclease Activity (i) in the Licensed Field for any Non-Profit Activity, and (ii) in the 2 Blades Commercial Licensed Field for any Other Activity, except (in the case of such Other Activities) to [*****]; in each

case solely in connection with 2 Blades' licenses under 2 Blades Licensed Patents. For clarity but without limitation, the foregoing includes the right to grant sublicenses through multiple tiers to bona-fide, not-for-profit organizations that work for the benefit of Subsistence Farmers for use in Subsistence Farming in Developing Countries. Upon the execution of a sublicense to a not-for profit organization under this Section 2.3(c), 2 Blades and CPS shall issue a press release announcing the execution of such sublicense and CPS' contribution to such sublicense within thirty (30) days after the execution thereof.

(d) Each Party shall engage each Sublicensee solely pursuant to a written agreement containing provisions consistent with the terms and conditions of this Agreement (a copy of which shall be provided to the other Party within thirty (30) days of execution, with provisions unrelated to this Agreement or the rights granted hereunder redacted), and such Sublicensee shall abide by all obligations of such Party hereunder as if it were a party to this Agreement. Notwithstanding the foregoing, for sublicenses granted by either Party under this Section 2.3, Sublicensees are not required to grant any licenses to, make any payments, notifications or reports to, submit to audits by, or indemnify the other Party. Each Party shall promptly notify the other Party in writing of entering into any such sublicense agreement and ensure that each Sublicensee complies with and fulfills all of such obligations. Each Party shall be entirely responsible and liable for any acts or omissions of its Sublicensees under any sublicenses granted by it hereunder.

2.4 **Subcontracting.**

(a) Subject to the terms and conditions of this Agreement, either Party may have bona fide Third Party subcontractors (each such party performing activities pursuant to this Section 2.4, a "**Subcontractor**") perform activities under the licenses granted in Section 2.1 solely on such Party's behalf; provided that such subcontracting shall not relieve such Party of any of its obligations under this Agreement and that the Party retains full ownership of the resulting Licensed Plant Product.

(b) Each Party shall ensure that such Subcontractor shall not transfer TAL Nucleases or Licensed Plant Products to any person or entity other than such Party. If such subcontract is terminated for any reason, such Party shall notify the other Party of such termination and take any and all necessary measures to destroy or take possession of the TAL Nucleases and Licensed Plant Products in the possession or control of the Subcontractor at the time of termination.

(c) Each Party shall engage each Subcontractor solely pursuant to a written agreement containing provisions consistent with the terms and conditions of this Agreement (including, for clarity, provisions granting Control of Improvements to such Party in order to

enable such Party to grant the licenses to Improvements granted in this Agreement), and such Subcontractor shall abide by all obligations of such Party hereunder as if it were a party to this Agreement. Each Party shall promptly notify the other Party in writing of entering into any such subcontracting agreement and ensure that each Subcontractor complies with and fulfills all of such obligations. Each Party shall be entirely responsible and liable for any acts or omissions of its subcontractors under any subcontracting agreements entered into hereunder.

(d) Neither Party shall have any Third Party perform any activity under the license granted in Section 2.1 except in accordance with this Section 2.4.

2.5 **No Further License.** No right or license under any patents or other intellectual property is granted or shall be granted by implication. All such rights are or shall be granted only as expressly provided in the terms of this Agreement. Except as set forth in Section 2.7, neither Party shall be obligated to provide: the other Party: (i) any information other than that disclosed in the Licensed Patents, or (ii) any technical assistance, including hands-on technical support by its personnel, relating to the practice of the Licensed Patents or use of TAL Nucleases.

2.6 **Upstream License Agreements.**

(a) All rights and licenses granted by 2 Blades under this Agreement are subject to the grant of rights in that certain [*****] between [*****] and 2 Blades dated [*****] (the "**[*****]**"). 2 Blades shall not amend the [*****] in a manner that would adversely affect CPS' rights under this Agreement without the prior written consent of CPS.

(b) All rights and licenses granted by CPS under this Agreement under the patents identified in Exhibit B as owned by [*****] are subject to the grant of rights in that certain [*****] dated [*****] between [*****] and [*****]. CPS [*****] shall not amend the [*****] in a manner that would adversely affect 2 Blades' rights under this Agreement without the prior written consent of 2 Blades.

2.7 **Improvements.** Each Party will promptly, but in no event later than thirty (30) days from invention or creation, inform the other Party of all Improvements Controlled by such Party (or, in the case of CPS, its Subsidiaries) that arise under this Agreement. Information provided with respect to such Improvements will be provided using such Party's standard form of invention disclosure and in reasonable detail but in no circumstance less than would be sufficient to permit an understanding of the nature of the Improvements by a practitioner reasonably skilled in the relevant technical or scientific area.

2.8 **Progress Report.** Within sixty (60) days of the end of each calendar year, each Party shall provide to the other Party an annual report summarizing its activities relating to the development and commercialization of Licensed Plant Products, including a list of all Sublicensees (hereinafter called the "**Progress Report**").

ARTICLE 3 CONSIDERATION

3.1 **Fees to 2 Blades.**

(a) License Fee. In consideration for the rights and license granted to CPS under this Agreement as of the Effective Date, CPS shall pay to 2 Blades an irrevocable and non-refundable license fee of [*****] (the "**License Fee**"). The License Fee shall be paid by CPS according to the following schedule payment:

- [*****] within forty five (45) days of the Effective Date;

- [*****] within forty five (45) days of the three-month anniversary of the Effective Date.

(b) Fees for CPS Sublicense Grants. In consideration of CPS' rights under the 2 Blades Licensed Patents to each Sublicensee (on a Sublicensee by Sublicensee basis), CPS shall pay to 2 Blades an irrevocable and non-refundable license fee of [*****] (the "**Sublicense Fee**" for such sublicense). Payment shall be made by CPS in full simultaneously with the execution of such sublicense; provided, however, if such sublicense does not include commercial rights as of the date of execution, CPS shall notify 2 Blades in writing and payment shall be made by CPS within thirty (30) days of the date of the exercise of the commercial option. If CPS has prior to the Effective Date granted any sublicense that, automatically upon execution of this Agreement or otherwise, would include a sublicense of CPS' rights under the 2 Blades Licensed Patents, such sublicense shall not be deemed effective with respect to CPS' rights under the 2 Blades Licensed Patents unless and until CPS has (i) notified 2 Blades in writing, (ii) taken such actions (if any) necessary to comply with Section 2.3 with respect to such sublicense, and (iii) paid the Sublicense Fee for such sublicense, as applicable.

(c) Fees for additional crops. In consideration for the addition of any new crop to the Licensed Crops under Section 2.1(c), CPS shall pay to 2 Blades an irrevocable and non-refundable license fee of [*****] for each additional crop. Payment shall be made by CPS in full simultaneously with the addition of such crop.

3.2 **Payment of Fees.** Each payment under Section 3.1 shall be made in United States Dollars by wire transfer to the following bank account with a written notice of such wire transfer. For the avoidance of doubt, any and all bank commission shall be borne by CPS:

[*****]

3.3 **Sublicense Revenue to CPS.** In the event that 2 Blades receives cash consideration from a for-profit organization for a sublicense granted pursuant to Section 2.3(b) or 2.3(c)(ii) for Other Activities, in consideration for the rights and license granted to 2 Blades under this Agreement as of the Effective Date, 2 Blades shall pay to CPS [*****] of the net payments or other cash consideration that 2 Blades receives from the applicable Sublicensee in consideration of the grant of such sublicense under the CPS Licensed Patents, [*****] (the "**Net Revenue**"). Payment shall be made together with the Progress Report described in Section 2.8; within sixty (60) days of the end of each calendar year.

3.4 **Payment of Sublicense Revenue.** Each payment under Section 3.3 shall be made in United States Dollars by wire transfer to the following bank account with a written notice of such wire transfer. For the avoidance of doubt; any and all bank commission shall be borne by 2 Blades:

[*****]

3.5 **Tax.**

(a) All amounts payable pursuant to this Agreement are understood as amounts exclusive of any withholding taxes. In the case that either Party is obliged by law to withhold taxes on payments due to the other Party under this Agreement, such taxes shall be borne by such Party and paid to the relevant tax authorities by such Party on behalf of the other Party in addition to the amounts due.

(b) Each Party shall cooperate with each other in order to allow the Parties to benefit to the maximum extent from any applicable double tax treaties (*e.g.*, CPS may need to submit documents with 2 Blades' signature to the tax authorities prior to, on or after the date of payment; 2 Blades may need to submit the evidence of the payment of certain withholding tax, if applicable).

3.6 **Late Payment.** Notwithstanding any other remedy available to a Party under the provisions of this Agreement, if any sum of money owed to a Party hereunder is not paid when due, the unpaid amount shall bear interest compounded quarterly, [*****] until paid.

ARTICLE 4 COVENANTS OF THE PARTIES

4.1 **Regulatory Approvals and Product Registration.**

(a) CPS or its Sublicensee, as applicable shall be responsible for obtaining any necessary or appropriate regulatory approvals and/or product registration for the Licensed Plant Products made, used, sold or imported by CPS or its Sublicensee. The decision to seek such regulatory approval or product registration for the Licensed Plant Products shall be made solely by CPS or its Sublicensee. The costs of securing such regulatory approvals and/or product registrations shall be borne solely by CPS or its Sublicensee.

(b) 2 Blades or its Sublicensee, as applicable shall be responsible for obtaining any necessary or appropriate regulatory approvals and/or product registration for the Licensed Plant Products made, used, sold or imported by 2 Blades or its Sublicensee. The decision to seek such regulatory approval or product registration for the Licensed Plant Products shall be made solely by 2 Blades or its Sublicensee. The costs of securing such regulatory approvals and/or product registrations shall be borne solely by 2 Blades or its Sublicensee.

4.2 **Covenants Regarding the Manufacture of Licensed Plant Products.** Each Party hereby covenants and agrees that (i) its manufacture, use, sale, or transfer of Licensed Plant Products shall comply with all applicable federal and state laws, including all federal export laws and regulations; and (ii) it will make commercially reasonable efforts such that such Licensed Plant Products shall not be defective in design or manufacture. Each Party hereby further covenants and agrees that, pursuant to and only to the extent required by 35 United States Code Section 204, it shall, and it shall cause each of its Sublicensees (and in the case of CPS, its Subsidiaries), to substantially manufacture in the United States of America ("**US**") all products embodying or produced through the use of an invention that is subject to the rights of the federal government of the US.

4.3 **Export and Regulatory Compliance.** Each Party understands that the Arms Export Control Act ("**AECA**"), including its implementing International Traffic in Arms Regulations ("**ITAR**"), and the Export Administration Act ("**EAA**"), including its Export Administration Regulations ("**EAR**") are some (but not all) of the laws and regulations that comprise the US export laws and regulations. Each Party further understands that the US export laws and regulations include (but are not limited to): (i) ITAR and EAR product/service/data-specific requirements; (ii) ITAR and EAR ultimate destination-specific requirements; (iii) ITAR and EAR end user-specific requirements; (iv) Foreign Corrupt-Practices Act; and (v) antiboycott laws and regulations. Each Party shall comply with all then-current applicable export laws and regulations of the US Government (and other applicable US laws and regulations) pertaining to the Licensed Plant Products (including any associated products, items, articles, computer software, media, services, technical data, and other information). Each

Party certifies that it shall not, directly or indirectly, export (including any deemed export), nor re-export (including any deemed re-export) Licensed Plant Products (including any associated products, items, articles, computer software, media, services, technical data, and other information) in violation of the US export laws and regulations.

4.4 **Reports and Audits.**

(a) Together with the Progress Report described in Section 2.8, within sixty (60) days of the end of each calendar year, 2 Blades shall supply to CPS a report reflecting an itemized calculation of net sublicense revenue payable to CPS under Section 3.3. CPS will treat each such report as confidential information of 2 Blades under Article 9 of this Agreement, and will disclose it only to the employees or agents of CPS, who have a need to know such information for purpose of this Agreement, or as necessary under the [*****], provided that such parties are under a duty of confidentiality no less restrictive than CPS' duties hereunder. If no royalty or fee is due, 2 Blades shall provide CPS with a report certifying this.

(b) Each Party shall keep or cause to be kept complete and accurate records of its sublicensing activities under this Agreement, including net sublicense revenue payable by 2 Blades to CPS under Section 3.3, and records of all agreements with Sublicensees included in any broader transactions, in each case in accordance with generally accepted accounting procedures and in sufficient detail to enable the amounts payable by the Parties under Section 3.1 and Section 3.3 to be determined and proven, as the case may be. Such records shall enable the calculation and verification of the amount of net sublicense revenue and any other sums due to either Party under this Agreement. Such records shall be accessible, upon at least sixty (60) days prior notice of either Party to the other Party, not more than once a year during business hours, during the term of this Agreement and within five (5) years after the end of the periods to which such records relate, to an independent accountant selected by the first Party for the purpose of verifying the amount of net sublicense revenue and any other sums due to either Party under this Agreement. If in dispute, such records shall be kept until the dispute is settled. The independent accountant shall be required to keep confidential all information received during any such inspection and shall disclose only information relating to the accuracy of the records and payment made. The cost of such inspection shall be borne by the inspecting Party. If any error or discrepancy is shown by which the amount due to the inspecting Party is greater than [*****] of the amount shown in the inspected Party's reports to the inspecting Party, the inspected Party shall bear the cost of such inspection. Any amount underpaid shall be paid within forty five (45) days of the close of the audit. Any amount overpaid shall be refunded within forty five (45) days of the close of the audit. Once examined, the reports and payments shall be closed for that period. The Parties further agree to support any audit conducted by either Party's licensors, [*****].

4.5 **Use of the [*****] and CPS Name and Trademarks or the Names of [*****] and CPS Faculty, Staff, or Students.** Except for the limited press release rights set forth in Section 9.5, (a) no provision of this Agreement grants 2 Blades or any Sublicensee any right or license to use the name, logo, or any marks owned by or associated with [*****] and/or CPS or the names, or identities of any member of the faculty, staff, or student body of [*****] and/or CPS, and 2 Blades shall not use and shall not permit a Sublicensee to use any such logos, marks, names, or identities without [*****], CPS' and, as the case may be, such member's prior written approval; and (b) no provision of this Agreement grants CPS or any Sublicensee any right or license to use the name, logo, or any marks owned by or associated with 2 Blades or the names, or identities of any member of the staff of 2 Blades, and CPS shall not use and shall not permit a Sublicensee to use any such logos, marks, names, or identities without 2 Blades and, as the case may be, such member's prior written approval.

4.6 **Governmental Markings.**

(a) Each Party and its Sublicensees may mark all Licensed Plant Products in a manner consistent with their current patent marking practices for their own products and applicable laws and regulations. Where marking is to be performed but the Licensed Plant Product cannot be marked, the patent notice shall be placed on associated tags, labels, packaging, or accompanying documentation either electronic or paper as appropriate.

(b) Each Party is responsible for including with its Licensed Plant Products any warning labels, packaging and instructions as to the use and the quality control for any such Licensed Plant Products.

(c) Each Party agrees to register this Agreement with any foreign governmental agency that requires such registration, and the registering Party shall pay all costs and legal fees in connection with such registration. Each Party shall comply with all foreign laws affecting this Agreement or the sale of Licensed Plant Products.

ARTICLES 5 PATENT RIGHTS

5.1 **Licensed Patent Prosecution Updates.** Each Party shall provide the other Party with non-privileged information regarding the prosecution status of the Licensed Patents Controlled by such Party upon the reasonable written request of the other Party.

5.2 **Defense and Enforcement.**

(a) As between the Parties, 2 Blades shall have the sole right (but not the obligation) in its discretion to defend and enforce the 2 Blades Licensed Patents against third Party infringers. In the event that 2 Blades engages or is engaged in a proceeding involving the 2 Blades Licensed Patents, CPS agrees to fully cooperate with such proceeding upon the reasonable request of 2 Blades.

(b) As between the Parties, CPS shall have the sole right (but not the obligation) in its discretion to defend and enforce the CPS Licensed Patents against Third Party infringers. In the event that CPS engages or is engaged in a proceeding involving the CPS Licensed Patents, 2 Blades agrees to fully cooperate with such proceeding upon the reasonable request of CPS.

ARTICLE 6 REPRESENTATIONS, WARRANTIES AND LIMITATIONS

6.1 **Representations and Warranties.**

(a) Each Party represents and warrants to the other Party that as of the Effective Date (i) such Party is a company or corporation duly organized, validly existing and in good standing under the laws of the jurisdiction in which it is organized; (ii) such Party has the legal power and authority to execute, deliver and perform this Agreement; (iii) the execution, delivery and performance by such Party of this Agreement has been duly authorized by all necessary corporate action; (iv) this Agreement constitutes the legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms; and (v) the execution, delivery and performance of this Agreement will not cause or result in a violation of any law, of such Party's charter documents, or of any contract by which such Party is bound.

(b) As of the Effective Date, 2 Blades represents and warrants that:

To the best of its knowledge (i) it holds a license under the patents and patent applications set forth in Exhibit A, attached hereto, in the Licensed Field, with the right to sublicense such rights, and (ii) it has the right to grant the rights and license granted to CPS herein relating to the Licensed Field; (ii) it has the full right, power, and authority to grant, has obtained all consents necessary to grant, and is not prohibited by the terms of any agreement to which it is a party from granting, all of the rights granted to CPS under this Agreement on the terms and conditions set forth herein, and it has not previously granted and will not grant any rights to any Third Party that are inconsistent with such rights; (iii) Exhibit A contains complete and accurate description of all patents and patent applications owned or Controlled by 2 Blades related to the inventions disclosed in the 2 Blades Licensed Patents, and all patent applications included in the 2 Blades Licensed Patents have been duly filed; (iv) there are no actions, claims, demands, suits, judgments, settlements, citations, summons, subpoenas, inquiries or investigations of any nature, civil, criminal, regulatory or otherwise, in law or in equity, or arbitral proceeding or before any governmental authority, pending or, to 2 Blades' knowledge, threatened, relating to or affecting the 2 Blades Licensed Patents (with the exception of normal prosecution at the United States Patent and Trademark Office and equivalent foreign patent offices).

(c) CPS represents and warrants that as of the Effective Date:

(i) it has the full right, power, and authority to grant, bas obtained all consents necessary to grant, and is not prohibited by the terms of any agreement to which it is a party from granting, all of the rights granted to 2 Blades under this Agreement on the terms and conditions set forth herein, and it has not previously granted and will not grant any rights to any Third Party that are inconsistent with such rights;

(ii) it is the owner or exclusive licensee of all right, title and interest in and to the patents and patent applications set forth in Exhibit B. Exhibit B contains a complete and accurate description of all patents and patent applications owned or Controlled by CPS, Cellectis SA or any of their Affiliates related to the inventions disclosed in the CPS Licensed Patents. All patent applications included in the CPS Licensed Patents have been duly filed;

(iii) there are no actions, claims, demands, suits, judgments, settlements, citations, summons, subpoenas, inquiries or investigations of any nature, civil, criminal, regulatory or otherwise, in law or in equity, or arbitral proceedings or any proceedings by or before any governmental authority, pending or, to CPS' knowledge, threatened, relating to or affecting the CPS Licensed Patents (with the exception of normal prosecution at the United States Patent and Trademark Office and equivalent foreign patent offices); and

(iv) [*****] is a legal and valid obligation binding upon CPS and [*****], is in full force and effect, is enforceable in accordance with its terms, [*****]. A true, correct and complete copy of [*****], including all amendments thereto (subject to redactions of financial terms), has been provided by CPS to 2 Blades. To CPS' knowledge, no event has occurred which, after the giving of notice or the lapse of time or both, would constitute a default or breach under [*****] by CPS or [*****]. Neither CPS nor, to the knowledge of CPS, [*****], has waived any rights or defaults or breaches under [*****] that would adversely affect the ability of 2 Blades to exercise any rights granted under this Agreement or that would prohibit the transactions contemplated by this Agreement. CPS has not received any notice orally or in writing that [*****] has been, will be or is threatened to be terminated (in whole or in part), and CPS has no intention of terminating [*****] (in whole or in part). This Agreement is consistent in all respects with [*****].

For the purpose of the Section 6.1 the term "as of" shall mean up to and including the Effective Date.

6.2 **Disclaimer of Warranties.** EXCEPT AS EXPRESSLY PROVIDED IN SECTION 6.1, EACH PARTY AND ITS LICENSORS (INCLUDING WITHOUT LIMITATION [*****]) EXPRESSLY DISCLAIMS ANY REPRESENTATIONS OR WARRANTIES TO THE MAXIMUM EXTENT PERMISSIBLE BY LAW, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, PATENTABILITY, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, FITNESS FOR A PARTICULAR PURPOSE, SUCCESS OF RESEARCH OR DEVELOPMENT EFFORTS, OR ANY WARRANTY THAT ANY PATENT LICENSED HEREUNDER SHALL BE VALID OR ENFORCEABLE. EACH PARTY ACKNOWLEDGES THAT IT IS NOT RELYING ON ANY WARRANTIES OTHER THAN THOSE SET FORTH IN SECTION 6.1. [*****].

6.3 **Consequential Damages Disclaimer.** EXCEPT WITH RESPECT TO EITHER PARTY'S INDEMNIFICATION OBLIGATIONS UNDER ARTICLE 7, INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OR EITHER PARTY'S BREACH OF ARTICLE 9, IN NO EVENT SHALL EITHER PARTY OR ITS AFFILIATES OR LICENSORS (SUBJECT TO SECTION 6.6) BE LIABLE HEREUNDER TO THE OTHER PARTY, ITS AFFILIATES OR ANY OTHER PERSON OR ENTITY FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR OTHER INDIRECT DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS OR LOSS OF USE DAMAGES) ARISING FROM THE RESEARCH, MANUFACTURE, USE OR SALE OF LICENSED PLANT PRODUCTS OR TAL NUCLEASES OR THE PERFORMANCE OF TAL NUCLEASE ACTIVITIES, OR OTHERWISE IN CONNECTION WITH THIS AGREEMENT, EVEN IF THE PARTIES, ITS AFFILIATES OR LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES.

6.4 **2 Blades Liability Cap.** EXCEPT FOR ITS PAYMENT OBLIGATIONS UNDER SECTION 3.3, IN NO EVENT SHALL 2 BLADES' (TOGETHER WITH ITS AFFILIATES' AND LICENSORS') LIABILITY IN CONNECTION WITH THIS AGREEMENT EXCEED [*****].

6.5 **CPS Liability Cap.** EXCEPT FOR ITS INDEMNIFICATION OBLIGATIONS UNDER ARTICLE 7, IN NO EVENT SHALL CPS' (TOGETHER WITH ITS AFFILIATES' AND LICENSORS') LIABILITY BASED ON 2 BLADES' ACTIVITIES UNDER THE LICENSE GRANTED IN SECTION 2.1(b)(ii) IN CONNECTION WITH THIS AGREEMENT EXCEED [*****].

6.6 [*****].

ARTICLE 7 INDEMNIFICATION; [*****]

7.1 **Indemnification.**

(a) CPS hereby agrees to indemnify, defend and hold harmless 2 Blades and its Affiliates and licensors, and its and their respective directors, officers, employees and agents ("**2 Blades Indemnitees**"), from and against any and all suits, claims, actions, demands, damages, liabilities, expenses and/or loss, including reasonable legal expense and attorneys' fees, resulting from CPS' or its Sublicensees, 'Subsidiaries' or Subcontractors' (i) activities under the license granted in Section 2.1(a) constituting manufacture, use, handling, storage, sale or other disposition of Licensed Plant Products or TAL Nucleases, or performance of TAL Nuclease Activities or any other exercise of any right or license granted under this Agreement, or (ii) gross negligence, recklessness, willful misconduct or breach of this Agreement.

(b) 2 Blades hereby agrees to indemnify, defend and hold harmless CPS and its Affiliates and licensors, and its and their respective directors, officers, employees and agents ("**CPS Indemnitees**"), from and against any and all suits, claims, actions, demands, damages, liabilities, expenses and/or loss, including reasonable legal expense and attorneys' fees, resulting from 2 Blades' or its Sublicensees' or Subcontractors' (i) activities under the license granted in Section 2.1(b)(ii) in the 2 Blades Commercial Licensed Field constituting manufacture, use, handling, storage, sale or other disposition of Licensed Plant Products or TAL Nucleases, or performance of TAL Nuclease Activities, or (ii) gross negligence, recklessness, willful misconduct or breach of this Agreement.

(c) In the event that any 2 Blades Indemnitee or CPS Indemnitee (collectively, "**Indemnitee**") is seeking indemnification under this Section 7.1, it shall inform the other Party (the "**Indemnifying Party**") of a claim as soon as reasonably practicable after it receives notice of the claim, shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration), and shall cooperate as requested in the defense of the claim; provided, however, that the Indemnitee shall have the right to retain its own counsel and, if such counsel advises the Indemnitee that representation of the Indemnitee by the counsel retained by the Indemnifying Party would be inappropriate because of actual differences in the interests of the Indemnitee and any other party represented by such counsel, then the Indemnifying Party shall reimburse the Indemnitee on a monthly basis for the reasonable attorneys' fees incurred by the Indemnitee in connection with the claim following receipt of reasonable documentation of such fees (provided that the Indemnitee shall not be required to disclosed any time entries that are subject to the attorney-client privilege). The Indemnifying Party agrees to keep the Indemnitee informed of the

progress in the defense and disposition of such claim and to consult with the Indemnitee with regard to any proposed settlement. The Indemnifying Party shall not settle any such claim with an admission of liability of the Indemnitee without the Indemnitee's prior written approval, which shall not be unreasonably withheld or delayed.

7.2 **[*****].**

ARTICLE 8 TERM AND TERMINATION

8.1 **Term.** This Agreement shall remain in effect until the expiration of the last-to-expire of the Licensed Patents, unless earlier terminated pursuant to the other provisions of this Agreement.

8.2 **Termination for Material Breach.** Each Party shall have the right to terminate this Agreement or the license granted by it in Section 2.1(a) or Section 2.1(b) upon [*****] prior written notice to the other Party should the other Party commit a material breach of its obligations or be in default under any of the provisions of this Agreement; provided that the breaching Party has failed to cure the material breach or default within the same [*****] notice period. For the avoidance of doubt, and without limiting any other basis on which a Party may claim a material breach of this Agreement, the other Party's failure to comply with its obligation to make any payment under this Agreement will constitute a material breach of this Agreement.

8.3 **Termination for Patent Challenge.** Each Party shall have the right to terminate the Agreement and/or any licenses granted by it hereunder with immediate effect upon written notice to the other Party in the event the other Party, its Affiliate, Sublicensee or Subcontractor challenges such Party's Licensed Patents or assists or otherwise supports a Third Party challenging the validity, enforceability and/or patentability of, or directly, or through assistance granted to a Third Party, commences or participates (except as such participation may be required by applicable law) in any interference, pre- or post-grant opposition or other pre- or post- grant proceeding related to the validity, enforceability and/or patentability of, the other Party's Licensed Patents during the Term. Notwithstanding anything to the contrary, no act of [*****] or sublicensees or subcontractors in connection with the 2 Blades – [*****] shall give CPS a right to terminate this Agreement or any license granted by CPS hereunder.

8.4 **Automatic Termination.** In the event of termination of [*****], CPS shall provide 2 Blades with written notice of such termination within five (5) days (and shall cooperate in good faith with 2 Blades as may be required to obtain a direct license from [*****]), and the license in Section 2.1(a) shall terminate simultaneous to the termination of [*****].

8.5 **Other Remedies.** Notwithstanding either Party's rights to terminate this Agreement as set forth in this Article 8, neither Party shall be prevented from seeking any other remedy which may be available to it at law or equity.

8.6 **Termination for Insolvency.** Either Party may terminate this Agreement if, at any time: (i) the other Party makes an assignment for the benefit of creditors; (ii) any decree or order for relief is entered against the other Party under any bankruptcy, reorganization, compromise, arrangement, insolvency, readjustment of debt, dissolution or liquidation or similar law; (iii) the other Party petitions or applies to any tribunal for, or consents to, the appointment of, or taking possession by, a trustee, receiver, custodian, liquidator or similar official, of such other Party or any substantial part of its assets, or commences a voluntary case under the bankruptcy law of any jurisdiction; (iv) any such petition or application is filed, or any such proceedings are commenced, against the other Party and such other Party by any act indicates its approval thereof, consent thereto or acquiescence therein, or an order, judgment or decree is entered appointing any such trustee, receiver, custodian, liquidator or similar official, or approving the petition in any such proceedings, and such order for relief, order, judgment or decree remains unstayed and in effect for more than sixty (60) days; or (v) any order, judgment or decree is entered in any proceedings against the other Party decreeing the dissolution of such other Party and such order, judgment or decree remains unstayed and in effect for more than sixty (60) days.

8.7 **Effect of Termination.** Expiration or termination of this Agreement shall not relieve the Parties of any obligation accruing prior to or upon such expiration or termination date, including, for clarity, CPS' obligation to make the second installment of the License Fee, if such payment has not yet been made. Upon any termination of this Agreement or the license grant in Section 2.1(a), CPS shall cease to practice the 2 Blades Licensed Patents and shall promptly incinerate or otherwise destroy, at 2 Blades' request, all Licensed Plant Products and TAL Nucleases in CPS' control covered by one or more Valid Claims or Pending Claims within the 2 Blades Licensed Patents. Upon any termination of this Agreement or the license grant in Section 2.1(b), 2 Blades shall cease to practice the CPS Licensed Patents and shall promptly incinerate or otherwise destroy, at CPS' request, all Licensed Plant Products and TAL Nucleases in 2 Blades' control covered by one or more Valid Claims or Pending Claims within the CPS Licensed Patents. All rights and obligations of the Parties set forth herein that expressly survive the expiration or termination of this Agreement, as well as the provisions of Articles 1 (to the extent required to enforce other surviving rights and obligations), 3 (to the extent that any applicable payments have not yet been paid by either Party prior to termination of this Agreement), 7, 9, 10 and 11, and Sections 2.5, 4.4, 6.2, 6.3, 6.4, 6.5, 6.6, 8.5 and 8.7, shall continue in full force and effect subsequent to and notwithstanding the expiration or termination of this Agreement until they are satisfied or by their nature expire and shall bind the Parties and their successors and permitted assigns. For clarity, the licenses granted under Section 2.1 (including any rights granted by either Party to Sublicensees, Subsidiaries and Subcontractors) shall not survive termination of this Agreement under any circumstances.

ARTICLE 9 CONFIDENTIALITY

9.1 **Confidential Information.** It is anticipated that it may be necessary, in connection with their obligations under this Agreement, for the Parties hereto to disclose to each other Confidential Information. Confidential Information shall include information disclosed in writing or other tangible form, including samples of materials. If disclosed orally, the Confidential Information shall be summarized in written form within thirty (30) days by the disclosing party and a copy provided to the recipient. Notwithstanding the foregoing, the obligations of confidentiality and limited use provided for in this Article 9 shall not apply to any Confidential Information which:

(a) is publicly available by publication or other documented means at the time of receipt from the disclosing party or later becomes publicly available through no act or fault of recipient;

(b) is already known to recipient before receipt from the disclosing party, as demonstrated by recipient's written records;

(c) is made known to recipient by a Third Party who did not obtain it directly or indirectly from the disclosing party and who is not obligated to hold it in confidence; or

(d) is independently developed by the recipient as evidenced by credible written research records of recipient's employees who did not have access to the disclosing party's Confidential Information.

Specified information should not be deemed to be within any of these exclusions merely because it is embraced by more general information falling within these exclusions.

9.2 **Confidentiality and Limited Use.** All Confidential Information disclosed to the recipient shall remain the property of the disclosing party and shall be maintained in confidence by the recipient and shall not be disclosed to Third Parties by the recipient (other than as reasonably necessary to permitted Sublicensees and Subcontractors, provided that the recipient has previously bound such Sublicensees and Subcontractors by confidentiality and restricted use obligations at least as stringent than those set forth in this Section 9.2) and, further, shall not be used except for purposes contemplated in this Agreement. All confidentiality and limited

use obligations with respect to the Confidential Information shall terminate five (5) years after the termination date of this Agreement. Notwithstanding anything to the contrary in this Agreement, 2 Blades may disclose Confidential Information of CPS (a) to the extent required by [*****], and (b) provided by CPS in its reports to 2 Blades pursuant to Section 2.8, as such information relates directly to TAL Nucleases or any invention disclosed or claimed in the Licensed Patents, in 2 Blades' reporting and marketing activities in a form approved in writing by CPS (which approval shall not be unreasonably withheld). For clarity, Confidential Information disclosed pursuant to clause (b) of the immediately preceding sentence shall not include any information regarding particular Traits or Third Party. In addition, either Party may disclose Confidential Information of the other Party: (i) in connection with an order of a court or other government body or as otherwise required by or in compliance with law or regulations; provided, however, that the disclosing party provides the other party with reasonable notice and takes reasonable measures to obtain confidential treatment thereof; or (ii) in confidence to recipient's attorneys, accountants, banks and financial sources and its advisors, so long as, in each case, the entity to which disclosure is made is bound to confidentiality on terms consistent with those set forth herein.

9.3 **Disclosures to Employees.** The recipient agrees to advise its officers and employees who need to know Confidential Information of these confidentially and limited use obligations and further agrees, prior to any disclosure of Confidential Information to such individuals, to cause them to be bound by the same obligations of confidentially and limited use as those contained in this Agreement. Any breach by such officers or employees of such obligations shall be deemed a breach of this Agreement by the recipient.

9.4 **Return of Confidential Information.** Upon termination of this Agreement, originals and copies of Confidential Information in written or other tangible form will be returned to the disclosing party by recipient or destroyed by recipient under instruction of the disclosing party. One copy of each document may be retained solely for legal archiving purposes.

9.5 **Confidential Status of Agreement.** The terms of this Agreement shall be deemed Confidential Information of both Parties and shall be dealt with according to the confidentially requirements of this Article 9. Notwithstanding the foregoing, the Parties will each issue a press release announcing the execution of this Agreement within thirty (30) days after the Effective Date. Neither Party will make public disclosures concerning other specific terms of this Agreement without obtaining the prior written consent of the other Party, which consent shall not be unreasonably withheld. Notwithstanding anything to the contrary in this Agreement, under no circumstances shall CPS disclose the financial terms of this Agreement to any Sublicensee, Subcontractor or any other Third Party.

ARTICLE 10 DISPUTE RESOLUTION

10.1 **Meeting.** In the event of any dispute relating to this Agreement, including the validity, scope, interpretation or application of this Agreement, each Party agrees to notify the other Party of the nature of the dispute in writing and arrange to meet and confer at the senior management level to try to resolve such dispute by good faith negotiations. If the Parties have not resolved the dispute within ninety (90) days of the date of written notice, the Parties agree to proceed by arbitration under the Rules of Arbitration ("Rules") of the International Chamber of Commerce (Paris) ("ICC") by a single arbitrator appointed in accordance with said Rules, if not otherwise stipulated in Section 10.2.

10.2 **Arbitration Procedures.** There shall be one arbitrator, who shall be selected jointly by the Parties within twenty (20) days of receipt by respondent of a copy of the demand for arbitration. Any arbitrator not timely appointed shall be appointed by the ICC from the ICC's large, complex case panel, using the listing, ranking and striking procedure in the Rules, with each Party having a limited number of peremptory strikes. Any arbitrator appointed by the ICC shall have significant experience with the arbitration of similar large, complex, commercial disputes. The arbitration proceeding shall be conducted in the English language. The arbitration proceeding shall be held in Chicago, Illinois, USA; provided that the Parties may agree in writing to conduct individual hearings in other locations, in accordance with the Rules of the ICC. The Parties agree that only documents directly relevant to the issues in dispute must be produced in any such arbitration. The arbitration shall be conducted as expeditiously as practicable, and the Parties and the arbitrator shall use their best efforts to hold the hearing on the merits no later than ninety (90) days after the appointment of the arbitrator, and the arbitrator shall use its best efforts to issue a final award within twenty (20) days after the close of the hearing. In addition to damages, the arbitral tribunal may award any remedy provided for under applicable law and the terms of this Agreement, including specific performance or other forms of injunctive relief. The arbitral tribunal is not empowered to award damages in excess of compensatory damages, and each Party hereby irrevocably waives any right to recover punitive, treble or similar damages with respect to any arbitrated dispute. The arbitration award shall be in writing and shall briefly state the findings of fact and conclusions of law on which it is based. The arbitration award shall be final and binding on the Parties. The award may be entered and enforced in any court having competent jurisdiction. The administrative charges, arbitrators' fees, and related expenses of any arbitration shall be paid equally by the Parties, but each Party shall be responsible for any costs or expenses incurred in presenting such Party's case to the arbitrators, such as attorney's fees or expert witness fees; provided, however, that if in the opinion of the arbitrator any claim by a Party hereto or any defense or objection thereto by the other Party was unreasonable, the arbitrator may in its sole discretion assess as part of the award all or any part of the arbitration expenses of the other Party as applicable (including reasonable attorneys' fees) and the fees and expenses of the

arbitrator and the ICC against the Party raising such unreasonable claim, defense or objection. Notwithstanding the Parties' agreement to arbitrate, the Parties hereby agree that either Party may apply to any court of law or equity of competent jurisdiction for specific performance or injunctive relief to enforce or prevent any violation of the provisions of Article 9 of this Agreement. Without prejudice to such provisional remedies as may be available under the jurisdiction of a court, the arbitral tribunal shall have full authority to grant provisional remedies and to direct the Parties to request that any court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any Party to respect the arbitral tribunal's orders to that effect.

10.3 **IP Matters.** Notwithstanding the Parties' agreement to arbitrate, unless the Parties agree in writing in any particular case, claims and disputes between the Parties relating to or arising out of, or for which resolution depends on a determination of the interpretation, validity, enforceability or infringement of, patents or trademarks or the misappropriation of trade secrets, shall not be subject to arbitration under this Agreement, and the Parties may pursue whatever rights and remedies may be available to them under law or equity, including litigation in a court of competent jurisdiction, with respect to such claims and disputes.

ARTICLE 11 MISCELLANEOUS

11.1 **Relationship of Parties.** The relationship of the Parties is that of independent contractors, and nothing herein shall be construed as establishing one Party or any of its employees as the agent, legal representative, joint venture, partner, employee, or servant of the other Party. Except as set forth herein, neither Party shall have any right, power or authority to assume, create or incur any expense, liability or obligation, express or implied, on behalf of the other Party. Neither Party shall hold itself out as being the agent, legal representative, joint venturer, partner, employee, or servant of the other Party or as having authority to represent or act for the other Party in any capacity whatsoever.

