UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

(Amendment No. 1)

(Mark One)

 \mathbf{X} ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2023

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

Commission File Number 001-37566

SYNLOGIC, INC.

(Exact name of Registrant as specified in its Charter)

Delaware

(State or other jurisdiction of incorporation or organization

301 Binney St., Suite 402 Cambridge, MA

(Address of principal executive offices)

X

26-1824804 (I.R.S. Employer Identification No.)

> 02142 (Zip Code)

> > Accelerated filer

Small reporting company

X

(617) 401-9975

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, par value \$0.001 per share	SYBX	The Nasdaq Capital Market
Preferred Stock Purchase Rights	N/A	The Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of The Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES 🗆 NO 🗵

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES 🗆 NO 🗵

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES 🛛 NO 🗆

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). YES 🗵 NO 🗆

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 Non-accelerated filer Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. \Box

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES 🗆 NO 🗵

The aggregate market value of common stock held by non-affiliates of the registrant as of June 30, 2023, the last business day of the registrant's most recently completed second quarter, was \$23.6 million, computed based on the closing price of \$6.45 per share on June 30, 2023.

As of March 31, 2024 there were 11,627,216 shares of the registrant's common stock, par value \$0.001 per share, outstanding,

DOCUMENTS INCORPORATED BY REFERENCE

None

EXPLANATORY NOTE

This registrant is filing this Amendment No. 1 ("Amendment") to its Annual Report on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission (the "SEC") on March 19, 2024 (the "Original Filing") solely to include the information required by Item 10 - "Directors, Executive Officers and Corporate Governance", Item 11 - "Executive Compensation", Item 12 - "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters", Item 13 - "Certain Relationships and Related Transactions, and Director Independence" and Item 14 - "Principal Accounting Fees and Services" of Part III of Form 10-K that was intentionally omitted from Part III of Original Filing. The reference on the cover page of the Original Filing to the incorporation by reference of portions of our definitive proxy statement into Part III of the Original Filing is hereby deleted. Items 10, 11, 12, 13 and 14 of Part III of the Original Filing are amended and restated in their entirety as set forth in this Amendment. In addition, pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), we are including with this Amendment certain currently dated certifications. Because no financial statements have been included in this Amendment and this Amendment does not contain or amend any disclosure with respect to Items 307 and 308 of Regulation S-K, paragraphs 3, 4 and 5 of the certifications have been omitted. We are not including the certifications under Section 906 of the Sarbanes-Oxley Act of 2002 as no financial statements are being filed with this Amendment. Except as described above, no other amendments are being made to the Original Filing. This Amendment does not reflect events occurring after the March 19, 2024 filing of the Original Filing or modify or update the disclosure contained in the Original Filing and our other filings with the SEC. Terms used but not defined herein shall have the meanings ascribed to the min the Original Filing.

FORWARD-LOOKING STATEMENTS

This Amendment contains forward-looking statements that involve risks and uncertainties. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements other than statements of historical facts contained herein are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- our evaluation of strategic alternatives with a goal to enhance stockholder value, including the possibility of a merger or a sale of the Company;
- the success of our research and development efforts;
- the initiation, progress, timing, costs and results of clinical trials for our product candidates;
- the time and costs involved in obtaining regulatory approvals for our product candidates;
- the success of our collaborations with third parties;
- the progress, timing and costs involved in developing manufacturing processes and in manufacturing products, as well as agreements with third-party manufacturers;
- the rate of progress and cost of our commercialization activities;
- the expenses we incur in marketing and selling our product candidates, if approved;
- the revenue generated by sales of our product candidates, if approved;
- the emergence of competing or complementary technological developments;
- the terms and timing of any additional collaborative, licensing or other arrangements that we may establish;
- the acquisition of businesses, products and technologies;
- our need to implement additional infrastructure and internal systems;
- our need to add personnel and financial and management information systems to support our product development and potential future commercialization efforts, and to enable us to operate as a public company;

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- the extent to which our business is adversely impacted by the effects of the coronavirus outbreak (COVID-19) or by other health epidemics or pandemics; and
- other risks and uncertainties, including those listed under Part I, Item 1A. "Risk Factors" of the Original Filing.

