

AUDIT COMMITTEE CHARTER OF SYNLOGIC, INC.

I. Purpose

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

- (a) the oversight of the Company’s accounting and financial reporting processes;
- (b) the audit of the Company’s financial statements; and
- (c) oversight responsibilities with respect to the Company’s compliance with accounting, regulatory and legal requirements.

The Committee’s responsibility is oversight. Management of the Company has the responsibility for the Company’s financial statements as well as the Company’s financial reporting process, principles, and internal controls. The independent registered public accounting firm engaged by the Company (the “independent auditor”) is responsible for performing an audit of the Company’s annual financial statements, expressing an opinion as to the conformity of such annual financial statements with generally accepted accounting principles, reviewing the Company’s quarterly financial statements and other procedures. To the fullest extent permissible under applicable law, each member of the Committee shall be entitled to rely on (i) the integrity of those persons within the Company and of the professionals and experts (such as the independent auditor) from which it receives information, (ii) the accuracy of the financial and other information provided to the Committee by such persons, professionals or experts absent actual knowledge to the contrary and (iii) representations made by management of the independent auditor as to any non-audit services provided by the independent auditor to the Company.

Consistent with the Board’s and Committee’s oversight roles, the Committee should encourage continuous improvement of, and should foster adherence to, the Company’s policies, procedures, and practices at all levels. The Committee should encourage open communication among the independent auditors, finance, and senior management and the Board.

The Committee shall engage in such activities as are necessary or appropriate (many of which are outlined in this charter) in order for it to render an annual report of the Committee that meets the requirements of the rules of the Securities and Exchange Commission (the “SEC”), including the actions and disclosure required by Regulation S-K, Item 407(d)(3) under the Exchange Act regarding inclusion of the audited financial statements in the Company’s Annual Reports on Form 10-K.

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 and Procedures

A. Membership and Appointment

All members of the Committee will be appointed by, and shall serve at the discretion of, the Board. The Committee shall consist of at least three (3) members of the Board; provided, that if at any time there is a vacancy on the Committee and the remaining members meet all membership requirements, then the Committee may consist of two (2) members until the earlier of the Company's next annual stockholders meeting or one (1) year from the occurrence of the vacancy, unless the next annual stockholders meeting occurs within 180 days following the occurrence of the vacancy, in which case the Committee may consist of two (2) members until the end of such 180-day period; (ii) each member of the Committee shall be independent in accordance with the independence requirements applicable to audit committees of companies listed on NASDAQ under any applicable law, rule or regulation, including the requirements set forth in Rule 10A-3 under the Exchange Act, and (iii) no member of the Committee may simultaneously serve on the audit committee of more than two other public companies unless the Board determines that such service does not impair the member's ability to serve on the Committee.

Each member of the Committee (i) must not have participated in the preparation of the financial statements of the Company or any current subsidiary of the Company at any time during the past three years and (ii) must be able to read and understand fundamental financial statements, including the Company's balance sheet, income statement and cash flow statement. Members of the Committee are not required to be engaged in the accounting and auditing profession and, consequently, some members may not be expert in financial matters, or in matters involving auditing or accounting. However, at least one member of the Committee shall (a) have past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the member's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities, and (b) qualify as an "audit committee financial expert" under Item 401(h) of Regulation S-K under the Exchange Act, in which case such member will be presumed to have such financial sophistication.

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.

Meeting, 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 four (4) 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.

Meetings can be called by the chairperson of the Committee, at the request of any member of the Committee, or any member of the Board. At all Committee meetings, a majority of the then-current members of the Committee shall constitute a quorum. If less than a quorum is available for a given meeting, the Board may, in its discretion, delegate the responsibilities of the Committee to the available members of the Committee and/or any substitute members who meet the qualifications for membership for the purposes of such meeting, including the delegation of its authority to grant pre-approvals of audit and permitted non-audit services, provided that decisions made under such authority shall be presented to the full Committee at its next meeting. Any action required or permitted to be taken at any meeting of the Committee 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. Be directly responsible, and have sole authority, to appoint, retain, evaluate, compensate, oversee and terminate, if necessary, the Company's independent auditors, who shall report to and be directly accountable to the Committee. The Committee may, in its discretion, recommend that the Board seek stockholder ratification of the independent auditor the Committee appoints.