11.2. **Assignment.** This Agreement and the licenses granted herein are not assignable by either Party to any person or entity without the prior written consent of the other Party (which consent shall not unreasonably be withheld), provided, however, that either Party may assign this Agreement, without such consent, upon a transfer or sale of all or substantially all of the business of such Party to which this Agreement relates to a Third Party (the "**Transfer or Sale**"), whether by merger, sale of stock, sale of assets or otherwise, provided in each case that (i) such Party notifies to the other Party within thirty days of a Transfer or Sale and assignment of this Agreement, and (ii) the assignee delivers to the other Party a written instrument unconditionally agreeing to be bound by this Agreement; provided further that in any case the non-assigning Party shall retain all the benefits of the rights and licenses granted to it under this Agreement. The terms and conditions of this Agreement will be binding on and inure to the benefit of the successors and permitted assigns of the Parties. Any attempted assignment in violation of this Section 11.2 shall be null and void.

11.3 **Amendment.** This Agreement shall not be amended except by an instrument in writing executed by 2 Blades and CPS.

11.4 **Entire Agreement.** This Agreement, including any exhibits hereto, constitutes the entire, full, and complete agreement between the Parties concerning the subject matter hereof, and supersedes all prior agreements, negotiations, representations, and discussions, written or oral, express or implied, between the Parties in relation thereto, including that certain Confidentiality Agreement between the Parties dated May 30, 2014.

11.5 **Governing Law.** This Agreement shall be interpreted and enforced in accordance with laws of the state of New York, USA, without regard to its conflicts of laws rules, provided, that those matters pertaining to the validity or enforceability of patent rights shall be interpreted and enforced in accordance with the laws of the territory in which such patent rights exist.

11.6 **Notices.** All communication concerning this Agreement, including payments, notices, demands or requests required or permitted hereunder shall be given in writing and shall be considered to have been duly delivered: (a) at the time personally delivered; or (b) one (1) day after transmission by facsimile, confirmed by registered or certified mail; or (c) five (5) days after being deposited prepaid in registered or certified mail; or (d) two (2) days after being deposited with a reputable private overnight mail courier service prepaid, requesting delivery in the fastest manner available. The addresses to be used for all payments, notices, demands or requests shall be as follows, unless and until changed by a Party by providing proper notice to all other Parties:

If to CPS: [*****]

With a Copy (which shall not constitute notice) to:

[*****]

If to 2 Blades: [*****]

With a Copy (which shall not constitute notice) via mail or telefax to:

[*****]

11.7 **Severability.** If any provision of this Agreement is held to be illegal, invalid, or unenforceable under present or future laws effective while this Agreement remains in effect, the legality, validity and enforceability of the remaining provisions will not be affected thereby; provided, however, that, if the absence of such provision causes a material adverse change in either the risks or benefits of this Agreement to any Party, the Parties shall negotiate in good faith a commercially reasonable substitute or replacement for the invalid or unenforceable provision.

11.8 **Waiver.** The Parties hereto mutually covenant and agree that no waiver by either Party of any breach of the terms of this Agreement shall be deemed a waiver of any subsequent breach thereof. No waiver shall be effective unless made in writing with specific reference to the relevant provision of this Agreement and signed by a duly authorized representative of the Party granting the waiver.

11.9 **Interpretation.** All terms used herein in any one gender or number shall mean and include any other gender and number as the facts, context, or sense of this Agreement may require. Headings used herein are for descriptive purposes only and shall not control or alter the meaning of this Agreement as set forth in the text. The words "**include,**" "**includes**" and "**including**" shall be deemed to be followed by the phrase "**without limitation.**"

11.10 **Computation of Time.** Whenever the last day for the exercise of any privilege or the discharge of any duty hereunder shall fall on a Saturday, Sunday, or any public or legal holiday, whether local or national, the Party having such privilege or duty shall have until 5:00 p.m. in such Party's time zone on the next succeeding business day to exercise such privilege, or to discharge such duty. All references to days in this Agreement shall mean calendar days, unless otherwise specified.

11.11 **Language.** All written materials, correspondence, notices and oral assistance supplied by either Party hereto shall be in the English language. The English language version of this Agreement will be controlling on the Parties.

11.12 **Further Assurances.** Each of the Parties will execute and deliver, or cause to be executed or delivered, such further documents and do or cause to be done such further acts and things as may be required to carry out the intent and purpose of this Agreement.

11.13 **Third-Party Beneficiary.** This Agreement is solely for the benefit of the Parties and their respective successors and permitted assigns.

11.14 **Advice of Counsel.** 2 Blades and CPS have each consulted counsel of their choice regarding this Agreement, and each Party acknowledges and agrees that this Agreement shall not be deemed to have been drafted by one Party or the other and shall be construed accordingly.

11.15 **Consideration.** The Parties acknowledge that each of the licenses and rights granted by 2 Blades and CPS in Article 2 and each of the provisions of this Agreement individually and collectively, constitute good, valuable, and sufficient consideration for each and all of the fees and payment called for hereunder and for each and all of the other obligations of CPS and its Sublicensees, Subsidiaries and Subcontractors, and 2 Blades and its Sublicensees and Subcontractors, as applicable; the Parties further acknowledge that the individual and collective rights under and access to the Licensed Patents renders the way in which those fees and payments hereunder are determined, and their duration, appropriate and desirable as a matter of convenience.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the Effective Date.

Cellectis Plant Sciences, Inc.

By: /s/ Luc Mathis
Name: Luc Mathis
Title: CEO

Two Blades Foundation

By: /s/ Diana M. Horvath
Name: Diana M. Horvath
Title: President

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406 UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

EXHIBIT A

2 BLADES LICENSED PATENTS

[*****]

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

EXHIBIT B

CPS LICENSED PATENTS

[*****]

Exhibit 10.8

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406 UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

CONFIDENTIAL

AMENDMENT 1 TO THE COMMERCIAL LICENSE AGREEMENT

This AMENDMENT 1 TO THE COMMERCIAL LICENSE AGREEMENT (this "Amendment") is made effective as of December 1, 2016 (the "Amendment Effective Date") by and between **CALYXT, INC.** (previously known as CELLECTIS PLANT SCIENCES, INC., with the change of name occurring on or about May 5, 2015), a company existing and registered under the laws of Delaware, located at **[*****]**, represented by Federico Tripodi acting as Chief Executive Officer (CEO) duly authorized for the purposes hereof ("CALYXT" or "CPS") and **Two Blades Foundation**, a not-for-profit corporation organized and existing under the laws of the State of Delaware with its principal place of business at **[*****]** ("2 Blades"; CPS and 2 Blades, each a "Party" and collectively, the "Parties").

WHEREAS, the Parties executed a Commercial License Agreement made effective on December 9, 2014 (the "Agreement"); and

WHEREAS, certain terms of the Agreement are set to expire on December 8, 2016, including CPS's option to add Plants to the scope of the Licensed Crops under Section 2.1(c); and

WHEREAS, the Parties now agree to extend the term of such option for an additional one (1) year period.

NOW, THEREFORE, for and in consideration of the premises and other obligations set forth herein, the Parties agree as follows:

1- Extension of the Option to Add Plants under the Agreement

Section 2.1(c) of the Agreement is hereby deleted in its entirety and replaced with the following:

> "Addition of crops into Licensed Crops. Within the first **[*****]** years of this Agreement, CPS is granted an option (the "**Option**") to add **[*****]** crop Plants of its choice to the "Licensed Crops" subject to payments under Section 3.1(c), provided, however, if **[*****]** are added under the Option, the Licensed Field for purposes of CPS' license under Section 2.1(a) with respect to **[*****]**, as applicable, will exclude the 2 Blades Commercial Licensed Field. In order to exercise the Option, CPS shall provide 2 Blades with written notice of such exercise, together with the payment required under Section 3.1(c)."

2- Acknowledgment of Prior Partial Exercise of the Option

The parties acknowledge that on December 31, 2015, CALYXT exercised the Option with respect to **[*****]** crop Plants: **[*****]**. Accordingly, the parties acknowledge that CALYXT may continue to exercise the Option during the period set forth in Section 2.1(c) of the Agreement for up to an additional **[*****]** crop Plants of its choice.

3- Consideration

In consideration of this Amendment, CALYXT shall pay 2 Blades a fee of **[*****]**, payable upon execution of this Amendment in accordance with the fee payment terms of Section 3.2 of the Agreement.

4- Miscellaneous

Terms not defined herein shall have the meaning ascribed to them in the Agreement. Ali provisions of the Agreement not expressly modified by the present Amendment shall remain unchanged and in full force and effect according to their terms.

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

This Amendment shall enter into force as of the Amendment Effective Date and shall constitute an integral part of the Agreement.

[SIGNATURE PAGE FOLLOWS]

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

IN WITNESS THEREOF, the Parties have caused this Amendment to be executed in duplicate by their respective duly authorized officers or representatives as of the Amendment Effective Date.

TWO BLADES FOUNDATION

By: /s/ Diana M. Horvath
Name: Diana M. Horvath
Title: President

CALYXT, INC.

By: /s/ Federico Tripodi
Name: Federico Tripodi
Title: Chief Executive Officer (CEO)

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**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

EXCLUSIVE LICENCE AGREEMENT

THIS EXCLUSIVE LICENCE AGREEMENT (the "Agreement") is made effective as from the 25th day of April 2015 (the "Effective Date")

By and between:

PLANT BIOSCIENCE LIMITED, a company registered in England with [*****] and whose registered office is at [*****] (hereinafter "PBL") and

CALYXT, INC. (formerly named CELLECTIS PLANT SCIENCES), a company existing and registered under the laws of Delaware, located at [*****], under the [*****] (hereinafter "CALYXT").

PBL and CALYXT shall also be referred to singly as "Party";

and PBL and CALYXT collectively as "Parties".

WHEREAS, PBL has the right to and is able to license the exclusive rights granted or agreed to be granted under this Agreement relating to the Licensed Technology (as defined hereinafter) developed by [*****];

WHEREAS, CALYXT wishes to receive and PBL is willing to grant the right to develop and commercialise Licensed Products, on a worldwide royalty-bearing basis. PBL is willing to grant CALYXT these rights as more particularly set out herein.

NOW THEREFORE, the Parties agree as follows:

1 DEFINITIONS

1.1 "**Affiliate**" means any company, corporation, firm, partnership or other entity controlling, controlled by or under common control with a Party to this Agreement, "control" meaning in this context the direct or indirect ownership of more than fifty percent (50%) of the voting rights of a company, corporation, firm, partnership or other entity, or the power to nominate more than half of the directors, or the power otherwise to determine the policy of a company or organisation. For the purpose of this Agreement, CALYXT shall be deemed to include CALYXT's Affiliates and CALYXT shall be responsible for its Affiliates' compliance with the terms and conditions contained herein.

1.2 "**Bare Sub-License**" means any sub-license granted by CALYXT to any Third Party of rights to some or all of the Licensed Technology, without any Licensed Product developed by or in collaboration with CALYXT and/or CALYXT's Affiliates, or other technologies or rights developed, controlled or owned by CALYXT. For any avoidance of doubt, Sub-Licenses will not be considered Bare Sub-Licenses.

1.3 "**Commercially Reasonable Efforts**" means [*****].

1.4 "**Confidential Information**" means all information either in connection with the discussions and negotiations pertaining to, or in the course of performing, this Agreement, including without limitation the terms of this Agreement, inventions, discoveries, know-how, data, formulae, information, compositions, biological materials, substances, processes and equipment proprietary to or controlled by a Party and disclosed or made available to the other during the License Term.

1.5 "**Field Of Use**" shall mean any and all purposes including without limitation development and commercial activities.

1.6 "**Half Year**" shall mean a period of six (6) months from 1st January to 30th June or 1st July to 31st December, as applicable.

1.7 "**Improvements**" shall mean any improvement, alteration, extension, modification or discovery of the Licensed Technology, whether patentable or not, developed by [*****].

1.8 "**Licensed Patent**" shall mean:

(i) Patent application numbers [*****], and any patent(s) granted on these applications; and,

(ii) any patents and applications corresponding to such patents and applications which may be granted to or made by PBL in other countries; and,

(iii) any re-issues or extensions, any division and continuations, continuations-in-part, re-examinations, reissues or supplemental protection certificates etcetera that claim priority from such patents and patent applications;

(iv) any patent applications and any patents granted therefrom in respect of any Improvements; and

(v) any patent applications and any patents granted therefrom in respect of the [*****].

1.9 "**Licensed Product**" shall mean any plant, seed, seedling, explants and other plant material, and products and derivatives from such plants, seeds, seedlings, explants and other plant material, or other product or good, which (i) contains or was produced using the Licensed Technology and (ii) the manufacture, use, sale, offer for sale, export or import of which is covered by a Valid Claim.

1.10 "**Licensed Technology**" shall mean the Licensed Patent, the [*****] and/or any Improvements.

1.11 "**[*****]**" shall mean wheat line(s) or related plant material(s) created by [*****] that contains at least one targeted modification of the [*****], as further described in Appendix B, and supplied to CALYXT under this Agreement. For purposes herein, **[*****]**.

1.12 "**Licence Term**" shall mean the period from the Effective Date until the later of (a) the tenth anniversary of the date that sales of Licensed Products first occur or (b) the last day of existence of a Valid Claim of a Licensed Patent.

1.13 "**Net Revenues**" shall mean any revenue or amount paid by a Third Party to CALYXT or its Affiliates pursuant to a Bare Sub-License (including upfront and milestones payments, and royalties paid to CALYXT based on seeds sold by such Bare Sub-License beneficiary).

1.14 "**Net Trait Value Premium**" shall mean, with respect to any Licensed Product developed by CALYXT and/or CALYXT's Affiliates and either exploited directly by CALYXT (and/or its Affiliate) or by a Sub-Licensee, in a particular region/market, the value attributed to the Trait on Net Sales of Seeds. For Purposes herein, "**Net Sales**" shall be defined as the cash consideration paid by a Third Party for the purchase of Seeds of Licensed Products to CALYXT (and/or its Affiliate or Sub-Licensee), less the following documented deductions [*****].

1.15 "**Seed**" means seeds of Licensed Product for planting in a commercial field by a grower for the production of grains.

1.16 "**Sub-License**" means any license granted by CALYXT or CALYXT's Affiliates to a Third Party (a "**Sub-Licensee**") for the development and/or exploitation of a Licensed Product developed by or in collaboration with CALYXT or CALYXT's Affiliates.

1.17 [*****].

1.18 "**Territory**" means any countries and regions worldwide.

1.19 "**Third Party**" means any company, corporation, firm, partnership or other entity other than PBL, CALYXT or their respective Affiliates.

1.20 "**Trait**" means the resistance [*****].

1.21 "**Valid Claim**" means a claim in a granted, unexpired and unabandoned patent, or a claim of a pending patent application that has been pending for not more than ten (10) years after the filing date from which such claim takes priority, which has not been held unpatentable, invalid, or unenforceable by a court or other governmental agency of competent jurisdiction in a final decision from which no appeal can be taken.

2 GRANT OF RIGHTS

2.1 Grant of License. PBL hereby grants to CALYXT and its Affiliates, an exclusive (subject to [*****] reservation of rights under Article 2.2), in the Territory, royalty-bearing licence (together with the rights granted under Article 2.3, the "Licence"), under the Licensed Technology, during the Licence Term, (a) to make, use, sell, offer to sell, exploit, export and/or import Licensed Products in the Field of Use, and (b) to provide commercial development, co-development and/or similar technical services to Third Parties in order to develop or create Licensed Products for such Third Parties.

2.2 [*****]

(i) [*****]

(ii) [*****]

2.3 CALYXT shall have the exclusive right to grant Bare Sub-Licenses in respect of the Licensed Technology, and Sub-Licenses, to Third Parties in the Territory and during the License Term, under the following conditions:

(i) CALYXT warrants that any Bare Sub-License or Sub-Licence executed under this Agreement shall impose on the sub-licensee obligations compatible with the obligations imposed by this Agreement on CALYXT;

(ii) CALYXT shall keep PBL informed of any breach by a sub-licensee of any material obligations under any such sublicense and shall use all best efforts commensurate with the breach of such obligations to enforce the terms of the sub-licence;

(iii) CALYXT shall keep PBL informed of its Bare Sub-Licensing activities and shall provide PBL with redacted copies of all Bare Sub-Licence agreements, within thirty (30) days of executing such Bare Sub-License;

(iv) Except for humanitarian and/or bona fide not-for profit public-good purposes, CALYXT shall not enter into a Bare Sub-Licence or Sub-License agreement that includes non-monetary consideration in respect of the Licensed Technology, except to secure rights from the sub-licensee to any sub-licensee improvement that would, in the absence of a grant-back of rights to CALYXT, prevent CALYXT from exploiting Licensed Products.

2.4 On all Licensed Products, CALYXT and Affiliates and sub-licensees shall display patent notices in a manner consistent with current laws, regulations and practices for patented materials including without limitation on packages containing any Licensed Products.

2.5 No licence, whether expressed or implied, is granted to any intellectual property of PBL other than the rights expressly granted herein. It is also expressly agreed that nothing in this Agreement shall be deemed to create any grant of right to PBL and/or [*****], whether expressed or implied, to any intellectual property owned or controlled by CALYXT.

2.6 Upon execution of this Agreement, PBL shall secure the supply of [*****] to CALYXT by [*****].

3 LICENCE and MILESTONE FEES, AND ROYALTIES

3.1 As consideration for the rights granted to CALYXT under the present Agreement, CALYXT shall pay to PBL fees and royalties as set out more particularly in this Section 3.

3.2 CALYXT shall pay to PBL a licence commencement fee of [*****]. Such commencement fee shall be invoiced by PBL upon execution of this Agreement.

3.3 CALYXT shall pay to PBL annual licence maintenance fees of [*****] on each of the first, second and third anniversaries of the Effective Date; and on the fourth anniversary of the Effective Date and each anniversary of the Effective Date thereafter, CALYXT shall pay to PBL annual licence maintenance fees of [*****].

3.4 On the occurrence of [*****], CALYXT shall pay to PBL a non-refundable, non-creditable once off Milestone Fee of [*****]. CALYXT shall advise PBL in writing within thirty (30) days of the event causing this Milestone Fee to become due.

3.5 All payments detailed in Articles 3.1 to 3.4 inclusive shall be non-refundable and non-creditable against royalties or any other payments or expenses made or incurred by CALYXT.

3.6 With regard to any Bare Sub-licences granted by CALYXT, CALYXT shall pay to PBL, for the Licence Term [*****] of any Net Revenues paid to CALYXT by the Bare Sub-Licensee.

3.7 With regard to any Licensed Product developed by CALYXT and/or CALYXT's Affiliates and either exploited directly by CALYXT (and/or its Affiliate) or by a Sub-Licensee, CALYXT shall pay to PBL royalties amounting [*****] of the Net Trait Value Premium. Royalties under the Net Trait Value in the present Section 3.7 shall be subject to a minimum of [*****].

3.8 CALYXT's obligation to make payments under sections 3.4 and 3.7 shall endure for the License Term, and under sections 3.3 and 3.6 shall endure until the last day of existence of a Valid Claim of a Licensed Patent. After such time, the Licence shall be considered fully paid up. Any and all payments due under Articles 3.3, 3.4 and the minimum royalty stated in Article 3.7 shall be adjusted on the 1st of April of each year by the percentage increase, if any, in the British Government Office for National Statistics Retail Price Index (RPI) or its equivalent as compared to the same index for March 2015.

3.9 Payments under this Agreement are exclusive of VAT or any other taxes or duty, which, where applicable, shall be invoiced by PBL and paid by CALYXT in full, without deduction of taxes, charges, duties or other sums, by bank transfer to PBL's bank as detailed on PBL's invoices.

3.10 CALYXT shall pay sums due within forty-five (45) days of the date of receipt of the relevant invoice from PBL.

3.11 Within thirty (30) days after the end of each Half Year, CALYXT shall provide to PBL a written report of all Net Revenues and Net Trait Value Premium during such Half Year from which payments to PBL are due. The report shall set out in detail the determination of all payments due to PBL pursuant to this Article 3. Following receipt of the revenue reports herein, PBL shall invoice CALYXT accordingly and CALYXT shall make the royalty payments then due, within forty-five (45) days of the date of receipt of said invoice(s). Payments shall be made by direct transfer into PBL's bank account the details of which shall be provided on the relevant invoices prepared by PBL.

3.12 CALYXT shall keep books and records of Net Revenues and Net Trait Value Premium and shall cause its sub-licensees to keep books and records of sales of Licensed Products for each and every Half Year in sufficient detail to permit PBL to confirm the accuracy of CALYXT's royalty calculations, including, without limitation, all Net Sales of Licensed Products by CALYXT (and/or its Affiliate) or by a Sub-Licensee. At PBL's request, CALYXT shall permit an independent Certified Public Accountant appointed by PBL and reasonably acceptable to CALYXT to examine, not more often than once during any calendar year and under appropriate confidentiality provisions, upon reasonable notice of at least ten (10) working days and at reasonable times and in a manner that does not interfere unreasonably with CALYXT's business, such records solely to the extent necessary to verify CALYXT's calculations. Such records shall be kept and examination thereof shall be limited to a period of time no more than three (3) years immediately preceding the request for examination.

The audit of record pursuant the present Article shall be at the cost of PBL, provided that, if a net aggregate underpayment by CALYXT of more than [*****] is found, CALYXT shall be obligated to reimburse PBL for the cost of the audit.

3.13 Notwithstanding any other remedy available to PB under the provisions of this Agreement or otherwise, if any sum or money owed to PBL hereunder is not paid when due, PBL shall charge interest on any and all such late payments of [*****], calculated on a daily basis.

4 DILIGENT EXPLOITATION OF RIGHTS GRANTED

4.1 While this Agreement remains in force, CALYXT shall use Commercially Reasonable Efforts to [*****].

4.2 Without limitation to the generality of Article 4.1, CALYXT shall use Commercially Reasonable Efforts [*****]. PBL acknowledges that factors contributing to a failure to achieve the indicated timelines maybe outside the direct control or influence of CALYXT and that the Development and Commercial Program is non-binding and indicative. CALYXT will keep PBL regularly informed of the progress, difficulties or delays in implementing the Development and Commercial Program. If CALYXT fails to achieve a milestone set out in Appendix A, then CALYXT will promptly advise PBL in writing the reasons for such failure and set out its plans for remedying such delay, and mutually agree any applicable adjustment of the relevant milestones set out in Appendix A. In the event that following such review of the missed milestone(s), CALYXT fails to implement the agreed remedial activities and/or fails to meet a subsequent or adjusted milestone, then PBL may on sixty (60) days' written notice to CALYXT, convert the Licence to non-exclusive.

4.3 CALYXT shall ensure that [*****] supplied under this Agreement are used only in accordance with the provisions of this Agreement. [*****] supplied to CALYXT shall be kept secure and shall only be supplied to Third Parties for the purposes of exploiting the Licence and always under written agreements in accordance with the terms and conditions of this Agreement.

5 MEETINGS & PROGRESS REPORTS

5.1 Within one (1) month after the 1st of January of each year, CALYXT shall provide a written report ("Progress Report") to PBL to keep PBL informed of CALYXT's progress on its development, Bare Sub-Licensing, Third-Party collaborations and service activity and its and Sub-licensees' progress with and towards commercialisation of Licensed Products, and plans for the coming 12-month period. Up to January 1st 2018 (included), such progress reports shall be provided within thirty (30) days after the end of each Half Year.

5.2 Representatives of the Parties shall meet at locations to be agreed upon by the Parties at least every twelve (12) months, or otherwise as mutually agreed upon by the Parties, to discuss CALYXT's Progress Reports. Such meetings may, if agreed upon by the Parties, take place via a teleconference.

6 CONFIDENTIALITY PROVISIONS

6.1 Confidential Information, as used herein, shall mean any information which is by its nature or substance usually considered to be of confidential nature or is expressly identified by the disclosing Party as confidential; in the case of oral information, the disclosing Party shall within four (4) weeks after the date of disclosure confirm in writing that the information so disclosed was of confidential nature. Confidential Information shall include, but not be limited to, any information both of commercial or technical character relating to material, models, specifications, formulae, data, designs, know-how, inventions, apparatuses, methods, techniques, drawings, recipes, methods of manufacture, prices, contractual information, capacities and/or accounting of materials, and material itself, business information of either Party, reports provided under this Agreement, copies of redacted sub-license agreements executed by CALYXT, and the financial terms of this Agreement.

6.2 The Parties undertake

- to keep strictly confidential any and all Confidential Information received by it under this Agreement and not to make it available to any Third Party; and
- to use the Confidential Information only for the purpose of this Agreement;

with the proviso that CALYXT may disclose Confidential Information to sub-licensees, collaboration partners and/or marketing partners with the aim to fulfil the purpose of this Agreement on a need-to-know basis and under confidentiality terms commensurate in scope with the confidentiality terms defined in this Agreement.

6.3 The Parties shall limit the disclosure of the Confidential Information to those of its employees and its Affiliate's employees who are required to have the Confidential Information for the purpose of this Agreement and who are under commitments of confidentiality commensurate in scope with this Agreement as far as legally permissible, and shall in general maintain the same degree of secrecy with respect to their own operation, and confidential information of similar importance.

6.4 The receiving Party may disclose Confidential Information received from the disclosing Party to receiving Party's consultants on a need-to-know basis, subject to confidentiality terms consistent with this Agreement.

6.5 The foregoing obligations shall not apply to any Confidential Information, which can be proved by the receiving Party

a. was of public knowledge at the date of its disclosure by the disclosing Party;

b. has become of public knowledge after the disclosure by the disclosing Party through no default of the receiving Party;

c. was in its possession prior to the disclosure by the receiving Party and the receiving Party had the right to make such disclosure;

d. to be independently developed by the receiving Party without reference to or use of the disclosing Party's Confidential Information;

e. has become legally available to the receiving Party from any third party, which was in lawful possession thereof and had the right to make such disclosure; and/or

f. has to be disclosed on the basis of legal requirements.

6.6 For the purposes of the foregoing exceptions (a) to (f), Confidential Information transmitted by the disclosing Party to the receiving Party under this Agreement shall not be deemed to be within the exceptions merely because it is embraced by general disclosures, which are known or in the possession of the receiving Party. Further, a combination of measures or elements of Confidential Information transmitted under this Agreement shall not be within the foregoing exceptions (a) to (f) if only individual measures or elements of Confidential Information were known to or in the possession of the receiving Party, unless the combination itself is covered by the above specified exceptions.

6.7 Without prejudice to the generality of the confidentiality terms set forth above, the Parties agree to keep confidential the financial terms and conditions set out in this Agreement and not to disclose it to any person except to such of its employees who need to know the same for the purposes of this Agreement or to legal, financial or business consultants, actual or potential investors in the company who will be bound by an obligation of confidentiality.

6.8 The confidentiality obligations in this Section 6, as far as not subject to the exceptions specified in Article 6.5 above, shall survive termination of this Agreement and be enforceable for ten (10) years after termination of this Agreement.

6.9 SEC Filings and Other Disclosures. Notwithstanding any provision of this Agreement to the contrary, either Party may disclose the terms of this Agreement to the extent required, in the reasonable opinion of such Party's legal counsel, to comply with applicable Law, including the rules and regulations promulgated by the United States Securities and Exchange Commission or any equivalent governmental agency in any country. Notwithstanding the foregoing, before disclosing this Agreement or any of the terms hereof pursuant to this Section 6.9, the Parties will consult with one another on the terms of this Agreement to be redacted in making any such disclosure. Further, if a Party discloses this Agreement or any of the terms hereof in accordance with this Section 6.9, such Party will, at its own expense, seek such confidential treatment of confidential portions of this Agreement and such other terms, as may be reasonably requested by the other Party.

7 PATENT COSTS & INFRINGEMENT

7.1 Subject to Clause 7.2 and as long as the License is exclusive, CALYXT shall pay all out-of-pocket Licensed Patent costs and other reasonable out-of pocket costs incurred by PBL in association with the filing and maintenance of the Licensed Patents, including but not limited to costs arising from translations, filing, prosecution, issuance/grant, maintenance, defence and oppositions of Licensed Patents. Such costs shall be promptly reimbursed by CALYXT by direct transfer into PBL's bank account the details of which shall be provided on the relevant invoices prepared by PBL.

7.2 PBL shall keep CALYXT informed on progress with prosecution, and maintenance of the Licensed Intellectual Property, CALYXT shall have the opportunity to comment on and make suggestions to PBL in the prosecution and maintenance of the Licensed Patents. In particular, PBL shall ask CALYXT, at least 2 months before the deadlines, in which countries the Licensed Patents should be filed and/or issued. In the absence of a response from CALYXT, PBL will file and seek for patent protection in [*****] plus any other countries requested by CALYXT in addition to these. PBL will not abandon any patent or patent application within the Licensed Patents without the approval of CALYXT.

7.3 Each Party shall promptly notify the other Party of any Third Party activity of which it becomes aware which can reasonably be considered to constitute an infringement of Licensed Patents within the scope of the Licence.

CALYXT shall institute and control the conduct of all claims and proceedings in respect of infringement or defence actions relating to any infringement by Third Parties that is within the scope of exclusive rights granted to CALYXT under this Agreement, subject to prior approval from PBL, which shall not be withheld or delayed unreasonably. PBL agrees to perform, and have [*****] perform, all acts within its power which may become necessary to vest in CALYXT the right to conduct any such claims and proceedings, upon reasonable notice, cooperate and to the extent deemed necessary by CALYXT and at CALYXT's expense, participate in the conduct of such claims and proceedings. CALYXT shall, after it has recouped its attorney's fees and out of pocket costs incurred, apply any excess recovered damages paying PBL royalties provided in Section 3.7 of such excess fee recovered damages that constitute compensation for lost sales of Licensed Products.

7.4 If CALYXT does not institute infringement or defence proceedings according to Article within ninety (90) days of becoming aware of such an infringement then PBL may protect the Licensed Patent from infringement and commence proceedings against alleged infringers when, in its exclusive judgement, such action may be reasonably necessary, proper, justified and feasible, but PBL shall not be obliged to take any action at all.

7.5 If CALYXT or an Affiliate of CALYXT should challenge or encourage or facilitate a challenge by a Third Party, of the validity of any of the Licensed Patents, PBL may, in its sole but reasonable discretion, terminate any or all of the rights granted to CALYXT under this Agreement.

8 WARRANTIES & LIMITATION OF LIABILITY

8.1 PBL represents, warrants and covenants that

(i) it has the right to grant the Licence as set forth in this Agreement;

(ii) it has full power and authority to enter into this Agreement;

(iii) as of the Effective Date each such Licensed Patent is in full force and effect and PBL or [*****] have timely paid all filing and renewal fees payable with respect to such Licensed Patents;

(iv) to its knowledge: (i) the Licensed Patent existing as of the Effective Date, are, or, upon issuance, will be, valid and enforceable patents and (ii) as of the Effective Date, no Third Party (a) is infringing any Licensed Patent for use in the Field or (b) has challenged or threatened to challenge the extent, validity or enforceability of any Licensed Patents (including, by way of example, through the institution or threat of institution of interference, nullity or similar invalidity proceedings before the United States Patent and Trademark Office or any analogous foreign Governmental Authority);

(v) it and its counsel, and, to its knowledge, [*****], its inventors, and its counsel, with respect to with the Licensed Patents, have complied with all Applicable Laws, including any disclosure requirements, in connection with the filing, prosecution and maintenance of the Licensed Patents;

(vi) PBL and/or [*****] has/have independently developed the Licensed Technology or otherwise has a valid right to use, and to permit CALYXT, CALYXT's Affiliates and any sub-licensee to use, the Licensed Technology for all permitted purposes under this Agreement;

(vii) no Licensed Technology is encumbered under any funding agreement with any Governmental Authority;

(viii) neither PBL nor any of its Affiliates and licensors are subject to any agreement or obligation that limits any ownership or license right granted to CALYXT or its Affiliates under this Agreement, including any right granted to CALYXT or its Affiliates to access, practice, grant any licenses or sublicenses under, or provide CALYXT's sub-licensees with access to any intellectual property right or material, in each case, that would, but for such agreement or obligation, be included in the rights licensed or assigned to CALYXT or its Affiliates pursuant to this Agreement;

(ix) at the Effective Date, no Third Party has any right, title or interest in or to, or any license under, any Licensed Technology for use in the Field;

(x) there is no (a) claim, demand, suit, proceeding, arbitration, inquiry, investigation or other legal action of any nature, civil, criminal, regulatory or otherwise, pending or, to the knowledge of PBL and [*****], threatened against PBL, [*****] or any of their respective Affiliates or (b) judgment or settlement against or owed by PBL, [*****] or any of their respective Affiliates, in each case in connection with the Licensed Technology or relating to the transactions contemplated by this Agreement; and

(xi) the license agreements between PBL and [*****] in respect of the Licensed Technology cannot be terminated while this Agreement remains in force.

8.2 Subject to Section 8.1 above, PBL gives no warranty as to the validity, novelty, non-infringement, scope of claims, or safety of any of the Licensed Technology or its suitability for any particular purpose. All implied terms, conditions and warranties, statutory or otherwise, which might otherwise by operation of law be incorporated in this Agreement are hereby expressly excluded insofar as is permitted by law.

8.3 Save as is prohibited by law neither Party shall have any liability to the other in respect of liability for any loss of profits, revenue or goodwill or any other type of special, indirect or consequential loss suffered by the other Party, except to the extent that such loss results from the negligence, wilful misconduct or gross negligence of such Party. Each Party's entire liability to the other Party for loss or damage, including related expenses and legal costs, arising from a breach of this Agreement shall be limited to the total of the payments actually made to PBL by CALYXT under this Agreement in the 12 months previous to the date of the event giving rise to the claim.

8.4 Indemnification

Without prejudice to Section 8.3, CALYXT shall indemnify, defend and hold harmless PBL and the [*****] and their respective trustees, officers, employees and Affiliates from and against all claims and expenses, including legal expenses and reasonable attorneys' fees, arising out of the death or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever resulting from the improper use by CALYXT or its Affiliates or sub-licensees of Licensed Intellectual Property in the production, sales, or consumption of the Licensed Products, except to the extent arising out of the negligence or wilful misconduct of PBL.

8.5 CALYXT shall maintain and/or shall ensure that its Affiliates and Sub-licensees maintain reasonable levels of product liability insurance as soon as CALYXT, its Affiliates or its Sub-licensees (as applicable) begin to sell Licensed Products. PBL shall have the right to require such insurance policies or certificates of insurance to be made available for inspection.

8.6 The Parties represent and warrant that there are no outstanding agreements, assignments, or encumbrances inconsistent with the provisions of this Agreement.

9 TERMINATION

9.1 CALYXT may terminate this Agreement at any time and for any reason by giving PBL no less than ninety (90) days' notice in writing stating the reasons for its decision to terminate. CALYXT shall, on or before the date of actual termination of this Agreement in accordance with this Article 9.1, submit a report to or schedule a final meeting with PBL's representative(s) for explaining the reasons for its decision to terminate.

9.2 PBL may elect to terminate this Agreement if CALYXT is in material breach of any of the terms in this Agreement, including without limitation the late payment of any of the fees SUBJECT THAT, if the breach can be remedied, PBL shall give CALYXT not less than [*****] written notice specifying the breach and requiring it to be remedied. If CALYXT subsequently fails to remedy the specified breach within the [*****]' period, the Agreement shall terminate on the date specified in the written notice. A breach of any term of this Agreement by an Affiliate of CALYXT shall be considered a breach by CALYXT. CALYXT shall incorporate any such provision in its Sublicense agreements so that CALYXT shall be entitled to terminate any such Sublicense in the conditions herein.

9.3 Without prejudice to the generality of Article 9.2 it shall be a material breach of this Agreement by either Party should they disclose confidential information contrary to Section 6.

9.4 This Agreement and the rights granted hereunder shall terminate automatically if CALYXT goes into compulsory or voluntary liquidation or if a receiver or administrator is appointed in respect of the whole or any part of its assets or if CALYXT makes an assignment for the benefit of its creditors generally or if CALYXT contests, directly or indirectly, the validity of any or all of the Licensed Patents.

9.5 Termination of this Agreement for any reason shall not bring to an end the liability of CALYXT to pay any and all sums due from CALYXT under this Agreement at the date of termination.

9.6 Upon termination of this Agreement for any reason CALYXT shall return all [*****] (still existing at the date of termination) provided under this Agreement and/or as instructed by PBL destroy all Licensed Products. This Section shall not apply if this Agreement is terminated by CALYXT for a material breach by PBL.

Notwithstanding termination of this Agreement for any reason, Sections 6 and 8 shall continue in full force and effect.

9.7 In case of early termination of this Agreement between CALYXT and PBL, CALYXT shall provide a list of any Bare Sub-License that will be assigned by CALYXT to PBL who will replace CALYXT, and CALYXT's rights and obligations shall be transferred to PBL at the date of the effective termination of this Agreement only with respect to the Bare Sub-Licensees listed by CALYXT. CALYXT expressly agrees in advance to such assignment to PBL and PBL consents to such potential assignment.

10 SEVERABILITY

10.1 If any provision of this Agreement becomes invalid or unenforceable, such invalidity or un-enforceability shall not affect the other portions of this Agreement, which shall remain in full force and effect provided that the basic intent of the Parties is preserved. The Parties shall in good faith negotiate substitute provisions to replace the invalid or unenforceable provisions, which reflect the original intentions of the Parties as closely as possible.

11 ASSIGNABILITY

11.1 This Agreement shall be binding on the Parties hereto. Each Party shall be able to assign any and all of its rights and obligations under this Agreement to an Affiliate without the written consent of the other Party. This Agreement shall inure to the benefit of or be binding on the successors of either Party (by way of merger, consolidation or transfer of substantially all of its assets).

12 NOTICES

12.1 Notices, invoices, communications, and payments hereunder shall be deemed made if given by registered or certified envelope, postage prepaid and addressed to the Party to receive such notice, invoice or communication at the address given below, or such other address as may hereafter be designated by notice in writing.

CALYXT	**PBL**
[*****]	[*****]

13 APPLICABLE LAW AND VENUE

13.1 This Agreement shall come within the jurisdiction of the English courts and the proper law of the contract shall be English Law.