Any forward-looking statements in this Amendment reflect our current views with respect to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under Part I, Item 1A. "Risk Factors" and elsewhere in the Original Filing. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

This Amendment also contains estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

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PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The Board of Directors

Our bylaws provide that our business is to be managed by or under the direction of our Board of Directors (our "Board"). Our Board currently consists of six members, classified into three classes as follows: (1) Nick Leschly constitutes a class with a term ending at the 2024 annual meeting of stockholders, (2) Richard Shea and James Flynn constitute a class with a term ending at the 2025 annual meeting of stockholders and (3) Peter Barrett, Ph.D. and Edward Mathers constitute a class with a term ending at the 2026 annual meeting of stockholders, their ages as of March 31, 2024. In addition, information about the specific experience, qualifications, attributes or skills that led to our Board's conclusion at the time of filing of this Amendment that each person listed below should serve as a director is set forth below:

Name	Age	Position with the Company
Peter Barrett, Ph.D.	71	Chairman of the Board
James Flynn	43	Director
Michael Heffernan	59	Director
Nick Leschly	51	Director
Edward Mathers	63	Director
Richard P. Shea	72	Director

Our Board has reviewed the materiality of any relationship that each of our directors has with Synlogic, either directly or indirectly. Based upon this review, our Board has determined that the following members of the Board are "independent directors" as defined by the Nasdaq Stock Market: Richard P. Shea, Peter Barrett, Ph.D., Edward Mathers, Nick Leschly, Michael Heffernan and James Flynn.

Peter Barrett, Ph.D. has served as Chairman of our Board since the Merger closed on August 28, 2017, and prior to that time served as the Chairman of the Private Synlogic board of directors since March 2014. Dr. Barrett is a partner at Atlas Venture and has been involved in the creation of several novel therapeutic and drug discovery platform companies. He is also a Executive Fellow at Harvard Business School, where he is the Faculty Chair of the Key Advisory Board of the Blavatnik Fellowship Program. Dr. Barrett currently serves on the board of Revvity and Obsidian Therapeutics. Prior to joining Atlas, Dr. Barrett was Co-founder, Executive Vice President, and Chief Business Officer of Celera Genomics, which announced the first successful sequencing of the human genome in 2001. While at Celera, Dr. Barrett led strategic alliances, acquisitions, and business strategy and helped launch it as a public company in 1999. Prior to founding Celera, Dr. Barrett held senior management positions at Applera, most recently serving as Vice President of corporate planning and business development. During his tenure, he ran several businesses and expanded the life science business of licensing agreements, partnerships, and acquisitions. Dr. Barrett received a BS in chemistry from Lowell Technological Institute (now known as the University of Massachusetts, Lowell), and a Ph.D. in analytical chemistry from Northeastern University. He also completed Harvard Business School's Management Development Program. The Board has concluded that Dr. Barrett possesses specific attributes that qualify him to serve as a member and chairman of the Board, including his extensive leadership, executive, managerial and business experience with life sciences companies, including experience in the formation, development and business strategy of multiple start-up companies in the life sciences sector.

James Flynn, CFA has served as a member of our Board since March 2024. Mr. Flynn is currently a Managing Member and Portfolio Manager of Nerium Capital LLC, an investment adviser he founded in January 2021. Nerium Capital LLC is the General Partner of Nerium Partners LP, a healthcare focused investment partnership. Mr. Flynn also currently serves as a Board Member for ARCA Biopharma, Inc., a biotechnology company dedicated to developing therapies for cardiovascular diseases, MEI Pharma, Inc., a clinical stage pharmaceutical company committed to developing novel and differentiated cancer therapies, and Ricebran Technologies, an innovative specialty ingredients company. From 2019 to 2020, Mr. Flynn was exploring business opportunities which ultimately led to the formation of Nerium Capital LLC. From 2017 to 2018, Mr. Flynn worked as a therapeutics analyst at Aptigon Capital (a Citadel Company), an investment firm. Prior to that, from 2003 to 2017, Mr. Flynn served in various roles at Amici Capital, LLC, an investment firm. Mr. Flynn earred a S.B. degree in Manager (2008 to 2017). From 2002 to 2003, Mr. Flynn worked in the credit research/high yield group at Putnam Investments, an investment firm. Mr. Flynn earred a S.B. degree in Management Science with a concentration in Finance and a minor in Economic Science from the Massachusetts Institute of Technology (MIT). Mr. Flynn is a Chartered Financial Analyst (CFA) charterholder. The Board has concluded that Mr. Flynn possesses specific attributes that qualify him to serve as a member of our Board, including his experience with the healthcare and pharmaceutical industries and his broad life sciences industry knowledge.

