COMPENSATION COMMITTEE CHARTER OF SYNLOGIC, INC.

I. Purpose

The purpose of the Compensation Committee (the "<u>Committee</u>") of the Board is to assist the Board in discharging the Board's responsibilities regarding compensation and organizational matters described in this Charter.

In addition to the powers and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities delegated to it by the Board from time to time consistent with the Company's bylaws and applicable law. While acting within the scope of the powers and responsibilities delegated to it, the Committee shall have and may exercise all the powers and authority of the Board. To the fullest extent permitted by law, the Committee shall have the power to determine which matters are within the scope of the powers and responsibilities delegated to it.

II. Membership

A. Membership and Appointment

The Committee shall be composed of at least two (2) directors as determined by the Board, each of whom shall satisfy the independence and other eligibility requirements of NASDAQ rules, and applicable laws. In addition to the general independence standard the Board must consider factors such as other material relationships, sources of compensation and affiliations that may affect independence. To the extent that the Board deems practicable and advisable, all members of the Committee shall also qualify as "non-employee directors" for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"); provided, however, that notwithstanding anything contained herein to the contrary, if not all members of the Committee qualify as non-employee directors, any grant of equity compensation to directors and officers (as defined by Rule 16a-1(f) of the Exchange Act) shall be made by the full Board or a subcommittee of the Committee comprised of at least two members who qualify as non-employee directors.

B. Resignation or Removal

Committee members may be removed from the Committee, with or without cause and with or without prior notice, by a majority vote of the Board. Any Committee member may resign effective upon delivery of oral or written notice to the Chairman of the Board and the Secretary of the Company.

III. Meetings and Procedures

The Chair (or in his or her absence, a member designated by the Chair) shall preside at each meeting of the Committee and set the agendas for Committee meetings. The Committee shall have the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company's bylaws that are applicable to the Committee.

Meetings, Minutes and Reporting

The Committee should meet as often as it determines advisable to fulfill its duties and responsibilities, but in no event less than two (2) times per year.

The Chair shall designate a secretary for each meeting who shall record minutes of the meeting including all formal actions of the Committee and shall maintain the original signed minutes for filing with the corporate records of the Company. Such minutes will be distributed to each member of the Committee and made available to other members of the Board. The Chair shall report to the Board regarding the activities of the Committee at appropriate times and as otherwise requested by the Chairperson of the Board.

A majority of the Committee members, present in person or by phone, shall constitute a quorum. A majority of the members present shall decide any questions brought before the Committee, except to the extent otherwise required by the Company's certificate of incorporation or bylaws (each as in effect from time to time). Notwithstanding the foregoing, in the event the Committee consists of only two (2) members, both members must be present, in person or by phone, to constitute a quorum, and any questions brought before the Committee must be decided by unanimous vote. Any action may be taken without a meeting if all members of the Committee consent thereto in writing (including by electronic transmission), and such writing is filed with the minutes of the Committee.

All non-management directors who are not members of the Committee may attend and observe meetings of the Committee at the pleasure of the Committee but shall not participate in any discussion or deliberation unless invited to do so by the Committee, and in any event shall not be entitled to vote. The Committee may, at its discretion, include in its meetings members of the Company's management, compensation and benefits consultants or any other person whose presence the Committee believes to be desirable or appropriate. Notwithstanding the foregoing, the CEO and other officers may not be present during voting or deliberations concerning his, her or their compensation.

Delegation

The Committee may, by resolution passed by a majority of the Committee members, designate one or more subcommittees, each consisting of one or more members of the Committee. Any such subcommittee, to the extent provided in the resolutions may exercise all the powers and authority of the Committee and shall keep regular minutes of its meetings and report the same to the Committee or the Board when required.

To the extent permitted by and consistent with applicable law and the provisions of a given equity-based plan, the Committee may delegate to one or more executive officers of the Corporation the power to grant options or other stock awards pursuant to such equity-based plan to employees of the Corporation who are not directors or executive officers of the Corporation.

Authority to Retain Advisors

The Committee may retain any independent counsel, experts, search firms or advisors that the Committee believes to be desirable and appropriate. The Committee may also use the services

of the Company's regular legal counsel or other advisors to the Company. The Company shall provide appropriate funding, as determined by the Committee, for such advisors.

IV. Duties and Responsibilities

The following shall be recurring duties and responsibilities of the Committee in carrying out its purposes. These duties and responsibilities are set forth below as a guide to the Committee, with the understanding that the Committee may alter or supplement them as appropriate under the circumstances, to the extent permitted by applicable law.

- 1. Periodically review the compensation philosophy of the Company.
- 2. Establish a compensation program for the CEO including benefits and severance arrangements, and review and recommend the program for other executive officers consistent with the philosophy.
- 3. Annually review and recommend to the Board corporate goals and objectives relevant to compensation of the CEO.
- 4. Evaluate the CEO's performance in light of relevant corporate goals and objectives and recommend to the Board the CEO's compensation.
- 5. Annually review the compensation of executive officers of the Company other than the CEO in light of relevant goals and objectives.
- 6. Annually review and recommend to the Board the compensation of the directors of the Company, including with respect to any equity-based plans.
- 7. As deemed necessary or appropriate, approve employment contracts, severance arrangements, change in control provisions and other agreements or compensation plans for executive officers.
 - 8. Approve and oversee reimbursement policies for directors and executive officers.
- 9. Periodically review and make recommendations to the Board with respect to equity-based plans. The Committee shall oversee the Company's compliance with the requirement under Nasdaq rules that, with limited exceptions, stockholders approve equity compensation plans. Subject to such stockholder approval, or as otherwise required by the Exchange Act, or other applicable law, the Committee shall have the power to manage all equity-based plans and approve which employees or consultants are entitled to awards under the Company's stock option and other equity compensation plans.
- 10. Review and discuss with the Company the Compensation Discussion and Analysis (the "CD&A"), and based on such discussions, recommend to the Board that the CD&A be included in the Company's proxy statement and annual report on Form 10-K.
- 11. Review the Company's strategy, objectives, policies and practices in the areas of human capital management (e.g., compensation plans, benefits, talent management, performance management, workforce management, employee engagement, and leadership development).

- 12. Review the Company's initiatives, policies, and practices related to fostering an equitable, diverse and inclusive environment, including in relation to recruiting practices, culture, talent management, pay equity, and gender and racial/ethnic opportunity.
- 13. Review the succession plan for executive officers of the Company other than the CEO and other key management personnel, consulting with the Nominating & Governance Committee as appropriate.
- 14. Recommend to the Board that the stockholders of the Company approve, on an advisory basis, the compensation of the named executive officers of the Company, as disclosed in the Company's proxy statement, if such proposal will be contained in the Company's proxy statement.
- 15. Recommend to the Board the frequency of holding a vote on the compensation of the Company's named executive officers if such proposal will be contained in the Company's proxy statement.
 - 16. Annually conduct an evaluation of the performance of its duties under this Charter.
- 17. Annually review the provisions of this Charter and, if appropriate, recommend changes for approval by the Board.
- 18. Periodically review executive supplementary benefits and, as appropriate, the organization's retirement, benefit, and special compensation programs involving significant cost.
- 19. Perform any other activities that are consistent with this Charter, the Company's Bylaws and governing laws, and as the Committee or the Board deems necessary or appropriate.