13.2 The Parties shall in the first instance endeavour to resolve any disputes arising from this Agreement by mutual agreement through good faith discussions.

13.3 Failing resolution under Article 13.2 within sixty (60) days of such good faith discussions the Parties agree first to try in good faith to settle the dispute by mediation under the procedures of the Centre for Dispute Resolution, London (www.cedr.com) before resorting to arbitration, litigation, or some other dispute resolution procedure. The costs of any mediation, including administrative and arbitrator(s)' fees, shall be shared equally by the Parties and each Party shall bear its own costs and attorneys' and witness' fees incurred in connection with the mediation. The place of mediation shall be London and the language used in the mediation shall be English. The result of the mediation shall not be binding on the Parties, unless by prior written mutual agreement of the Parties.

14 PUBLICITY

14.1 Within one month following the signature of the Agreement, the Parties will use all reasonable efforts to agree on the appropriate time and means of any public announcements of the execution of this Agreement, as well as on the wording before issuing any press release or making any other public announcement with respect to this Agreement (except as required by any applicable laws or regulatory requirement).

15 FINAL PROVISIONS

15.1 Neither Party shall be held liable or responsible to the other Party or be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from events beyond the reasonable control of the non-performing Party, including fires floods, earthquakes, embargoes, shortages, epidemics, quarantines, war, acts of war (whether war be declared or not) or terrorism, insurrections, riots, civil commotion, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority. The non-performing Party shall notify the other Party of such force majeure within ten (10) days after such occurrence by giving written notice to the other Party stating the nature of the event, its anticipated duration, and any action being taken to avoid or minimize its effect. The suspension of performance shall be of no greater scope and no longer duration than is necessary and the non-performing Party shall use Commercially Reasonable Efforts to remedy its inability to perform.

15.2 Each Party shall inform the other Party of its intention to file a voluntary petition in bankruptcy or of another's intention to file an involuntary petition in bankruptcy to be received by the other Party in writing at least thirty (30) days prior to filing such a petition. A Party's filing without conforming to this requirement shall be deemed a material, pre-petition incurable breach of the present Agreement.

15.3 The failure or delay of either Party to enforce at any time any provision of this Agreement or to require performance by the other Party of any provision hereof shall not be considered to be a waiver of such provision and shall not in any way affect the validity of this Agreement or any part thereof, or the right of such Party to thereafter enforce each and every such provision, nor shall the waiver by either Party of a breach or default of any of the provisions hereof by the other be construed as a waiver of any succeeding breach of the same or any other provision hereof.

15.4 This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

15.5 No amendments or modifications of this Agreement or its Appendix shall be effective unless made in writing and signed by authorised representatives of both Parties.

16 SIGNATURES

For and on behalf of PLANT BIOSCIENCE LIMITED

/s/ A J Chojecki

Name: A J Chojecki

Position Managing Director

Date: 10th June 2015

For and on behalf of CALYXT

CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

/s/ Luc Mathis

Name: Luc Mathis

Position Chief Executive Officer

Date: May 27th, 2015

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

Appendix A

Development and Commercialisation Program

Objective

The objective of this Appendix is to describe the intended product development activities that CALYXT will conduct for the [*****]. The timelines are indicative and non-binding ta the agreement.

[*****]

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

Appendix B

[*****] **Materials**

[*****]

**CONFIDENTIAL TREATMENT REQUESTED UNDER RULE 406
UNDER THE SECURITIES ACT OF 1933, AS AMENDED.**

[*****] INDICATES OMITTED MATERIAL THAT IS THE SUBJECT OF A CONFIDENTIAL TREATMENT REQUEST FILED SEPARATELY WITH THE COMMISSION. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE COMMISSION.

Appendix C

Licensed Patents

[*****]

Exhibit 10.11

CALYXT, INC.

EQUITY INCENTIVE PLAN (AS AMENDED)

1. **Purposes of the Plan.** The purposes of this Equity Incentive Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees and Consultants, and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant of an Option and subject to the applicable provisions of Section 422 of the Code and the regulations promulgated thereunder.

2. **Definitions**. As used herein, the following definitions shall apply:

(a) "**Administrator**" means the Board or a Committee.

(b) **"Affiliate"** means an entity other than a Subsidiary which, together with the Company, is under common control of a third person or entity.

(c) **"Applicable Laws"** means all applicable laws, rules, regulations and requirements, including, but not limited to, all applicable U.S. federal or state laws, any Stock Exchange rules or regulations, and the applicable laws, rules or regulations of any other country or jurisdiction where Options are granted under the Plan or Participants reside or provide services, as such laws, rules, and regulations shall be in effect from time to time.

(d) **"Award"** means any award of an Option under the Plan.

(e) **"Board"** means the Board of Directors of the Company.

(f) **"California Participant"** means a Participant whose Award is issued in reliance on Section 25102(o) of the California Corporations Code.

(g) **"Cashless Exercise"** means a program approved by the Administrator in which payment of the Option exercise price or tax withholding obligations may be satisfied, in whole or in part, with Shares subject to the Option, including by delivery of an irrevocable direction to a securities broker (on a form prescribed by the Administrator) to sell Shares and to deliver all or part of the sale proceeds to the Company in payment of the aggregate exercise price and, if applicable, the amount necessary to satisfy the Company's withholding obligations.

(h) **"Cause"** for termination of a Participant's Continuous Service Status will exist (unless another definition is provided in an applicable Option Agreement, employment agreement or other applicable written agreement) if the Participant's Continuous Service Status is terminated for any of the following reasons: (i) the Participant's willful failure to perform his or her duties and responsibilities to the Company or the Participant's violation of any written Company policy; (ii) the Participant's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in injury to the Company; (iii) the Participant's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom the Participant owes an obligation of nondisclosure as a result of his or her relationship with the Company; or (iv) the Participant's

material breach of any of his or her obligations under any written agreement or covenant with the Company. The determination as to whether a Participant's Continuous Service Status has been terminated for Cause shall be made in good faith by the Company and shall be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time, and the term "Company" shall be interpreted to include any Subsidiary, Parent, Affiliate, or any successor thereto, if appropriate.

(i) **"Code"** means the Internal Revenue Code of 1986, as amended.

(j) **"Committee"** means one or more committees or subcommittees of the Board consisting of two (2) or more Directors (or such lesser or greater number of Directors as shall constitute the minimum number permitted by Applicable Laws to establish a committee or sub-committee of the Board) appointed by the Board to administer the Plan in accordance with Section 4 below.

(k) **"Common Stock"** means the Company's common stock, par value $0.001 per share, as adjusted in accordance with Section 15 below.

(l) **"Company"** means Calyxt, Inc., a Delaware corporation.

(m) **"Consultant"** means any person, including an advisor but not an Employee, who is engaged by the Company, or any Parent, Subsidiary or Affiliate, to render services (other than capital-raising services) and is compensated for such services, and any Director whether compensated for such services or not.

(n) **"Continuous Service Status"** means the absence of any interruption or termination of service as an Employee or Consultant. Continuous Service Status as an Employee or Consultant shall not be considered interrupted or terminated in the case of: (i) Company approved sick leave; (ii) military leave; (iii) any other bona fide leave of absence approved by the Administrator, provided that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to a written Company policy. Also, Continuous Service Status as an Employee or Consultant shall not be considered interrupted or terminated in the case of a transfer between locations of the Company or between the Company, its Parents, Subsidiaries or Affiliates, or their respective successors, or a change in status from an Employee to a Consultant or from a Consultant to an Employee.

(o) **"Current Parent"** means a Person that is a Parent as of December 14, 2014, or any other Person in which a Current Parent owns, directly or indirectly, equity securities possessing than fifty percent (50%) or more of the total combined voting power of all classes of stock.

(p) **"Director"** means a member of the Board.

(q) **"Disability"** means "disability" within the meaning of Section 22(e)(3) of the Code.

(r) **"Employee"** means any person employed by the Company, or any Parent, Subsidiary or Affiliate, with the status of employment determined pursuant to such factors as are deemed appropriate by the Administrator in its sole discretion, subject to any requirements of the Applicable Laws, including the Code. The payment by the Company of a director's fee shall not be sufficient to constitute "employment" of such director by the Company or any Parent, Subsidiary or Affiliate.

(s) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.

(t) **"Fair Market Value"** means, as of any date, the per share fair market value of the Common Stock, as determined by the Administrator in good faith on such basis as it deems appropriate and applied consistently with respect to Participants. Whenever possible, the determination of Fair Market Value shall be based upon the per share closing price for the Shares as reported in the Wall Street Journal for the applicable date.

(u) **"Family Member"** means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships) of the Optionee, any person sharing the Optionee's household (other than a tenant or employee), a trust in which these persons (or the Optionee) have more than 50% of the beneficial interest, a foundation in which these persons (or the Optionee) control the management of assets, and any other entity in which these persons (or the Optionee) own more than 50% of the voting interests.

(v) **"Incentive Stock Option"** means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable Option Agreement.

(w) **"Involuntary Termination"** means (unless another definition is provided in the applicable Option Agreement, employment agreement or other applicable written agreement) the termination of a Participant's Continuous Service Status by the Company or a Subsidiary, Parent, Affiliate or successor thereto, as appropriate, for any reason other than Cause, Disability or death.

(x) **"Listed Security"** means any security of the Company that is listed or approved for listing on a national securities exchange.

(y) **"Nonstatutory Stock Option"** means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable Option Agreement.

(z) **"Option"** means a stock option granted pursuant to the Plan.

(aa) **"Option Agreement"** means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of an Option granted under the Plan and includes any documents attached to or incorporated into such Option Agreement, including, but not limited to, a notice of stock option grant and a form of exercise notice.

(bb) **"Option Exchange Program"** means a program approved by the Administrator whereby outstanding Options (i) are exchanged for Options with a lower exercise price or Restricted Stock or (ii) are amended to decrease the exercise price as a result of a decline in the Fair Market Value of the Common Stock.

(cc) **"Optioned Stock"** means Shares that are subject to an Option or that were issued pursuant to the exercise of an Option.

(dd) **"Optionee"** means an Employee or Consultant who receives an Option.

(ee) **"Parent"** means any corporation (other than the Company) in an unbroken chain of corporations above the Company and ending with the Company if, at the time of grant of the Award, each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

(ff) **"Participant"** means any holder of one or more Awards or Shares issued pursuant to an Award.

(gg) **"Plan"** means this Calyxt, Inc. Equity Incentive Plan (as amended).

(hh) **"Rule 16b-3"** means Rule 16b-3 promulgated under the Exchange Act, as amended from time to time, or any successor provision.

(ii) **"Share"** means a share of Common Stock, as adjusted in accordance with Section 15 below.

(jj) **"Stock Exchange"** means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(kk) **"Subsidiary"** means any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if, at the time of grant of the Award, each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such date.

(ll) **"Ten Percent Holder"** means a person who owns stock representing more than 10% of the voting power of the outstanding shares of all classes of stock of the Company or any Parent or Subsidiary, measured as of an Award's date of grant.

(mm) **"Triggering Event"** means:

(i) a sale, transfer or disposition of all or substantially all of the Company's assets other than to (A) a corporation or other entity of which at least a majority of its combined voting power is owned directly or indirectly by the Company, (B) a corporation or other entity owned directly or indirectly by the holders of capital stock of the Company in substantially the same proportions as their ownership of Common Stock, or (C) an Excluded Entity (as defined in subsection (ii) below); or

(ii) any merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction with or into another corporation, entity or person in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding in the continuing entity or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction (an "Excluded Entity"); or

(iii) any direct or indirect purchase or other acquisition by any Person or "group" (as defined in or under Section 13(d) of the Exchange Act), other than a Current Parent or another Person that is controlled by a Current Parent, of more than fifty percent (50%) of the total outstanding equity interests in or voting securities of the Company, excluding any transaction that is determined by the Board in its reasonable discretion to be a bona fide capital raising transaction.

Notwithstanding anything stated herein, a transaction shall not constitute a "Triggering Event" if its sole purpose is to change the state of the Company's incorporation, or to create a holding company that will be owned in substantially the same proportions by the persons who hold the Company's securities immediately before such transaction.

3. **Stock Subject to the Plan.** Subject to the provisions of Section 15 below, the maximum aggregate number of Shares that may be issued under the Plan is 8,315 Shares, of which a maximum of 8,315 Shares may be issued under the Plan pursuant to Incentive Stock Options. The Shares issued under the Plan may be authorized, but unissued, or reacquired Shares. If an Award should expire or become unexercisable for any reason without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grants under the Plan. In addition, any Shares which are retained by the Company upon exercise of an Award in order to satisfy the exercise or purchase price for such Award or any withholding taxes due with respect to such Award shall be treated as not issued and shall continue to be available under the Plan. Shares issued under the Plan and later repurchased by the Company pursuant to any repurchase right that the Company may have shall not be available for future grants under the Plan.

4. **Administration of the Plan**.

(a) **General.** The Plan shall be administered by the Board or a Committee, or a combination thereof, as determined by the Board. The Plan may be administered by different administrative bodies with respect to different classes of Participants and, if permitted by Applicable Laws, the Board may authorize one or more officers of the Company to make Awards under the Plan to Employees and Consultants (who are not subject to Section 16 of the Exchange Act) within parameters specified by the Board.

(b) **Committee Composition.** If a Committee has been appointed pursuant to this Section 4, such Committee shall continue to serve in its designated capacity until otherwise directed by the Board. From time to time the Board may increase the size of any Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies (however caused) and dissolve a Committee and thereafter directly administer the Plan, all to the extent permitted by the Applicable Laws and, in the case of a Committee administering the Plan in accordance with the requirements of Rule 16b-3 or Section 162(m) of the Code, to the extent permitted or required by such provisions.

(c) **Powers of the Administrator.** Subject to the provisions of the Plan and, in the case of a Committee or officer, the specific duties delegated by the Board to such Committee or by the Board or such Committee to an officer, the Administrator shall have the authority, in its sole discretion:

(i) to determine the Fair Market Value of the Common Stock in accordance with Section 2(t) above, provided that such determination shall be applied consistently with respect to Participants under the Plan;

(ii) to select the Employees and Consultants to whom Awards may from time to time be granted;

(iii) to determine the number of Shares to be covered by each Award;

(iv) to approve the form(s) of agreement(s) and other related documents used under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when Awards may be exercised (which may be based on performance criteria), the circumstances (if any) when vesting shall be accelerated or forfeiture restrictions shall be waived, and any restriction or limitation regarding any Award or Optioned Stock;

(vi) to amend any outstanding Award or agreement related to any Optioned Stock, including any amendment adjusting vesting (*e.g.*, in connection with a change in the terms or conditions under which such person is providing services to the Company), provided that no amendment shall be made that would materially and adversely affect the rights of any Participant without his or her consent, as determined in the sole discretion of the Board;

(vii) to determine whether and under what circumstances an Option may be settled in cash under Section 10(c) below instead of Common Stock;

(viii) to implement an Option Exchange Program and establish the terms and conditions of such Option Exchange Program, provided that no amendment or adjustment to an Option that would materially and adversely affect the rights of any Optionee shall be made without his or her consent, as determined in the sole discretion of the Board;

(ix) to grant Awards to, or to modify the terms of any outstanding Option Agreement or any agreement related to any Optioned Stock held by, Participants who are

foreign nationals or employed outside of the United States with such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom which deviate from the terms and conditions set forth in this Plan to the extent necessary or appropriate to accommodate such differences; and

(x) to construe and interpret the terms of the Plan, any Option Agreement, and any agreement related to any Optioned Stock, which constructions, interpretations and decisions shall be final and binding on all Participants.

(d) **Indemnification.** To the maximum extent permitted by Applicable Laws, each member of the Committee (including officers of the Company, if applicable), or of the Board, as applicable, shall be indemnified and held harmless by the Company against and from (i) any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan or pursuant to the terms and conditions of any Award except for actions taken in bad faith or failures to act in bad faith, and (ii) any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit, or proceeding against him or her, provided that such member shall give the Company an opportunity, at its own expense, to handle and defend any such claim, action, suit or proceeding before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's Articles of Incorporation, Certificate of Incorporation or Bylaws, by contract, as a matter of law, or otherwise, or under any other power that the Company may have to indemnify or hold harmless each such person.

5. **Eligibility**.

(a) **Recipients of Grants.** Nonstatutory Stock Options may be granted to Employees and Consultants. Incentive Stock Options may be granted only to Employees, provided that Employees of Affiliates shall not be eligible to receive Incentive Stock Options.

(b) **Type of Option.** Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option.

(c) **ISO $100,000 Limitation.** Notwithstanding any designation under Section 5(b) above, to the extent that the aggregate Fair Market Value of Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(c), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.

(d) **Disqualifying Dispositions.** Any Participant who shall make a "disposition" (as defined in Section 424 of the Code) of all or any portion of an Incentive Stock Option within two years from the date of grant of such Incentive Stock Option or within one year after the issuance of the Shares acquired upon exercise of such Incentive Stock Option shall be required to immediately advise the Company in writing as to the occurrence of the sale and the price realized upon the sale of such Shares.

(e) **No Employment Rights.** Neither the Plan nor any Award shall confer upon any Employee or Consultant any right with respect to continuation of an employment or consulting relationship with the Company (any Parent or Subsidiary), nor shall it interfere in any way with such Employee's or Consultant's right or the Company's (Parent's or Subsidiary's) right to terminate his or her employment or consulting relationship at any time, with or without cause.

6. **Term of Plan.** The Plan shall become effective upon its adoption by the Board of Directors (December 13, 2014). It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 17 below.

7. **Term of Option.** The term of each Option shall be the term stated in the Option Agreement; provided that the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement and provided further that, in the case of an Incentive Stock Option granted to a person who at the time of such grant is a Ten Percent Holder, the term of the Option shall be five (5) years from the date of grant thereof or such shorter term as may be provided in the Option Agreement.

8. **Limitation on Grants to Participants.** Subject to adjustment as provided in Section 15 below, the maximum aggregate number of Shares that may be subject to Awards granted to any one person under this Plan for any fiscal year of the Company shall be 8,315 Shares, provided that such limitation shall be 8,315 Shares during the fiscal year of any person's initial year of service with the Company.

9. **Option Exercise Price and Consideration**.

(a) **Exercise Price.** The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option shall be such price as is determined by the Administrator and set forth in the Option Agreement, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who at the time of grant is a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value on the date of grant;

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value on the date of grant;

(ii) Except as provided in subsection (iii) below, in the case of a Nonstatutory Stock Option, the per Share exercise price shall be such price as is determined by the Administrator, provided that, if the per Share exercise price is less than 100% of the Fair Market Value on the date of grant, it shall otherwise comply with all Applicable Laws, including Section 409A of the Code;

(iii) In the case of a Nonstatutory Stock Option that is intended to qualify as performance-based compensation under Section 162(m) of the Code and is granted on or after the date, if ever, on which the Common Stock becomes a Listed Security, the per Share exercise price shall be no less than 100% of the Fair Market Value on the date of grant; and

(iv) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(b) **Permissible Consideration.** The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option and to the extent required by Applicable Laws, shall be determined at the time of grant) and may consist entirely of (1) cash; (2) check; (3) other previously owned Shares that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which the Option is exercised; (4) a Cashless Exercise; (5) such other consideration and method of payment permitted under Applicable Laws; or (6) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company and the Administrator may, in its sole discretion, refuse to accept a particular form of consideration at the time of any Option exercise.

10. **Exercise of Option**.

(a) **General**.

(i) **Exercisability.** Any Option granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, consistent with the terms of the Plan and reflected in the Option Agreement, including vesting requirements and/or performance criteria with respect to the Company, and Parent or Subsidiary, and/or the Optionee.

(ii) **Leave of Absence.** The Administrator shall have the discretion to determine whether and to what extent the vesting of Options shall be tolled during any unpaid leave of absence; provided, however, that in the absence of such determination, vesting of Options shall be tolled during any such unpaid leave (unless otherwise required by the Applicable Laws). Notwithstanding the foregoing, in the event of military leave, vesting shall toll during any unpaid portion of such leave, provided that, upon a Optionee's returning from military leave (under conditions that would entitle him or her to protection upon such return under the Uniform Services Employment and Reemployment Rights Act), he or she shall be given vesting credit with respect to Options to the same extent as would have applied had the Optionee continued to provide services to the Company (or any Parent or Subsidiary, if applicable) throughout the leave on the same terms as he or she was providing services immediately prior to such leave.

(iii) **Minimum Exercise Requirements.** An Option may not be exercised for a fraction of a Share. The Administrator may require that an Option be exercised as to a minimum number of Shares, provided that such requirement shall not prevent an Optionee from exercising the full number of Shares as to which the Option is then exercisable.

(iv) **Procedures for and Results of Exercise.** An Option shall be deemed exercised when written notice of such exercise has been received by the Company in accordance with the terms of the Option Agreement by the person entitled to exercise the Option and the Company has received full payment for the Shares with respect to which the Option is exercised and has paid, or made arrangements to satisfy, any applicable withholding requirements in accordance with Section 13 below. The exercise of an Option shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(v) **Rights as Holder of Capital Stock.** Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a holder of capital stock shall exist with respect to the Optioned Stock, notwithstanding the exercise of the Option. No adjustment shall be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 15 below.

(b) **Termination of Employment or Consulting Relationship.** The Administrator shall establish and set forth in the applicable Option Agreement the terms and conditions upon which an Option shall remain exercisable, if at all, following termination of an Optionee's Continuous Service Status, which provisions may be waived or modified by the Administrator at any time. To the extent that an Option Agreement does not specify the terms and conditions upon which an Option shall terminate upon termination of an Optionee's Continuous Service Status, the following provisions shall apply:

(i) **General Provisions.** If the Optionee (or other person entitled to exercise the Option) does not exercise the Option to the extent so entitled within the time specified below, the Option shall terminate and the Optioned Stock underlying the unexercised portion of the Option shall revert to the Plan. In no event may any Option be exercised after the expiration of the Option term as set forth in the Option Agreement (and subject to Section 7 above).

(ii) **Termination other than Upon Disability, Death or for Cause.** In the event of termination of an Optionee's Continuous Service Status other than under the circumstances set forth in subsections (iii) through (v) below, such Optionee may exercise any outstanding Option at any time within three (3) months following such termination to the extent the Optionee was vested in the Optioned Stock as of the date of such termination.

(iii) **Disability of Optionee.** In the event of termination of an Optionee's Continuous Service Status as a result of his or her Disability, such Optionee may exercise any outstanding Option at any time within six (6) months following such termination to the extent the Optionee was vested in the Optioned Stock as of the date of such termination.

(iv) **Death of Optionee.** In the event of the death of an Optionee during the period of Continuous Service Status since the date of grant of any outstanding Option, or within three (3) months following termination of Optionee's Continuous Service Status, the Option may be exercised by the Optionee's estate, or by a person who acquired the right to exercise the Option by bequest or inheritance, at any time within nine (9) months following the date of death or, if earlier, the date the Optionee's Continuous Service Status terminated, but only to the extent the Optionee was vested in the Optioned Stock as of the date of death.

(v) **Termination for Cause.** In the event of termination of an Optionee's Continuous Service Status for Cause, any outstanding Option (including any vested portion thereof) held by such Optionee shall immediately terminate in its entirety upon first notification to the Optionee of termination of the Optionee's Continuous Service Status for Cause. If an Optionee's Continuous Service Status is suspended pending an investigation of whether the Optionee's Continuous Service Status will be terminated for Cause, all the Optionee's rights under any Option, including the right to exercise the Option, shall be suspended during the investigation period. Nothing in this Section 10(b)(v) shall in any way limit the Company's right to purchase unvested Shares issued upon exercise of an Option as set forth in the applicable Option Agreement.

(c) **Buyout Provisions.** The Administrator may at any time offer to buy out for a payment in cash or Shares an Option previously granted under the Plan based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

11. **Taxes**.

(a) As a condition of the grant, vesting and exercise of an Award, the Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) shall make such arrangements as the Administrator may require for the satisfaction of any applicable U.S. federal, state or local tax withholding obligations or foreign tax withholding obligations that may arise in connection with such Award. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

(b) The Administrator may permit a Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) to satisfy all or part of his or her tax withholding obligations by Cashless Exercise or by surrendering Shares (either directly or by stock attestation) that he or she previously acquired; provided that, unless the Cashless Exercise is an approved broker-assisted Cashless Exercise, the Shares tendered for payment have been previously held for a minimum duration (*e.g.*, to avoid financial accounting charges to the Company's earnings), or as otherwise permitted to avoid financial accounting charges under applicable accounting guidance. Any Shares withheld pursuant to this Section 11(b) shall not exceed the amount necessary to satisfy the Company's tax withholding obligations at the minimum statutory withholding rates, including, but not limited to, U.S. federal and state income taxes, payroll taxes, and foreign taxes, if applicable. Any payment of taxes by surrendering Shares to the Company may be subject to restrictions, including, but not limited to, any restrictions required by rules of the Securities and Exchange Commission.

12. **Non-Transferability of Options**.

(a) **General.** Except as set forth in this Section 12, Options may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a beneficiary by an Optionee shall not constitute a transfer. An Option may be exercised, during the lifetime of the holder of the Option, only by such holder or a transferee permitted by this Section 12.

(b) **Limited Transferability Rights.** Notwithstanding anything else in this Section 12, the Administrator may in its sole discretion grant Nonstatutory Stock Options that may be transferred by instrument to an inter vivos or testamentary trust in which the Options are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift to Family Members.

13. **Adjustments Upon Changes in Capitalization, Merger or Certain Other Transactions**.

(a) **Changes in Capitalization.** Subject to any action required under Applicable Laws by the holders of capital stock of the Company, (i) the numbers and class of Shares or other stock or securities: (x) available for future Awards under Section 3 above, (y) set forth in Section 8 above, and (z) covered by each outstanding Award, (ii) the price per Share covered by each such outstanding Option, and (iii) any repurchase price per Share applicable to Shares issued pursuant to any Award, shall be equitably adjusted by the Administrator in the event of a stock split, reverse stock split, stock dividend, combination, consolidation, recapitalization (including a recapitalization through a large nonrecurring cash dividend) or reclassification of the Shares, subdivision of the Shares, a rights offering, a reorganization, merger, spin-off, split-up, change in corporate structure or other similar occurrence, in each case excluding a Triggering Event. Any adjustment by the Administrator pursuant to this Section 13(a) shall be made in the Administrator's sole and absolute discretion and shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to an Award. If, by reason of a transaction described in this Section 13(a) or an adjustment pursuant to this Section 13(a), a Participant's Award agreement or agreement related to any Optioned Stock covers additional or different shares of stock or securities, then such additional or different shares, and the Award agreement or agreement related to the Optioned Stock in respect thereof, shall be subject to all of the terms, conditions and restrictions which were applicable to the Award and Optioned Stock prior to such adjustment.

(b) **Dissolution or Liquidation.** In the event of the dissolution or liquidation of the Company, each Award shall terminate immediately prior to the consummation of such action, unless otherwise determined by the Administrator.

(c) **Corporate Transactions.** Unless a Participant's applicable Award Agreement, employment agreement or other applicable written agreement provides otherwise, in the event of:

(i) a dissolution or liquidation of the Company, or

(ii) a Triggering Event, then:

each outstanding Award shall either be (i) assumed or an equivalent award shall be substituted by such successor corporation or a parent or subsidiary of such successor corporation (the "Successor Corporation"), or (ii) terminated in exchange for a payment of cash, securities and/or other property equal to the excess of the Fair Market Value of the portion of the Award Stock that is

vested and exercisable immediately prior to the consummation of the corporate transaction over the per Share exercise price thereof, or (iii) any combination of (i) and (ii) that is approved by the Administrator. Notwithstanding the foregoing, in the event such Successor Corporation does not agree to such assumption, substitution or exchange, each such Award shall terminate upon the consummation of the corporate transaction.

Unless a Participant's applicable Award Agreement, employment agreement or other applicable written agreement provides otherwise, if a Triggering Event, dissolution, or liquidation occurs and any outstanding Award held by the Participant is to be terminated (in whole or in part) pursuant to the preceding paragraph, the Administrator may accelerate the vesting and exercisability of each such Award in his sole discretion such that the Award shall become vested and exercisable in full prior to the consummation of the corporate transaction at such time and on such conditions as the Administrator shall determine. The Administrator shall notify the Participant that the Award shall terminate at least five (5) days prior to the date upon which the Award terminates.

14. **Time of Granting Options.** The date of grant of an Award shall, for all purposes, be the date on which the Administrator makes the determination granting such Award, or such later date as is determined by the Administrator, provided that in the case of any Incentive Stock Option, the grant date shall be the later of the date on which the Administrator makes the determination granting such Incentive Stock Option or the date of commencement of the Optionee's employment relationship with the Company.

15. **Amendment and Termination of the Plan.** The Board may at any time amend or terminate the Plan, but no amendment or termination (other than an adjustment pursuant to Section 13 above or as necessary to comply with Applicable Laws or regulations or accounting rules) shall be made that would materially and adversely affect the rights of any Participant under any outstanding Award, without his or her consent, as determined in the sole discretion of the Board. In addition, to the extent necessary and desirable to comply with the Applicable Laws, the Company shall obtain the approval of holders of capital stock with respect to any Plan amendment in such a manner and to such a degree as required.

16. **Conditions Upon Issuance of Shares.** Notwithstanding any other provision of the Plan or any agreement entered into by the Company pursuant to the Plan, the Company shall not be obligated, and shall have no liability for failure, to issue or deliver any Shares under the Plan unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. As a condition to the exercise of any Option, the Company may require the person exercising the Option to represent and warrant at the time of any such exercise or purchase that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by Applicable Laws. Shares issued upon exercise of Options prior to the date, if ever, on which the Common Stock becomes a Listed Security shall be subject to a right of first refusal in favor of the Company pursuant to which the Participant shall be required to offer Shares to the Company before selling or transferring them to any third party on such terms and subject to such conditions as is reflected in the applicable Option Agreement.

17. **Beneficiaries.** Unless stated otherwise in an Award agreement, a Participant may designate one or more beneficiaries with respect to an Award by timely filing the prescribed form with the Company. A beneficiary designation may be changed by filing the prescribed form with the Company at any time before the Participant's death. If no beneficiary was designated or if no designated beneficiary survives the Participant, then after a Participant's death any vested Award(s) shall be transferred or distributed to the Participant's estate.

18. **Approval of Holders of Capital Stock.** If required by the Applicable Laws, continuance of the Plan shall be subject to approval by the holders of capital stock of the Company within twelve (12) months before or after the date the Plan is adopted or, to the extent required by Applicable Laws, any date the Plan is amended. Such approval shall be obtained in the manner and to the degree required under the Applicable Laws.

19. **Addenda.** The Administrator may approve such addenda to the Plan as it may consider necessary or appropriate for the purpose of granting Awards to Employees or Consultants, which Awards may contain such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom, which, if so required under Applicable Laws, may deviate from the terms and conditions set forth in this Plan. The terms of any such addenda shall supersede the terms of the Plan to the extent necessary to accommodate such differences but shall not otherwise affect the terms of the Plan as in effect for any other purpose.

20. **Compliance with Section 409A of the Code**. To the extent applicable, it is intended that this Plan and any grants made hereunder comply with the provisions of Section 409A of the Code. This Plan and any grants made hereunder shall be administered in a manner consistent with this intent, and any provision that would cause this Plan or any grant made hereunder to fail to satisfy Section 409A of the Code shall have no force and effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of Participants). Any reference in this Plan to Section 409A of the Code shall also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service.

ADDENDUM A

Calyxt, Inc. Equity Incentive Plan (as amended)

(California Participants)

Prior to the date, if ever, on which the Common Stock becomes a Listed Security and/or the Company is subject to the reporting requirements of the Exchange Act, the terms set forth herein shall apply to Awards issued to California Participants. All capitalized terms used herein but not otherwise defined shall have the respective meanings set forth in the Plan.

1. The following rules shall apply to any Option in the event of termination of the California Participant's Continuous Service Status:

(a) If such termination was for reasons other than death, "disability" (as defined below), or Cause, the California Participant shall have at least thirty (30) days after the date of such termination to exercise his or her Option to the extent the California Participant is entitled to exercise on his or her termination date, provided that in no event shall the Option remain exercisable after the expiration of the Option term as set forth in the Option Agreement.

(b) If such termination was due to death or disability, the California Participant shall have at least six (6) months after the date of such termination to exercise his or her Option to the extent the California Participant is entitled to exercise on his or her termination date, provided that in no event shall the Option remain exercisable after the expiration of the Option term as set forth in the Option Agreement.

2. "Disability" for purposes of this Addendum shall mean the inability of the California Participant, in the opinion of a qualified physician acceptable to the Company, to perform the major duties of the California Participant's position with the Company or any Parent or Subsidiary because of the sickness of injury of the California Participant.

3. Notwithstanding anything stated herein to the contrary, no Option shall be exercisable on or after the tenth anniversary of the date of grant and any Award agreement shall terminate on or before the tenth anniversary of the date of grant.

4. The Company shall furnish summary financial information (audited or unaudited) of the Company's financial condition and results of operations, consistent with the requirements of Applicable Laws, at least annually to each California Participant during the period such California Participant has one or more Awards outstanding, and in the case of an individual who acquired Shares pursuant to the Plan, during the period such California Participant owns such Shares. The Company shall not be required to provide such information if (a) the issuance is limited to key employees whose duties in connection with the Company assure their access to equivalent information or (b) the Plan or any agreement complies with all conditions of Rule 701 of the Securities Act of 1933, as amended, provided that for purposes of determining such compliance, any registered domestic partner shall be considered a "family member" as that term is defined in Rule 701.

Exhibit 10.12

CALYXT, INC.

EQUITY INCENTIVE PLAN (AS AMENDED)

NOTICE OF STOCK OPTION GRANT

«OptioneeName»
«OptioneeAddress1»
«OptioneeAddress2»

You have been granted an option to purchase Common Stock of Calyxt, Inc., a Delaware corporation (the "Company"), as follows:

Date of Grant:	
Exercise Price Per Share:	
Total Number of Shares:	[•]
Total Exercise Price:	$[•]
Type of Option:	Nonstatutory Stock Option
Expiration Date:	
Vesting Commencement Date:	
First Vest Date:	
Vesting/Exercise Schedule:	So long as your Continuous Service Status does not terminate, the Shares underlying this Option shall vest in accordance with the provisions of the Stock Option Agreement. This Option shall only become exercisable in accordance with the provisions of the Stock Option Agreement.
Transferability:	You may not transfer this Option.

By your signature and the signature of the Company's representative below, you and the Company agree that this Option is granted under and governed by the terms and conditions of the Calyxt, Inc. Equity Incentive Plan (as amended) and the Stock Option Agreement, both of which are attached to and made a part of this document.

In addition, you agree and acknowledge that your rights to any Shares underlying this Option will be earned only as you provide services to the Company over time, that the grant of this Option is not as consideration for services you rendered to the Company prior to the Date of Grant, and that nothing in this Notice or the attached documents confers upon you any right to continue your employment or consulting relationship with the Company for any period of time,

nor does it interfere in any way with your right or the Company's right to terminate that relationship at any time, for any reason, with or without cause. Also, to the extent applicable, the Exercise Price Per Share has been set in good faith compliance with the applicable guidance issued by the Internal Revenue Service under Section 409A of the Code. However, there is no guarantee that the Internal Revenue Service will agree with the valuation, and by signing below, you agree and acknowledge that the Company and the Administrator shall not be held liable for any applicable costs, taxes, or penalties associated with this Option if, in fact, the Internal Revenue Service were to determine that this Option constitutes deferred compensation under Section 409A of the Code. You should consult with your own tax advisor concerning the tax consequences of such a determination by the Internal Revenue Service.

THE COMPANY:

CALYXT, INC.

By: _____
(Signature)
Name: _____
Title: _____

OPTIONEE:

[•]

_____

CALYXT, INC.

EQUITY INCENTIVE PLAN (AS AMENDED)

STOCK OPTION AGREEMENT

1. **Grant of Option.** Calyxt, Inc., a Delaware corporation (the "Company"), hereby grants to [•] ("Optionee"), an option (the "Option") to purchase the total number of shares of Common Stock (the "Shares") set forth in the Notice of Stock Option Grant (the "Notice"), at the exercise price per Share set forth in the Notice (the "Exercise Price") subject to the terms, definitions and provisions of the Calyxt, Inc. Equity Incentive Plan (as amended) (the "Plan") adopted by the Company, which is incorporated in this agreement (this "Agreement") by reference. Unless otherwise defined in this Agreement, the terms used in this Agreement shall have the meanings defined in the Plan.

2. **Designation of Option.** This Option is intended to be a Nonstatutory Stock Option.

3. **Vesting/Exercise of Option.** Provided that the Optionee's Continuous Service Status does not terminate, this Option shall vest as follows:

- _____ of the Total Number of Shares on _____;

- _____ of the Total Number of Shares on _____; and

- _____ of the Total Number of Shares on the last day of each calendar quarter beginning after _____;

provided that the vested portion of this Option shall only become exercisable in the event that a Triggering Event or Initial Public Offering of the Company occurs prior to the Expiration Date of the Option, in which case, an additional 25% of the Total Number of Shares shall immediately vest; and provided further that 100% of the Total Number of Shares shall vest in the event of (i) termination of Optionee without Cause or (ii) resignation of Optionee for Good Reason within 12 months following a Triggering Event. In all cases, in no event will more than 100% of the Total Number of Shares vest.

As used in this Stock Option Agreement and for all purposes relating to the Option, including cessation of Continuous Service Status, "Good Reason" shall mean: (a) a material reduction in the Optionee's base salary, other than a general reduction in base salaries that affects all similarly-situated Employees or Consultants, as applicable, in substantially the same proportion; or (b) an involuntary relocation of the Optionee's principal place of employment by more than 100 miles, provided that (i) the Optionee has provided written notice to the Company of the existence of the circumstances constituting Good Reason within 30 days of the initial existence of such circumstances, (ii) the Company fails to cure such circumstances within 30 days of the receipt of such written notice, and (iii) Optionee's resignation is effective not later than 90 days after the first occurrence of the applicable grounds constituting Good Cause. If Optionee does not resign for Good Reason in accordance with, and within the time period set forth in, the preceding sentence, then Optionee will be deemed to have waived Optionee's right to terminate for Good Reason with respect to such circumstances and such circumstances shall be deemed not to constitute Good Reason.

