COMPENSATION COMMITTEE CHARTER

OF CALYXT, INC.

Further to the approval of the Board of Directors at its meeting of July 7, 2017, the Compensation Committee of Calyxt, Inc. (the "Company") has drawn up this charter of the Company's Compensation Committee.

I. MISSION

The Compensation Committee (the "Committee") of the Board of Directors of the Company (the "Board"), reviews and recommends the Company's policies, programs and procedures for compensating its senior management and Board members and has notable responsibility to:

- Review and approve the Company's overall compensation philosophy;
- Review the compensation policy for the employees, directors, director nominees, officers and consultants of the Company and its affiliates, (fixed and variable compensations, bonus, etc.) and make any recommendation to the Board in connection thereto;
- Review equity incentive plans relating to the Company's capital for employees, directors, director nominees, officers and consultants of the Company (stock options, SARs, restricted stock, RSUs, performance awards, deferred awards and other share- and cash-based awards) and make recommendations to the Board in connection therewith:
- Recommend the approval, adoption and amendment of all cash- and equity-based incentive compensation plans in which any executive officer or director of the Company participates and all other equity-based plans;
- Review annually the Company's incentive compensation arrangements to understand whether they encourage excessive risk-taking and evaluate potential compensation policies to mitigate such risk:
- Make recommendations to the Board regarding the compensation, pension and insurance plans, benefits in kind and other various pecuniary rights, of officers, as well as the allocation of equity incentive instruments to executive officers and directors of the Company;
- Make recommendations on the compensation policies and programs for the Company's Chief Executive Officer and the other executive officers:
- Review any proposed employment agreement with, and any proposed severance or retention plans or agreements applicable to, any executive officer of the Company. The Committee shall review any severance or other termination payments proposed to be made to any executive officer of the Company;
- Review, at least annually, corporate goals and objectives relevant to the compensation of the Chief Executive Office and other executive officers of the Company;
- Evaluate the performance of the executive officers in light of corporate goals and objectives and recommend compensation levels for these executive officers based on those evaluations and any other factors the Committee deems appropriate;

- Review regulatory compliance with respect to compensation matters, including any compensation programs intended to preserve tax deductibility;
- Evaluate and make recommendations regarding the compensation policies and programs of executive officers and members of the Board and periodically review director compensation in relation to other comparable companies and in light of such other factors as the Committee may deem appropriate; provide the Board with recommendations on its composition and the composition of its committees;
- Review and recommend all grants of stock options and other equity-based awards, subject to the terms and conditions of applicable plans;
- Oversee the administration of compensation benefit programs, policies and practices and incentive and equity-based compensation plans; and
- Perform other duties or responsibilities delegated to the Committee by the Board from time to time.

Generally, the Committee will furnish any advice and express any appropriate recommendation in the above mentioned areas.

II. COMPOSITION

The size of the Committee shall be determined by the Board, but it must always have at least two members. The Board will select the members of the Committee. Desirable qualifications for Committee members include experience in business management, executive compensation, employee benefits, and human resources. As provided in the Stockholders Agreement, dated as of [•], 2017 by and among the Company, Cellectis and the persons listed on Schedule A thereto, (the "Stockholders Agreement"), for so long as Cellectis is entitled to nominate directors for election to the Board pursuant to the Stockholders Agreement, Cellectis shall have the right to designate at least one director to serve on the Committee. While the Company is a "controlled company" under applicable listing requirements of the Nasdaq Stock Market LLC ("NASDAQ"), the Committee shall not be required to consist solely of independent directors.

It is specified, for the avoidance of doubt, that no Board member discharging management functions within the Company may be a member of the Committee.

The members of the Committee may not receive any amounts from the Company or its subsidiaries, other than reimbursements for any expenses and attendance fees due in connection with their functions as members of the Board and members of the Committee.

Each Committee member will serve at the pleasure of the Board for such term or terms as the Board may decide or until such Committee member is no longer a Board member.

The Board may modify the composition of the Committee at any time.

The Committee may, in its discretion, delegate all or a portion of its duties and responsibilities to a subcommittee of the Committee.