2. Take appropriate action to oversee the independence of the outside auditors and ensure that the auditors are independent consistent with applicable laws, rules, regulations and requirements, and, when applicable, review and discuss with the independent auditors the auditors' responsibilities under generally accepted accounting standards and Public Company Accounting Oversight Board ("PCAOB") requirements. This will include the following responsibilities:

- a. At least annually, obtain and review (i) a report from the independent auditors describing the independent auditors' internal quality-control procedures, any material issues raised by the review, or by any inquiry or investigation by governmental or professional authorities within the preceding five years (including Peer Reviews and PCAOB inspections) and (ii) all relationships and services between the independent auditors and the Company potentially impacting the independent auditors' independence.
- b. At least annually, obtain a formal written statement delineating all relationships between the independent auditors and the Company. Discuss with the independent auditors any disclosed relationships that may impact the objectivity and independence of the auditor. If the Committee determines that further inquiry is advisable, the Committee shall take appropriate action in response to the independent auditor's report to satisfy itself of the auditor's independence.
- c. Ensure the regular rotation of the lead audit partner, including to the extent required by law.
- d. Review company procedures to establish clear hiring policies for employees or former employees of the independent auditors.
- e. Obtain from the independent auditors assurance that, to the extent applicable, Section 10A(b) of the Exchange Act (concerning required responses to audit discoveries of an illegal act), has not been implicated.
- f. Monitor whether the auditor's independence is maintained, including by reviewing the non-audit services provided to the Company by the auditor. Prohibited services under Section 10A(g) of the Exchange Act will include: (i) bookkeeping or other services related to the accounting records or financial statements of the Company;

(ii) financial information systems design and implementation; (iii) appraisal or valuation services, proving fairness opinions or preparing contribution-in-kind reports; (iv) actuarial services; (v) internal audit outsourcing services; (vi) management functions or human resources; (vii) broker or dealer, investment adviser or investment banking services; (viii) legal services and expert services unrelated to the audit; and (ix) any other service that the PCAOB prohibits through regulation.

3. Meet separately, periodically, with management, with the internal auditor, if any, and with the independent auditor.
4. Meet with management and the independent auditors before the audit to discuss the preparation and employment of the audit, including without limitation, all material scope decisions.
5. Review with management and the independent auditors the results of the independent auditors' review of the Company's quarterly financial statements, management's discussion and analysis of financial condition and results of operations ("MD&A") (if applicable) and any significant accounting or disclosure issues, prior to filing Quarterly Reports on Form 10-Q with the SEC, as may be applicable to the Company.
6. Review with management and the independent auditors the Company's annual audited financial statements, the results of the audit, MD&A (if applicable) and any significant accounting or disclosure issues, prior to filing Annual Reports on Form 10-K with the SEC, as may be applicable to the Company. Request that the independent auditors inform the Committee of all material issues on which the national office of the independent auditors is consulted by the Company's audit team.
7. Prepare any disclosure that may be required by Regulation S-K, Item 407(d)(3) under the Exchange Act regarding inclusion of the audited financial statements in the Company's Annual Reports on Form 10-K, as may be applicable to the Company.
8. Review and discuss with management and the independent auditors the Company's earnings releases to the public, including the use of any pro forma or adjusted non-GAAP information, as well as material financial information and earnings guidance provided to analysts and rating agencies. The Committee should be furnished with an advance copy of each earnings release for its review prior to publication.
9. Discuss significant issues, events and transactions and any significant changes regarding accounting principles, practices, judgments or estimates with management and the independent auditors, including any significant disagreements among management and the independent auditors. Review and discuss reports from the independent auditors with regard to (i) critical accounting policies and practices to be used; (ii) alternative treatments of financial information within generally accepted accounting principles that have been discussed with management, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditors; (iii) material judgmental areas where there may have been differing views between management and the independent auditors, including with

regard to accounting, disclosure and presentation matters; (iv) the effect of regulatory and accounting pronouncements and initiatives on the financial statements of the Company; (v) off-balance sheet structures; and (vi) other material written communications between the independent auditors and management, including management letter or schedules of unadjusted differences.

10. Review with the independent auditors, to the extent possible, the matters required to be discussed by the Codification of Statements on Accounting Standards, AU § 380, as amended, as adopted by the PCAOB, relating to the conduct of the audit, including any audit problems or difficulties encountered in the course of the audit work, any restrictions on the scope of activities or access to requested information, management's response to the difficulties or problems, and any significant disagreements with management.

11. Discuss with management and the independent auditors any correspondence with regulators or governmental agencies and any published reports, if any, that raise material issues regarding, or call into question the integrity of, the Company's financial statements or accounting policies.

12. Discuss and review with the independent auditors, management and the internal auditors (if any), the adequacy and effectiveness of the Company's internal controls.

- a. Make inquiries to confirm that controls and required approvals are in place to prevent the Company from engaging the independent auditors in any services that might impact their independence.
- b. Review disclosures, if any, about any significant deficiencies or material weaknesses in the design or operation of the Company's system of internal controls and any fraud involving management or employees playing a significant role in the Company's system of internal controls, including, to the extent applicable, any disclosures made by the Company's chief executive officer and chief financial officer during their certification process for the Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.
- c. Review any special steps and remedial measures adopted in light of material control weaknesses or significant deficiencies, if any.
- d. Review the Company's internal controls report and the independent auditors' internal controls report, to the extent applicable, prior to the filing of any such reports, including without limitation, any Annual Report on Form 10-K, as may be required to be filed by the Company with the SEC.