(a) **Right to Exercise.**

(i) This Option may not be exercised for a fraction of a share.

(ii) In the event of Optionee's death, Disability or other termination of Continuous Service Status, the exercisability of this Option shall be governed by Section 5 below, subject to the limitations contained in this Section 3.

(iii) In no event may this Option be exercised after the Expiration Date set forth in the Notice.

(b) **Method of Exercise.**

(i) This Option shall be exercisable by execution and delivery of the following:

(1) the Exercise Agreement attached hereto as Exhibit A or of any other form of written notice approved for such purpose by the Company which shall state Optionee's election to exercise this Option, the number of Shares in respect of which this Option is being exercised, and such other representations and agreements as to the holder's investment intent with respect to such Shares as may be required by the Company pursuant to the provisions of the Plan. Such written notice shall be signed by Optionee and shall be delivered to the Company by such means as are determined by the Plan Administrator in its discretion to constitute adequate delivery. The written notice shall be accompanied by payment of the aggregate Exercise Price for the purchased Shares.

and

(2) the Adoption Agreement to the Company Stockholders Agreement attached hereto as Exhibit B (the "Adoption Agreement").

(ii) As a condition to the exercise of this Option and as further set forth in Section 11 of the Plan, Optionee agrees to make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the grant, vesting or exercise of this Option, or disposition of Shares, whether by withholding, direct payment to the Company, or otherwise. Regardless of any action the Company takes with respect to any or all income tax, social security, payroll tax, or other tax-related items related to Optionee's participation in the Plan and legally applicable to Optionee ("Tax-Related Items"), Optionee acknowledges that the ultimate liability for all Tax-Related Items is and remains Optionee's responsibility and may exceed the amount actually withheld. Optionee further acknowledges that the Company (A) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option, including, but not limited to, the grant, vesting, exercise/settlement of the Option, the issuance of Shares upon settlement of the Option and the subsequent sale of Shares acquired pursuant to such issuance and (B) does not commit to and is under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate Optionee's liability for Tax-Related Items or achieve any particular tax result.

In the event Optionee fails to make adequate provision for applicable tax withholding obligations (or where the amount of money provided is insufficient to satisfy the applicable obligations), Optionee authorizes the Company, in its discretion, to satisfy the obligations with regard to all Tax-Related Items by (x) withholding from Optionee's wages or other cash compensation paid to Optionee, (y) withholding through a Cashless Exercise or (z) a combination of the foregoing.

If Optionee's obligation is satisfied through a Cashless Exercise as described in the foregoing paragraph, the Company shall endeavor to sell only the number of Shares required to satisfy Optionee's obligations for Tax-Related Items; however Optionee agrees that the Company may sell more Shares than necessary to cover the Tax-Related Item, and that in such event, the Company shall reimburse Optionee for the excess amount withheld, in cash and without interest.

(iii) The Company is not obligated, and shall have no liability for failure, to issue or deliver any Shares upon exercise of this Option unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. This Option may not be exercised until such time as the Plan has been approved by the holders of capital stock of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such Shares would constitute a violation of any Applicable Laws, including any applicable U.S. federal or state securities laws or any other law or regulation. As a condition to the exercise of this Option, the Company may require Optionee to make any representation and warranty to the Company as may be required by the Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Optionee on the date on which this Option is exercised with respect to such Shares.

(iv) Subject to compliance with Applicable Laws, this Option shall be deemed to be exercised upon receipt by the Company of the appropriate written notice of exercise accompanied by the Exercise Price, the executed Adoption Agreement, and the satisfaction of any applicable withholding obligations.

4. **Method of Payment.** Payment of the Exercise Price shall be by any of the following, or a combination of the following, at the election of Optionee:

(a) cash or check;

(b) at the discretion of the Plan Administrator on a case by case basis, by surrender of other shares of Common Stock of the Company (either directly or by stock attestation) that Optionee previously acquired and that have an aggregate Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Shares as to which this Option is being exercised; or

(c) at the discretion of the Plan Administrator on a case by case basis, by Cashless Exercise.

5. **Termination of Relationship.** Following the date of termination of Optionee's Continuous Service Status for any reason (the "Termination Date") other than a termination for Cause, Optionee may continue to hold, and potentially exercise this Option to the extent a Triggering Event or an Initial Public Offering occurs, only as set forth in the Notice and this Section 5. In no event may this Option be exercised after the Expiration Date of this Option as set forth in the Notice.

(a) **Termination.** In the event of termination of Optionee's Continuous Service Status for any reason including the optionees death or Disability, other than as a result of a for Cause termination, Optionee (or Optionee's estate or by a person who acquired the right to exercise this Option by bequest or inheritance, as applicable) may, to the extent Optionee is vested in the Optioned Stock at the date of such termination (the "Termination Date"), continue to hold the vested portion of the Option. The unvested portion of the Option on the Termination Date shall expire on such date.

(b) **Termination for Cause.** In the event of termination of Optionee's Continuous Service Status for Cause, this Option (including any vested portion thereof) shall terminate immediately upon such termination for Cause. If Optionee's Continuous Service Status is suspended pending an investigation of whether Optionee's Continuous Service Status will be terminated for Cause, all Optionee's rights under this Option, including the right to exercise this Option, shall be suspended during the investigation period.

6. **Non-Transferability of Option.** This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Optionee only by him or her. The terms of this Option shall be binding upon the executors, administrators, heirs, successors and assigns of Optionee.

7. **Lock-Up Agreement.** In connection with any initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Optionee hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, during the period commencing as of 18 days prior to and ending 180 days, or such lesser period of time as the relevant underwriters may permit, after the effective date of a registration statement covering any public offering of the Company's securities or, if required by such underwriter, such longer period of time as is necessary to enable such underwriter to issue a research report or make a public appearance that relates to an earnings release or announcement by the Company within 18 days before or after the date that is 180 days after the effective date of the registration statement relating to such initial public offering, but in any event not to exceed 198 days following the effective date of the registration statement relating to such initial public offering and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering. The Company is hereby authorized to impose stock transfer instructions to its transfer agent (which may the Company itself) in order to enforce the above restrictions.

8. **Corporate Transaction**. Notwithstanding the above, if a corporate transaction constitutes a Triggering Event and the Optionee's retains his Continuous Service Status, the Option shall become vested under the formula in Section 3 and the Administrator shall provide the Optionee with at least 5 days prior to the consummation of the corporate transaction to exercise the vested portion of the Option.

9. **Effect of Agreement.** Optionee acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof (and has had an opportunity to consult counsel regarding the Option terms), and hereby accepts this Option and agrees to be bound by its contractual terms as set forth herein and in the Plan. Optionee hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Plan Administrator regarding any questions relating to this Option. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of the Notice and this Agreement, the Plan terms and provisions shall prevail.

10. **Miscellaneous.**

(a) **Governing Law.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law.

(b) **Entire Agreement; Enforcement of Rights.** This Agreement, together with the Notice to which this Agreement is attached and the Plan, sets forth the entire agreement and understanding of the parties relating to the subject matter herein and therein and merges all prior discussions between the parties. Except as contemplated under the Plan, no modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement and a substantially similar provision shall be inserted that as closely as possible reflects the intent of the parties shall be substituted in place of such unenforceable provision, (ii) the balance of this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms.

(d) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(e) **Counterparts.** This Option may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(f) **Successors and Assigns.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Optionee under this Agreement may not be assigned without the prior written consent of the Company.

11. **Data Privacy Notice and Consent**. Optionee hereby explicitly and unambiguously consents to the collection, use and transfer, in electronic or other form, of Optionee's personal data as described in the Notice, this Agreement and Exhibit A to this Agreement by and among, as applicable, the Company and its affiliates for the exclusive purpose of implementing, administering and managing Optionee's participation in the Plan.

Optionee understands that the Company and its affiliates may hold certain personal information about Optionee, including, but not limited to, Optionee's name, home address and telephone number, date of birth, social security number or other identification number, salary, nationality, job title, any Shares held in the Company, details of all Options or any other entitlement to Shares awarded, canceled, vested, unvested or outstanding in Optionee's favor, for the purpose of implementing, administering and managing the Plan (collectively, "Data").

Optionee understands that Data may be transferred to any third parties assisting in the implementation, administration and management of the Plan, that these recipients may be located in Optionee's country, or elsewhere, and that the recipient's country may have different data privacy laws and protections than Optionee's country. Optionee understands that Optionee may request a list with the names and addresses of any potential recipients of the Data by contacting his or her local human resources representative. Optionee authorizes the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing his or her participation in the Plan, including any requisite transfer of such Data as may be required to a broker or other third party with whom the Shares received upon exercise of the Options may be deposited. Optionee understands that Data will be held only as long as is necessary to implement, administer and manage Optionee's participation in the Plan. Optionee understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing Optionee's local human resources representative. Optionee understands, however, that refusal or withdrawal of consent may affect his or her ability to participate in the Plan. For more information on the consequences of Optionee's refusal to consent or withdrawal of consent, Optionee understands that he or she may contact his or her local human resources representative.

IN WITNESS WHEREOF, the parties have executed or caused this Agreement to be executed by their officers thereunto duly authorized, effective as of the Date of Grant set forth in the accompanying Notice.

THE COMPANY:

CALYXT, INC.

By: _____
(Signature)

Name: _____
Title: _____
Address:

_____

_____

Attn:
Fax: _____

OPTIONEE: [•]

_____

Address:

_____

_____

Fax: _____

EXHIBIT A

CALYXT, INC.

EQUITY INCENTIVE PLAN (AS AMENDED)

EXERCISE AGREEMENT

This Exercise Agreement (this "Agreement") is made as of _____, by and between Calyxt, Inc., a Delaware corporation (the "Company"), and [•] ("Purchaser"). To the extent any capitalized terms used in this Agreement are not defined, they shall have the meaning ascribed to them in the Company's Equity Incentive Plan (the "Plan").

1. **Exercise of Option.** Subject to the terms and conditions hereof, Purchaser hereby elects to exercise his or her option to purchase _____ shares of the Common Stock (the "Shares") of the Company under and pursuant to the Plan and the Stock Option Agreement granted _____ (the "Option Agreement"). The purchase price for the Shares shall be $_____ per Share for a total purchase price of $_____. The term "Shares" refers to the purchased Shares and all securities received as stock dividends or splits, all securities received in replacement of the Shares in a recapitalization, merger, reorganization, exchange or the like, and all new, substituted or additional securities or other property to which Purchaser is entitled by reason of Purchaser's ownership of the Shares.

2. **Time and Place of Exercise.** The purchase and sale of the Shares under this Agreement shall occur at the principal office of the Company simultaneously with the execution and delivery of this Agreement and the Adoption Agreement to the Company Stockholders Agreement attached to the Option Agreement as Exhibit B (the "Adoption Agreement"), the payment of the aggregate exercise price by any method listed in Section 4 of the Option Agreement, and the satisfaction of any applicable tax withholding obligations, all in accordance with the provisions of Section 3(b) of the Option Agreement. The Company shall issue the Shares to Purchaser by entering such Shares in Purchaser's name as of such date in the books and records of the Company or, if applicable, a duly authorized transfer agent of the Company, against payment of the exercise price therefor by Purchaser. If applicable, the Company shall deliver to Purchaser a certificate representing the Shares as soon as practicable following such date.

3. **Limitations on Transfer.** In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not assign, encumber or dispose of any interest in the Shares except in compliance with the provisions set forth below and applicable securities laws.

(a) **Right of First Refusal.** Before any Shares held by Purchaser or any transferee of Purchaser (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 3(a) (the "Right of First Refusal").

(i) **Notice of Proposed Transfer.** The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the terms and conditions of each proposed sale or transfer. The Holder shall offer the Shares at the same price (the "Purchase Price") and upon the same terms (or terms as similar as reasonably possible) to the Company or its assignee(s).

(ii) **Exercise of Right of First Refusal.** At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the Purchase Price. If the Purchase Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board in good faith and shall be payable therefor.

(iii) **Payment.** Payment of the Purchase Price shall be made, at the election of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness, or by any combination thereof within ninety (90) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(iv) **Holder's Right to Transfer.** If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 3(a), then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee on terms, including price, that are no more favorable to the Proposed Transferee than that set forth in the Notice, provided that such sale or other transfer is consummated within one hundred twenty (120) days after the date of the Notice and provided further that any such sale or other transfer is effected in accordance with any applicable securities laws and the Proposed Transferee agrees in writing that the provisions of this Section 3 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, or if the Holder proposes to change the price or other terms to make them more favorable to the Proposed Transferee, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(v) **Exception for Certain Family Transfers.** Anything to the contrary contained in this Section 3(a) notwithstanding, and provided that such transfer complies with applicable securities laws, the transfer of any or all of the Shares during Purchaser's lifetime or on Purchaser's death by will or intestacy to Purchaser's Immediate Family or a trust for the benefit of Purchaser's Immediate Family shall be exempt from the provisions of this Section 3(a). "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 3, and there shall be no further transfer of such Shares except in accordance with the terms of this Section 3.

(b) **Company's Right to Purchase upon Involuntary Transfer.** In the event of any transfer by operation of law or other involuntary transfer (including death or

divorce, but excluding a transfer to Immediate Family as set forth in Section 3(a)(v) above) of all or a portion of the Shares by the record holder thereof, the Company shall have an option to purchase all of the Shares transferred at the greater of the purchase price paid by the Purchaser pursuant to this Agreement or the Fair Market Value of the Shares on the date of transfer (as determined by the Board). Upon such a transfer, the person acquiring the Shares shall promptly notify the Secretary of the Company of such transfer. The right to purchase such Shares shall be provided to the Company for a period of sixty (60) days following receipt by the Company of written notice by the person acquiring the Shares.

(c) **Assignment.** The right of the Company to purchase any part of the Shares may be assigned in whole or in part to any holder or holders of capital stock of the Company or other persons or organizations.

(d) **Restrictions Binding on Transferees.** All transferees of Shares or any interest therein will receive and hold such Shares or interest subject to the provisions of this Agreement. Any sale or transfer of the Company's Shares shall be void unless the provisions of this Agreement are satisfied and agreed to by such transferee.

(e) **Termination of Rights.** The right of first refusal granted the Company by Section 3(a) above and the option to repurchase the Shares in the event of an involuntary transfer granted the Company by Section 3(b) above shall terminate upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"). Upon termination of the right of first refusal described in Section 3(a) above the Company shall remove any stop-transfer notices referred to in Section 5(b) below and related to the restrictions in this Section 3 and, if certificates are issued, a new certificate or certificates representing the Shares not repurchased shall be issued, on request, without the legend referred to in Section 5(a)(ii) below and delivered to Purchaser.

4. **Investment and Taxation Representations.** In connection with the purchase of the Shares, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. Purchaser is purchasing these securities for investment for his or her own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act or under any applicable provision of state law. Purchaser does not have any present intention to transfer the Shares to any person or entity.

(b) Purchaser understands that the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands

that the Company is under no obligation to register the securities. Purchaser understands that the certificate(s) evidencing the securities will be imprinted with a legend which prohibits the transfer of the securities unless they are registered or such registration is not required in the opinion of counsel for the Company.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer of the securities (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Purchaser understands that the Company provides no assurances as to whether he or she will be able to resell any or all of the Shares pursuant to Rule 144 or Rule 701, which rules require, among other things, that the Company be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, that resales of securities take place only after the holder of the Shares has held the Shares for certain specified time periods, and under certain circumstances, that resales of securities be limited in volume and take place only pursuant to brokered transactions. Notwithstanding this paragraph (d), Purchaser acknowledges and agrees to the restrictions set forth in paragraph (e) below.

(e) Purchaser further understands that in the event all of the applicable requirements of Rule 144 or 701 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

(f) Purchaser understands that Purchaser may suffer adverse tax consequences as a result of Purchaser's purchase or disposition of the Shares. Purchaser represents that Purchaser has consulted any tax consultants Purchaser deems advisable in connection with the purchase or disposition of the Shares and that Purchaser is not relying on the Company for any tax advice.

5. **Restrictive Legends and Stop-Transfer Orders.**

(a) **Legends.** The certificate or certificates representing the Shares shall bear the following legends (as well as any legends required by applicable state and federal corporate and securities laws):

(i) THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

(ii) THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE HOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

(b) **Stop-Transfer Notices.** Purchaser agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) **Refusal to Transfer.** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

6. **No Employment Rights.** Nothing in this Agreement shall affect in any manner whatsoever the right or power of the Company, or a parent or subsidiary of the Company, to terminate Purchaser's employment or consulting relationship, for any reason, with or without cause.

7. **Lock-Up Agreement.** In connection with any initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Optionee hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, during the period commencing as of 18 days prior to and ending 180 days, or such lesser period of time as the relevant underwriters may permit, after the effective date of a registration statement covering any public offering of the Company's securities or, if required by such underwriter, such longer period of time as is necessary to enable such underwriter to issue a research report or make a public appearance that relates to an earnings release or announcement by the Company within 18 days before or after the date that is 180 days after the effective date of the registration statement relating to such initial public offering, but in any event not to exceed 198 days following the effective date of the registration statement relating to such initial public offering and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering. The Company is hereby authorized to impose stock transfer instructions to its transfer agent (which may the Company itself) in order to enforce the above restrictions.

8. **Miscellaneous.**

(a) **Governing Law.** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law.

(b) **Entire Agreement; Enforcement of Rights.** This Agreement sets forth the entire agreement and understanding of the parties relating to the subject matter herein and merges all prior discussions between them. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party.

(c) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement and a substantially similar provision shall be inserted that as closely as possible reflects the intent of the parties shall be substituted in place of such unenforceable provision, (ii) the balance of the Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of the Agreement shall be enforceable in accordance with its terms.

(d) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice.

(e) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(f) **Successors and Assigns.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Purchaser under this Agreement may only be assigned with the prior written consent of the Company.

(g) **California Corporate Securities Law.** THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

[Signature Page Follows]

The parties have executed this Exercise Agreement as of the date first set forth above.

THE COMPANY:

CALYXT, INC.

By: _____
(Signature)
Name: _____
Title: _____
Address:

_____
_____
Attn:
Fax: _____

PURCHASER:

[•]
_____

Address:

_____
_____
Fax: _____

I, _____, spouse of [•], have read and hereby approve the foregoing terms set forth in this Agreement and the Adoption Agreement. In consideration of the Company's granting my spouse the right to purchase the Shares as set forth in this Agreement, I hereby agree to be irrevocably bound by this Agreement and the Adoption Agreement and further agree that any community property or other such interest shall hereby be similarly bound by this Agreement and the Adoption Agreement. I hereby appoint my spouse as my attorney-in-fact with respect to any amendment or exercise of any rights under this Agreement and the Adoption Agreement.

_____

Spouse of [•] (if applicable)

EXHIBIT B

CALYXT, INC.

EQUITY INCENTIVE PLAN (AS AMENDED)

ADOPTION AGREEMENT TO THE COMPANY STOCKHOLDERS AGREEMENT

This Adoption Agreement ("**Adoption Agreement**") is executed on _____, 20__, by the undersigned (the "**Holder**") pursuant to the terms of that certain Stockholders Agreement dated as of December 3, 2014 (the "**Agreement**"), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder is acquiring certain shares of the capital stock of the Company (the "**Stock**"), for one of the following reasons (Check the correct box):

☐ As a transferee of Shares from a party in such party's capacity as an "Stockholder" bound by the Agreement, and after such transfer, Holder shall be considered a "Stockholder" for all purposes of the Agreement.

☐ As a new Stockholder in accordance with Subsection 4.1(a) of the Agreement, in which case Holder will be a "Stockholder" for all purposes of the Agreement.

1.2 Agreement. Holder hereby (a) agrees that the Stock, and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER: _____
By: _____
Name and Title of Signatory
Address: _____

_____
Facsimile Number: _____

ACCEPTED AND AGREED:

CALYXT, INC.

By: _____
Title: _____

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Exhibit 10.15

CONSULTING AGREEMENT

This Consulting Agreement (this "***Agreement***") is made as of January 1st, 2010 (the "***Effective Date***") by and between Cellectis Plant Sciences, Inc., a Delaware corporation ("***Client***"), and Daniel F. Voytas, an individual residing at 2197 FOL WELL A VENUE, FALCON HEIGHTS, MN 55108 USA, ("***Consultant***").

RECITALS

WHEREAS, Client specializes in Meganuclease technology for use in plant research and the development of products for use in agriculture ("***Client Business***");

WHEREAS, Consultant is the Director of the Center for Genome Engineering at the University of Minnesota;

WHEREAS, Client desires to engage Consultant to provide certain services including without limitation, strategic planning services and analyses (the "***Services***"); and

WHEREAS, Consultant is willing to provide such Services on the terms and conditions set out below.

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Services. In consideration for the Consultation Fee set forth in Section 2(a) below, Consultant agrees to provide the Services as described in Exhibit A ("***Services Description***"). The parties may amend the Services Description from time to time; each such amendment shall be attached hereto as an additional exhibit and incorporated herein by reference.

2. Payment.

(a) Consultation Fees. As compensation for the performance of the Services during the Term (as defined in Section 6(a) below), Client will pay Consultant a consultation fee (the "***Consultation Fee***") as set forth in the table below:

Dates	Average Day Worked	Consultation Fee
January 1, 2010 – June 30, 2010	1 day per week	$ 5,000
July 1, 2010 – June 30, 2011	10 days per month	$12,500
July 1, 2011 – December 31,2012	TBD	TBD

(b) Payment Terms. Client shall pay to Consultant the Consultation Fee on a monthly basis. All payments shall be made by Client to Consultant via check or wire transfer (Consultant to separately provide wire transfer details). All payments shall be in U.S. Dollars.

(c) CPS Scientific Bonus Plan. During the Term, Consultant will be eligible to participate in the CPS Scientific Bonus Plan, subject to the terms and conditions set forth therein. Any bonus that Consultant becomes eligible to receive under the plan will be paid to Consultant within two (2) months following the end of the applicable calendar year. A copy of the Cellectis Scientific Bonus Plan will be separately provided to Consultant within a reasonable time following the Effective Date.

(d) CPS Commercial Bonus Plan. During the Term, Consultant will be eligible to participate in the CPS Commercial Bonus Plan, subject to the terms set forth therein. A copy of the CPS Commercial Bonus Plan will be separately provided to Consultant within a reasonable time following the Effective Date.

(e) Change of Control. Prior to the consummation of a Change of Control, Client will pay to Consultant the total Bonus Amount due to Consultant under the CPS Scientific and CPS Commercial Bonus Plan to which Consultant is entitled. CPS Scientific and CPS Commercial Bonus Plan will vest upon Change of Control. For purposes of this Agreement, "***Change of Control***" means a majority of the ownership interests or assets (by value) of Client shall have been transferred by sale, operation of law, or other disposition, including merger or consolidation of Client (other than to an affiliate of Client).

(f) No Right to Subcontract. Consultant shall not have the right to subcontract any Services to be provided by it hereunder without the express prior written consent of Client, which may be withheld in Client's sole discretion.

3. Relationship of Parties.

(a) Independent Contractor. Consultant is an independent contractor and is not an agent or employee of, and has no authority to bind, Client by contract or otherwise. Consultant will perform the Services under the general direction of Client, but Consultant shall determine, in Consultant's sole discretion, the manner and means by which the Services are accomplished, subject to the requirement that Consultant shall at all times comply with applicable law.

(b) Employment Taxes. If any payment required to be made hereunder is subject to any withholding taxes imposed by any governmental authority, Consultant shall pay such taxes to the relevant authorities as required by law.

4. Intellectual Property Rights. Consultant agrees that it will promptly make full written disclosure to Client, hold in trust for the sole right and benefit of Client, and does hereby assign to Client, or its designee, all its right, title, and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements, designs, discoveries, ideas, trademarks and trade secrets, whether or not patentable or registrable under copyright, trademark or similar laws, which Consultant may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, in the course of its performance of Services for Client (collectively referred to as "***Work Product***"). Consultant further acknowledges that, to the extent permitted by law, all original works of authorship which are made by it (solely or jointly with others) in the course of its performance of Services for Client under this Agreement and which are protectable by copyright shall be deemed "works made for hire," as that term is defined in the United States Copyright Act. Consultant understands and agrees that the decision whether or not to commercialize or market any Work Product is within Client's sole discretion and for Client's sole benefit and that no royalty will be due to Consultant as a result of Client's efforts to commercialize or market any such Work Product. Consultant agrees to provide Client such assistance as is reasonably necessary to obtain or perfect any such rights, including but not limited to executing and delivering to Client any documents required to apply for patents, register copyrights or to obtain other protections, upon Client's request and at Client's sole expense. Consultant forever waives and releases to Client all rights and benefits accorded under any law with respect to Work Product, including but not limited to the law known as "*droit moral*," unfair competition or trade secret laws, or any similar provisions. Client, within its sole discretion, will be entitled to itself amend, change or modify any Work Product or to engage any third party to amend, change or modify any Work Product.

5. Confidential Information.

(a) Each party ("***Recipient***") acknowledges that it may acquire information and materials from the other party ("***Discloser***") and knowledge about trade secrets and know-how of the other party contained in the business, activities and strategies of the Recipient and that all such knowledge and information acquired are and will be the confidential and proprietary information of Discloser (collectively, the "***Confidential Information***"). Recipient agrees to hold all such Confidential Information in strict confidence, and not to disclose it to others or use it in any way, commercially or otherwise, except that Recipient may disclose it to Recipient's employees and subcontractors on a need-to-know basis and only to employees and subcontractors who are under a like obligation of confidentiality, and not to allow any unauthorized person access to it, either before or after expiration or termination of this Agreement. Recipient further agrees to use commercially reasonable efforts to protect the confidentiality of the Confidential Information including, without limitation, implementing and enforcing operating procedures to minimize the possibility of unauthorized use or copying of the Confidential Information.

(b) Notwithstanding the foregoing, this Agreement imposes no obligation upon Recipient with respect to Confidential Information, which the Recipient can show by competent documentation, that (i) was in Recipient's possession before receipt from Discloser; (ii) is or becomes a matter of public knowledge through no fault of Recipient; (iii) is rightfully received by Recipient from a third party without a duty of confidentiality; (iv) is disclosed by Discloser to a third party without a duty of confidentiality on the third party; (v) is independently developed by Recipient without use of or reference to such Confidential Information; (vi) is disclosed by Discloser with Recipient's prior written approval; or (vii) is required to be disclosed by a government body or court of law. If Recipient is required by a government body or court of law to disclose Confidential Information, prior to such required disclosure, Recipient shall give Discloser reasonable advance notice of any such disclosure and shall cooperate with Discloser in protecting against any such disclosure and/or obtaining a protective order narrowing the scope of the such disclosure and/or use of the Confidential Information.

6. Termination and Expiration.

(a) Term. The term of this Agreement will commence on the Effective Date and continue for a period of three (3) years thereafter, unless terminated earlier in accordance with this Section 6 (the "***Term***").

(b) By Client.

(i) This Agreement may be terminated by the Client at any time, for any reason or no reason, by written notice to Consultant, subject to Section 6(d) below; and

(ii) Client may terminate this Agreement with immediate effect if Consultant fails to obtain the approvals set forth in Section 8(b)(ii) herein. In the event of such termination, Section 6(d) shall be null and void and of no effect.

(c) Material Breach. In the event of a material breach or material default of this Agreement by either party, the non-breaching party shall give the breaching party written notice of the material breach or material default. The breaching party will then have thirty (30) days to cure the material breach or material default, and if cure has not been affected within said thirty (30) days, this Agreement may, within the sole discretion of the non-breaching party, automatically terminate, effective as of the date specified in the notice. All termination rights shall be in addition to and not in substitution for any other remedies that may be available to the non-breaching party.

(d) Termination Payment and Release. Upon termination of this Agreement pursuant to Section 6(b)(i) herein, Client shall pay to Consultant a lump-sum payment in an amount equal to: (i) $15,000 if such termination occurs prior to June 30, 2010; (ii) $37,500 if such termination occurs after June 30, 2010 but before June 30, 2011; or (iii) three (3) months of Consultation Fees if such termination occurs after June 30, 2011 but before the end of the Term. Notwithstanding anything herein to the contrary, Client will not be obligated to make any payment or provide any benefit under this Section 6(d) hereof unless (1) Consultant executes a release of all current or future claims, known or unknown, arising on or before the date of the release against Client and its subsidiaries and the directors, officers, employees and affiliates of any of them, in a form approved by Client, and (2) Consultant does not revoke such release during any applicable revocation period.

(e) Accrued Rights. Termination of this Agreement for any reason does not relieve either party of any obligation or liabilities accrued prior to the termination or rescind anything done by either party and the termination does not affect in any manner any rights of either party arising under this Agreement prior to the termination.

(f) Survival. Upon the expiration or termination of this Agreement for any reason, the rights and obligations of the parties under the following Sections of the Agreement shall survive: 3(b), 4, 5, 6(e), 6(f), 7, 8, 9, 10, and 11. Section 6(d) shall also survive termination of this Agreement unless such termination is pursuant to Section 6(b)(ii).

7. Limitation of Liability. EXCEPT FOR A BREACH OF SECTION 5 (CONFIDENTIAL INFORMATION), SECTION 8 (REPRESENTATIONS AND WARRANTIES), OR SECTION 9 (INDEMNIFICATION), IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS OR OTHER ECONOMIC LOSS, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES; PROVIDED, HOWEVER, THAT NEITHER PARTY'S LIABILITY SHALL BE SO LIMITED IN THE EVENT SUCH DAMAGES ARISE DIRECTLY FROM SUCH PARTY'S FRAUD, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. EXCEPT FOR A BREACH OF SECTION 5 (CONFIDENTIAL INFORMATION), SECTION 8 (REPRESENTATIONS AND WARRANTIES), OR SECTION 9 (INDEMNIFICATION), THE COLLECTIVE LIABILITY OF EITHER PARTY UNDER THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY CLIENT TO CONSULTANT HEREUNDER DURING THE TWELVE (12) MONTH PERIOD IMMEDIATELY PRECEDING THE CLAIM.

8. Representations and Warranties.

(a) General. In addition to the other representations and warranties set forth herein, each party hereto represents and warrants as of the Effective Date to each other party hereto that (i) each party hereto has the full and entire right, power, and authority (1) to enter into this Agreement, (2) to fulfill the obligations imposed herein upon such party, and (3) to consummate the transactions contemplated herein, (ii) this Agreement constitutes the legal, valid, and binding obligation of each party hereto, enforceable against such party in accordance with its terms, and (iii) there are no agreements, contracts, understandings or commitments which would prevent each party hereto from entering into this Agreement, making any representations or warranties herein, and/or consummating any of the transactions contemplated herein.

(b) By Consultant. In addition to the other representations and warranties set forth herein, Consultant represents and warrants to Client that Consultant: (i) has and will continue during the Term to comply with all college and university policies at which Consultant is a faculty member in any capacity or with which Consultant is otherwise affiliated ("***Universities***"); (ii) has or will make all necessary disclosures to and obtain all necessary approvals (including any special exemptions) from all such Universities prior to performing any Services for Client; and (iii) has not and will not use any of the Universities' resources (including facilities, equipment, students or faculty) in the performance of any Services for Client (iiii) has full capacity to assign to Client all its right, title and interest in and to any and all Work Product.

9. Indemnification. Consultant will indemnify the Client and hold it harmless from and against all claims, damages, losses and expenses, including court costs and reasonable fees and expenses of attorneys, expert witnesses and other professionals, arising out of or resulting from: (a) any action by a third party against the Client that is based on any claim that any Services performed by Consultant under this Agreement, or their results, infringe a patent, copyright or other proprietary right, misappropriate a trade secret or breach an agreement; and (b) any action by a third party that is based on any negligent act or omission or willful conduct of Consultant and winch results in: (i) any bodily injury, sickness, disease or death; (ii) any damage or destruction to tangible or intangible property (including computer programs and data) or any loss of use resulting therefrom; or (iii) any violation of any statute, ordinance, law or regulation.

10. Non-Solicitation and Non-Competition by Consultant. Consultant agrees that during the Term and for a period of one (1) year thereafter, Consultant shall not either directly or indirectly (a) solicit, induce, recruit or encourage any of Client's employees, consultants or contractors to terminate their relationship with Client, or (b) attempt to solicit, induce, recruit, encourage or take away employees, consultants or contractors of Client, either for itself or for any other person or entity. Consultant agrees that during the Term and for a period of one (1) year thereafter, Consultant shall not either directly or indirectly engage or participate in a business (including owning greater than 1% of the outstanding shares of such, business) that is a competitor of Client or work or perform services for, or assist any person or entity engaged in the Client Business. Notwithstanding the foregoing, Consultant shall not be prohibited from performing similar services for the University of Minnesota; provided that the performance of such services is for academic and research purposes only and does not otherwise breach this Agreement.

11. General.

(a) Assignment. Except as otherwise set forth herein, neither party may assign its rights or delegate its duties under this Agreement either in whole or in part without the prior written consent of the other party; provided, however, that Client may assign its rights or delegate its duties under this Agreement in whole or in part without the consent of Consultant in the event of a sale of all or substantially all of Client's assets, merger, consolidation or other Change of Control of Client. Any attempted assignment or delegation without such consent will be void.

(b) Equitable Remedies. Because the Services are personal and unique and because each party will have access to Confidential Information of the other party, each party will have the right to enforce this Agreement and any of its provisions by injunction, specific performance or other equitable relief without prejudice to any other rights and remedies that such party may have for a breach of this Agreement.

(c) Attorneys' Fees. If any action is necessary to enforce the terms of this Agreement, the substantially prevailing party will be entitled to reasonable attorneys' fees, costs and expenses in addition to any other relief to which such prevailing party may be entitled.

(d) Choice of Law. This Agreement will be governed by, and construed in accordance with, the internal, substantive laws of the State of Delaware. Each party agrees that the state and federal courts located in the State of New York will have jurisdiction in any action, suit or proceeding against Consultant based on or arising out of this Agreement and each party hereby: (i) submits to the personal jurisdiction of such courts; (ii) consents to service of process in connection with any action, suit or proceeding against the other party; and (iii) waives any other requirement (whether imposed by statute, rule of court or otherwise) with respect to personal jurisdiction, venue or service of process.

(e) Notices. Any notices under this Agreement will be sent by nationally recognized overnight delivery service to the address specified below or such other address as the party specifies in writing. Such notice will be effective upon delivery to the other party.

(f) Complete Understanding; Modification. This Agreement, together with all exhibits constitutes the complete and exclusive understanding and agreement of the parties and supersedes all prior understandings and agreements, whether written or oral, with respect to the subject matter hereof. Any waiver, modification or amendment of any provision of this Agreement will be effective only if in writing and signed by the parties hereto. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

(g) Counterparts. This Agreement may be executed in two (2) counterparts, each of which will be considered an original, but both of which together will constitute one and the same instrument.

[Signature Page Follows]

IN WITNESS WHEREOF, Client has caused this Consulting Agreement to be signed by its duly authorized representative, and Consultant has signed this Consulting Agreement, as of the date first set forth above.

CLIENT:

CELLECTIS PLANT SCIENCES, INC.

By: /s/ David Sourdive
David Sourdive, Director

CONSULTANT:

DAN VOYTAS

By: /s/ Dan Voytas
Dan Voytas

EXHIBIT A

Services Description

(a) top level planning of projects including CPS business plan preparation

(b) analysis of results in the context of project review meetings

(c) contribute to the strategy of developing a unique position for CPS in agricultural R&D

(d) advising on new emerging technologies in the Field to adopt

(e) scientific support during business development missions

(f) run the scientific advisory board

Exhibit 10.16

CPS-12005-AM1
Confidential

AMENDMENT 1 TO CONSULTING AGREEMENT

This Amendment to the Consulting Agreement (the "***Amendment***") is made as of December 21, 2012 (the "***Effective Date***") by and between **Cellectis Plant Sciences**, a corporation registered under the laws of Delaware, located at 600 West County Road D New Brighton, Minnesota, 55112, represented by Luc MATHIS acting as Chief Executive Officer ("***Client***"), and Daniel F. VOYTAS, an individual residing at 2197 Folwell Avenue, Falcon Heights, MN 55108 USA ("***Consultant***").

WHEREAS, Client and Consultant have signed a consultancy agreement dated on January 1, 2010 (the "***Agreement***").

WHEREAS, Client and Consultant are willing to extend the duration of the Agreement and to determine the consultation fees due to Consultant from July 1, 2011.

NOW, THEREFORE, in consideration of the mutual covenants and promises, the Parties hereby agree as follows:

The Agreement is extended after the 1st January 2013, for a period of one (1) year and will be automatically renewed by successive periods of one (1) year, unless earlier terminated pursuant to the provisions of Section 6 (b) and 6 (c) of the Agreement.

Beginning from July 1st, 2011, the consultation fee due to the Consultant correspond to USD 12,500 for 10 days per month.

All capitalized terms used in this Amendment not otherwise defined herein shall have the same meaning ascribed to them in the Agreement.

Except as explicitly amended hereby, the Agreement shall remain in full force and effect.

The Agreement and this present Amendment form an integral part of the Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their duly authorized officers in two (2) hard copies.

CLIENT:	CONSULTANT:
CELLECTIS PLANT SCIENCES	
/s/ Luc Mathis	/s/ Daniel F. Voytas
Luc Mathis Chief Executive Officer	Daniel F. VOYTAS

Exhibit 10.17

Employment Agreement
(Consolidation of the Successive Amendments to the Initial Contract dated January 2, 2006)

BETWEEN THE UNDERSIGNED

The company **CELLECTIS**, having its registered office located at 8 rue de la Croix Jarry, 75013 Paris, France, represented by Mr. André CHOULIKA, as Chief Executive Officer,

Below referred as the "**Company**"

Of the one part,

And

Mr. **Luc Mathis**, residing 30 rue Gambetta, 94270 Le Kremlin, France, born on December 7, 1969 in Paris 15th arrondissement, of French nationality,

Below referred as the "**Employee**"

Of the other part,

Together referred as the "**Parties**".