III. ORGANIZATION OF THE WORK

The Committee appoints its Chairman and its Secretary from among its members. In the absence of the Chairman, the Committee appoints an Interim Chairman. In the event of a tie vote, the most senior candidate is appointed as Interim Chairman.

The Committee Chairman will supervise the conduct of the meetings and will have other responsibilities as the Committee may specify from time to time.

The Committee deliberates in the presence of at least one half of its members, which will constitute a Quorum. The act of a majority of Committee members present at a Committee meeting at which a Quorum is in attendance will be the act of the Committee.

The members of the Committee may not be represented by proxy.

The Committee meets at least once a year, according to a schedule defined by its Chairman, or more frequently, as it deems necessary to carry out its responsibilities under these rules, and on an agenda sent to the members of the Committee at least seven days prior to the date of the meeting.

The Committee meets upon notice from its Chairman, from one of its members, or from the Chairman of the Board. Meeting notices may be given by any means, including verbally.

The Chairman, in consultation with the other members of the Committee and appropriate officers of the Company, determines the agenda for each meeting and leads the discussions. Any Committee member may submit items to be included on the agenda. Committee members may also raise subjects that are not on the agenda at any meeting.

The members of the Board who are neither corporate officers, nor members of the Committee, are free to attend Committee meetings.

The Chairman of the Board, to the extent he/she is not a member of the Committee, may be invited to attend Committee meetings. The Committee invites him/her to present his/her proposals. He/she does not take part in the vote and does not attend the deliberations on his/her own situation or compensation.

The Committee may ask the Chairman of the Board to be assisted by, and may invite to attend a meeting, any officer or any representative of the Company's legal counsel or other advisers of the Company whose expertise may facilitate the treatment of any given matter on the agenda. The Chairman of the Committee or the Interim Chairman draws the attention of any person taking part in the discussions on the confidential duties incumbent upon him/her.

Any individual whose performance or compensation is to be discussed at a Committee meeting should not attend such meeting unless specifically invited by the Committee, except for the Chief Executive Officer who may not be present during voting or deliberation on CEO compensation.

Any Committee member may be excused from a meeting to permit the remaining members of the Committee to act on any matter in which such member's participation is not appropriate. Such member's absence shall not destroy the Quorum for the meeting.

The members of the Committee may validly deliberate by videoconference, telephone conference or in writing, including by facsimile, provided that its members all agree on such procedure.

The Committee's proposals are presented to the Board.

The Committee shall have appropriate resources and authority to discharge its responsibilities, including, without limitation, appropriate funding, in such amounts as the Committee deems reasonably necessary, to compensate any consultants or any other advisers retained by the Committee. The Committee will have the sole authority to retain and terminate compensation consultants to assist in the evaluation of director or executive officer compensation and the sole authority to approve the fees and other retention terms of such compensation consultants. The Committee may also retain independent counsel and other independent advisers to assist it in carrying out its responsibilities. The Committee may select such advisers, or receive advice from any other adviser, only after taking into consideration the independence factors enumerated by the rules and regulations of the Nasdaq and the US Securities and Exchange Commission. The Committee shall have full access to all books, records, facilities and personnel of the Company as deemed necessary or appropriate by any member of the Committee to discharge his or her responsibilities hereunder.

The Secretary of the Committee draws up a report on the meeting of the Committee which is forwarded to the Board within a period of fifteen days following the date of the meeting.

IV. REPORT

The Chairman of the Committee ensures that the Committee's activities are reported to the Board at least annually in such manner and at such times as the Committee or the Board deems appropriate to allow for the Board to be fully informed, thereby facilitating its deliberations.

The annual report includes a description of the Committee's activities during the financial year ended. The Committee reviews (inter alia) the draft Company report on the corporate officer's compensation.

V. ANNUAL REVIEW

At least annually, the Committee will (a) review these internal rules with the Board and recommend any changes to the Board and (b) evaluate its own performance against the requirements of these internal rules and report the results of this evaluation to the Board. The evaluation will include establishment of the goals and objectives of the Committee for the upcoming year. The Committee will conduct its review and evaluation in such manner as it deems appropriate.