Michael Heffernan has served as a member of or Board since December 2020. Mr. Heffernan is a successful entrepreneur and biopharmaceutical leader with over 30 years of experience in building and leading development stage and commercial companies. He is the Founder and Chairman of Collegium Pharmaceutical, a publicly traded pharmaceutical company that he founded that is focused on developing and commercializing products for the treatment of chronic pain and related disorders. He served as its President and CEO from company inception until June 2018. Mr. Heffernan is currently an advisor, investor and board member in numerous public and private biotech companies. He recently co-founded Avenge Bio, Inc., an immuno-oncology company that he is actively managing and serves on the board. Mr. Heffernan has held previous positions as CEO of Onset Dermatologics, a dermatology company that he founded and spun out of Collegium to create PreCision Dermatology, which was sold to Valeant. He was co-founder and CEO of Clinical Studies Ltd., a pharmaceutical company and served in numerous sales and marketing roles. In addition to Collegium, Mr. Heffernan is also currently on the board of directors of Trevi Therapeutics, Inc. and Biohaven Pharmaceuticals. He has served in a number of non-profit roles as both an advisor and board member. Mr. Heffernan was named E&Y Entrepreneur of the Year, Northeast Regional Winner in 2016. He is a registered pharmacist and earned his B.S. Degree in Pharmacy from the



University of Connecticut. The Board has concluded that Mr. Heffernan possesses specific attributes that qualify him to serve as a member our Board, including his experience with the healthcare and pharmaceutical industries and his broad management experience.

Nick Leschly has served as a member of our Board since the Merger closed on August 28, 2017, and prior to that time served on the Private Synlogic board of directors since March 2016. Mr. Leschly is Chairman of 2Seventy Bio and previously served as its CEO. Prior to that, he served as the chief bluebird of bluebird bio, Inc., a publicly traded clinical-stage biotechnology company, since September 2010. Mr. Leschly currently serves on the board of bluebird bio, Inc. Formerly a founding partner of Third Rock Ventures, L.P. since 2007, Mr. Leschly played an integral role in the overall formation, development and business strategy of several of Third Rock's portfolio companies, including Agios Pharmaceuticals. Prior to joining Third Rock, he worked at Millennium Pharmaceuticals, Inc. (now a subsidiary of Takeda), leading several early-stage drug development programs and served as the product and alliance leader for VELCADE®. Mr. Leschly currently serves on the board of bluebird bio B.S. in Molecular Biology from Princeton University and his M.B.A. from Wharton Business School. He also serves on the advisory boards for Princeton University Molecular Biology Department and the Special Olympics of Massachusetts. The Board has concluded that Mr. Leschly possesses specific attributes that qualify him to serve as a member of our Board, including his experience in the venture capital industry and drug research and development.

Edward Mathers has served as a member of our Board since October 2012. Mr. Mathers previously served on the Private Synlogic board of directors since July 2014. Mr. Mathers is a General Partner at NEA, a private venture capital firm focusing on technology and healthcare investments. Mr. Mathers serves on the board of directors of the following publicly traded pharmaceutical companies: Trevi Therapeutics, Inc., Inozyme Pharma, Inc., Rhythm Pharmaceuticals, Inc., Reneo Pharmaceuticals, Inc. and Senti Biosciences, Inc. Mr. Mathers also serves on the board of directors of several privately held companies. Mr. Mathers previously served on the board of directors of the following publicly traded companies: ObsEva SA, Mirum Pharmaceuticals, Inc., Akouos, Inc., Liquidia Technologies, Inc., Lumos Pharma, Inc., and Ra Pharmaceuticals, Inc. From 2002 to 2008, Mr. Mathers served as Executive Vice President, Corporate Development and Venture at MedImmune, Inc., a biopharmaceutical company, and led its venture capital subsidiary, MedImmune Ventures, Inc. Before joining MedImmune in 2002, Mr. Mathers was Vice President, Marketing and Acquisitions at Inhale Therapeutic Systems, a biotechnology company. Previously, Mr. Mathers spent 15 years at Glaxo Wellcome, Inc. (GlaxoSmithKline), a pharmaceutical company, where he held various sales and marketing positions. Mr. Mathers received a B.S. in Chemistry from North Carolina State University. The Board has concluded that Mr. Mathers possesses specific attributes that qualify him to serve as a member of our Board, including his experience with the healthcare and pharmaceutical industries and his broad management experience.