RECITALS

- By an indefinite term employment agreement entered into on January 2, 2006, the Company hired the Employee as of January 1, 2006 as Business Developer under the category of executive, ranking position II, coefficient 100 (the "**Initial Contract**").
- Four amendments have been entered into on March 12, 2012, June 29, 2012, December 31, 2012 and December 31, 2013 between the Employee, the Company and Calyxt (formerly known as "Cellectis Plant Sciences Inc"), a U.S. subsidiary of the Company, in order to set the conditions whereby the Employee has been seconded within Calyxt as Chief Executive Officer.
- By a new amendment to the Initial Contract dated March 31, 2014, the Parties agreed that the Employee would fulfill the duties of "Head of the Plant Biotechnologies" within the Company as of April 1, 2014, under the authority and the instructions of the Chief Executive Officer.
- By a new amendment to the Initial Contract dated July 1, 2016, the Parties agreed that the Employee would fulfill the duties of "Head of the New Projects" within the Company as of July 1, 2016, under the authority and the instructions of the Chief Executive Officer.

- The Parties agreed to execute the present agreement to sum up the relevant terms applicable as of Today to the Employee pertaining to his employment contract with the Company.

It has been agreed as follows:

ARTICLE 1 – OFFICES

The Employee exercises since July 1, 2016 and shall continue to exercise the duties of "Head of the New Projects", under the authority and the instructions of the Chief Executive Officer or any other person designated by this latter, to whom the Employee shall report.

Within the scope of his duties which encompass a creative dimension, the Employee will be responsible for the following tasks, this list being not limited: the research of new strategic opportunities in the domain of the microbiome, the nutrition and health and their respective feasibility studies.

These duties are changing by nature, which the Employee expressly accepts. Consequently, the Employee's responsibilities may be partially modified, especially regarding the growth and evolution of the business and structure of the Company, which the Employee hereby accepts.

ARTICLE 2 – INDUSTRIAL PROPERTY

The Employee's duties are creative.

Consequently, except otherwise provided by legal mandatory provisions, it is hereby reminded that any invention made by the Employee during the exercise of his abovementioned duties and any other research or production that would result from or complement it, is the sole property of the Company.

The Employee undertakes to immediately inform the Company of any of his invention.

ARTICLE 3 – WORKPLACE

The Employee will mainly perform his duties at the Company's registered office currently located in the 13th arrondissement of Paris, it being agreed that the Employee may be asked to travel on a temporary basis within France and abroad.

Any change of the usual workplace, required for the organization of the service and the good functioning of the business, cannot be construed as a modification of the present agreement, even if it leads to a change of residency.

ARTICLE 4 – WORKING TIME – REMUNERATION

The importance of the duties and the responsibilities entrusted to the Employee, which imply a large independence in the organization and the management of his working time to achieve his mission, the autonomy granted to the Employee in the decision making process make him fall within the scope of the category of senior executives within the meaning of article L. 3111-2 of the French Labor Code.

Therefore, the Employee benefits from a fixed remuneration in consideration of the exercise of his mission, no link being established between the amount of this remuneration and the time spent as a result of the exclusion of the Employee from the legal regime applicable to the working time.

In consideration of his duties, the Employee receives since April 1st, 2015 an annual fixed gross remuneration of one hundred fifty thousand euros (€ 150,000), an additional secondment bonus of one thousand eight hundred and seventy-five euros (€ 1,875) per month and a variable fee determined according to the objectives achieved, as defined by the board of directors of the Company.

ARTICLE 5 – BUSINESS EXPENSES

The expenses incurred by the Employee while carrying out his duties shall be, upon presentation of supporting documents, covered or reimbursed in accordance with the terms and conditions in effect in the Company which could be modified over time without constituting a substantial modification of the present contract.

ARTICLE 6 – EQUIPMENT

The Employee undertakes to return, as of the effective termination of his duties, all the equipment belonging to the Company (computer, electronic agendas, software, telephone, fax, …) in his possession and all the data concerning the Company (folder, listing, programs, …).

ARTICLE 7 – LOYALTY – CONFIDENTIALITY

For the entire duration of this contract, the Employee shall be under a duty of loyalty owed to the Company. Without prejudice of the provisions set forth under article 8 below, the Employee will be authorized to perform another professional activity, subject to the following conditions:

- the activity developed by the Employee in any way whatsoever (whether under an employee regime or not, as corporate officer…) shall only be performed after the express authorization of the Chief Executive Officer of the Company this latter being previously informed of the beneficiary entity and the duties of the Employee in this entity;
- the activity developed by the Employee shall not benefit directly or indirectly to a business competing with one of the entities of the Cellectis group in France or throughout the world.

Failure to comply with any of the above provision would constitute a serious breach of the Employee's professional obligations and would expose him to the payment of a lump sum of € 150,000 (one hundred fifty thousand euros), without prejudice to the Company's right to obtain the full compensation of its damage before the courts of competent jurisdiction.

It is also reminded that the developed activity shall not cause a decrease by circa 25% of the involvement of the Employee in the Company. In this respect, the Parties recall the senior executive status of the Employee.

Given the research and development activity carried out within the Company, the Employee shall remain bound, during the term of his employment contract and after its termination, to an absolute secrecy obligation, regarding all the activities of the Company, and especially regarding the patents, the processes, the methods, the programs, the formulas, and any other information concerning the research and development activities, as well as the projects carried out by the Company, regardless the importance and the stage of development.

Shall also be covered by this obligation of confidentiality, the information concerning the organization and the operation of the business, as well as all the data or information which the Employee has had, have and could possibly know, directly or indirectly, whether or not these data or information are related to his duties.

ARTICLE 8 – NON-COMPETITION

Given the Company's activity in the field of biotechnology, genome engineering research and development of patents, the investment made for the creation of a pole of expertise, the strategic nature of the information relating to the Company and the market risks on which it operates.

Given the confidential nature and the high technicality of the former Employee's position and the knowledge gained in performing his functions, the highly secret and confidential nature of the information to which he had access, the Employee cannot, for whatever reason, in the event of the termination of this employment contract:

- join a firm which has, fully or partially, a similar or comparable activity to the Company and which can be considered as a competitor,
- get in contact, directly or indirectly, and in any form, with such a firm.

This non-competition clause is limited to a two-year period, for a period of one year renewable once, beginning on the first day of the effective termination of this contract and covers the following regions: *Ile de France, Alsace-Lorraine, Languedoc-Roussillon, Provence-Alpes Côte d'Azur and Rhône-Alpes.*

As consideration for the non-competition obligation provided above, the Employee shall receive, after the effective termination of this contract, and throughout the prohibition

period, the financial compensation provided under article 28 of the national collective bargaining agreement applicable to the Engineers and executives working in the metal working sector (*"la Convention Collective Nationale Ingénieurs et Cadres de la Métallurgie"*) namely:

"a monthly special compensation equal to 5/10° of the average monthly salary as well as the contractual benefits and rewards the engineer or executives has received over the last twelve months of service in the company.

However, in the event of a dismissal that is not caused by a serious misconduct ("faute grave"), this monthly compensation will be set at 6/10° of this average as long as the engineer or executive finds a new position and within the limit of the non-competition clause duration."

Any breach of this non-competition clause, while releasing the Company from its payment, will render the Employee indebted toward the Company for the amount he received.

Any breach of this non-competition clause will automatically render the Employee liable to a penalty set to 6 months' wages of the monthly average wage earned over the last twelve months of service in the Company, this penalty being due for each discovered breach, without requiring a formal notice to end the competitive activity.

The payment of this compensation shall not bar the Company from suing the Employee for reimbursement of the economic and moral damages actually suffered and to obtain an injunction to stop the competitive activity.

Finally, pursuant to article 28 of the national collective bargaining agreement applicable to the Engineers and executives working in the metal working sector (*"la Convention Collective Nationale Ingénieurs et Cadres de la Métallurgie"*) the Company, as of termination of this employment contract will be able to release itself from the provided compensation by discharging the Employee from the non-competition clause provided that it informs the Employee in writing within eight days following the notification of the termination of this employment contract.

ARTICLE 9 – NON POACHING

The Employee undertakes not to seek or make an employment offer in any way whatsoever as employee or consultant, either on his own behalf or on behalf of any person or company for which he would become an employee, a corporate officer, a shareholder, a consultant or otherwise interested, to an employee working within the Company or within an entity belonging to the Company's group.

The Employee also undertakes not to use in any circumstance, for whatever reason and capacity (CEO, employee, consultant, associate or any other position, even as a nonprofit), for his own benefit or for the benefit of a third party, the studies and projects led by the Company on which he worked on or he was aware of in performing his duties.

ARTICLE 10 – SOCIAL PROTECTION

The Employee will benefit from all the pension benefits granted by the Company.

The Employee cannot waive his right to these benefits nor to refuse to pay the share he would assume as his benefits and contributions are currently set or as they could be set in the future because of a modification of his current regime.

ARTICLE 11 – DURATION OF CONTRACT

This agreement is made for an indefinite term. It could be terminated at the request of either Party by providing a prior notice pursuant to the applicable collective bargaining agreement, except for serious misconduct ("*faute grave*") or force majeure.

ARTICLE 12 – APPLICABLE LEGISLATION TO THE EMPLOYMENT RELATIONSHIP

Notwithstanding this written agreement, the following texts and provisions apply to the employment relationship within the limits of their own terms:

- the legal and regulatory provisions pertaining to paid vacations;
- the applicable collective bargaining agreement in the Company regarding its main activity. The applicable bargaining agreement covers in particular the notice to be given in case of breach of contract. The Employee is informed that the Company currently applies as a use the national collective bargaining agreement applicable to the Engineers and executives working in the metal working sector ("*la Convention Collective Nationale Ingénieurs et Cadres de la Métallurgie"*);
- the company's internal regulation; and
- the employer's uses and unilateral decisions.

Made in Paris,
The 1st July 2016
In two originals

/s/ Andre Choulika

Mr Luc MATHIS

For the Company
Mr André CHOULIKA
Chief Executive Officer

/s/ Luc Mathis

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Exhibit 10.19

SETTLEMENT AGREEMENT, WAIVER AND RELEASE

This Settlement Agreement and Release [the "Agreement"] is executed by and between Gregory R. Smith ["Smith"], and Calyxt, Inc., f/n/a Cellectis Plant Sciences ["Calyxt"] [sometimes jointly referred to as "the Parties"].

WHEREAS, Smith is a former employee of Calyxt; and

WHEREAS, Smith's employment and compensation with Calyxt was governed by the terms of various employment documents, including, but not limited to, an April 24, 2015 Offer Letter, a September 9, 2015 Amended Equity Incentive Plan, and a September 9, 2015 Action by Written Consent of Shareholder; and

WHEREAS, on or about March 22, 2016, Smith's employment with Calyxt ended; and

WHEREAS, Smith has raised various concerns and potential claims concerning his termination of employment with Calyxt; and

WHEREAS, Calyxt has denied all of Smith's claims, and denies any wrongdoing whatsoever with respect to Smith or Smith's employment with Calyxt; and

WHEREAS, Calyxt takes the position that Smith's termination of employment was "for cause" within the meaning of the relevant employment documents; and

WHEREAS, Smith disputes Calyxt's termination of his employment as being "for cause," and intends to continue to publically represent to third parties that his termination was "not for cause"; and

WHEREAS, the Parties have successfully conciliated all disputes between them, and wish to enter into a settlement of all claims one against the other; and

WHEREAS, the Parties further wish to subsume the terms of the above-described Agreements, and any other Agreements between the Parties;

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements set forth below, the adequacy and sufficiency of which are specifically acknowledged, the Parties, intending to be legally bound, agree as follows:

1. Consideration. In full consideration of all claims and causes of action Smith has or may have against Calyxt (as more fully set forth in paragraph 2, below), Smith and Calyxt agree as follows: Calyxt agrees to pay to Smith a total gross sum of $43,750 less applicable income taxes. Said payment will be made as follows: Calyxt will mail to Smith's attorney, as soon as reasonably possible following full expiration of the rescission periods described in paragraph 18, below, a check in the amount of $43,750.00 less the normal tax withholdings in the same manner as Calyxt withheld taxes while Smith was employed. The Parties agree and understand that this payment is made to Smith for his claimed wrongful discharge damages, including emotional distress damages.

Nothing in this Agreement is intended to negatively affect any claim by Smith for unemployment compensation benefits, beginning after March 22, 2016. Nothing in this Agreement violates Minn. Stat. § 268.192, Subd. 1a.

Smith agrees and understands that the payments set forth in this paragraph are the sole payments to be made by Calyxt to him or anyone on her behalf with respect to all claims set forth in paragraph 2, below. Calyxt will have no other liability or obligation to make other payments in this regard following execution of this Agreement.

2. Mutual Release of Claims. In consideration of the payment described in Paragraph 1, above, Smith hereby releases, acquits, and forever discharges Calyxt together with its predecessors, successors, assigns, agents, clients, directors, officers, fiduciaries, employees, representatives, attorneys, insurers, claim managers, divisions, subsidiaries, owners and affiliates (and agents, directors, officers, fiduciaries, employees, representatives, and attorneys of such divisions, subsidiaries owners and affiliates), and all persons acting by, through, under or in concert with any of them from any and all liability, claims, demands, actions, causes of action, suits, grievances, debts, sums of money, controversies, agreements, promises, damages, back and front pay, costs, expenses, attorneys' fees, medical fees or expenses and remedies of any type which Smith now has or hereafter may have by reason of any matter, cause, act or omission from the beginning of time until the execution of this Agreement, including without limiting the generality of the foregoing, claims, demands or actions for severance pay, breach of contract claims, claims for stock and/or stock options (or the vesting of stock or stock options), wrongful discharge claims, tortious interference with contract claims, or any claims under the Retirement Income Security Act (ERISA) (to the extent allowable by law), the Consolidated Omnibus Budget Reconciliation Agreement of 1985 (COBRA) (to the extent allowable by law), Title VII of the Civil Rights Act of 1964, the Older Workers Benefit Protection Act, the Age Discrimination in Employment Act, the Americans with Disabilities Act of 1990, the Rehabilitation Act of 1973, the Fair Labor Standards Act, the Equal Pay Act, the Civil Rights Act of 1866, the Minnesota Human Rights Act, the Minnesota Whistle Blower Act, the Federal and State OSH Acts, the Minnesota Workers' Compensation Act (to the extent allowable by law), any other federal, state or local statute or regulation regarding employment, discrimination in employment, or the termination of employment, and the common law of any state, and any and all claims or other liability or damage of any nature whatsoever which have arisen or might have arisen from any acts, omissions, events or circumstances including but not limited to, any claims for torts, defamation, statutory violations, assault, battery, invasion of privacy, defamation, intentional or negligent infliction of emotional distress, or other personal injuries arising under statute or common law.

Smith is not releasing or waiving any claims or rights that cannot be waived by law, including: (i) Smith's right to file a charge with an administrative agency or to participate in an any agency investigation (though Smith waives the right to recover any money or other relief in connection with any such charge or investigation); (ii) any vested accrued benefits Smith may have in any employee retirement plan; (iii) Smith's right to apply for state unemployment and/or workers' compensation benefits; (iv) any rights or claims that may arise after the Agreement is signed (with the exception of claims for stock or stock options as described herein); and (iv) any rights Smith has under the Consolidated Omnibus Budget Reconciliation Act ("COBRA").

In exchange for the waiver of claims described above, Calyxt releases Smith and his representatives, agents and attorneys from any and all claims that they have, had, or may have against Smith for all acts prior to the date of this Agreement.

3. Waiver of Rights to Equity Interest(s). In addition to the waivers described in paragraph 2, above, Smith specifically waives any and all rights or claims under the Equity Incentive Plan (as Amended) dated September 9, 2015, the Action by Written Consent of the Sole Stockholder in Lieu of a Special Meeting dated September 9, 2015, or any other document concerning stock options, vesting or granting of stock options, or any other document relating to an actual or claimed equity interest (whether potential, vested or unvested, earned or unearned) by Smith in Calyxt, its predecessors, successors, affiliates or related companies.

4. Representation by Calyxt. Calyxt represents that it has no current or pending initial public offerings of stock. The Parties recognize that Calyxt may, in the future, engage in an initial public offering of stock, and that said future initial public offering will not constitute a breach of this paragraph nor this Agreement.

5. Agreement not to Reapply. Smith agrees to never apply for employment or reemployment with Calyxt (or any of its affiliates), and understands that should he make such application and for any reason be hired, that Calyxt will have the right to terminate said employment simply by citing the terms of this Agreement.

6. Confidentiality of Terms. The Parties agree to keep the terms of this Agreement confidential. If questioned, each Party will simply state that any disagreements between the Parties have been satisfactorily resolved. Smith may disclose the terms of this Agreement as required by law, or to his spouse, attorneys, financial advisors, accountants or tax advisors, banking or mortgage institutions and as may be required by government agencies, after advising such party of this confidentiality provision. Calyxt may disclose the terms of this Agreement to the extent required by law, and to those in Calyxt's organization (or to any vendors who have a need to know) who have a need to know the information. For purposes of this paragraph, "Calyxt" includes management employees, owners, directors, and officers.

The Parties agree and understand that this Confidentiality Agreement was a substantial inducement for each Party to enter into this Agreement, and that should either Party violate the terms of this Confidentiality paragraph, a material injury will result, and the non-breaching party will have the right to recoup its reasonable damages.

7. Non-Disparagement. The Parties agree not to disparage or defame one another. The Parties agree that if asked about the dispute between them, they will say that "we have resolved our differences in a mutually-satisfactory manner" or words to that effect. Smith agrees to direct all requests for references or employment verification to Ms. Delphine Jay (or her replacement), and Ms. Jay will only disclose dates of employment and last position held. Calyxt will provide no information regarding the nature of or reason for the end of the employment relationship. For purposes of this paragraph, "Calyxt" means Calyxt, its executive team, managers, and Human Resources Department.

8. Neutral Reference. Calyxt agrees that should it be contacted by any third party regarding a reference for Smith, it will provide a neutral reference consisting of confirmation of employment and dates of employment. Calyxt agrees to further inform any such third party that this neutral reference is being provided pursuant to Calyxt policy.

9. Non-Admission. This Agreement does not constitute an admission by Calyxt that it has violated any law or any of Smith's legal rights, is liable to any other Party, or has engaged in any wrongdoing.

10. Assignment. This Agreement shall be binding on and inure to the benefit of the Parties and their successors and assigns. Smith may not transfer or assign his rights or obligations under this Agreement to any other person or entity without the express written authorization of Calyxt. Calyxt's rights under this Agreement shall be freely assignable. Smith represents that he has not assigned, sold, transferred or otherwise conveyed any claim or cause of action he now has or claims to have against Calyxt to any other person or entity.

11. Medicare Representations. For purposes of this paragraph, "CMS" means the Centers for Medicare & Medicaid Services within the U.S. Department of Health and Human Services, including any agents, representatives, or contractors of CMS, such as the Coordination of Benefits Contractor ("COBC") or Medicare Secondary Payer Recovery Contractor ("MSPRC"). "Conditional Payments" has the meaning ascribed to it under the MSP Statute and implementing regulations. "MMSEA" means the Medicare, Medicaid, and SCHIP Extension Act of 2007 (P.L. 110-173), which, in part, amended the Medicare Secondary Payer statute at 42 U.S.C. § 1395y(b)(7) and (8). This portion of MMSEA is referred to herein as "Section 111 of MMSEA." "MSP Statute" means the Medicare Secondary Payer ("MSP") statute. 42 U.S.C. § 1395y(b). "Released Matter" and "Released Matters" mean any released accident, occurrence, injury, illness, disease, loss, claim, demand, or damages subject to this Agreement and the releases herein. "Releasee" means Calyxt, as fully defined in paragraph 2 of this Agreement, above.

Smith represents and warrants that he is not enrolled in the Medicare program, was not enrolled in the Medicare program at the time of the Released Matters or thereafter through the date of this Agreement, and has not received Medicare benefits for medical services or items arising from or in connection with the Released Matters. Smith further represents and warrants that no Medicaid payments have been made to him or on her behalf and that no liens, claims, demands, subrogated interests, or causes of action of any nature or character exist or have been asserted arising from or related to any Released Matters. Smith further agrees that he, and not the Releasee, is responsible for satisfying all such liens, claims, demands, subrogated interests, or causes of action that may exist or have been asserted or that may in the future exist or be asserted.

Finally, Smith agrees to indemnify and hold harmless the Releasee from any and all claims, demands, liens, subrogated interests, and causes of action of any nature or character that have been or may in the future be asserted by Medicare and/or persons or entities acting on behalf of Medicare, or any other person or entity, arising from or related to this Agreement, the payment of the Settlement Sum, any Conditional Payments made by Medicare, or any medical expenses or payments arising from or related to any Released Matters that are subject to this Agreement or the release set forth herein, including but not limited to: (i) all claims for reimbursement of Conditional Payments or for damages or double damages based upon failure to reimburse Medicare for Conditional Payments; (ii) all claims for penalties based upon any failure to report, late reporting, or other noncompliance with Section 111 of MMSEA that is based in whole or in part upon late, inaccurate, or inadequate information provided to Releasee by Smith

or upon any failure of Smith to provide information; and (iii) all Medicaid liens. This indemnification obligation includes all damages, double damages, fines, penalties, attorneys' fees, costs, interest, and judgments incurred by or on behalf of Releasee in connection with such claims, subrogated interests, and causes of action.

12. Governing Law and Venue. This Agreement will be construed and interpreted in accordance with the substantive and procedural laws of the State of Minnesota and federal law (where appropriate), and any dispute arising hereunder shall be venued in the courts of the State of Minnesota, County of Hennepin, which shall have jurisdiction of any such dispute.

13. Entire Agreement. This Agreement constitutes the entire agreement between the Parties. Smith affirmatively states that he has not been given any promises, representations, or inducements to enter into this Agreement, other than those specifically contained in the Agreement itself. Calyxt affirmatively state that it has not given any promises, representations, or inducements for Smith to enter into this Agreement, other than those specifically contained in the Agreement itself.

14. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Agreement. Photographic copies of such signed counterparts may be used in lieu of the originals for any purpose. Signature pages delivered by facsimile or as a PDF attachment to an email may be relied upon by the recipient as the original.

15. Severability. If for any reason a court of competent jurisdiction finds any provision of this Agreement to be unenforceable, the offending provision may be amended to the extent necessary to conform to applicable law, or, if it cannot be so amended without materially altering the intention of the Parties, it shall be severed herefrom. In either event, the remainder of the Agreement shall continue in full force and effect.

16. Waiver, Modification or Amendment. No waiver, modification or amendment of any term, condition or provision of this Agreement shall be valid or have any effect unless made in writing, signed by each Party or their duly authorized representatives, and specifying with particularity the nature and extent of such waiver, modification or amendment. Any waiver by any Party of any default of the other shall not affect or impair any right arising from a subsequent default. Nothing herein shall limit the rights and remedies of the Parties hereto under and pursuant to this Agreement, except as herein before set forth.

17. Actions. Smith represents that as of the date of his signing of this Agreement, he has not filed any charges, lawsuits, actions, complaints or demands waivable by private agreement against Calyxt, or any of Calyxt's parents, subsidiaries, successors or assigns or any of its past or present officers, directors, employees, agents or representatives arising out of his employment with Calyxt or the termination of that employment.

18. Periods for Consideration and Rescission. Smith acknowledges that he is waiving and releasing any rights he may have under the Age Discrimination in Employment Act and that this waiver and release is knowing and voluntary. The Parties agree that this waiver and release

does not apply to any rights or claims that may arise under the ADEA after the date of Smith's execution of this Agreement. Smith acknowledges that the consideration (payment) given for this Agreement is in addition to anything of value to which he was already entitled. Smith further acknowledges that he has been advised that: (a) he should consult with an attorney prior to executing this Agreement; and (b) he has up to twenty-one (21) days to consider whether to sign this Agreement, and the offer set forth herein will expire and be revoked automatically at the expiration of that consideration period. Nothing in this Agreement prevents Smith from challenging or seeking a determination in good faith of the validity of this waiver under the ADEA, nor does it impose any condition precedent, penalties, costs or attorneys' fees for doing so, unless specifically authorized by federal law.

Smith further understands that he has the right to rescind (cancel) this Agreement insofar as it releases claims under the Minnesota Human Rights Act within fifteen (15) calendar days of signing it, and that he has the right to rescind or cancel this Agreement insofar as it releases claims under the Age Discrimination in Employment Act within seven (7) calendar days of signing it. In order to be effective, the rescission must be in writing and delivered to Mr. Federico Tripodi, CEO, Calyxt Inc., 600 County Road D West, New Brighton, MN 55112. Such delivery may be made by hand or U.S. Mail. If delivered by U.S. Mail, the rescission must be postmarked within the applicable 15-day or 7-day period, properly addressed as set forth above, and sent by certified mail, return receipt requested. If Employee rescinds the release of claims under the Age Discrimination in Employment Act and/or the Minnesota Human Rights Act, then Calyxt shall be relieved from its obligations hereunder.

19. Declaration of Understanding. The Parties hereto declare that they have had the opportunity to review the terms of this Agreement with counsel of their choice, that the terms of this Agreement are fully understood, that they voluntarily accept those terms for the purpose of making a full and final compromise of all disputes between the Parties based on any right or obligation listed or contemplated by paragraphs 2 or 3 of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year written below.

Dated: October 26, 2016

CALYXT, INC., F/N/A CELLECTIS PLANT SCIENCES, INC.

By: /s/ Federico A. Tripodi

Its: Federico A. Tripodi, CEO

Dated: 10/23/2016

GREGORY R. SMITH

/s/ Gregory R. Smith

CALYXT, INC.

2017 OMNIBUS INCENTIVE PLAN

1. **Purposes of the Plan.** The purposes of this Omnibus Incentive Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees and Consultants, and to promote the success of the Company's business.

2. **Definitions.** As used herein, the following definitions shall apply:

(a) "**Administrator**" means the Board or a Committee.

(b) "**Affiliate**" means an entity other than a Subsidiary which, together with the Company, is under common control of a third person or entity.

(c) "**Applicable Laws**" means all applicable laws, rules, regulations and requirements, including, but not limited to, all applicable U.S. federal or state laws, any Stock Exchange rules or regulations, and the applicable laws, rules or regulations of any other country or jurisdiction where Awards are granted under the Plan or Participants reside or provide services, as such laws, rules, and regulations shall be in effect from time to time.

(d) "**Award**" means any award of a Nonstatutory Stock Option, Incentive Stock Option, SAR, Restricted Stock, RSU, Performance Award, Deferred Award, Other Cash-Based Award or Other Share-Based Award under the Plan.

(e) "**Award Agreement**" means a written document, the form(s) of which shall be approved from time to time by the Administrator, reflecting the terms of an Award granted under the Plan and includes any documents attached to or incorporated into such Award Agreement, including, but not limited to, a notice of award grant and a form of exercise notice.

(f) "**Board**" means the Board of Directors of the Company.

(g) "**Cashless Exercise**" means a program approved by the Administrator in which payment of the Option exercise price or tax withholding obligations may be satisfied, in whole or in part, with Shares subject to the Option, including by delivery of an irrevocable direction to a securities broker (on a form prescribed by the Administrator) to sell Shares and to deliver all or part of the sale proceeds to the Company in payment of the aggregate exercise price and, if applicable, the amount necessary to satisfy the Company's withholding obligations.

(h) "**Cause**" for termination of a Participant's Continuous Service Status will exist (unless another definition is provided in an applicable Award Agreement, employment agreement or other applicable written agreement) if the Participant's Continuous Service Status is terminated for any of the following reasons: (i) the Participant's willful failure to perform his or her duties and responsibilities to

the Company or the Participant's violation of any written Company policy; (ii) the Participant's commission of any act of fraud, embezzlement, dishonesty or any other willful misconduct that has caused or is reasonably expected to result in injury to the Company; (iii) the Participant's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom the Participant owes an obligation of nondisclosure as a result of his or her relationship with the Company; or (iv) the Participant's material breach of any of his or her obligations under any written agreement or covenant with the Company. The determination as to whether a Participant's Continuous Service Status has been terminated for Cause shall be made in good faith by the Company and shall be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time, and the term "Company" shall be interpreted to include any Subsidiary, Parent, Affiliate, or any successor thereto, if appropriate.

(i) "**Code**" means the Internal Revenue Code of 1986, as amended.

(j) "**Committee**" means one or more committees or subcommittees of the Board consisting of two (2) or more Directors (or such lesser or greater number of Directors as shall constitute the minimum number permitted by Applicable Laws to establish a committee or sub-committee of the Board) appointed by the Board to administer the Plan in accordance with Section 4 below.

(k) "**Common Stock**" means the Company's common stock, par value $0.001 per share, as adjusted in accordance with Section 17 below.

(l) "**Company**" means Calyxt, Inc., a Delaware corporation.

(m) "**Consultant**" means any person, including an advisor but not an Employee, who is engaged by the Company, or any Parent, Subsidiary or Affiliate, to provide services (other than capital-raising services), and is compensated for such services, including any Director and any member of the supervisory board or director of any Affiliate or Parent, whether compensated for such services or not.

(n) "**Continuous Service Status**" means the absence of any interruption or termination of service as an Employee, Director or Consultant, or as a director of a Parent. Continuous Service Status as an Employee, Director or Consultant, or a director of a Parent shall not be considered interrupted or terminated in the case of: (i) Company approved sick leave; (ii) military leave; or (iii) any other bona fide leave of absence approved by the Administrator; *provided* that such leave is for a period of not more than ninety (90) days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to a written Company policy. Continuous Service Status as an Employee, Director or Consultant, or as a director of a Parent, shall not be considered interrupted or terminated in the case of a transfer of employment or location between the Company, and any of its Parents, Subsidiaries or Affiliates, or their respective successors, or a change in status from an Employee to a Consultant or from a Consultant to an Employee. Notwithstanding the foregoing, the "Continuous Service Status" of an individual who is nominated to become a Director and is not an Employee or Consultant or a director of a Parent shall be considered to begin on the date such individual begins providing services as a Director; *provided* that if such individual does not begin providing services within 12 months of the date of grant of an Award, such individual shall not be considered to have begun Continuous Service Status.

(o) "**Covered Employee**" means an individual who is, for a given fiscal year of the Company, (i) a "covered employee" within the meaning of Section 162(m) of the Code or (ii) designated by the Administrator by not later than 90 days following the start of such year (or such other time as may be required or permitted by Section 162(m) of the Code) as an individual whose compensation for such fiscal year may be subject to the limit on deductible compensation imposed by Section 162(m) of the Code.

(p) "**Current Parent**" means a Person that is a Parent as of June 14, 2017, or any other Person in which a Current Parent owns, directly or indirectly, equity securities possessing than fifty percent (50%) or more of the total combined voting power of all classes of stock.

(q) "**Deferred Award**" shall mean an Award granted pursuant to Section 12.

(r) "**Director**" means a member of the Board.

(s) "**Disability**" means "disability" within the meaning of Section 22(e)(3) of the Code.

(t) "**Employee**" means any person employed by the Company, or any Parent, Subsidiary or Affiliate, under the terms and conditions of an employment contract or with the status of employment determined pursuant to such factors as are deemed appropriate by the Administrator in its sole discretion, subject to any requirements of the Applicable Laws, including the Code. The payment by the Company of a director's fee shall not be sufficient to constitute "employment" of such director by the Company or any Parent, Subsidiary or Affiliate.

(u) "**Exchange Act**" means the Securities Exchange Act of 1934, as amended.

(v) "**Fair Market Value**" means (i) with respect to Shares, the per share closing price for the Shares on the applicable date (or, if there is no reported sale on such date, on the last preceding date on which any reported sale occurred) as reported in the Wall Street Journal on the principal stock market or exchange on which the Shares are quoted or trade, or if Shares are not so quoted or traded, fair market value of a Share, as determined by the Administrator in good faith on such basis as it deems appropriate and applied consistently with respect to Participants, and (ii) with respect to property other than Shares, the fair market value of such properly determined by such methods or procedures as shall be established from time to time by the Administrator.

(w) "**Family Member**" means any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (including adoptive relationships) of the Participant, any person sharing the Participant's household (other than a tenant or employee), a trust in which these persons (or the Participant) have more than 50% of the beneficial interest, a foundation in which these persons (or the Participant) control the management of assets, and any other entity in which these persons (or the Participant) own more than 50% of the voting interests.

(x) "**Incentive Stock Option**" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code, as designated in the applicable Award Agreement.

(y) "**Listed Security**" means any security of the Company that is listed or approved for listing on a national securities exchange.

(z) "**Nonstatutory Stock Option**" means an Option not intended to qualify as an Incentive Stock Option, as designated in the applicable Award Agreement.

(aa) "**Option**" means an option representing the right to purchase Shares from the Company, granted pursuant to Section 8 of the Plan.

(bb) "**Parent**" means, subject to Section 20(a) of the Plan, any corporation (other than the Company) in an unbroken chain of corporations above the Company and ending with the Company if, at the time of grant of the Award, each of the corporations other than the Company owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Parent on a date after the adoption of the Plan shall be considered a Parent commencing as of such date.

(cc) "**Participant**" means any holder of one or more Awards or Shares issued pursuant to an Award.

(dd) "**Performance Award**" means an Award granted pursuant to Section 11.

(ee) "**Performance Period**" means the period established by the Administrator at the time any Performance Award is granted or at any time thereafter during which any performance goals specified by the Administrator with respect to such Award are measured.

(ff) "**Plan**" means this Calyxt, Inc. 2017 Omnibus Incentive Plan.

(gg) "**Restricted Stock**" means any Share granted pursuant to Section 10.

(hh) "**Restricted Stock Unit**", or "**RSU**", means a contractual right granted pursuant to Section 10 that is denominated in Shares. Each RSU represents a right to receive the value of one Share (or a percentage of such value) in cash, Shares or a combination thereof. Awards of RSUs may include the right to receive dividend equivalents.

(ii) "**Section 162(m) Compensation**" means "qualified performance-based compensation," within the meaning of Section 162(m) of the Code.

(jj) "**Share Appreciation Right**", or "**SAR**", means any right granted pursuant to Section 9 to receive upon exercise by the Participant or settlement, in cash, Shares or a combination thereof, the excess of (i) the Fair Market Value of one Share on the date of exercise or settlement over (ii) the exercise or hurdle price of the right on the date of grant, or if granted in connection with an Option, on the date of grant of the Option.

(kk) "**Share**" means a share of Common Stock, as adjusted in accordance with Section 17 below.

(ll) "**Successor Corporation**" means a successor corporation or a parent or subsidiary of such successor corporation.

(mm) "**Stock Exchange**" means any stock exchange or consolidated stock price reporting system on which prices for the Common Stock are quoted at any given time.

(nn) "**Subsidiary**" means, subject to Section 20(a) of the Plan, any corporation (other than the Company) in an unbroken chain of corporations beginning with the Company if, at the time of grant of the Award, each of the corporations other than the last corporation in the unbroken chain owns stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain. A corporation that attains the status of a Subsidiary on a date after the adoption of the Plan shall be considered a Subsidiary commencing as of such. date.

(oo) "**Substitute Award**" means an Award granted in assumption of, or in substitution for, an outstanding award previously granted by a company or other business acquired by the Company or with which the Company combines.

(pp) "**Ten Percent Holder**" means a person who owns stock representing more than 10% of the voting power of the outstanding shares of all classes of stock of the Company or any Parent or Subsidiary, measured as of an Award's date of grant.

(qq) "**Triggering Event**" means a sale, transfer or disposition of all or substantially all of the Company's assets other than to (A) a corporation or other entity of which at least a majority of its combined voting power is owned directly or indirectly by the Company, (B) a corporation or other entity owned directly or indirectly by the holders of capital stock of the Company in substantially the same proportions as their ownership of Common Stock, or (C) an Excluded Entity (as defined in subsection (i) below); or

(i) any merger, consolidation or other business combination transaction of the Company with or into another corporation, entity or person, other than a transaction with or into another corporation, entity or person in which the holders of at least a majority of the shares of voting capital stock of the Company outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding in the continuing entity or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Company (or the surviving entity) outstanding immediately after such transaction (an "**Excluded Entity**"); or

(ii) any direct or indirect purchase or other acquisition by any Person or "group" (as defined in or under Section 13(d) of the Exchange Act), other than a Current Parent or another Person that is controlled by a Current Parent, of more than fifty percent (50%) of the total outstanding equity interests in or voting securities of the Company, excluding any transaction that is determined by the Board in its reasonable discretion to be a bona fide capital raising transaction.

Notwithstanding anything stated herein, a transaction shall not constitute a Triggering Event if its sole purpose is to change the state of the Company's incorporation, or to create a holding company that will be owned in substantially the same proportions by the persons who hold the Company's securities immediately before such transaction.

3. **Eligibility**.

(a) **Recipients of Grants.** Any Employee, Consultant, non-employee Director, individuals nominated to be Directors, a director of a Parent, or any other individual who provides services to the Company or any Affiliate shall be eligible to be selected to receive an Award under the Plan, to the extent an offer of an Award or a receipt of such Award is permitted by Applicable Laws or accounting or tax rules and regulations. Incentive Stock Options may be granted only to Employees; *provided* that Employees of Affiliates shall not be eligible to receive Incentive Stock Options.

(b) **Type of Award.** Each Award shall be designated in the Award Agreement as a Nonstatutory Stock Option, Incentive Stock Option, SAR, Restricted Stock, RSU, Performance Award, Deferred Award, Other Cash Based Award or Other Share Based Award under the Plan.

(c) **Substitute Awards.** Holders of Options and other types of Awards granted by a company acquired by the Company or with which the Company combines are eligible for grants of Substitute Awards under the Plan to the extent permitted under applicable regulations of any stock exchange on which the Company is listed.

(d) **No Employment Rights.** Neither the Plan nor any Award shall confer upon any Participant any right with respect to Continuous Service Status with the Company (any Parent or Subsidiary), nor shall it interfere in any way with such Employee's or Consultant's right or the Company's (Parent's or Subsidiary's) right to terminate his or her employment or consulting relationship at any time, with or without cause, as applicable.

4. **Administration of the Plan.**

(a) **General.** The Plan shall be administered by the Board or a Committee, or a combination thereof, as determined by the Board. The Plan may be administered by different administrative bodies with respect to different classes of Participants and, if permitted by Applicable Laws, the Board may authorize one or more officers of the Company to make Awards under the Plan to Employees and Consultants (who are not subject to Section 16 of the Exchange Act) within parameters specified by the Board. The Administrator may issue rules and regulations for administration of the Plan.