13. Pre-approve all audits and permitted non-audit and tax services that may be provided by the independent auditors and establish policies and procedures for the Committee's pre-approval of permitted services by the independent auditors or other registered public accounting firms.

- a. Committee pre-approval of audit and non-audit services will not be required if the engagement for the services is entered into pursuant to pre-approval policies and procedures established by the Committee regarding the Company's engagement of

the independent auditor, provided the policies and procedures are detailed as to the particular service, the Committee is informed of each service provided and such policies and procedures do not include delegation of the Committee's responsibilities under the Exchange Act to the Company's management, as may be applicable to the Company. If the Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Committee must be informed of each non-audit service provided by the independent auditor. Committee pre-approval of non-audit services (other than review and attest services) also will not be required if such services fall within available exceptions established for companies subject to the periodic and current reporting requirements of Section 13 or 15(d) of the Exchange Act by the SEC.

- b. The Committee may delegate pre-approval authority to one or more of its members. The member (or members) to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Committee at its next regularly scheduled meeting.

14. Review and oversee the activities, organizational structure, and qualifications of the Company's internal audit function, if any, including reviewing the scope, performance and results of the internal audit and any reports to management and management's response to those reports.

15. Oversee procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential, anonymous submission by Company employees of concerns regarding questionable accounting or auditing matters.

16. Review on a periodic basis, or as appropriate, any investment policy of the Company and recommend to the Board any changes to the investment policy.

17. Discuss with management the Company's significant financial exposures and the actions management has taken to limit, monitor or control such exposures. The Committee shall assist the Board in its oversight of the management of financial risks, such as with respect to accounting matters, liquidity and credit risks, corporate tax positions, insurance coverage, and cash investment strategy and results, and risks relating to the performance of the Company's internal audit function and its independent registered public accounting firm, as well as the Company's systems of internal controls and disclosure controls and procedures.

18. Review and request assurances from management that the Company is complying with the appropriate legal and audit requirements for any Company sponsored retirement plans, including the Company's 401(k) plan.

19. Review all related person transactions (as defined by Item 404 of Regulation S-K) on an ongoing basis and all such transactions must be approved by the Committee. The Committee may adopt and administer a policy regarding the review and approval of such transactions, if and as appropriate.

20. Oversee the establishment of and compliance with the Company's Insider Trading Compliance Policy and approve any modifications or waivers of such policy.

21. Oversee the Company's ethics and compliance functions, including the Code of Business Conduct and Ethics, and other procedures established by the Company with regard to ethical behavior, avoidance of conflicts of interest, and other related matters. The Committee shall oversee the appropriate investigation of any reports received through the ethics helpline, if any, and report to the Board periodically with respect to the information received through the ethics helpline and any related investigations. The Committee will ensure such procedures maintain the appropriate confidentiality and anonymity of persons reporting violations or suspected violations and that the Company does not take retaliatory actions against those reporting.

22. Review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow-up (including disciplinary action) of any instances of noncompliance.

23. Institute and oversee special investigations as needed.

24. Confer with the Company's internal legal counsel, if any, or outside counsel about legal matters that may have a material impact on the financial statements or the Company's compliance policies. The Committee also shall: (a) at least annually, receive a presentation by management summarizing the Company's programs and control for compliance with legal and regulatory requirements; and (b) review and discuss with management the Company's procedures and practices designed to provide reasonable assurance that: (i) the Company's books, records, accounts and internal accounting controls are established and maintained in compliance with the Foreign Corrupt Practices Act of 1977, the UK Bribery Act 2010 and similar laws and regulations to which the Company is subject, and (ii) there are adequate company level controls in place to prevent or detect (A) any improper or illegal disbursement of corporate funds or property of value or (B) the making of any arrangement on behalf of the Company which may provide for or result in the improper or illegal disbursement of funds or property of value.

25. Review the policies and programs of the Company regarding overall risk management and risk assessment and inquire about risks or exposures for the Company, including but not limited to the areas of corporate compliance, regulatory compliance, employment, quality, patients, public relations, and SEC and investor issues.

26. Oversee the integrity of the Company's information technology systems, processes and data, and periodically (but no less than annually), at its discretion, (a) review and assess with management the adequacy of controls and security for the Company's information technology systems, processes and data, and (b) the Company's contingency plans in the event of a breakdown or security breach affecting the Company's information technology systems.

27. Oversee the Company's Environmental, Social and Governance ("ESG") strategy, initiatives and policies, which will include receiving periodic reports from management regarding appropriateness of Company's ESG efforts.

28. Annually conduct an evaluation of the performance of its duties under this charter.

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

30. 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.