Richard P. Shea has served as a member of our Board since the Merger closed on August 28, 2017. Mr. Shea served as the Chief Financial Officer of Syndax Pharmaceuticals, Inc. from February 2017 through July 2020. Mr. Shea previously served as a member of the Syndax Pharmaceuticals board of directors from January 2014 to February 2017. From July 2007 through December 2016, Mr. Shea served as Senior Vice President and Chief Financial Officer of Momenta Pharmaceuticals Inc., a publicly traded biotechnology company, and was its Vice President and Chief Financial Officer since October 2003. Prior to joining Momenta, Mr. Shea served as Chief Operating Officer and Chief Financial Officer of Variagenics Inc., a publicly traded biotechnology company, which was acquired by Wyeth Pharmaceuticals, Inc., which was then acquired by Pfizer, Inc. Mr. Shea received an A.B. from Princeton University and an M.B.A. from the Public Management Program at Boston University. The Board has concluded that Mr. Shea possesses specific attributes that qualify him to serve as a member of our Board, including his experience with the healthcare and pharmaceutical industries and his broad life sciences industry knowledge.

Committees of the Board of Directors and Meetings

Meeting Attendance. During the fiscal year ended December 31, 2023, Synlogic's Board held four meetings, and the various committees of the Board met a total of sixteen times. All directors attended at least 75% of the total number of meetings of the Board and of committees of the Board on which he or she served during fiscal 2023. Synlogic's annual meeting was held on June 15, 2023 and all of Synlogic's directors attended the meeting. We encourage our directors to attend the Annual Meeting.

Audit Committee. Synlogic's Audit Committee met seven times during fiscal 2023. This committee currently has three members, Richard P. Shea (Chairman), Peter Barrett, and Michael Heffernan. Our former director Michael Burgess served on the Audit Committee until March 2024 when Mr. Burgess resigned from our board of directors. Our Audit Committee's role and responsibilities are set forth in the Audit Committee's written charter and include the authority to retain and terminate the services of our independent registered public accounting firm. In addition, the Audit Committee reviews annual financial statements, considers matters relating to accounting policy and internal controls and reviews the scope of annual audits. All members of the Audit Committee satisfy the current independence standards promulgated by the Securities and Exchange Commission and by the Nasdaq Stock Market, as such standards apply specifically to members of audit committees. The Board has determined that Mr. Shea is an "audit committee financial expert," as the Securities and Exchange Commission has defined that term in Item 407 of Regulation S-K. Please also see the report of the Audit Committee set forth elsewhere in this proxy statement.

A copy of the Audit Committee's written charter is publicly available on our website at www.synlogictx.com.

Compensation Committee. Synlogic's Compensation Committee met four times during fiscal 2023. This committee currently has two members, Nick Leschly and Ed Mathers. Our former director Lisa Kelly-Croswell served on the Compensation Committee until March 2024 when Ms. Kelly-Croswell resigned from our board of directors. Our Compensation Committee's role and responsibilities are set forth in the Compensation Committee's written charter and includes reviewing, approving and making recommendations regarding our compensation policies, practices and procedures to ensure that legal and fiduciary responsibilities of the Board are carried out and that such policies, practices and procedures contribute to our success. Our Compensation Committee also administers our 2015 Equity Incentive Award Plan, 2017 Stock Incentive Plan, 2015 Employee

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Stock Purchase Plan, and 2023 Inducement Equity Incentive Award Plan. The Compensation Committee reviews and recommends policies relating to compensation and benefits of our officers and employees. The Compensation Committee reviews and recommends corporate goals and objectives relevant to compensation of our Principal Executive Officer and other executive officers, evaluates the performance of these officers in light of those goals and objectives and may approve the compensation of the executive officers, other than the Principal Executive Officer, whose compensation the Compensation Committee recommends to the Board, based on such evaluations. The Compensation Committee also recommends to the Board the issuance of stock options and other awards under our stock plans. All members of the Compensation Committee qualify as independent under the definition promulgated by the Nasdaq Stock Market.

The Compensation Committee has the authority to directly retain the services of independent consultants and other experts to assist in fulfilling its responsibilities. The Compensation Committee has engaged the services of Alpine Rewards, LLC ("Alpine Rewards"). Alpine Rewards, an executive compensation consulting firm, to review and provide recommendations concerning all of the company's executive compensation program. Alpine Rewards performs services solely on behalf of the Compensation Committee and has no relationship with the Company or management except as it may relate to performing such services. Alpine Rewards assists the Compensation Committee in defining the appropriate market of the Company's peer companies for executive compensation and practices and in benchmarking our executive compensation program against the peer group each year. Alpine Rewards also assists the Compensation Committee in benchmarking our director compensation program and practices against those of our peers. In compliance with the SEC and the corporate governance rules of the Nasdaq Stock Market, Alpine Rewards provided the Compensation Committee with a letter addressing each of the six independence factors. Their responses affirm the independence of Alpine Rewards and the partners, consultants, and employees who service the Compensation Committee on executive compensation matters and governance issues.