(b) **Powers of the Administrator.** Subject to the provisions of the Plan and, in the case of a Committee or officer, the specific duties delegated by the Board to such Committee or by the Board or such Committee to an officer, the Administrator shall have the authority, in its sole discretion:

(i) to determine the Fair Market Value of the Common Stock in accordance with Section (u) above; *provided* that such determination shall be applied consistently with respect to Participants under the Plan;

(ii) to select the Employees and Consultants to whom Awards may from time to time be granted;

(iii) to determine the type or type of Awards (including Substitute Awards) to be granted to each Participant under the Plan;

(iv) to determine the number of Shares to be covered by each Award;

(v) to approve the form(s) of agreement(s) and other related documents used under the Plan;

(vi) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder, which terms and conditions include but are not limited to the exercise or purchase price, the time or times when Awards may be exercised (which may be based on performance criteria), the circumstances (if any) when vesting shall be accelerated or forfeiture restrictions shall be waived, and any restriction or limitation regarding any Award;

(vii) to amend any outstanding Award or agreement related to any Award, including any amendment adjusting vesting (*e.g.,* in connection with a change in the terms or conditions under which such person is providing services to the Company); *provided* that no amendment shall be made that would materially and adversely affect the rights of any Participant without his or her consent, as determined in the sole discretion of the Board;

(viii) to determine whether and under what circumstances an Award may be settled and exercised in cash, Shares, other Awards, other property, net settlement, or any combination thereof, or cancelled, forfeited or suspended, and the method or methods by which Awards may be settled, exercised, cancelled, forfeited or suspended;

(ix) determine whether, to what extent and under what circumstances cash, Shares, other Awards, other property and other amounts payable with respect to an Award under the Plan shall be deferred either automatically or at the election of the holder thereof or of the Administrator;

(x) to grant Awards to, or to modify the terms of any outstanding Award Agreement or any agreement related to any Award held by, Participants who are foreign nationals or employed outside of the United States with such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom which deviate from the terms and conditions set forth in this Plan to the extent necessary or appropriate to accommodate such differences;

(xi) correct any defect, supply any omission and reconcile any inconsistency in the Plan or any Award, in the manner and to the extent it shall deem desirable to carry the Plan into effect;

(xii) establish, amend, suspend or waive such rules and regulations and appoint such agents, trustees, brokers, depositories and advisors and determine such terms of their engagement as it shall deem appropriate for the proper administration of the Plan and due compliance with Applicable Laws or accounting or tax rules and regulations;

(xiii) make any other determination and take any other action that the Administrator deems necessary or desirable for the administration of the Plan and due compliance with Applicable Laws or accounting or tax rules and regulations; and

(xiv) to construe and interpret the terms of the Plan, any Award Agreement, and any agreement related to any Award, which constructions, interpretations and decisions shall be final and binding on all Participants.

(c) **Indemnification.** To the maximum extent permitted by Applicable Laws, each member of the Committee (including officers of the Company, if applicable), or of the Board, as applicable, shall be indemnified and held harmless by the Company against and from (i) any loss, cost, liability, or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit, or proceeding to which he or she may be a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan or pursuant to the terms and conditions of any Award except for actions taken in bad faith or failures to act in bad faith, and (ii) any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such claim, action, suit, or proceeding against him or her; *provided* that such member shall give the Company an opportunity, at its own expense, to handle and defend any

such claim, action, suit or proceeding before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive of any other rights of indemnification to which such persons may be entitled under the Company's Articles of Incorporation, Certificate of Incorporation or Bylaws, by contract, as a matter of law, or otherwise, or under any other power that the Company may have to indemnify or hold harmless each such person.

5. **Stock Subject to the Plan.** Subject to the provisions of Section 17 below and except for Substitute Awards, the maximum aggregate number of Shares that may be issued under the Plan is 2,000,000 Shares. The total number of Shares available for issuance under the Plan will be increased on the first day of each Company fiscal year following the effective date of the Company's initial public offering in an amount equal to the least of (i) 2,000,000 Shares, (ii) 5% of outstanding Shares on the last day of the immediately preceding fiscal year or (iii) such number of Shares as determined by the Board in its discretion.

6. **Limitation on Grants to Participants.**

(a) Subject to adjustment as provided in Section 17 below, the maximum aggregate number of Shares that may be subject to Awards granted to any one person under this Plan for any fiscal year of the Company shall be (i) Options and SARs that relate to no more than 200,000 Shares; (ii) Restricted Stock and RSUs that relate to no more than 200,000 Shares, (iii) Performance Awards and Other Share-Based Awards that relate to no more than 200,000; (iv) Share-based Deferred Awards that relate to no more than 200,000 Shares; (v) cash-based Deferred Awards that relate to no more than $5,000,000; and (vi) Other Cash-Based Awards that relate to no more than $5,000,000; *provided* that such limitation shall be 200,000 Shares during the fiscal year of any person's initial year of service with the Company.

(b) No Participant who is a non-employee Director may receive Awards under the Plan for any calendar year, subject to adjustment as provided in Section 17, that relate to more than $5,000,000 in the aggregate.

(c) The Shares issued under the Plan may be authorized, but unissued or reacquired Shares. If an Award should be forfeited, expire, terminate, lapse or become unexercisable for any reason without having been exercised in full or be settled in cash, in whole or in part, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grants under the Plan. Any Shares which are retained by the Company upon exercise of an Award in order to satisfy (i) the exercise or purchase price for such Award or (ii) any withholding taxes due with respect to such Award and Shares issued under the Plan and later repurchased by the Company pursuant to any repurchase right that the Company may have shall not be available for future grants under the Plan.

7. **Term of Plan.** The Plan was adopted by the Board of Directors (June 14, 2017) and approved by the shareholders of the Company on (June 14, 2017). It shall be effective as of (June 14, 2017) (the "**Effective Date**") and continue in effect for a term of ten (10) years unless sooner terminated under Section 20 below. No Award shall be granted under the Plan after the earliest to occur of (i) the tenth-year anniversary of the Effective Date; *provided* that to the extent permitted by the listing rules of any stock exchange on which the Company is listed, such ten-year term may be extended indefinitely so long as the maximum number of Shares available for issuance under the Plan have not been issued; (ii) the maximum number of Shares available for issuance under the Plan have been issued; or (iii) the Board terminates the Plan in accordance with Section 20. However, unless otherwise expressly provided in the Plan or in an applicable Award Agreement, any Award theretofore granted may extend beyond such date, and the authority of the Administrator to amend, alter, adjust, suspend, discontinue or terminate any such Award, or to waive any conditions or rights under any such Award, and the authority of the Board to amend the Plan, shall extend beyond such date.

8. **Options.**

(a) **Term of Option.** The term of each Option shall be the term stated in the Award Agreement; *provided* that the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Award Agreement; *provided further* that, in the case of an Incentive Stock Option granted to a person who at the time of such grant is a Ten Percent Holder, the term of the Option shall be five (5) years from the date of grant thereof or such shorter term as may be provided in the Award Agreement; and, *provided further,* that the Administrator may (but shall not be required to) provide in an Award Agreement for an extension of such term in the event the exercise of the Option would be prohibited by law on the expiration date.

(b) **Option Exercise Price.** The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option shall be such price as is determined by the Administrator and set forth in the Award Agreement, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(A) granted to an Employee who at the time of grant is a Ten Percent Holder, the per Share exercise price shall be no less than 110% of the Fair Market Value on the date of grant;

(B) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value on the date of grant, except in the case of Substitute Awards;

(ii) Except as provided in subsection (iii) below, in the case of a Nonstatutory Stock Option, the per Share exercise price shall be such price as is determined by the Administrator; *provided* that, if the per Share exercise price is less than 100% of the Fair Market Value on the date of grant, it shall otherwise comply with all Applicable Laws, including Section 409A of the Code;

(iii) In the case of a Nonstatutory Stock Option that is intended to qualify as performance-based compensation under Section 162(m) of the Code and is granted on or after the date, if ever, on which the Common Stock becomes a Listed Security, the per Share exercise price shall be no less than 100% of the Fair Market Value on the date of grant; and

(iv) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(c) **Vesting and Exercisability**. The Administrator shall determine the time or times at which an Option becomes vested and exercisable in whole or in part.

(d) **Incentive Stock Option $100,000 Limitation.** Notwithstanding any designation under Section 8(b) above, to the extent that the aggregate Fair Market Value of Shares with respect to which Options designated as Incentive Stock Options are exercisable for the first time by any Participant during any calendar year (under all plans of the Company or any Parent or Subsidiary) exceeds $100,000, such excess Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 8(d), Incentive Stock Options shall be taken into account in the order in which they were granted, and the Fair Market Value of the Shares subject to an Incentive Stock Option shall be determined as of the date of the grant of such Option.

(e) **Disqualifying Dispositions.** Any Participant who shall make a "disposition" (as defined in Section 424 of the Code) of all or any portion of an Incentive Stock Option within two years from the date of grant of such Incentive Stock Option or within one year after the issuance of the Shares acquired upon exercise of such Incentive Stock Option shall be required to immediately advise the Company in writing as to the occurrence of the sale and the price realized upon the sale of such Shares.

(f) **Permissible Consideration.** The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option and to the extent required by Applicable Laws, shall be determined at the time of grant) and may consist entirely of (1) cash; (2) check; (3) wireless transfer; (4) other previously owned Shares that have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which the Option is exercised; (5) a Cashless Exercise; (6) other property; (7) net settlement; (8) such other consideration and method of payment permitted under Applicable Laws; or (9) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company and the Administrator may, in its sole discretion, refuse to accept a particular form of consideration at the time of any Option exercise.

9. **SARs.**

(a) **Term of SARs.** The term of each SAR shall be the term stated in the Award Agreement; *provided* that the term shall be no more than ten (10) years from the date of grant thereof or such shorter term as may be provided in the Award Agreement.

(b) **Grant of SARs**. SARs may be granted under the Plan to Participants either alone ("freestanding") or in addition to other Awards granted under the Plan ("tandem") and may, but need not, relate to a specific Option granted under Section 8.

(c) **SAR Exercise Price.** The exercise or hurdle price per Share to be issued pursuant to the exercise of a SAR shall be such price as is determined by the Administrator and set forth in the Award Agreement; *provided*, *however*, that, except in the case of Substitute Awards, such exercise or hurdle price shall not be less than the Fair Market Value of a Share on the date of grant of such SAR.

(d) **Vesting and Exercisability**. The Administrator shall determine the time or times at which a SAR may be exercised or settled in whole or in part.

(e) **Settlement**. Upon the exercise of an SAR, the Company shall pay to the Participant an amount equal to the number of Shares subject to the SAR multiplied by the excess, if any, of the Fair Market Value of one Share on the exercise date over the exercise or hurdle price of such SAR. The Company shall pay such excess in cash, in Shares valued at Fair Market Value, or any combination thereof, as determined by the Administrator.

10. **Restricted Stock and RSUs.** The Administrator is authorized to grant Awards of Restricted Stock and RSUs to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Administrator shall determine:

(a) The Award Agreement shall specify the vesting schedule and, with respect to RSUs, the delivery schedule (which may include deferred delivery later than the vesting date) and whether the Award of Restricted Stock or RSUs is entitled to dividends or dividend equivalents, voting rights or any other rights; *provided* that if the Award relates to Shares on which dividends are declared during the period that the Award is outstanding, the Award shall not provide for the payment of such dividend (or a dividend equivalent) to the Participant prior to the time at which such Award, or applicable portion thereof, becomes nonforfeitable.

(b) Shares of Restricted Stock and RSUs shall be subject to such restrictions as the Administrator may impose (including any limitation on the right to vote a Share of Restricted Stock or the right to receive any dividend, dividend equivalent or other right), which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise, as the Administrator may deem appropriate.

(c) Any Share of Restricted Stock granted under the Plan may be evidenced in such manner as the Administrator may deem appropriate, including book-entry registration or issuance of a stock certificate or certificates. In the event any stock certificate is issued in respect of shares of Restricted Stock granted under the Plan, such certificate shall be registered in the name of the Participant and shall bear an appropriate legend referring to the terms, conditions and restrictions applicable to such Restricted Stock.

(d) If, and to the extent the Administrator intends that an Award granted under this Section 10 shall constitute or give rise to Section 162(m) Compensation, such Award shall be structured in accordance with the requirements of Section 11, including the performance criteria set forth therein and the Award limitation set forth in Section 6(a), and any such Award shall be considered a Performance Award for purposes of the Plan.

(e) The Administrator may provide in an Award Agreement that an Award of Restricted Stock is conditioned upon the Participant making or refraining from making an election with respect to the Award under Section 83(b) of the Code. If a Participant makes an election pursuant to Section 83(b) of the Code with respect to an Award of Restricted Stock, the Participant shall be required to file promptly a copy of such election with the Company and the applicable Internal Revenue Service office.

(f) The Administrator may determine the form or forms (including cash, Shares, other Awards, other property or any combination thereof) in which payment of the amount owing upon settlement of any RSU Award may be made.

11. **Performance Awards.** The Administrator is authorized to grant Performance Awards to Participants with the following terms and conditions and with such additional terms and conditions, in either case not inconsistent with the provisions of the Plan, as the Administrator shall determine:

(a) Performance Awards may be denominated as a cash amount, number of Shares or a combination thereof and are Awards which may be earned upon achievement or satisfaction of performance conditions specified by the Administrator. In addition, the Administrator may specify that any other Award shall constitute a Performance Award by conditioning the right of a Participant to exercise the Award or have it settled, and the timing thereof, upon achievement or satisfaction of such performance conditions as may be specified by the Administrator. The Administrator may use such business criteria and other measures of performance as it may deem appropriate in establishing any performance conditions. Subject to the terms of the Plan, the performance goals to be achieved during any Performance Period, the length of any Performance Period, the amount of any Performance Award granted and the amount of any payment or transfer to be made pursuant to any Performance Award shall be determined by the Administrator.

(b) If the Administrator intends that a Performance Award should constitute Section 162(m) Compensation, such Performance Award shall include a pre-established formula, such that payment, retention or vesting of the Award is subject to the achievement during a Performance Period or Performance Periods, as determined by the

Administrator, of a level or levels of, or increases in, in each case as determined by the Administrator, one or more of the following performance measures or any other performance measure reasonably determined by the Administrator, with respect to the Company:

(i) return measures (including, but not limited to, total shareholder return; return on equity; return on assets or net assets; return on risk-weighted assets; and return on capital (including return on total capital or return on invested capital));

(ii) revenues (including, but not limited to, total revenue; gross revenue; net revenue; and net sales);

(iii) income/earnings measures (including, but not limited to, earnings per share; earnings or loss (including earnings before or after interest, taxes, depreciation and amortization); gross income; net income; operating income (before or after taxes); pre-or after-tax income or loss (before or after allocation of corporate overhead and bonus); pre- or after-tax operating income; net earnings; net income or loss (before or after taxes); operating margin; gross margin; and adjusted net income);

(iv) expense measures (including, but not limited to, expenses; operating efficiencies; and improvement in or attainment of expense levels or working capital levels (including cash and accounts receivable));

(v) cash flow measures (including, but not limited to, cash flow or cash flow per share (before or after dividends); and cash flow return on investment);

(vi) share price measures (including, but not limited to, share price; appreciation in and/or maintenance of share price; and market capitalization);

(vii) strategic objectives (including, but not limited to, market share; debt reduction; customer growth; employee satisfaction; research and development achievements; mergers and acquisitions; management retention; dynamic market response; expense reduction initiatives; reductions in costs; risk management; regulatory compliance and achievements; recruiting and maintaining personnel; and business quality); and

(viii) other measures (including, but not limited to, economic value-added models or equivalent metrics; economic profit added; gross profits; economic profit; comparisons with various stock market indices; financial ratios (including those measuring liquidity, activity, profitability or leverage); cost of capital or assets under management; and financing and other capital raising transactions (including sales of the Company's equity or debt securities; factoring transactions; sales or licenses of the Company's assets, including its intellectual property, whether in a particular jurisdiction or territory or globally; or through partnering transactions)).

(c) Performance criteria may be measured on an absolute (*e.g.*, plan or budget) or relative basis, may be established on a corporate-wide basis or with respect to one or more business units, divisions, subsidiaries or business segments, may be based on a ratio or separate calculation of any performance criteria and may be made relative to an index or one or more of the performance goals themselves. Relative performance may be measured against a group of peer companies, a financial market index or other acceptable objective and quantifiable indices. Except in the case of an Award intended to qualify as Section 162(m) Compensation, if the Administrator determines that a change in the business, operations, corporate structure or capital structure of the Company, or the manner in which the Company conducts its business, or other events or circumstances render the performance objectives unsuitable, the Administrator may modify the performance objectives or the related minimum acceptable level of achievement, in whole or in part, as the Administrator deems appropriate and equitable. Performance measures may vary from Performance Award to Performance Award and from Participant to Participant, and may be established on a stand-alone basis, in tandem or in the alternative. The Administrator shall have the power to impose such other restrictions on Awards subject to this Section 11(c) as it may deem necessary or appropriate to ensure that such Awards satisfy all requirements for Section 162(m) Compensation or requirements of any Applicable Laws or accounting or tax rules and regulations. Notwithstanding any provision of the Plan to the contrary, with respect to any Award intended to be Section 162(m) Compensation, the Administrator shall not be authorized to increase the amount payable under any Award to which this Section 11(c) applies upon attainment of such pre-established formula. In order to ensure that any Performance Award that is intended to qualify as Section 162(m) Compensation so qualifies, no Participant may be granted in any calendar year Performance Awards denominated in cash that, taken collectively in the aggregate, could result in a future payout at maximum performance in excess of $10,000,000. For the avoidance of doubt, with respect to an Award intended to qualify as Section 162(m) Compensation, the Administrator shall be a committee meeting the requirements of Section 162(m) of the Code to the extent required thereby.

(d) Settlement of Performance Awards shall be in cash, Shares, other Awards, other property, net settlement, or any combination thereof, as determined in the discretion of the Administrator. The Administrator shall specify the circumstances in which, and the extent to which, Performance Awards shall be paid or forfeited in the event of a Participant's termination of Continuous Service Status.

(e) Performance Awards shall be settled only after the end of the relevant Performance Period. The Administrator may, in its discretion, increase or reduce the amount of a settlement otherwise to be made in connection with a Performance Award but, to the extent required by Section 162(m) of the Code, may not exercise discretion to increase any amount payable to a Covered Employee in respect of a Performance Award intended to qualify as Section 162(m) Compensation. Any settlement that changes the form of payment from that originally specified shall be implemented in a manner such that the Performance Award and other related Awards do not, solely for that reason, fail to qualify as Section 162(m) Compensation.

12. **Deferred Awards.** The Administrator is authorized, subject to limitations under Applicable Laws, to grant to Participants Deferred Awards, which may be a right to receive Shares or cash under the Plan (either independently or as an element of or supplement to any other Award under the Plan), including, as may be required by any Applicable Laws or determined by the Administrator, in lieu of any annual bonus that may be payable to a Participant under any applicable bonus plan or arrangement. The Administrator shall determine the terms and conditions of such Deferred Awards, including, without limitation, the method of converting the amount of annual bonus into a Deferred Award, if applicable, and the form, vesting, settlement, forfeiture and cancellation provisions or any other criteria, if any, applicable to such Deferred Awards. Shares underlying a Share-denominated Deferred Award, which is subject to a vesting schedule or other conditions or criteria, including forfeiture or cancellation provisions, set by the Administrator shall not be issued until on or following the date that those conditions and criteria have been satisfied. Deferred Awards shall be subject to such restrictions as the Administrator may impose (including any limitation on the right to vote a Share underlying a Deferred Award or the right to receive any dividend, dividend equivalent or other right), which restrictions may lapse separately or in combination at such time or times, in such installments or otherwise, as the Administrator may deem appropriate. The Administrator may determine the form or forms (including cash, Shares, other Awards, other property or any combination thereof) in which payment of the amount owing upon settlement of any Deferred Award may be made.

13. **Other Cash-Based Awards and Other Share-Based Awards**. The Administrator is authorized, subject to limitations under Applicable Laws, to grant to Participants Other Cash-Based Awards (either independently or as an element of or supplement to any other Award under the Plan) and Other Share-Based Awards. The Administrator shall determine the terms and conditions of such Awards. Shares delivered pursuant to an Award in the nature of a purchase right granted under this Section 13 shall be purchased for such consideration, paid for at such times, by such methods and in such forms, including cash, Shares, other Awards, other property, net settlement, broker-assisted Cashless Exercise or any combination thereof, as the Administrator shall determine; *provided* that the purchase price therefore shall not be less than the Fair Market Value of such Shares on the date of grant of such right.

14. **Exercise of Awards.**

(a) **General.**

(i) **Exercisability.** Any Award granted hereunder shall be exercisable at such times and under such conditions as determined by the Administrator, consistent with the terms of the Plan and reflected in the Award Agreement, including vesting requirements and/or performance criteria with respect to the Company, and Parent or Subsidiary, and/or the Participant.

(b) The Administrator shall determine the time or times at which a SAR may be exercised or settled in whole or in part.

(i) **Leave of Absence.** The Administrator shall have the discretion to determine whether and to what extent the vesting of Awards shall be tolled during any unpaid leave of absence; *provided, however,* that in the absence of such determination, vesting of Awards shall be tolled during any such unpaid leave (unless otherwise required by the Applicable Laws). Notwithstanding the foregoing, in the event of military leave, vesting shall toll during any unpaid portion of such leave; *provided* that, upon a Participant's returning from military leave (under conditions that would entitle him or her to protection upon such return under the Uniform Services Employment and Reemployment Rights Act), he or she shall be given vesting credit with respect to Awards to the same extent as would have applied had the Participant continued to provide services to the Company (or any Parent or Subsidiary, if applicable) throughout the leave on the same terms as he or she was providing services immediately prior to such leave.

(ii) **Minimum Exercise Requirements.** An Award may not be exercised for a fraction of a Share. The Administrator may require that an Award be exercised as to a minimum number of Shares; *provided* that such requirement shall not prevent a Participant from exercising the full number of Shares as to which the Award is then exercisable.

(iii) **Procedures for and Results of Exercise.** An Award shall be deemed exercised when written notice of such exercise has been received by the Company in accordance with the terms of the Award Agreement by the person entitled to exercise the Award and the Company has received full payment for the Shares with respect to which the Award is exercised and has paid, or made arrangements to satisfy, any applicable withholding requirements in accordance with Section 17 below. The exercise of an Award shall result in a decrease in the number of Shares that thereafter may be available, both for purposes of the Plan and for sale under the Award, by the number of Shares as to which the Option is exercised.

(iv) **Rights as Holder of Capital Stock.** Until the issuance of the Shares (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a holder of capital stock shall exist with respect to the Shares, notwithstanding the exercise of the Award. No adjustment shall be made for a dividend or other right for which the record date is prior to the date the stock certificate is issued, except as provided in Section 17 below.

(c) **Termination of Service.** The Administrator shall establish and set forth in the applicable Award Agreement the terms and conditions upon which an Award shall remain exercisable, if at all, following termination of a Participant's Continuous Service Status, which provisions may be waived or modified by the Administrator at any time. To the extent that an Award Agreement does not specify the terms and conditions upon which an Award shall terminate upon termination of a Participant's Continuous Service Status, the following provisions shall apply:

(i) **General Provisions.** If the Participant (or other person entitled to exercise the Award) does not exercise the Award to the extent so entitled within the time specified below, the Award shall terminate and the Shares underlying the unexercised portion of the Award shall revert to the Plan. In no event may any Award be exercised after the expiration of the Award term as set forth in the Award Agreement (and subject to Sections 8(a) and 9(a) above).

(ii) **Termination other than Upon Disability, Death or for Cause.** In the event of termination of a Participant's Continuous Service Status other than under the circumstances set forth in subsections (iii) through (v) below, such Participant may exercise any outstanding Award at any time within three (3) months following such termination to the extent the Participant was vested in the Shares underlying the Award as of the date of such termination.

(iii) **Disability of Participant.** In the event of termination of a Participant's Continuous Service Status as a result of his or her Disability, such Participant may exercise any outstanding Award at any time within six (6) months following such termination to the extent the Participant was vested in the Shares underlying the Award as of the date of such termination.

(iv) **Death of Participant.** In the event of the death of a Participant during the period of Continuous Service Status since the date of grant of any outstanding Award, or within three (3) months following termination of the Participant's Continuous Service Status, the Award may be exercised by the Participant's estate, or by a person who acquired the right to exercise the Award by bequest or inheritance, at any time within nine (9) months following the date of death or, if earlier, the date the Award's Continuous Service Status terminated, but only to the extent the Participant was vested in the Shares underlying the Award as of the date of death.

(v) **Termination for Cause.** In the event of termination of a Participant's Continuous Service Status for Cause, any outstanding Participant (including any vested portion thereof) held by such Participant shall immediately terminate in its entirety upon first notification to the Participant of termination of the Participant's Continuous Service Status for Cause. If an Participant's Continuous Service Status is suspended pending an investigation of whether the Participant's Continuous Service Status will be terminated for Cause, all the Participant's rights under any Award, including the right to exercise the Award, shall be suspended during the investigation period. Nothing in this Section 14(c)(v) shall in any way limit the Company's right to purchase unvested Shares issued upon exercise of an Award as set forth in the applicable Award Agreement.

15. **Taxes.**

(a) As a condition of the grant, vesting and exercise of an Award, the Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) shall make such arrangements as the Administrator may require for the satisfaction of any applicable U.S. federal, state or local tax withholding obligations or foreign tax withholding obligations that may arise in connection with such Award. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

(b) The Administrator may permit a Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) to satisfy all or part of his or her tax withholding obligations by Cashless Exercise or by surrendering Shares (either directly or by stock attestation) that he or she previously acquired; *provided* that, unless the Cashless Exercise is an approved broker-assisted Cashless Exercise, the Shares tendered for payment have been previously held for a minimum duration *(e.g.,* to avoid financial accounting charges to the Company's earnings), or as otherwise permitted to avoid financial accounting charges under applicable accounting guidance. Any Shares withheld pursuant to this Section 15(b) shall not exceed the amount necessary to satisfy the Company's tax withholding obligations at the maximum statutory withholding rates, including, but not limited to, U.S. federal and state income taxes, payroll taxes, and foreign taxes, if applicable. Any payment of taxes by surrendering Shares to the Company may be subject to restrictions, including, but not limited to, any restrictions required by rules of the Securities and Exchange Commission.

16. **Non-Transferability of Awards.**

(a) **General.** Except as set forth in this Section 16, Awards may not be sold, pledged, assigned, hypothecated, transferred or disposed of in any manner other than by will or by the laws of descent or distribution. The designation of a beneficiary by a Participant shall not constitute a transfer. An Award may be exercised, during the lifetime of the holder of the Award, only by such holder or a transferee permitted by this Section 16.

(b) **Limited Transferability Rights.** Notwithstanding anything else in this Section 16, the Administrator may in its sole discretion grant Awards that may be transferred by instrument to an inter vivos or testamentary trust in which the Awards are to be passed to beneficiaries upon the death of the trustor (settlor) or by gift to Family Members.

17. **Adjustments Upon Changes in Capitalization, Merger or Certain Other Transactions.**

(a) **Changes in Capitalization.** Subject to any action required under Applicable Laws by the holders of capital stock of the Company, the Administrator shall, subject to compliance with Section 409A or Section 424, as applicable, of the Code, equitably adjust (i) the number, type and class of Shares or other stock or securities: (x) available for future Awards under Section 5 above, (y) set forth in Section 5 above, and (z) covered by each outstanding Award, (ii) the grant, purchase, exercise or hurdle price covered by each such outstanding Award, and (iii) any repurchase price per Share applicable to Shares issued pursuant to any Award, or, if deemed appropriate, shall make

a provision for a cash payment to the holder of an outstanding Award in the event of a stock split, reverse stock split, stock dividend, combination, consolidation, recapitalization (including a recapitalization through a large nonrecurring cash dividend) or reclassification of the Shares, repurchase, exchange or subdivision of the Shares or other securities of the Company, a rights offering, a reorganization, merger, spin-off, split-up, change in corporate structure or other similar occurrence, in each case excluding a Triggering Event; *provided*, *however*, that the number of Shares subject to any Award denominated in Shares shall always be a whole number. Any adjustment by the Administrator pursuant to this Section 17(a) shall be made in the Administrator's sole and absolute discretion and shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to an Award. If, by reason of a transaction described in this Section 17(a) or an adjustment pursuant to this Section 17(a), a Participant's Award Agreement or agreement related to any Shares underlying an Award covers additional or different shares of stock or securities, then such additional or different shares, and the Award Agreement or agreement related to the Shares underlying an Award in respect thereof, shall be subject to all of the terms, conditions and restrictions which were applicable to the Award and the Shares underlying the Award prior to such adjustment.

(b) **Dissolution or Liquidation.** In the event of the dissolution or liquidation of the Company, each Award shall terminate immediately prior to the consummation of such action, unless otherwise determined by the Administrator.

(c) **Corporate Transactions.** Unless a Participant's applicable Award Agreement, employment agreement or other applicable written agreement provides otherwise, in the event of:

(i) a dissolution or liquidation of the Company, or

(ii) a Triggering Event, then:

each outstanding Award shall either be (i) assumed or an equivalent award shall be substituted by such Successor Corporation, or (ii) terminated in exchange for a payment of cash, securities and/or other property equal to the excess of the Fair Market Value of the portion of the Award Stock that is vested and exercisable immediately prior to the consummation of the corporate transaction over the per Share exercise price thereof, or (iii) any combination of (i) and (ii) that is approved by the Administrator; *provided* that, in the case of an Option or SAR Award, such Award may be cancelled without consideration if the Fair Market Value on the date of the event is greater than the exercise or hurdle price of such Award. Notwithstanding the foregoing, in the event such Successor Corporation does not agree to such assumption, substitution or exchange, each such Award shall terminate upon the consummation of the corporate transaction.

Unless a Participant's applicable Award Agreement, employment agreement or other applicable written agreement provides otherwise, if a Triggering Event, dissolution, or liquidation occurs and any outstanding Award held by the Participant is to be terminated (in whole or in part) pursuant to the preceding paragraph, the Administrator may accelerate the vesting and exercisability of each such Award in his sole discretion such that the Award shall become vested and exercisable in full prior to the consummation of the corporate transaction at such time and on such conditions as the Administrator shall determine. The Administrator shall notify the Participant that the Award shall terminate at least five (5) days prior to the date upon which the Award terminates.

18. **Time of Granting Options.** The date of grant of an Award shall, for all purposes, be the date on which the Administrator makes the determination granting such Award, or such later date as is determined by the Administrator; *provided* that in the case of any Incentive Stock Option, the grant date shall be the later of the date on which the Administrator makes the determination granting such Incentive Stock Option or the date of commencement of the Participant's employment relationship with the Company.

19. **General Provisions Applicable to Awards**.

(a) Awards shall be granted for such cash or other consideration, if any, as the Administrator determines; *provided* that in no event shall Awards be issued for less than such minimal consideration as may be required by Applicable Laws.

(b) Awards may, in the discretion of the Administrator, be granted either alone or in addition to or in tandem with any other Award or any award granted under any other plan of the Company. Awards granted in addition to or in tandem with other Awards, or in addition to or in tandem with awards granted under any other plan of the Company, may be granted either at the same time as or at a different time from the grant of such other Awards or awards.

(c) Subject to the terms of the Plan, payments or transfers to be made by the Company upon the grant, exercise or settlement of an Award may be made in the form of cash, Shares, other Awards, other property, net settlement, or any combination thereof, as determined by the Administrator in its discretion at the time of grant, and may be made in a single payment or transfer, in installments or on a deferred basis, in each case in accordance with rules and procedures established by the Administrator. Such rules and procedures may include provisions for the payment or crediting of reasonable interest on installment or deferred payments or the grant or crediting of dividend equivalents in respect of installment or deferred payments.

(d) Except as may be permitted by the Administrator (except with respect to Incentive Stock Options) or as specifically provided in an Award Agreement, (i) no Award and no right under any Award shall be assignable, alienable, saleable or transferable by a Participant otherwise than by will or pursuant to the laws of descent and distribution and (ii) during a Participant's lifetime, each Award, and each right under any Award, shall be exercisable only by such Participant or, if permissible under Applicable Laws, by such Participant's guardian or legal representative. The provisions of this Section 19(d) shall not apply to any Award that has been fully exercised or settled, as the case may be, and shall not preclude forfeiture of an Award in accordance with the terms thereof.

(e) All certificates for Shares and/or other securities delivered under the Plan pursuant to any Award or the exercise thereof shall be subject to such stop transfer orders and other restrictions as the Administrator may deem advisable under the Plan or the rules, regulations and other requirements of the Securities Exchange Commission, any stock market or exchange upon which such Shares or other securities are then quoted, traded or listed, and any applicable securities laws, and the Administrator may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions.

(f) The Administrator may impose restrictions on any Award with respect to non-competition, confidentiality and other restrictive covenants as it deems necessary or appropriate in its sole discretion.

(g) Any Award granted to an individual who is nominated to become a Director and is not an Employee or Consultant or a director of a Parent at the time of grant shall be forfeited in its entirety if such individual does not commence providing services to the Company within 12 months after the date of grant of such Award.

20. **Amendment and Terminations**.

(a) The Board may at any time amend, alter, suspend, discontinue or terminate the Plan or any portion thereof at any time, but no amendment or termination (other than an adjustment pursuant to Section 17 above or as necessary to comply with Applicable Laws or accounting or tax rules and regulations) shall be made that would materially and adversely affect the rights of any Participant under any outstanding Award, without his or her consent, as determined in the sole discretion of the Board except (x) to the extent any such amendment, alteration, suspension, discontinuance or termination is made to cause the Plan to comply with Applicable Laws or accounting or tax rules and regulations or (y) to impose any "clawback" or recoupment provisions on any Awards in accordance with Section 24. In addition, to the extent necessary and desirable to comply with the Applicable Laws, the Company shall obtain the approval of holders of capital stock with respect to any Plan amendment in such a manner and to such a degree as required by Applicable Laws. Notwithstanding anything to the contrary in the Plan, the Administrator may amend the Plan, or create sub-plans, in such manner as may be necessary to enable the Plan to achieve its stated purposes in any jurisdiction in a tax-efficient manner and in compliance with local rules and regulations.

(b) **Dissolution or Liquidation**. In the event of the dissolution or liquidation of the Company, each Award shall terminate immediately prior to the consummation of such action, unless otherwise determined by the Administrator.

(c) **Terms of Awards**. The Administrator may waive any conditions or rights under, amend any terms of, or amend, alter, suspend, discontinue or terminate any Award theretofore granted, prospectively or retroactively, without the consent of any relevant Participant or holder of an Award; *provided, however*, that, subject to Section 17, no such action shall materially adversely affect the rights of any affected Participant or holder under any Award theretofore granted under the Plan, except (x) to the extent any such action is made to cause the Plan to comply with Applicable Laws or accounting or tax rules and regulations, or (y) to impose any "clawback" or recoupment provisions

on any Awards in accordance with Section 24; *provided further*, that the Administrator's authority under this Section 20(c) is limited in the case of Awards subject to Section 11(b), as provided in Section 11(b). Except as provided in Section 11, the Administrator shall be authorized to make adjustments in the terms and conditions of, and the criteria included in, Awards in recognition of events (including the events described in Section 17) affecting the Company, or the financial statements of the Company, or of changes in Applicable Laws or accounting principles, whenever the Administrator determines that such adjustments are appropriate in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the Plan.

(d) **No Repricing**. Notwithstanding the foregoing, except as provided in Section 17, no action shall directly or indirectly, through cancellation and regrant or any other method, reduce, or have the effect of reducing, the exercise or hurdle price of any Award established at the time of grant thereof without approval of the Company's shareholders.

21. **Conditions Upon Issuance of Shares.** Notwithstanding any other provision of the Plan or any agreement entered into by the Company pursuant to the Plan, the Company shall not be obligated, and shall have no liability for failure, to issue or deliver any Shares under the Plan unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. As a condition to the exercise of any Award, the Company may require the person exercising the Award to represent and warrant at the time of any such exercise or purchase that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by Applicable Laws. Shares issued upon exercise of Awards prior to the date, if ever, on which the Common Stock becomes a Listed Security shall be subject to a right of first refusal in favor of the Company pursuant to which the Participant shall be required to offer Shares to the Company before selling or transferring them to any third party on such terms and subject to such conditions as is reflected in the applicable Award Agreement.

22. **Beneficiaries.** Unless stated otherwise in an Award Agreement, a Participant may designate one or more beneficiaries with respect to an Award by timely filing the prescribed form with the Company. A beneficiary designation may be changed by filing the prescribed form with the Company at any time before the Participant's death. If no beneficiary was designated or if no designated beneficiary survives the Participant, then after a Participant's death any vested Award(s) shall be transferred or distributed to the Participant's estate.

23. **Addenda.** The Administrator may approve such addenda to the Plan as it may consider necessary or appropriate for the purpose of granting Awards to Employees or Consultants, which Awards may contain such terms and conditions as the Administrator deems necessary or appropriate to accommodate differences in local law, tax policy or custom, which, if so required under Applicable Laws, may deviate from the terms and conditions set forth in this Plan. The terms of any such addenda shall supersede the terms of the Plan to the extent necessary to accommodate such differences but shall not otherwise affect the terms of the Plan as in effect for any other purpose.

24. **Cancellation or "Clawback" of Awards**. The Administrator shall have full authority to implement any policies and procedures necessary to comply with Section 10D of the Exchange Act and any rules promulgated thereunder and any other regulatory regimes. Notwithstanding anything to the contrary contained herein, the Administrator may, to the extent permitted by Applicable Laws or by any applicable Company policy or arrangement, and shall, to the extent required, cancel or require reimbursement of any Awards granted to the Participant or any Shares issued or cash received upon vesting, exercise or settlement of any such Awards or sale of Shares underlying such Awards.

25. **Restrictive Covenants**. The Administrator may impose restrictions on any Award with respect to non-competition, confidentiality and other restrictive covenants as it deems necessary or appropriate in its sole discretion.

26. **Compliance with Section 409A and Section 457A of the Code**. To the extent applicable, it is intended that this Plan and any grants made hereunder comply with the provisions of Section 409A and Section 457A of the Code. This Plan and any grants made hereunder shall be administered in a manner consistent with this intent, and any provision that would cause this Plan or any grant made hereunder to fail to satisfy Section 409A and Section 457A of the Code shall have no force and effect until amended to comply with Section 409A and Section 457A of the Code (which amendment may be retroactive to the extent permitted by Section 409A and Section 457A of the Code and may be made by the Company without the consent of Participants). Any reference in this Plan to Section 409A and Section 457A of the Code shall also include any proposed, temporary or final regulations, or any other guidance, promulgated with respect to such section by the U.S. Department of the Treasury or the Internal Revenue Service.

