

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE CHARTER OF SYNLOGIC, INC.

I. Purpose

The purpose of the Nominating and Corporate Governance Committee (the “Committee”) of the Board is to assist the Board in discharging the Board’s responsibilities regarding:

- (a) the identification of qualified candidates to become Board members consistent with criteria approved by the Board;
- (b) the selection, or recommendation of selection to the Board regarding the selection, of nominees for election as directors at the next annual meeting of stockholders (or special meeting of stockholders at which directors are to be elected);
- (c) the selection, or recommendation of selection to the Board regarding the selection, of candidates to fill any vacancies on the Board;
- (d) the evaluation and recommendation to the Board any changes to the authorized size of the Board;
- (e) the assignment and rotation of Board members to various Board committees;
- (f) the review and recommendation to the Board of revisions to the Corporate Governance Guidelines;
- (g) the oversight of the evaluation of the Board and its various committees; and
- (h) the assistance with the selection of candidates for future executive officers as well the promotion and changes in position of incumbent executive officers.

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 (a) satisfies the independence requirements of companies listed on NASDAQ and (b) has experience, in the business judgment of the Board, that would be helpful in addressing the matters delegated to the Committee. If at any time and for so long as the

Committee is not solely comprised of members meeting the independence requirements of NASDAQ (subject to applicable exceptions), then the duty and responsibility of the Committee set forth in Article IV Section 1 below shall be exercised by the directors of the Board constituting at least a majority of the Board's directors that are independent (within the meaning of NASDAQ Rule 5605(a)(2), including without limitation as contemplated by NASDAQ Rule 5605(e)(1)(A)).

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, or any other person whose presence the Committee believes to be desirable and appropriate.

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.

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. Evaluate the current composition, organization and governance of the Board and its committees, and make recommendations to the Board for approval.
2. Annually recommend to the Board for nomination by the Board such candidates as the Committee, in the exercise of its judgment, has found to be well qualified and willing and available to serve.
3. Evaluate and make recommendations to the Board concerning the appointment of directors to Board committees, the selection of Board committee chairs, and proposal of the slate of directors for election to the Board
4. Determine desired Board member skills and attributes and conduct searches for prospective directors whose skills and attributes reflect those desired. Evaluate and propose nominees for election to the Board. At a minimum, nominees for service on the Board must meet the threshold requirements set forth in the Nominating and Corporate Governance Committee Policy Regarding Qualifications of Directors attached as Appendix A hereto. Each nominee will be considered both on his or her individual merits and in relation to existing or other potential members of the Board, with a view to establishing a well-rounded, knowledgeable, and experienced Board.
5. Ensure that the composition of the board takes into account diversity and equity considerations, and that it fosters an inclusive environment. The Committee will also consider,

and discuss with its advisors, appropriate ways in which to disclose diversity metrics with regard to the Company's board of directors in the Company's public filings.

6. Review periodically the performance of each current director and consider the results of such evaluation when determining whether or not to recommend the nomination of such director for an additional term.

7. Consider bona fide candidates recommended by stockholders for nomination for election to the Board in accordance with the policies set forth in Policy on Stockholder Recommendation of Candidates for Election of Directors attached hereto as Appendix B.

8. Evaluate and recommend removal of a director for cause, in accordance with the Board's governance principles, for cause or for other appropriate reasons.

9. Oversee the process of succession planning for the CEO.

10. Consult with the Compensation Committee (the owner of the responsibility) to review the succession planning for other executive officers of the Company and other appropriate management personnel, which shall include transitional leadership in the event of an unplanned vacancy.

11. Recommend to the Board the employment and appointment of future executive officers, as well as promotion and changes in position of incumbent executive officers upon review of their performance.

12. Review and maintain oversight of matters relating to the independence of Board and committee members, keeping in mind the independence standards of the Sarbanes-Oxley Act of 2002 and the rules of The Nasdaq Stock Market.

13. Periodically review and recommend revisions to the Corporate Governance Guidelines.

14. Consider, develop and recommend to the Board such policies and procedures with respect to the nomination of directors or other corporate governance matters as may be required or required to be disclosed pursuant to any rules promulgated by the Securities and Exchange Commission, NASDAQ, or otherwise considered to be desirable and appropriate in the discretion of the Committee.

15. Annually conduct an evaluation of the performance of its duties under this Charter.

16. Annually review the provisions of this Charter and, if appropriate, recommend changes for approval by the Board.

17. 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.

APPENDIX A

Nominating and Corporate Governance Committee Policy Regarding

Qualifications of Directors

The Nominating and Corporate Governance Committee (the “Committee”) believes that members of the Company’s Board of Directors must possess certain basic personal and professional qualities in order to properly discharge their fiduciary duties to stockholders, provide effective oversight of the management of the Company and monitor the Company’s adherence to principles of sound corporate governance. It is therefore the policy of the Committee that all persons nominated to serve as a director of the Company should possess the minimum qualifications described in this Policy. These are only threshold criteria, however, and the Committee will also consider the contributions that a candidate can be expected to make to the collective functioning of the Board based upon the totality of the candidate’s credentials, experience and expertise, the composition of the Board at the time, and other relevant circumstances. This Policy may be modified by the Committee from time to time.

1. Integrity and Ethical Values. Candidates should possess the highest personal and professional standards of integrity and ethical values.
2. Commitment. Candidates must be committed to promoting and enhancing the long-term value of the Company for its stockholders.
3. Absence of Conflicts of Interest. Candidates should not have any interests that would materially impair his or her ability to (i) exercise independent judgment, or (ii) otherwise discharge the fiduciary duties owed as a director to the Company and its stockholders.
4. Fair and Equal Representation. Candidates must be able to represent fairly and equally all stockholders of the Company without favoring or advancing any particular stockholder or other constituency of the Company.
5. Achievement. Candidates must have demonstrated achievement in one or more fields of business, professional, governmental, community, scientific or educational endeavor, and possess mature and objective business judgment and expertise.
6. Oversight. Candidates are expected to have sound judgment, derived from management or policy-making experience (which may be as an advisor or consultant), that demonstrates an ability to function effectively in an oversight role.
7. Diversity. The Committee will consider issues of diversity among its members in identifying and considering nominees for director, and will strive where appropriate to achieve a diverse balance of backgrounds, perspectives, experience, and other metrics on the Board and its committees.

8. Business Understanding. Candidates must have a general appreciation regarding major issues facing public companies of a size and operational scope similar to the Company. These include:
 - contemporary governance concerns;
 - industry knowledge;
 - regulatory obligations of a public issuer;
 - strategic business planning;
 - competition in a global economy; and
 - basic concepts of corporate accounting and finance.
9. Available Time. Candidates must have, and be prepared to devote, adequate time to the Board and its committees. It is expected that each candidate will be able to arrange their business and professional commitments, including service on the boards of other companies and organizations, so that they are available to attend the meetings of the Company's Board and any committees on which they serve, as well as the Company's annual meeting of stockholders.
10. Board Policies. The candidate's election must not conflict with any applicable Board policies.
11. Limited Exceptions. Under exceptional and limited circumstances, the Committee may approve the candidacy of a nominee who does not satisfy all of these requirements if it believes the service of such nominee is in the best interests of the Company and its stockholders.
12. Additional Qualifications. In approving candidates to be recommended for election as director, the Committee will also assure that:
 - at least a majority of the directors serving at any time on the Board are independent, as defined under the rules of the Nasdaq Stock Market;
 - at least three of the directors satisfy the financial literacy requirements required for service on the audit committee under the rules of the Nasdaq Stock Market; and
 - at least one of the directors qualifies as an audit committee financial expert under the rules of the Securities and Exchange Commission.

APPENDIX B

Policy on Stockholder Recommendation of Candidates for Election as Directors

1. It is the policy of Synlogic, Inc. (the “Company”) that the Nominating and Corporate Governance Committee (the “Committee”) consider recommendations for the nomination of directors submitted by holders of the Company’s shares entitled to vote generally in the election of directors.
2. The Committee will review and evaluate qualifications of any stockholder proposed director nominees and conduct any inquiries it deems appropriate.
3. The Committee will only consider recommendations of director nominees who represent the interests of all stockholders and not serve for the purpose of favoring or advancing the interests of any particular stockholder group or other constituency. The Committee will also consider the extent to which the stockholder making the nominating recommendation intends to maintain its ownership interest in the Company.
4. All recommendations submitted by stockholders will be considered in the same manner and under the same process as any other recommendations submitted from other sources.
5. The Committee will select candidates to be recommended for nomination to the Board according to the above requirements and the qualification criteria set forth in Appendix A to the Company’s Nominating and Corporate Governance Committee Charter. The Committee is under no obligation to recommend a candidate for nomination.
6. This Policy may be revised or revoked by the Board or the Committee at any time.