27. **Successors and Assigns**. The terms of the Plan shall be binding upon and inure to the benefit of the Company and any successor entity, including any successor entity contemplated by Section 17.

28. **Data Privacy**. By participating in the Plan, the Participant consents to the holding and processing of personal information provided by the Participant to the Company or any subsidiary, trustee or third-party service provider, for all purposes relating to the operation of the Plan. These include, but are not limited to:

(a) administering and maintaining Participant records, a dissolution or liquidation of the Company;

(b) providing information to the Company, Subsidiaries, trustees of any employee benefit trust, registrars, brokers or third-party administrators of the Plan;

(c) providing information to future purchasers or merger partners of the Company or any subsidiary, or the business in which the Participant works; and

(d) transferring information about the Participant to any country or territory that may not provide the same protection for the information as the Participant's home country.

29. **Governing Law**. The Plan and each Award Agreement shall be governed by the laws of the State of Delaware, without application of the conflicts of law principles thereof.

30. **Waiver of Jury Trial**. EACH PARTICIPANT WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, ARISING OUT OF, UNDER OR IN CONNECTION WITH THE PLAN.

31. **Dispute Resolution**. Any dispute or claim arising out of, under or in connection with the Plan or any Award Agreement shall be submitted to arbitration in Delaware and shall be conducted in accordance with the rules of, but not necessarily under the auspices of, the American Arbitration Association rules in force when the notice of arbitration is submitted. The arbitration shall be conducted before an arbitration tribunal comprised of three individuals, one selected by the Company, one selected by the Participant, and the third selected by the first two. The Participant and the Company agree that such arbitration will be confidential and no details, descriptions, settlements or other facts concerning such arbitration shall be disclosed or released to any third party without the specific written consent of the other party, unless required by law or court order or in connection with enforcement of any decision in such arbitration. Any damages awarded in such arbitration shall be limited to the contract measure of damages, and shall not include punitive damages.

Exhibit 10.21

CALYXT, INC.
2017 STOCK OPTION SUB-PLAN
FOR FRENCH EMPLOYEES AND CONSULTANTS

1. **Introduction.** The Board of Calyxt, Inc. has established a 2017 Omnibus Incentive Plan for the benefit of certain employees and consultants of the Company and its subsidiary, parent and affiliate companies, including Cellectis S.A., which held directly or indirectly at least 10% of the share capital of the Company. Section 19 of the Plan specifically authorizes the Administrator to adopt procedures and forms relating to the Plan as it deems advisable with respect to foreign participants. The Board, therefore, intends to establish a sub-plan for France of the Plan for the purpose of granting Options which may qualify for the favourable tax and social security treatment in France applicable to Options granted under Sections L. 225-177 to L. 225-186-1 of the French Commercial Code as amended to qualifying employees and consultants under the Plan who are resident in France for French tax purposes.

The terms of the Plan, as subsequently amended and as set out in Appendix 1 hereto, shall, subject to the modifications in the following rules, constitute the rules of the 2017 Omnibus Incentive Plan for French Participants.

For the avoidance of doubt, this Sub-Plan shall become effective provided that the Common Stocks of Calyxt, Inc. are listed on a regulated market of the European Union or on the National Association of Securities Dealers Inc. Automated Quotation ("Nasdaq") System or on the New York Stock Exchange in the United States of America.

2. **Definitions.** The following definitions of the Plan are amended as follows:

(a) "Affiliate" means any corporation (other than the Company) of which at least fifty per cent (50%) of the share capital or voting rights is held directly or indirectly by a company which owns directly or indirectly at least fifty percent (50%) of the share capital or voting rights of the Company.

(b) "Award" means any award of an Option under this Sub-Plan.

(c) "Consultant" means, as of any date and provided that the Common Stock is listed on a regulated market of the European Union or on the Nasdaq System or on the New York Stock Exchange in the United States of America, any French resident who is a member of the supervisory board or director of any Affiliate or Parent;

it being specified that, no Option Awards may be made under this Sub-Plan to a member of the supervisory board or director of the Company or any Subsidiary.

For French Affiliate and Parent, the members of the supervisory board or directors eligible to be granted with Option under this Sub-Plan, subject to this definition of Consultant, include the president and the members of the management board (président et membres du directoire) or, as the case may be, the president of the board of directors (président du conseil d'administration), the general manager (directeur général) and the deputy general managers (directeurs généraux délégués).

(d) "Disability" means total and permanent disability, as defined under Applicable Laws, i.e. a disability declared further to a medical examination provided for in Section L. 4624-21 of the French Labor Code (*Code du travail*).

(e) "Employee" means, as of any date and provided that the Common Stock is listed on a regulated market of the European Union or on the Nasdaq System or on the New York Stock Exchange in the United States of America, any French resident who is employed by the Company or by any Subsidiary, Affiliate or Parent under the terms and conditions of an employment contract.

(f) "Fair Market Value" means, as of any date and provided that the Common Stock is listed on a regulated market of the European Union or on the Nasdaq System or on the New York Stock Exchange in the United States of America, the per share fair market value determined by reference to a closing sales price of one share on such stock exchange market for the day prior to the day of the decision of the Administrator to grant the Option as quoted on such exchange or system and reported in The Wall Street Journal or such other source as the Administrator deems reliable; provided, however, that the Fair Market Value shall in no case be less than ninety five per cent (95%) of the average of the closing sales price for a share as quoted on said stock exchange market during the twenty (20) market trading days prior to the day of the Administrator's decision to grant the Option (or the average closing bid for such twenty (20) day period, if no sales were reported);

it being specified that, when an Option entitles the holder to purchase shares previously repurchased by the Company, the exercise price, notwithstanding the above provisions and in accordance with applicable law, may not be less than 80% of the average purchase price paid by the Company for all shares so previously repurchased.

The price settled for the subscription or purchase of Shares shall not be modified during the period in which the Option may be exercised (other than an adjustment pursuant to Section 13 below or as necessary to comply with applicable laws or regulations).

(g) "Option" means an option representing the right to purchase Shares from the Company, granted pursuant to the Sub-Plan which is intended to qualify for preferred tax treatment under applicable French tax laws.

(h) "Parent" means a corporation which owns directly or indirectly at least ten per cent (10%) of the share capital or voting rights of the Company.

(i) "Subsidiary" means a corporation of which at least ten per cent (10%) of the share capital or voting rights is held directly or indirectly by the Company.

Section 1 of the Plan is also completed as follows:

(a) "French Participant" means a Participant whose Award is issued in reliance on Sections L. 225-177 to L. 225-186-1 of the French Commercial Code.

(b) "Sub-Plan" means this Calyxt, Inc. 2017 Stock Option Sub-Plan for French Employees and Consultants.

3. **Eligibility.**

(a) Recipients of Grants. Section 3(a) of the Plan is amended as follows:

Any Employee shall be eligible to be selected to receive an Award under the Plan, to the extent an offer of an Award or a receipt of such Award is permitted by Applicable Laws or accounting or tax rules and regulations.

(b) Type of Award. Section 3(b) of the Plan is amended as follows:

Each Award shall be designated in the Award Agreement as an Option granted under the Sub-Plan.

(c) Substitute Awards. Section 3(c) of the Plan is not applicable for Awards made further to the present Sub-Plan.

(e) No Employment Rights. The present Sub-Plan does not amend Section 3(d) of the Plan.

4. **Administration of the Plan.**

The present Sub-Plan does not amend Section 4 of the Plan.

5. **Stock Subject to the Sub-Plan.**

The present Sub-Plan does not amend Section 5 of the Plan.

6. **Limitations on Grants to Participants.**

Section 6 is amended as follows:

(a) Subject to adjustment as provided in Section 17 below, the maximum aggregate number of Shares that may be subject to Awards granted to any one person under the Plan for any fiscal year of the Company shall be Options that relate to no more than 200,000 Shares.

Notwithstanding any provision the foregoing, Option Awards may not be granted to French Participant owning more than ten percent (10%) of the Company's share capital except as permitted under Section L225-185 of the French commercial code.

The total number of Options granted to French Participants but not yet exercised may not give a right to subscribe a number of Shares exceeding one third of the stock capital of the Company.

(b) The Shares issued under the Plan may be authorized, but unissued or reacquired Shares. If an Award should be forfeited, expire, terminate, lapse or become unexercisable for any reason without having been exercised in full or be settled in cash, in whole or in part, the unpurchased Shares that were subject thereto shall, unless the Plan shall have been terminated, become available for future grants under the Plan. Any Shares which are retained by the Company upon exercise of an Award in order to satisfy (i) the exercise or purchase price for such Award or (ii) any withholding taxes due with respect to such Award and Shares issued under the Plan and later repurchased by the Company pursuant to any repurchase right that the Company may have shall not be available for future grants under the Plan.

7. **Term of the Sub-Plan.**

Section 7 of the Plan is completed as follows:

The Sub-Plan shall become effective as of the date of its adoption by the Board. It shall continue in effect until the termination of the Plan unless terminated earlier under Section 20 of the Sub-Plan.

8. **Options.**

(a) Term of Option. Section 8(a) of the Plan is amended as follows:

The term of each Option shall be as stated in the Option Agreement; provided, however, that subject to Section 10(d) hereof, the maximum term of an Option shall not exceed 10 years from the date of grant thereof or such shorter term as may be provided in the Option Agreement; *provided* further, that the Administrator may (but shall not be required to) provide in an Award Agreement for an extension of such term in the event the exercise of the Option would be prohibited by law on the expiration date.

(b) Option Exercise Price. Section 8(b) is amended as follows:

The Option Price for the shares to be issued or acquired upon exercise of an Option shall be determined by the Administrator upon the date of grant of the Option and stated in the Option Agreement, but in no event shall be lower than the Fair Market Value on the date the Option is granted. This Option Price cannot be modified while the Option is outstanding, except as expressly provided for under Applicable Laws.

(c) Option Exercise Price. The present Sub-Plan does not amend Section 8(c) of the Plan.

(d) Incentive Stock Option $100,000 Limitation. Section 8(d) of the Plan is not applicable for Awards made further to the present Sub-Plan.

(e) Disqualifying Dispositions. Section 8(e) of the Plan is not applicable for Awards made further to the present Sub-Plan.

(f) Permissible Consideration. Section 8(f) is amended as follows:

The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. Such consideration may consist of:

(i) cash or check (denominated in U.S. Dollars);

(ii) wire transfer (denominated in U.S. Dollars); or

(iii) a combination of the foregoing methods of payment.

9. **SARs.**

Section 9 of the Plan is not applicable for Awards made further to the present Sub-Plan.

10. **Restricted Stocks and RSUs.**

Section 10 of the Plan is not applicable for Awards made further to the present Sub-Plan.

11. **Restricted Stocks and RSUs.**

Section 11 of the Plan is not applicable for Awards made further to the present Sub-Plan.

12. **'Deferred Awards.**

Section 12 of the Plan is not applicable for Awards made further to the present Sub-Plan.

13. **Other Cash-Based Awards and Other Share-Based Awards.**

Section 13 of the Plan is not applicable for Awards made further to the present Sub-Plan.

14. **Exercise of Award.**

(a) General. The present Sub-Plan does not amend this Section 14(a) of the Plan.

(b) Termination of Employment or Consulting Relationship. Section 8(b) of the Plan is amended as follows:

The Administrator shall establish and set forth in the applicable Award Agreement the terms and conditions upon which an Award shall remain exercisable, if at all, following termination of an Participant's Continuous Service Status, which provisions may be waived or modified by the Administrator at any time. To the extent that an Award Agreement does not specify the terms and conditions upon which an Award shall terminate upon termination of an Participant's Continuous Service Status, the following provisions shall apply:

(i) General Provisions. If the Participant (or other person entitled to exercise the Award) does not exercise the Award to the extent so entitled within the time specified below, the Award shall terminate and the Shares underlying the unexercised portion of the Award shall revert to the Plan. In no event may any Award be exercised after the expiration of the Award term as set forth in the Award Agreement (and subject to Section 8(a) above).

(ii) Termination other than Upon Disability or Death. In the event of termination of an Participant's Continuous Service Status other than under the circumstances set forth in subsection (iii) and (iv) below, such Participant may exercise any outstanding Award at any time within three (3) months following such termination to the extent the Participant was vested in the Shares underlying the Award as of the date of such termination.

(iii) Disability of Participant. In the event that an Participant's status as an Employee or Consultant terminates as a result of the Participant's Disability, the Participant may exercise his or her Award at any time within six (6) months from the date of such termination, but only to the extent that the Participant was entitled to exercise it at the date of such termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). If, at the date of termination, the Participant is not entitled to exercise his or her entire Award, the shares covered by the unexercisable portion of the Award shall revert to the Sub-Plan. If, after termination, the Participant does not exercise his or her Award within the time specified herein, the Award shall terminate, and the shares covered by such Award shall revert to the Sub-Plan.

(iv) Death of Participant. In the event of the death of an Participant while an Employee or Consultant, the Award may be exercised at any time within six (6) months following the date of death by the Participant's estate or by a person who acquired the right to exercise the Award by bequest or inheritance, but only to the extent that the Participant was entitled to exercise the Award at the date of death. If, at the time of death, the Participant was not entitled to exercise his or her entire Award, the shares covered by the unexercisable portion of the Award shall revert to the Sub-Plan. If, after death, the Participant's estate or a person who acquired the right to exercise the Award by bequest or inheritance does not exercise the Award within the time specified herein, the Award shall terminate, and the shares covered by such Award shall immediately revert to the Sub-Plan.

(c) Buyout Provisions. This section is not applicable for Awards made further to the present Sub-Plan.

15. **Taxes.** Section 15 of the Plan is amended as follows:

As a condition of the grant, vesting and exercise of an Award, the Participant (or in the case of the Participant's death or a permitted transferee, the person holding or exercising the Award) shall make such arrangements as the Administrator may require for the satisfaction of any French and U.S. federal, state or local withholding obligations or foreign tax withholding obligations that may arise in connection with such Award. The Company shall not be required to issue any Shares under the Plan until such obligations are satisfied.

16. **Non-Transferability of Awards.** Section 16 of the Plan is amended as follows:

An Option may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant.

17. **Adjustments Upon Changes in Capitalization or Merger.**

(a) Changes in Capitalization. Section 17(a) of the Plan is amended as follows:

In the event of the carrying out by the Company of any of the financial operations pursuant to article L. 225-181 of the French commercial code as follows:

- amortization or reduction of the share capital,
- amendment of the allocation of profits,
- distribution of free shares,
- capitalization of reserves, profits, issuance premiums,
- the issuance of shares or securities giving right to shares to be subscribed for in cash or by set-off of existing indebtedness offered exclusively to the shareholders;

the Company shall take the required measures to protect the interest of the Participants in the conditions set forth in Article L. 228-99 of the French commercial code.

(b) Dissolution or Liquidation. The present Sub-Plan does not amend Section 17(b) of the Plan.

(c) Corporate Transactions. This section is completed as follows:

If the modification or adjustment is contrary to the conditions set forth in Article L. 225-197-1 through L.225-197-5 of the French commercial code, the Options may no longer qualify as French-qualified options. If the Options no longer qualify as French-qualified options, the Administrator may, provided it is authorized to do so under the Plan, determine to lift, shorten or terminate certain restrictions applicable to the vesting of the Options, the exercisability of the Options, or the sale of the shares which may have been imposed under this Sub-Plan or in the Option Agreement delivered to the Participant.

18. **Time of Granting Options.**

The present Sub-Plan does not amend Section 18 of the Plan.

19. **General Provisions Applicable to Awards.**

The present Sub-Plan does not amend Sections 19(a), 19(b), 19(d), 19(e), 19(f) and 19(g) of the Plan.

Section 19(c) of the Plan is not applicable for Awards made further to the present Sub-Plan.

20. **Amendment and Termination of the Plan.**

The present Sub-Plan does not amend Section 20 of the Plan

21. **Conditions Upon Issuance of Shares**

The present Sub-Plan does not amend Section 21 of the Plan.

22. **Beneficiaries.**

Section 22 of the Plan is not applicable for Awards made further to the present Sub-Plan.

23. **Addenda.**

The present Sub-Plan does not amend Section 23 of the Plan.

24. **Cancellation or "Clawback" of Awards.**

The present Sub-Plan does not amend Section 24 of the Plan.

25. **Restrictive Covenants.**

The present Sub-Plan does not amend Section 25 of the Plan.

26. **Compliance with Section 409A of the Code.**

Section 26 of the Plan is not applicable for Awards made further to the present Sub-Plan.

27. **Successors and Assigns.**

The present Sub-Plan does not amend Section 27 of the Plan.

28. **Data Privacy.**

The present Sub-Plan does not amend Section 28 of the Plan.

29. **Governing Law.**

The present Sub-Plan does not amend Section 29 of the Plan.

30. **Waiver of Jury Trial.**

The present Sub-Plan does not amend Section 30 of the Plan.

31. **Dispute Resolution.**

The present Sub-Plan does not amend Section 31 of the Plan.

Exhibit 10.22

CALYXT, INC.
2017 OMNIBUS INCENTIVE PLAN
NOTICE OF STOCK OPTION GRANT

Recipient

Subject to the terms and conditions set forth in this notice of grant (the "Notice") and Stock Option Agreement (the Notice and Stock Option Agreement constituting this "Award Agreement"), Calyxt, Inc., a Delaware corporation (the "Company") has granted you an Option (the "Option"). The Option is granted under and is subject to the Calyxt, Inc. 2017 Omnibus Incentive Plan (the "Plan"). Unless otherwise defined in this Agreement, the terms used in this Agreement shall have the meanings defined in the Plan. The provisions of the Plan shall control in the event of a conflict among the provisions of the Plan, this Agreement and any descriptive materials provided to you.

Date of Grant:	[•]
Exercise Price Per Share:	[•]
Total Number of Shares:	[•]
Total Exercise Price:	[•]
Type of Option:	Non statutory Stock Option
Expiration Date:	[•]
Vesting Commencement Date:	[•]
First Vest Date:	[•]
Vesting/Exercise Schedule:	Subject to Sections 2(n) and 19(g) of the Plan and Section 8 of the Award Agreement, so long as your Continuous Service Status does not terminate, the Shares underlying this Option shall vest in accordance with the provisions of the Award Agreement. This Option shall only become exercisable in accordance with the provisions of the Award Agreement.
Transferability:	You may not transfer this Option.

By your signature and the signature of the Company's representative below, you and the Company agree that this Option is granted under and governed by the terms and conditions of the Plan and the Agreement.

You are advised to consult with your own tax advisors in respect of any tax consequences arising in connection with this Option. In addition, you agree and acknowledge that your rights to any Shares underlying this Option will be earned only as you provide services to the Company over time, that the grant of this Option is not as consideration for services you rendered to the Company prior to the Date of Grant, and that nothing in this Notice or the attached documents confers upon you any right to continue your employment or consulting relationship with the

Company for any period of time, nor does it interfere in any way with your right or the Company's right to terminate that relationship at any time, for any reason, with or without cause. Also, to the extent applicable, the Exercise Price Per Share has been set in good faith compliance with the applicable guidance issued by the Internal Revenue Service under Section 409A of the Code. However, there is no guarantee that the Internal Revenue Service will agree with the valuation, and by signing below, you agree and acknowledge that the Company and the Administrator shall not be held liable for any applicable costs, taxes, or penalties associated with this Option if, in fact, the Internal Revenue Service were to determine that this Option constitutes deferred compensation under Section 409A of the Code.

THE COMPANY:

CALYXT, INC.

By: _____
Name:
Title:

PARTICIPANT:

_____
[Name]

CALYXT, INC.
2017 OMNIBUS INCENTIVE PLAN

STOCK OPTION AGREEMENT

1. **Grant of Option.** Calyxt, Inc., a Delaware corporation (the "Company"), hereby grants to [•] ("Participant"), an option (the "Option") to purchase the total number of shares of Common Stock (the "Shares") set forth in the Notice of Stock Option Grant (the "Notice"), at the exercise price per Share set forth in the Notice (the "Exercise Price") subject to the terms, definitions and provisions of the Calyxt, Inc. 2017 Omnibus Incentive Plan(the "Plan") adopted by the Company, which is incorporated in this agreement (this "Agreement") by reference. Unless otherwise defined in this Agreement, the terms used in this Agreement shall have the meanings defined in the Plan.

2. **Designation of Option.** This Option is intended to be a Nonstatutory Stock Option.

3. **Vesting of Option.** Provided that the Participant's Continuous Service Status does not terminate, this Option shall become vested as to:

- [•]% of the total number of Shares underlying the Option on [•]; and
- [•]% of the total number of Shares underlying the Option on [•]; and
- [•]% of the total number of Shares underlying the Option on [•];

provided that:

[the vested portion of this Option shall only become exercisable in the event that an Initial Public Offering of the Company occurs prior to the Expiration Date of the Option; and

provided further that;][1]

[in the event that a Triggering Event occurs prior to the Expiration Date of the Option, an the Option shall become vested as to an additional 25% of the total number of Shares underlying the Option; and *provided further* that the Option shall become vested as to100% of the Shares underlying the Option in the event of (a) the termination of Participant's employment without Cause within 12 months following a Triggering Event or (b) the resignation of Participant for Good Reason within 12 months following a Triggering Event. In all cases, in no event will the Option become vested as to more than 100% of the total number of Shares subject to the Option].[2]

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1 To be included in the pre-IPO award agreements.

2 To be included in award agreeements for Participants that are employees of the Company.

[in the event that a Triggering Event occurs or in the event of a change in control of a Parent, in each case prior to the Expiration Date of the Option, the Option will become vested as to 100% of the total number of the Shares underlying the Option, to the extent not already vested.][3]

As used in this Stock Option Agreement and for all purposes relating to the Option, including cessation of Continuous Service Status, "Good Reason" shall mean: (i) a material reduction in the Participant's base salary, other than a general reduction in base salaries that affects all similarly-situated Employees or Consultants, as applicable, in substantially the same proportion or (ii) an involuntary relocation of the Participant's principal place of employment by more than 100 miles, provided that (A) the Participant has provided written notice to the Company of the existence of the circumstances constituting Good Reason within 30 days of the initial existence of such circumstances, (B) the Company fails to cure such circumstances within 30 days of the receipt of such written notice, and (C) Participant's resignation is effective not later than 90 days after the first occurrence of the applicable grounds constituting Good Cause. If Participant does not resign for Good Reason in accordance with, and within the time period set forth in, the preceding sentence, then Participant will be deemed to have waived Participant's right to terminate for Good Reason with respect to such circumstances and such circumstances shall be deemed not to constitute Good Reason.

4. **Exercise of Option.**

(a) Right to Exercise.

(i) This Option may not be exercised for a fraction of a share.

(ii) In the event of Participant's death, Disability or other termination of Continuous Service Status, the exercisability of this Option shall be governed by Section 8 below, subject to the limitations contained in this Section 4.

(iii) In no event may this Option be exercised after the Expiration Date set forth in the Notice.

(b) Method of Exercise.

(i) This Option shall be exercisable by the Participant's execution and delivery of the following:

(A) the Exercise Agreement attached hereto as Exhibit A or of any other form of written notice approved for such purpose by the Company which shall state Participant's election to exercise this Option, the number of Shares in respect of which this Option is being exercised, and such other representations and agreements as to the holder's investment intent with respect to such Shares as may be required by the Company pursuant to the provisions of the Plan. Such written notice shall be signed by Participant and shall be delivered to the Company by such means as are determined by the Plan Administrator in its discretion to constitute adequate delivery. The written notice shall be accompanied by payment of the aggregate Exercise Price for the purchased Shares.

[3] To be included in award agreements for Participants who are Consultants, non-employee directors of the Company, or directors or employees of a Parent.

[and

(B) the Adoption Agreement to the Company Stockholders Agreement attached hereto as Exhibit B (the "Adoption Agreement").][4]

(ii) As a condition to the exercise of this Option and as further set forth in Section 15 of the Plan, Participant agrees to make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the grant, vesting or exercise of this Option, or disposition of Shares, whether by withholding, direct payment to the Company, or otherwise. Regardless of any action the Company takes with respect to any or all income tax, social security, payroll tax, or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("Tax-Related Items"), Participant acknowledges that the ultimate liability for **all** Tax-Related Items is and remains Participant's responsibility and may exceed the amount actually withheld. Participant further acknowledges that the Company (A) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Option, including, but not limited to, the grant, vesting, exercise/settlement of the Option, the issuance of Shares upon settlement of the Option and the subsequent sale of Shares acquired pursuant to such issuance and (B) does not commit to and is under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result.

In the event Participant fails to make adequate provision for applicable tax withholding obligations (or where the amount of money provided is insufficient to satisfy the applicable obligations), Participant authorizes the Company, in its discretion, to satisfy the obligations with regard to all Tax-Related Items by (x) withholding from Participant's wages or other cash compensation paid to Participant, (y) withholding through a Cashless Exercise or (z) a combination of the foregoing.

If Participant's obligation is satisfied through a Cashless Exercise as described in the foregoing paragraph, the Company shall endeavor to sell only the number of Shares required to satisfy Participant's obligations for Tax-Related Items; however Participant agrees that the Company may sell more Shares than necessary to cover the Tax-Related Item, and that in such event, the Company shall reimburse Participant for the excess amount withheld, in cash and without interest.

(iii) The Company is not obligated, and shall have no liability for failure, to issue or deliver any Shares upon exercise of this Option unless such issuance or delivery would comply with the Applicable Laws, with such compliance determined by the Company in consultation with its legal counsel. This Option may not be exercised until such time as the Plan has been approved by the holders of capital stock of the Company, or if the issuance of such Shares upon such exercise or the method of payment of consideration for such Shares would constitute a violation of any Applicable Laws, including any applicable federal or state

[4] To be included in the pre-IPO award agreements.

securities laws or any other law or regulation. As a condition to the exercise of this Option, the Company may require Participant to make any representation and warranty to the Company as may be required by the Applicable Laws. Assuming such compliance, for income tax purposes the Shares shall be considered transferred to Participant on the date on which this Option is exercised with respect to such Shares.

(iv) Subject to compliance with Applicable Laws, this Option shall be deemed to be exercised upon receipt by the Company of the appropriate written notice of exercise accompanied by the Exercise Price[, the executed Adoption Agreement,][5] and the satisfaction of any applicable withholding obligations.

5. **Method of Payment.** Payment of the Exercise Price shall be by any of the following, or a combination of the following, at the election of Participant:

(a) Cash, check or wireless transfer;

(b) at the discretion of the Plan Administrator on a case by case basis, by surrender of other shares of Common Stock of the Company (either directly or by stock attestation) that Participant previously acquired and that have an aggregate Fair Market Value on the date of surrender equal to the aggregate Exercise Price of the Shares as to which this Option is being exercised; or

(c) at the discretion of the Plan Administrator on a case by case basis, by Cashless Exercise.

6. **No Right to Continued Service**. The grant of an Option shall not be construed as conferring upon the Participant any right to continue his or her employment or consulting relationship with the Company for any period of time, nor does it interfere in any way with the Participant's right or the Company's right to terminate that relationship at any time, for any reason, with or without cause.

7. **No Right to Future Options**. Any Option granted under the Plan shall be a one-time Option that does not constitute a promise of future grants. The Company, in its sole discretion, maintains the right to make available future grants under the Plan.

8. **Termination of Relationship.** [Following the date of termination of Participant's Continuous Service Status for any reason (the "Termination Date"), other than a termination for Cause, Participant may continue to hold, and potentially exercise this Option to the extent a Triggering Event or an Initial Public Offering occurs, only as set forth in the Notice and this Section 8.][6] Notwithstanding the foregoing, any Award granted to an individual who is nominated to become a Director and is not an Employee or Consultant or a director of a Parent at the time of grant shall be forfeited in its entirety if such individual does not commence providing services to the Company within 12 months after the date of grant of such Award. In no event may this Option be exercised after the Expiration Date of this Option as set forth in the Notice.

(a) **Termination.** In the event of termination of Participant's Continuous Service Status for any reason including the Participant's death or Disability, and other than as a result of a for Cause termination, Participant (or Participant's estate or by a person who acquired the right to exercise this Option by bequest or inheritance, as applicable) may, to the extent Participant is vested in the Option at the Termination Date, continue to hold the vested portion of the Option. The unvested portion of the Option on the Termination Date shall expire on such date.

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5 To be included in the pre-IPO award agreements.

6 To be included in the pre-IPO award agreements.

(b) **Termination for Cause.** In the event of termination of Participant's Continuous Service Status for Cause, this Option (including any vested portion thereof) shall terminate immediately upon such termination for Cause. If Participant's Continuous Service Status is suspended pending an investigation of whether Participant's Continuous Service Status will be terminated for Cause, all Participant's rights under this Option, including the right to exercise this Option, shall be suspended during the investigation period.

9. **Non-Transferability of Option.** This Option may not be transferred in any manner otherwise than by will or by the laws of descent or distribution and may be exercised during the lifetime of Participant only by him or her. The terms of this Option shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

10. [**Restrictions on Shares Purchased upon Exercise of Option**. To the extent that Shares which are not registered under the Securities Act of 1933, pursuant to an effective registration statement, are issued to the Participant pursuant to the exercise of an Option, the stock certificates evidencing such Shares may bear such restrictive legend as the Company deems to be required or advisable under applicable law.][7]

11. **Not Salary, Pensionable Earnings or Base Pay**. The Participant acknowledges that the Option shall not be included in or deemed to be a part of (a) salary, normal salary or other ordinary compensation, (b) any definition of pensionable or other earnings (however defined) for the purpose of calculating any benefits payable to or on behalf of the Participant under any pension, retirement, termination or dismissal indemnity, severance benefit, retirement indemnity or other benefit arrangement of the Company or any Subsidiary or (c) any calculation of base pay or regular pay for any purpose.

12. **Forfeiture Upon Breach of Certain Other Agreements**. The Participant's breach of any non-competition, non-solicitation, confidentiality, non-disparagement, assignment of inventions or other intellectual property agreement that the Participant may be a party to with the Company or any Affiliate, in addition to whatever other equitable relief or monetary damages that the Company or any Affiliate may be entitled to, shall result in automatic rescission, forfeiture, cancellation or return of any Shares (whether or not vested) held by the Participant.

13. **Recoupment/Clawback**. This Option may be subject to recoupment or "clawback" as may be required by applicable law, stock exchange rules or by any applicable Company policy or arrangement, as it may be established or amended from time to time.

14. **[Lock-Up Agreement.** In connection with any initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Participant hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any

[7] To be included in the pre-IPO award agreements.

securities of the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, during the period commencing as of 18 days prior to and ending 180 days, or such lesser period of time as the relevant underwriters may permit, after the effective date of a registration statement covering any public offering of the Company's securities or, if required by such underwriter, such longer period of time as is necessary to enable such underwriter to issue a research report or make a public appearance that relates to an earnings release or announcement by the Company within 18 days before or after the date that is 180 days after the effective date of the registration statement relating to such initial public offering, but in any event not to exceed 198 days following the effective date of the registration statement relating to such initial public offering and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering. The Company is hereby authorized to impose stock transfer instructions to its transfer agent (which may the Company itself) in order to enforce the above restrictions.][8]

15. **[Corporate Transaction.** Notwithstanding the above, if a corporate transaction constitutes a Triggering Event and the Participant retains his or her Continuous Service Status, the Option shall become vested under the formula in Section 3 and the Administrator shall provide the Participant with at least 5 days prior to the consummation of the corporate transaction to exercise the vested portion of the Option.][9]

16. **Effect of Agreement.** Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof (and has had an opportunity to consult counsel regarding the Option terms), and hereby accepts this Option and agrees to be bound by its contractual terms as set forth herein and in the Plan. Participant hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Plan Administrator regarding any questions relating to this Option. The provisions of the Plan shall control in the event of a conflict among the provisions of the Plan, this Agreement and any descriptive materials provided to you.

17. **Miscellaneous.**

(a) **Governing Law; Waiver of Jury Trial** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. BY RECEIPT OF THIS OPTION, THE PARTICIPANT WAIVES ANY RIGHT THAT THE PARTICIPANT MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE PLAN.

(b) **Participant Undertaking; Acceptance**. The Participant agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable to carry out or give effect to any of the obligations or restrictions imposed on either the Participant or the Option pursuant to this Agreement. The Participant acknowledges receipt of a copy of the Plan and this Agreement and understands that material definitions and provisions concerning the Option and the Participant's rights and obligations with respect thereto are set forth in the Plan. The Participant has read carefully, and understands, the provisions of this Agreement and the Plan.

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8 To be included in the pre-IPO award agreements.

9 To be included in the pre-IPO award agreements.

(c) **Dispute Resolution**. Any dispute or claim arising out of, under or in connection with the Plan or any Award Agreement shall be submitted to arbitration in Delaware and shall be conducted in accordance with the rules of, but not necessarily under the auspices of, the American Arbitration Association rules in force when the notice of arbitration is submitted. The arbitration shall be conducted before an arbitration tribunal comprised of three individuals, one selected by the Company, one selected by the Participant, and the third selected by the first two. The Participant and the Company agree that such arbitration will be confidential and no details, descriptions, settlements or other facts concerning such arbitration shall be disclosed or released to any third party without the specific written consent of the other party, unless required by law or court order or in connection with enforcement of any decision in such arbitration. Any damages awarded in such arbitration shall be limited to the contract measure of damages, and shall not include punitive damages.

(d) **Entire Agreement; Enforcement of Rights.** This Agreement, together with the Notice to which this Agreement is attached and the Plan, sets forth the entire agreement and understanding of the parties relating to the subject matter herein and therein and merges and supersedes all prior and contemporaneous discussions, arrangements, agreements and understandings, both oral and written, whether in term sheets, presentations or otherwise, between the parties with respect to the subject matter hereof.

(e) **Amendment; Waiver**. Except as contemplated under the Plan, no modification of or amendment to this Agreement that has a material adverse effect on the Participant, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement; provided that the Company may amend or modify this Agreement without the Participant's consent in accordance with the provisions of the Plan or as otherwise set forth in this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party, provided that no waiver of any breach or condition of this Agreement shall be deemed to be a waiver of any other or subsequent breach or condition, whether of like or different nature. Any amendment or modification of or to any provision of this Agreement, or any waiver of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which made or given.

(f) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement and a substantially similar provision shall be inserted that as closely as possible reflects the intent of the parties shall be substituted in place of such unenforceable provision, (ii) the balance of this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms.

(g) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice:

If to the Company:

Calyxt, Inc.
600 County Rd D West #8
New Brighton, MN 55112
Attention:
Email:

If to the Participant:

At the Participant's most recent address in the Company's records.

(h) **Counterparts.** This Option may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(i) **Successors and Assigns; No Third-Party Beneficiaries.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Participant under this Agreement may not be assigned without the prior written consent of the Company. Nothing in this Agreement, express or implied, is intended to confer on any Person other than the Company and the Participant, and their respective heirs, successors, legal representatives and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

18. **Data Privacy Notice and Consent.** By participating in the Plan, the Participant consents to the holding and processing of personal information provided by the Participant to the Company or any subsidiary, trustee or third-party service provider, for all purposes relating to the operation of the Plan. These include, but are not limited to:

(a) administering and maintaining Participant records, a dissolution or liquidation of the Company;

(b) providing information to the Company, Subsidiaries, trustees of any employee benefit trust, registrars, brokers or third-party administrators of the Plan;

(c) providing information to future purchasers or merger partners of the Company or any subsidiary, or the business in which the Participant works; and

(d) transferring information about the Participant to any country or territory that may not provide the same protection for the information as the Participant's home country.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed or caused this Agreement to be executed by their officers thereunto duly authorized, effective as of the Date of Grant set forth in the accompanying Notice.

THE COMPANY:

CALYXT, INC.

By: _____
Name:
Title:

PARTICIPANT:

_____
[Name]

EXHIBIT A

CALYXT, INC.

2017 OMNIBUS INCENTIVE PLAN

EXERCISE AGREEMENT

This Exercise Agreement (this "Agreement") is made as of , by and between Calyxt, Inc., a Delaware corporation (the "Company"), and [•] ("Purchaser"). To the extent any capitalized terms used in this Agreement are not defined, they shall have the meaning ascribed to them in the Company's Equity Incentive Plan (the "Plan").

1. **Exercise of Option.** Subject to the terms and conditions hereof, Purchaser hereby elects to exercise his or her option to purchase shares of the Common Stock (the "Shares") of the Company under and pursuant to the Plan and the Stock Option Agreement granted [•] (the "Option Agreement"). The purchase price for the Shares shall be $[•] per Share for a total purchase price of $. The term "Shares" refers to the purchased Shares and all securities received as stock dividends or splits, all securities received in replacement of the Shares in a recapitalization, merger, reorganization, exchange or the like, and all new, substituted or additional securities or other property to which Purchaser is entitled by reason of Purchaser's ownership of the Shares.

2. **Time and Place of Exercise.** The purchase and sale of the Shares under this Agreement shall occur at the principal office of the Company simultaneously with the execution and delivery of this Agreement [and the Adoption Agreement to the Company Stockholders Agreement attached to the Option Agreement as Exhibit B (the "Adoption Agreement")], the payment of the aggregate exercise price by any method listed in Section 5 of the Option Agreement, and the satisfaction of any applicable tax withholding obligations, all in accordance with the provisions of Section 4(b) of the Option Agreement. The Company shall issue the Shares to Purchaser by entering such Shares in Purchaser's name as of such date in the books and records of the Company or, if applicable, a duly authorized transfer agent of the Company, against payment of the exercise price therefor by Purchaser. If applicable, the Company shall deliver to Purchaser a certificate representing the Shares as soon as practicable following such date.

3. **Limitations on Transfer.** In addition to any other limitation on transfer created by applicable securities laws, Purchaser shall not assign, encumber or dispose of any interest in the Shares except in compliance with the provisions set forth below and applicable securities laws.

(a) **[Right of First Refusal.** Before any Shares held by Purchaser or any transferee of Purchaser (either being sometimes referred to herein as the "Holder") may be sold or otherwise transferred (including transfer by gift or operation of law), the Company or its assignee(s) shall have a right of first refusal to purchase the Shares on the terms and conditions set forth in this Section 3(a) (the "Right of First Refusal").

(i) **Notice of Proposed Transfer.** The Holder of the Shares shall deliver to the Company a written notice (the "Notice") stating: (i) the Holder's bona fide intention to sell or otherwise transfer such Shares; (ii) the name of each proposed purchaser or other transferee ("Proposed Transferee"); (iii) the number of Shares to be transferred to each Proposed Transferee; and (iv) the terms and conditions of each proposed sale or transfer. The Holder shall offer the Shares at the same price (the "Purchase Price") and upon the same terms (or terms as similar as reasonably possible) to the Company or its assignee(s).

(ii) **Exercise of Right of First Refusal.** At any time within thirty (30) days after receipt of the Notice, the Company and/or its assignee(s) may, by giving written notice to the Holder, elect to purchase all, but not less than all, of the Shares proposed to be transferred to any one or more of the Proposed Transferees, at the Purchase Price. If the Purchase Price includes consideration other than cash, the cash equivalent value of the non-cash consideration shall be determined by the Board in good faith and shall be payable therefor.

(iii) **Payment.** Payment of the Purchase Price shall be made, at the election of the Company or its assignee(s), in cash (by check), by cancellation of all or a portion of any outstanding indebtedness, or by any combination thereof within ninety (90) days after receipt of the Notice or in the manner and at the times set forth in the Notice.

(iv) **Holder's Right to Transfer.** If all of the Shares proposed in the Notice to be transferred to a given Proposed Transferee are not purchased by the Company and/or its assignee(s) as provided in this Section 3(a), then the Holder may sell or otherwise transfer such Shares to that Proposed Transferee on terms, including price, that are no more favorable to the Proposed Transferee than that set forth in the Notice, *provided* that such sale or other transfer is consummated within one hundred twenty (120) days after the date of the Notice and; *provided further* that any such sale or other transfer is effected in accordance with any applicable securities laws and the Proposed Transferee agrees in writing that the provisions of this Section 3 shall continue to apply to the Shares in the hands of such Proposed Transferee. If the Shares described in the Notice are not transferred to the Proposed Transferee within such period, or if the Holder proposes to change the price or other terms to make them more favorable to the Proposed Transferee, a new Notice shall be given to the Company, and the Company and/or its assignees shall again be offered the Right of First Refusal before any Shares held by the Holder may be sold or otherwise transferred.

(v) **Exception for Certain Family Transfers.** Anything to the contrary contained in this Section 3(a)(v) notwithstanding, and *provided* that such transfer complies with applicable securities laws, the transfer of any or all of the Shares during Purchaser's lifetime or on Purchaser's death by will or intestacy to Purchaser's Immediate Family or a trust for the benefit of Purchaser's Immediate Family shall be exempt from the provisions of this Section 3(a)(v). "Immediate Family" as used herein shall mean spouse, lineal descendant or antecedent, father, mother, brother or sister. In such case, the transferee or other recipient shall receive and hold the Shares so transferred subject to the provisions of this Section 3(a)(v), and there shall be no further transfer of such Shares except in accordance with the terms of this Section 3(a)(v).

(b) **Company's Right to Purchase upon Involuntary Transfer.** In the event of any transfer by operation of law or other involuntary transfer (including death or divorce, but excluding a transfer to Immediate Family as set forth in Section 3(a)(v) above) of all or a portion of the Shares by the record holder thereof, the Company shall have an option to purchase all of the Shares transferred at the greater of the purchase price paid by the Purchaser pursuant to this Agreement or the Fair Market Value of the Shares on the date of transfer (as determined by the Board). Upon such a transfer, the person acquiring the Shares shall promptly notify the Secretary of the Company of such transfer. The right to purchase such Shares shall be provided to the Company for a period of sixty (60) days following receipt by the Company of written notice by the person acquiring the Shares.

(c) **Assignment.** The right of the Company to purchase any part of the Shares may be assigned in whole or in part to any holder or holders of capital stock of the Company or other persons or organizations.

(d) **Restrictions Binding on Transferees.** All transferees of Shares or any interest therein will receive and hold such Shares or interest subject to the provisions of this Agreement. Any sale or transfer of the Company's Shares shall be void unless the provisions of this Agreement are satisfied and agreed to by such transferee.

(e) **Termination of Rights.** The right of first refusal granted the Company by Section 3(a) above and the option to repurchase the Shares in the event of an involuntary transfer granted the Company by Section 3(b) above shall terminate upon the first sale of Common Stock of the Company to the general public pursuant to a registration statement filed with and declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"). Upon termination of the right of first refusal described in Section 3(a) above the Company shall remove any stop-transfer notices referred to in Section 5(b) below and related to the restrictions in this Section 3 and, if certificates are issued, a new certificate or certificates representing the Shares not repurchased shall be issued, on request, without the legend referred to in Section 5(a)(ii) below and delivered to Purchaser.][10]

4. **[Investment and Taxation Representations.** In connection with the purchase of the Shares, Purchaser represents to the Company the following:

(a) Purchaser is aware of the Company's business affairs and financial condition and has acquired sufficient information about the Company to reach an informed and knowledgeable decision to acquire the Shares. Purchaser is purchasing these securities for investment for his or her own account only and not with a view to, or for resale in connection with, any "distribution" thereof within the meaning of the Securities Act or under any applicable provision of state law. Purchaser does not have any present intention to transfer the Shares to any person or entity.

(b) Purchaser understands that the Shares have not been registered under the Securities Act by reason of a specific exemption therefrom, which exemption depends upon, among other things, the bona fide nature of Purchaser's investment intent as expressed herein.

(c) Purchaser further acknowledges and understands that the securities must be held indefinitely unless they are subsequently registered under the Securities Act or an exemption from such registration is available. Purchaser further acknowledges and understands that the Company is under no obligation to register the securities. Purchaser understands that the certificate(s) evidencing the securities will be imprinted with a legend which prohibits the transfer of the securities unless they are registered or such registration is not required in the opinion of counsel for the Company.

[10] To be included in the pre-IPO award agreements.

(d) Purchaser is familiar with the provisions of Rules 144 and 701, each promulgated under the Securities Act, which, in substance, permit limited public resale of "restricted securities" acquired, directly or indirectly, from the issuer of the securities (or from an affiliate of such issuer), in a non-public offering subject to the satisfaction of certain conditions. Purchaser understands that the Company provides no assurances as to whether he or she will be able to resell any or all of the Shares pursuant to Rule 144 or Rule 701, which rules require, among other things, that the Company be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, that resales of securities take place only after the holder of the Shares has held the Shares for certain specified time periods, and under certain circumstances, that resales of securities be limited in volume and take place only pursuant to brokered transactions. Notwithstanding this paragraph (d), Purchaser acknowledges and agrees to the restrictions set forth in paragraph (e) below.

(e) Purchaser further understands that in the event all of the applicable requirements of Rule 144 or 701 are not satisfied, registration under the Securities Act, compliance with Regulation A, or some other registration exemption shall be required; and that, notwithstanding the fact that Rules 144 and 701 are not exclusive, the Staff of the Securities and Exchange Commission has expressed its opinion that persons proposing to sell private placement securities other than in a registered offering and otherwise than pursuant to Rule 144 or 701 will have a substantial burden of proof in establishing that an exemption from registration is available for such offers or sales, and that such persons and their respective brokers who participate in such transactions do so at their own risk.

(f) Purchaser understands that Purchaser may suffer adverse tax consequences as a result of Purchaser's purchase or disposition of the Shares. Purchaser represents that Purchaser has consulted any tax consultants Purchaser deems advisable in connection with the purchase or disposition of the Shares and that Purchaser is not relying on the Company for any tax advice.][11]

5. **Restrictive Legends and Stop-Transfer Orders.**

(a) **[Legends.** The certificate or certificates representing the Shares shall bear the following legends (as well as any legends required by applicable state and federal corporate and securities laws):

(i) THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF. NO SUCH SALE OR DISTRIBUTION MAY BE EFFECTED WITHOUT AN EFFECTIVE REGISTRATION STATEMENT RELATED THERETO OR AN OPINION OF COUNSEL FOR THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED UNDER THE SECURITIES ACT OF 1933.

[11] To be included in the pre-IPO award agreements.

(ii) THE SHARES REPRESENTED BY THIS CERTIFICATE MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE HOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.][12]

(b) **Stop-Transfer Notices.** Purchaser agrees that, in order to ensure compliance with the restrictions referred to herein, the Company may issue appropriate "stop transfer" instructions to its transfer agent, if any, and that, if the Company transfers its own securities, it may make appropriate notations to the same effect in its own records.

(c) **Refusal to Transfer.** The Company shall not be required (i) to transfer on its books any Shares that have been sold or otherwise transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Shares or to accord the right to vote or pay dividends to any purchaser or other transferee to whom such Shares shall have been so transferred.

6. **No Right to Continued Service.** Nothing in this Agreement or the attached documents confers upon the Participant any right to continue his or her employment or consulting relationship with the Company for any period of time, nor does it interfere in any way with the Participant's right or the Company's right to terminate that relationship at any time, for any reason, with or without cause.

7. **[Lock-Up Agreement.** In connection with any initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Participant hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, during the period commencing as of 18 days prior to and ending 180 days, or such lesser period of time as the relevant underwriters may permit, after the effective date of a registration statement covering any public offering of the Company's securities or, if required by such underwriter, such longer period of time as is necessary to enable such underwriter to issue a research report or make a public appearance that relates to an earnings release or announcement by the Company within 18 days before or after the date that is 180 days after the effective date of the registration statement relating to such initial public offering, but in any event not to exceed 198 days following the effective date of the registration statement relating to such initial public offering and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering. The Company is hereby authorized to impose stock transfer instructions to its transfer agent (which may the Company itself) in order to enforce the above restrictions.][13]

8. **Miscellaneous.**

(a) **Governing Law; Waiver of Jury Trial** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. BY RECEIPT OF THIS OPTION, THE PARTICIPANT WAIVES ANY RIGHT THAT THE PARTICIPANT MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE PLAN.

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12 To be included in the pre-IPO award agreements.

13 To be included in the pre-IPO award agreements.

(b) **Participant Undertaking; Acceptance**. The Participant agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable to carry out or give effect to any of the obligations or restrictions imposed on either the Participant or the Option pursuant to this Agreement. The Participant acknowledges receipt of a copy of the Plan and this Agreement and understands that material definitions and provisions concerning the Option and the Participant's rights and obligations with respect thereto are set forth in the Plan. The Participant has read carefully, and understands, the provisions of this Agreement and the Plan.

(c) **Dispute Resolution**. Any dispute or claim arising out of, under or in connection with the Plan or any Award Agreement shall be submitted to arbitration in Delaware and shall be conducted in accordance with the rules of, but not necessarily under the auspices of, the American Arbitration Association rules in force when the notice of arbitration is submitted. The arbitration shall be conducted before an arbitration tribunal comprised of three individuals, one selected by the Company, one selected by the Participant, and the third selected by the first two. The Participant and the Company agree that such arbitration will be confidential and no details, descriptions, settlements or other facts concerning such arbitration shall be disclosed or released to any third party without the specific written consent of the other party, unless required by law or court order or in connection with enforcement of any decision in such arbitration. Any damages awarded in such arbitration shall be limited to the contract measure of damages, and shall not include punitive damages.

(d) **Entire Agreement; Enforcement of Rights.** This Agreement, together with the Notice to which this Agreement is attached and the Plan, sets forth the entire agreement and understanding of the parties relating to the subject matter herein and therein and merges and supersedes all prior and contemporaneous discussions, arrangements, agreements and understandings, both oral and written, whether in term sheets, presentations or otherwise, between the parties with respect to the subject matter hereof.

(e) **Amendment; Waiver**. Except as contemplated under the Plan, no modification of or amendment to this Agreement that has a material adverse effect on the Participant, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement; provided that the Company may amend or modify this Agreement without the Participant's consent in accordance with the provisions of the Plan or as otherwise set forth in this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party, provided that no waiver of any breach or condition of this Agreement shall be deemed to be a waiver of any other or subsequent breach or condition, whether of like or different nature. Any amendment or modification of or to any provision of this Agreement, or any waiver of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which made or given.

(f) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under applicable law, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement and a substantially similar provision shall be inserted that as closely as possible reflects the intent of the parties shall be substituted in place of such unenforceable provision, (ii) the balance of this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms.

(g) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice:

If to the Company:

Calyxt, Inc.
600 County Rd D West #8
New Brighton, MN 55112
Attention:
Email:

If to the Participant:

At the Participant's most recent address in the Company's records.

(h) **Counterparts.** This Option may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(i) **Successors and Assigns; No Third-Party Beneficiaries.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Participant under this Agreement may not be assigned without the prior written consent of the Company. Nothing in this Agreement, express or implied, is intended to confer on any Person other than the Company and the Participant, and their respective heirs, successors, legal representatives and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

(j) **[California Corporate Securities Law.** THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF THE SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO THE QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.][14]

[Signature Page Follows]

[14] To be included in the pre-IPO award agreements.

The parties have executed this Exercise Agreement as of the date first set forth above.

THE COMPANY:

CALYXT, INC.

By: _____
(Signature)

Name: _____

PURCHASER:

_____

I, , spouse of [•], have read and hereby approve the foregoing terms set forth in this Agreement. In consideration of the Company's granting my spouse the right to purchase the Shares as set forth in this Agreement, I hereby agree to be irrevocably bound by this Agreement and further agree that any community property or other such interest shall hereby by similarly bound by this Agreement [and the Adoption Agreement][15]. I hereby appoint my spouse as my attorney-in-fact with respect to any amendment or exercise of any rights under this Agreement [and the Adoption Agreement][16].

Spouse of [ ] (if applicable)

_____

[15] To be included in the pre-IPO award agreements.

[16] To be included in the pre-IPO award agreements.

EXHIBIT B[17]

CALYXT, INC.

2017 OMNIBUS INCENTIVE PLAN

ADOPTION AGREEMENT TO THE COMPANY STOCKHOLDERS AGREEMENT

This Adoption Agreement (**"Adoption Agreement"**) is executed on 20 , by the undersigned (the **"Holder"**) pursuant to the terms of that certain Stockholders Agreement dated as of December 3, 2014 (the **"Agreement"**), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder is acquiring certain shares of The capital stock of the Company (the **"Stock"**), for one of the following reasons (Check the correct box):

❑ As a transferee of Shares from a party in such party's capacity as an "Stockholder" bound by the Agreement, and after such transfer, Holder shall be considered a "Stockholder" for all purposes of the Agreement.

❑ As a new Stockholder in accordance with Subsection 4.1(a) of the Agreement, in which case Holder will be a "Stockholder" for all purposes of the Agreement.

1.2 Agreement. Holder hereby (a) agrees that the Stock, and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER:

By:_____
Name

By:_____

ACCEPTED AND AGREED:

CALYXT, INC.

Title:_____

[17] To be included in the pre-IPO award agreements.

Exhibit 10.23

CALYXT, INC.
2017 OMNIBUS INCENTIVE PLAN
NOTICE OF RESTRICTED STOCK UNIT AWARD

Recipient

Subject to the terms and conditions set forth in this notice of grant (the "Notice") and the Restricted Stock Agreement (the Notice and Restricted Stock Agreement constituting this "Award Agreement"), Calyxt, Inc., a Delaware corporation (the "Company") has granted you an award of RSUs (the "Award"). The Award is granted under and is subject to the Calyxt, Inc. 2017 Omnibus Incentive Plan (the "Plan"). Unless otherwise defined in this Agreement, the terms used in this Agreement shall have the meanings defined in the Plan. The provisions of the Plan shall control in the event of a conflict among the provisions of the Plan, this Agreement and any descriptive materials provided to you.

Date of Grant:	[•]
Total Number of Units:	[•]
Vesting Commencement Date:	[•]
First Vest Date:	[•]
Vesting/Exercise Schedule:	Subject to Sections 2(n) and 19(g) of the Plan and Section 8 of the Award Agreement, so long as your Continuous Service Status does not terminate, the RSUs shall vest and be settled in accordance with the provisions of the Award Agreement.
Transferability:	You may not transfer this Award.

By your signature and the signature of the Company's representative below, you and the Company agree that this Award is granted under and governed by the terms and conditions of the Plan and the Agreement.

You are advised to consult with your own tax advisors in respect of any tax consequences arising in connection with this Award. In addition, you agree and acknowledge that your rights to any Shares underlying this Award will be earned only as you provide services to the Company over time, that the grant of this Award is not as consideration for services you rendered to the Company prior to the Date of Grant, and that nothing in this Notice or the attached documents confers upon you any right to continue your employment or consulting relationship with the Company for any period of time, nor does it interfere in any way with your right or the Company's right to terminate that relationship at any time, for any reason, with or without cause. Also, to the extent applicable, the Exercise Price Per Share has been set in good faith compliance with the applicable guidance issued by the Internal Revenue Service under Section 409A of the Code. However, there is no guarantee that the Internal Revenue Service will agree with the valuation, and by signing below, you agree and acknowledge that the Company and the Administrator shall not be held liable for any applicable costs, taxes, or penalties associated with this Award if, in fact, the Internal Revenue Service were to determine that this Award constitutes deferred compensation under Section 409A of the Code.

[Signature Page Follows]

THE COMPANY:

CALYXT, INC.

By: _____

Name:
Title:

PARTICIPANT:

_____

[Name]

CALYXT, INC.

2017 OMNIBUS INCENTIVE PLAN

RESTRICTED STOCK UNIT AGREEMENT

1. **Grant of RSU Award.** Calyxt, Inc., a Delaware corporation (the "Company"), hereby grants to [•] ("Participant"), the number of restricted stock units ("RSUs" or "Award") set forth in the Notice of Restricted Stock Unit Award Grant (the "Notice"), subject to the terms, definitions and provisions of the Calyxt, Inc. 2017 Omnibus Incentive Plan (the "Plan") adopted by the Company, which is incorporated in this agreement (this "Agreement") by reference.

2. **Issuance of RSUs.** Each RSU shall represent the right to receive one Share upon the vesting of such RSU, as determined in accordance with and subject to the terms of this Agreement and the Plan.

3. **Vesting of RSUs.** Provided that the Participant's Continuous Service Status does not terminate, this Award shall vest as follows:

- [•] of the total number of RSUs on the Date of Grant (as defined in the Notice);
- [•]% of the total number of RSUs on [•]; and
- [•]% of the total number of RSUs on [•];

(each date above a "Vesting Date")[, *provided* that in the event that a Triggering Event occurs during the vesting period, an additional 25% of the total number of RSUs shall immediately vest; and *provided further* that 100% of the total number of RSUs shall vest in the event of (a) the termination of Participant's employment without Cause within 12 months following a Triggering Event or (b) resignation of Participant for Good Reason within 12 months following a Triggering Event. In all cases, in no event will more than 100% of the RSUs vest][1].

[in the event that a Triggering Event or change in control of a Parent occurs, 100% of the total number of Shares shall immediately vest to the extent not already vested][2]

As used in this Agreement and for all purposes relating to the RSUs, including of Continuous Service Status, "Good Reason" shall mean: (i) a material reduction in the Participant's base salary, other than a general reduction in base salaries that affects all similarly-situated Employees or Consultants, as applicable, in substantially the same proportion or (ii) an involuntary relocation of the Participant's principal place of employment by more than 100 miles, *provided* that (iii) the Participant has provided written notice to the Company of the existence of the circumstances constituting Good Reason within 30 days of

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1 To be included in the award agreements for Participants who are employees of the Company.

2 To be included in the award agreements for Participants who are Consultants, non-employee directors of the Company, or directors or employees of a Parent.

the initial existence of such circumstances, (x) the Company fails to cure such circumstances within 30 days of the receipt of such written notice, and (y) Participant's resignation is effective not later than 90 days after the first occurrence of the applicable grounds constituting Good Cause. If Participant does not resign for Good Reason in accordance with, and within the time period set forth in, the preceding sentence, then Participant will be deemed to have waived Participant's right to terminate for Good Reason with respect to such circumstances and such circumstances shall be deemed not to constitute Good Reason.

The vested RSUs shall be delivered subject to the Participant's execution and delivery of the Adoption Agreement to the Company Stockholders Agreement attached hereto as Exhibit A (the "Adoption Agreement").][3]

4. **Tax Liability; Withholding Requirements**. As a condition to the settlement of RSUs and as further set forth in Section 15 of the Plan, Participant agrees to make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the grant, vesting of the RSUs, dividend distribution thereon, whether by withholding, direct payment to the Company, or otherwise. Regardless of any action the Company takes with respect to any or all income tax, social security, payroll tax, or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("Tax-Related Items"), Participant acknowledges that the ultimate liability for **all** Tax-Related Items is and remains Participant's responsibility and may exceed the amount actually withheld. Participant further acknowledges that the Company (a) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Award, including, but not limited to, the grant, vesting, settlement of the Award, the issuance of Shares upon settlement of the Award and the subsequent sale of Shares acquired pursuant to such issuance and (b) does not commit to and is under no obligation to structure the terms of the grant or any aspect of the Award to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result.

In the event Participant fails to make adequate provision for applicable tax withholding obligations (or where the amount of money provided is insufficient to satisfy the applicable obligations), Participant authorizes the Company, in its discretion, to satisfy the obligations with regard to all Tax-Related Items by (i) withholding from Participant's wages or other cash compensation paid to Participant, (ii) withholding through a net settlement or (iii) a combination of the foregoing.

If Participant's obligation is satisfied through a net settlement as described in the foregoing paragraph, the Company shall endeavor to sell only the number of Shares required to satisfy Participant's obligations for Tax-Related Items; however Participant agrees that the Company may sell more Shares than necessary to cover the Tax-Related Item, and that in such event, the Company shall reimburse Participant for the excess amount withheld, in cash and without interest.

(a) to issue or deliver any Shares upon the vesting of the RSUs unless such issuance or delivery would comply with the Applicable Laws, including any applicable federal or state securities laws or any other law or regulation, with such compliance determined by the Company in consultation with its legal counsel. As a condition to the settlement of this Award, the Company may require Participant to make any representation and warranty to the Company as may be required by the Applicable Laws.

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[3] To be included in the pre-IPO award agreements.

(b) Subject to compliance with Applicable Laws, this Award shall be deemed to be settled upon [receipt by the Company of the satisfaction of the executed Adoption Agreement, and][4] the satisfaction of any applicable withholding obligations.

5. **Terms and Conditions**. It is understood and agreed that the Award evidenced hereby is subject to the following terms and conditions:

(a) **Voting Rights**. The Participant shall have no voting rights or any other rights as a shareholder of the Company with respect to the RSUs unless and until the Participant becomes the record owner of the Shares underlying such RSUs.

(b) **Dividends**. If a dividend is paid on Shares during the period commencing on the Grant Date and ending on the date on which the Shares underlying the RSUs are distributed to the Participant pursuant to Section 3, the Participant shall be eligible to receive an amount equal to the dividend that the Participant would have received had the Shares underlying the RSUs been distributed to the Participant as of the time at which such dividend is paid; *provided, however,* that no such amount shall be payable with respect to any RSUs that are forfeited. Such amount shall be paid to the Participant on the date on which the Shares underlying the RSUs are distributed to the Participant in the same form (cash, Shares or other property) in which such dividend is paid to holders of Shares generally. Any Shares that the Participant is eligible to receive pursuant to this Section 4(b) are referred to herein as "Dividend Shares."

(c) **Distribution on Vesting**. Subject to the provisions of this Agreement, upon the vesting of any of the RSUs, the Company shall deliver to the Participant, as soon as reasonably practicable after the applicable Vesting Date (or the Termination Date (as defined below), as applicable), one Share for each such RSU and the number of Dividend Shares (as determined in accordance with Section 3(b)); *provided* that such delivery of Shares shall be made no later than March 15 of the calendar year immediately following the year in which the applicable Vesting Date (or the Termination Date, as applicable) occurs. Upon such delivery, such Shares (including Dividend Shares) shall be fully assignable, alienable, saleable and transferrable by the Participant; *provided* that any such assignment, alienation, sale, transfer or other alienation with respect to such Shares shall be in accordance with applicable securities laws and any applicable Company policy.

6. **No Right to Continued Service**. The grant of an Award shall not be construed as conferring upon the Participant any right to continue his or her employment or consulting relationship with the Company for any period of time, nor does it interfere in any way with the Participant's right or the Company's right to terminate that relationship at any time, for any reason, with or without cause.

7. **No Right to Future Awards**. Any Award granted under the Plan shall be a one-time Award that does not constitute a promise of future grants. The Company, in its sole discretion, maintains the right to make available future grants under the Plan.

[4] To be included in the pre-IPO award agreements.

8. **Termination of Relationship.** Following the date of termination of Participant's Continuous Service Status for any reason (the "Termination Date"), other than a termination for Cause, Participant may continue to hold this Award, only as set forth in the Notice and this Section 8. Notwithstanding the foregoing, any Award granted to an individual who is nominated to become a Director and is not an Employee or Consultant or a director of a Parent at the time of grant shall be forfeited in its entirety if such individual does not commence providing services to the Company within 12 months after the date of grant of such Award.

9. **Non-Transferability of RSUs.** This Award may not be transferred in any manner otherwise than by will or by the laws of descent or distribution. The terms of this Award shall be binding upon the executors, administrators, heirs, successors and assigns of Participant.

10. **Not Salary, Pensionable Earnings or Base Pay**. The Participant acknowledges that the Award shall not be included in or deemed to be a part of (a) salary, normal salary or other ordinary compensation, (b) any definition of pensionable or other earnings (however defined) for the purpose of calculating any benefits payable to or on behalf of the Participant under any pension, retirement, termination or dismissal indemnity, severance benefit, retirement indemnity or other benefit arrangement of the Company or any Subsidiary or (c) any calculation of base pay or regular pay for any purpose.

11. **Forfeiture Upon Breach of Certain Other Agreements**. The Participant's breach of any non-competition, non-solicitation, confidentiality, non-disparagement, assignment of inventions or other intellectual property agreement that the Participant may be a party to with the Company or any Affiliate, in addition to whatever other equitable relief or monetary damages that the Company or any Affiliate may be entitled to, shall result in automatic rescission, forfeiture, cancellation or return of any Shares (whether or not vested) held by the Participant.

12. **Recoupment/Clawback**. This Award may be subject to recoupment or "clawback" as may be required by Applicable Laws or by any applicable Company policy or arrangement, as it may be established or amended from time to time.

13. **[Lock-Up Agreement.** In connection with any initial public offering of the Company's securities and upon request of the Company or the underwriters managing any underwritten offering of the Company's securities, Participant hereby agrees not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any securities of the Company however and whenever acquired (other than those included in the registration) without the prior written consent of the Company or such underwriters, as the case may be, during the period commencing as of 18 days prior to and ending 180 days, or such lesser period of time as the relevant underwriters may permit, after the effective date of a registration statement covering any public offering of the Company's securities or, if required by such underwriter, such longer period of time as is necessary to enable such underwriter to issue a research report or make a public appearance that relates to an earnings release or announcement by the Company within 18 days before or after the date that is 180 days after the effective date of the registration statement relating to such initial public offering, but in any event not to exceed 198 days following the effective date of the registration statement relating to such initial public offering and to execute an agreement reflecting the foregoing as may be requested by the underwriters at the time of the public offering. The Company is hereby authorized to impose stock transfer instructions to its transfer agent (which may the Company itself) in order to enforce the above restrictions.][5]

[5] To be included in the pre-IPO award agreements.

14. **[Corporate Transaction.** Notwithstanding the above, if a corporate transaction constitutes a Triggering Event and the Participant retains his or her Continuous Service Status, the Award shall become vested under the formula in Section 3.][6]

15. **Effect of Agreement.** Participant acknowledges receipt of a copy of the Plan and represents that he or she is familiar with the terms and provisions thereof (and has had an opportunity to consult counsel regarding the Award terms), and hereby accepts this Award and agrees to be bound by its contractual terms as set forth herein and in the Plan. Participant hereby agrees to accept as binding, conclusive and final all decisions and interpretations of the Plan Administrator regarding any questions relating to this Award. In the event of a conflict between the terms and provisions of the Plan and the terms and provisions of the Notice and this Agreement, the Plan terms and provisions shall prevail.

16. **Miscellaneous.**

(a) **Governing Law; Waiver of Jury Trial** This Agreement and all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law. BY RECEIPT OF THIS AWARD, THE PARTICIPANT WAIVES ANY RIGHT THAT THE PARTICIPANT MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE PLAN.

(b) **Participant Undertaking; Acceptance**. The Participant agrees to take whatever additional action and execute whatever additional documents the Company may deem necessary or advisable to carry out or give effect to any of the obligations or restrictions imposed on either the Participant or the Award pursuant to this Agreement. The Participant acknowledges receipt of a copy of the Plan and this Agreement and understands that material definitions and provisions concerning the Award and the Participant's rights and obligations with respect thereto are set forth in the Plan. The Participant has read carefully, and understands, the provisions of this Agreement and the Plan.

(c) **Dispute Resolution**. Any dispute or claim arising out of, under or in connection with the Plan or any Award Agreement shall be submitted to arbitration in Delaware and shall be conducted in accordance with the rules of, but not necessarily under the auspices of, the American Arbitration Association rules in force when the notice of arbitration is submitted. The arbitration shall be conducted before an arbitration tribunal, one selected by the Company, one selected by the Participant, and the third selected by the first two. The Participant and the Company agree that such arbitration will be confidential and no details, descriptions, settlements or other facts concerning such arbitration shall be disclosed or released to any third party without the specific written consent of the other party, unless required by law or court order or in connection with enforcement of any decision in such arbitration. Any damages awarded in such arbitration shall be limited to the contract measure of damages, and shall not include punitive damages.

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[6] To be included in the pre-IPO award agreements.

(d) **Entire Agreement; Enforcement of Rights.** This Agreement, together with the Notice to which this Agreement is attached and the Plan, sets forth the entire agreement and understanding of the parties relating to the subject matter herein and therein and merges and supersedes all prior and contemporaneous discussions, arrangements, agreements and understandings, both oral and written, whether in term sheets, presentations or otherwise, between the parties with respect to the subject matter hereof.

(e) **Amendment; Waiver**. Except as contemplated under the Plan, no modification of or amendment to this Agreement that has a material adverse effect on the Participant, nor any waiver of any rights under this Agreement, shall be effective unless in writing signed by the parties to this Agreement; *provided* that the Company may amend or modify this Agreement without the Participant's consent in accordance with the provisions of the Plan or as otherwise set forth in this Agreement. The failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of any rights of such party; *provided* that no waiver of any breach or condition of this Agreement shall be deemed to be a waiver of any other or subsequent breach or condition, whether of like or different nature. Any amendment or modification of or to any provision of this Agreement, or any waiver of any provision of this Agreement, shall be effective only in the specific instance and for the specific purpose for which made or given.

(f) **Severability.** If one or more provisions of this Agreement are held to be unenforceable under Applicable Laws, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (i) such provision shall be excluded from this Agreement and a substantially similar provision shall be inserted that as closely as possible reflects the intent of the parties shall be substituted in place of such unenforceable provision, (ii) the balance of this Agreement shall be interpreted as if such provision were so excluded and (iii) the balance of this Agreement shall be enforceable in accordance with its terms.

(g) **Notices.** Any notice required or permitted by this Agreement shall be in writing and shall be deemed sufficient when delivered personally or sent by telegram or fax or forty-eight (48) hours after being deposited in the U.S. mail, as certified or registered mail, with postage prepaid, and addressed to the party to be notified at such party's address as set forth below or as subsequently modified by written notice:

If to the Company:

Calyxt, Inc.
600 County Rd D West #8
New Brighton, MN 55112

Attention:
Email:

If to the Participant:

At the Participant's most recent address in the Company's records.

(h) **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one instrument.

(i) **Successors and Assigns; No Third-Party Beneficiaries.** The rights and benefits of this Agreement shall inure to the benefit of, and be enforceable by the Company's successors and assigns. The rights and obligations of Participant under this Agreement may not be assigned without the prior written consent of the Company. Nothing in this Agreement, express or implied, is intended to confer on any Person other than the Company and the Participant, and their respective heirs, successors, legal representatives and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

17. **Data Privacy Notice and Consent.** By participating in the Plan, the Participant consents to the holding and processing of personal information provided by the Participant to the Company or any subsidiary, trustee or third-party service provider, for all purposes relating to the operation of the Plan. These include, but are not limited to:

(a) administering and maintaining Participant records, a dissolution or liquidation of the Company;

(b) providing information to the Company, Subsidiaries, trustees of any employee benefit trust, registrars, brokers or third-party administrators of the Plan;

(c) providing information to future purchasers or merger partners of the Company or any subsidiary, or the business in which the Participant works; and

(d) transferring information about the Participant to any country or territory that may not provide the same protection for the information as the Participant's home country.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties have executed or caused this Agreement to be executed by their officers thereunto duly authorized, effective as of the Date of Grant set forth in the accompanying Notice.

THE COMPANY:

CALYXT, INC.

By: _____

Name:
Title:

PARTICIPANT:

_____

[Name]

I, , spouse of [•], have read and hereby approve the foregoing terms set forth in this Agreement [and the Adoption Agreement][7]. In consideration of the Company's granting my spouse the right to receive Shares as set forth in this Agreement, I hereby agree to be irrevocably bound by this Agreement [and the Adoption Agreement][8] and further agree that any community property or other such interest shall hereby by similarly bound by this Agreement [and the Adoption Agreement][9]. I hereby appoint my spouse as my attorney-in-fact with respect to any amendment or exercise of any rights under this Agreement [and the Adoption Agreement][10].

Spouse of [•] (if applicable)

_____

7 To be included in the pre-IPO award agreements.
8 To be included in the pre-IPO award agreements.
9 To be included in the pre-IPO award agreements.
10 To be included in the pre-IPO award agreements.

EXHIBIT A[11]

CALYXT, INC.

2017 OMNIBUS INCENTIVE PLAN

ADOPTION AGREEMENT TO THE COMPANY STOCKHOLDERS AGREEMENT

This Adoption Agreement (**"Adoption Agreement"**) is executed on 20 , by the undersigned (the **"Holder"**) pursuant to the terms of that certain Stockholders Agreement dated as of December 3, 2014 (the **"Agreement"**), by and among the Company and certain of its Stockholders, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder is acquiring certain shares of The capital stock of the Company (the **"Stock"**), for one of the following reasons (Check the correct box):

❑ As a transferee of Shares from a party in such party's capacity as an "Stockholder" bound by the Agreement, and after such transfer, Holder shall be considered a "Stockholder" for all purposes of the Agreement.

❑ As a new Stockholder in accordance with Subsection 4.1(a) of the Agreement, in which case Holder will be a "Stockholder" for all purposes of the Agreement.

1.2 Agreement. Holder hereby (a) agrees that the Stock, and any other shares of capital stock or securities required by the Agreement to be bound thereby, shall be bound by and subject to the terms of the Agreement and (b) adopts the Agreement with the same force and effect as if Holder were originally a party thereto.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address or facsimile number listed below Holder's signature hereto.

HOLDER:

By:_____
Name

By:_____

ACCEPTED AND AGREED:

CALYXT, INC.

Title:_____

[11] To be included in the pre-IPO award agreements.

Exhibit 10.24

TERMS AND CONDITIONS OF THE WARRANTS (THE« WARRANTS »)

ABSTRACT OF THE MINUTES OF THE BOARD MEETING HELD ON [●]

TRANSLATION FOR INFORMATION PURPOSES ONLY

Issuance of warrants to the benefit of directors and consultants

After deliberation, the board, unanimously:

using the delegation granted to it pursuant to the [●] resolution of the combined ordinary and extraordinary general meeting held on [●],

decided the issuance of a total number of [●] Warrants, the terms of which are defined below, each giving the right to subscribe an ordinary share of a nominal value of EUR [●] for an exercise price of EUR [●],

decided that the subscription of the Warrants is reserved to the non-employee directors of the Company and consultants listed in the Annex [●], and in the proportions set in said Annex [●],

decided that the Warrants are each issued at a price of EUR [●],

decided that the Warrants, shall be fully paid up, at the time of their subscription, in cash or by way of offset against receivables held on the Company,

decided that the subscription will be received as from the end of this board meeting and until [●] included and that the subscription period will be closed by anticipation as soon as all Warrants will have been subscribed by the above mentioned subscribers,

specified that each issue of Warrants is independent, so that the possible non-subscription of the Warrants by one of the aforementioned beneficiaries will not jeopardize the issue carried out to the benefit of another beneficiary,

decided that the exercisable Warrants are freely transferrable, they are issued in the nominative form and will be registered in the Company's accounts,

reminded that the shares subscribed pursuant to the exercise of the Warrants, will have to be fully paid up, at the time of this subscription, in cash or by way of offset against receivables held on the Company,

reminded that the new shares issued to the benefit of the beneficiary pursuant to the exercise of the Warrants will be submitted to all provisions of the by-laws and will have the same rights as from the first day of the fiscal year during which they have been issued,

decided that the Warrants so allocated, subject that they have been duly subscribed by the concerned beneficiary, could be exercised up to one third of the Warrants at the expiration of each year following their issuance, subject to

(i) regarding the directors, the continued presence of the beneficiary within the Company's board of directors during the considered year and, at the latest, within ten (10) year as from their issuance, i.e. at the latest on [●], it being specified that (i) the Warrants that would not be exercisable at the date on which the considered director would cease its function, as well as the Warrants exercisable but which have not been already exercised at the expiration of the above period of 10 years would lapse automatically, and (ii) the number of Warrants that can be exercised pursuant to the above vesting will also be rounded to the lowest full number.

(ii) regarding the consultants, that the consultancy agreement concluded with a company of the Cellectis group have been in force during the considered year, and at the latest within ten (10) year as from their issuance, i.e. at the latest on [●], it being specified that (i) the Warrants that will not be exercisable at the date on which the concerned beneficiary would cease to hold any function of consultant for the Cellectis Group, and the Warrants which will not be exercised at the expiration of the above period of 10 years, would lapse automatically, and (ii) the number of Warrants that can be exercised pursuant to the above vesting will also be rounded to the lowest full number.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated May 15, 2017 (except for the second paragraph of Note 1 and the third and fourth paragraphs of Note 14, as to which the date is June 15, 2017) with respect to the financial statements of Calyxt, Inc. included in the Registration Statement (Form S-1) and related Preliminary Prospectus of Calyxt, Inc. dated June 23, 2017.

/s/ Ernst & Young LLP

Minneapolis, MN
June 23, 2017