A copy of the Compensation Committee's written charter is publicly available on our website at www.synlogictx.com.

Nominating and Governance Committee. Synlogic's Nominating and Governance Committee met three times during fiscal 2023. This committee currently has one member, Michael Heffernan (Chairman). Our former directors Lisa Kelly-Croswell and Patricia Hurter served on the Nominating and Governance Committee until March 2024 when Ms. Kelly-Croswell and Ms. Hurter resigned from our board of directors. Our Board has determined that Mr. Heffernan qualifies as independent under the definition promulgated by the Nasdaq Stock Market. The Nominating and Governance Committee's responsibilities are set forth in the Nominating and Governance Committee's written charter and include: identification of qualified candidates to become Board members consistent with criteria approved by the Board; selection, or recommendation of selection to the Board, of candidates to fill any vacancies on the Board; evaluation of and recommendation of Board members to various Board committees; review and recommendation to the Board of revisions to the Corporate Governance Guidelines; oversight of the evaluation of the Board members to various committees; and assistance with the selection of candidates for future executive officers as well the promotion and changes in position of incumbent executive officers.

Generally, our Nominating and Governance Committee considers candidates recommended by stockholders as well as from other sources such as other directors or officers, third party search firms or other appropriate sources. Once identified, the Nominating and Governance Committee will evaluate a candidate's qualifications in accordance with our Corporate Governance Guidelines. Threshold criteria include: personal and professional integrity, ethics and values; absence of conflict of interest; fair and equal representation of all stockholders; commitment to promoting long term value of the company; experience in corporate management, such as serving as an officer or former officer of a publicly held company; strong finance experience; experience relevant to the Company's industry; experience as a board member or executive officer of another publicly held company; diversity of expertise and experience in substantive matters pertaining to the Company's business relative to other members of the Board; diversity of background and perspective, including with respect to age, gender, race, place of residence and specialized business or career experience relevant to the success of the Company; practical and mature business judgment, including the ability to make independent analytical inquiries; and any other relevant qualifications, attributes or skills. Our Nominating and Governance Committee will consider issues of diversity among its members in identifying and considering nominees for director and strive where appropriate to achieve a diverse balance of backgrounds, perspectives, business and career experience on the Board and its committees.

If a stockholder wishes to propose a candidate for consideration as a nominee for election to the Board, it must follow the procedures described in our bylaws, the "Policy on Stockholder Recommendation of Candidates for Election as Directors" set forth as Appendix B of the Committee Charter, and in "Stockholder Proposals and Nominations for Director" elsewhere in this Amendment. In general, persons recommended by stockholders will be considered in accordance with our Corporate Governance Guidelines. Any such recommendation should be made in writing to the Nominating and Governance Committee, care of our Secretary at our principal office and should be accompanied by the following information concerning each recommending stockholder and the beneficial owner, if any, on whose behalf the nomination is made:

- all information relating to such person that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of
 proxies for election of directors in a contested election pursuant to Section 14(a) under the Exchange Act (including such proposed nominee's written consent to being named
 in the proxy statement as a nominee and to serving as a director if elected);
- certain biographical and share ownership information about the stockholder and any other proponent, including a description of any derivative transactions in the Company's securities;
- a description of certain arrangements and understandings between the proposing stockholder and any beneficial owner and any other person in connection with such stockholder nomination; and

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• a statement whether or not either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of voting shares sufficient to carry the proposal.

The recommendation must also be accompanied by the following information concerning the proposed nominee:

- certain biographical information concerning the proposed nominee;
- all information concerning the proposed nominee required to be disclosed in solicitations of proxies for election of directors;
- certain information about any other security holder of the Company who supports the proposed nominee;
- a description of all relationships between the proposed nominee and the recommending stockholder or any beneficial owner, including any agreements or understandings regarding the nomination; and
- additional disclosures relating to stockholder nominees for directors, including completed questionnaires and disclosures required by our Bylaws.

A copy of the Nominating and Governance Committee's written charter is publicly available on the Company's website at www.synlogictx.com.

Science & Technology Committee. Synlogic's Science & Technology Committee met two times during fiscal 2023. This committee currently has one member, Peter Barrett. Our Science & Technology Committee's written charter and includes the authority to advise the Board and management on the strategy, objectives and priorities, as well as robustness and quality, of the Company's current and planned research and development programs and technology initiatives as well as such other topics as deemed appropriate. The Board has determined that all members of the Science & Technology Committee qualify as independent under the definition promulgated by the Nasdaq Stock Market.

A copy of the Science & Technology Committee's written charter is publicly available on our website at www.synlogictx.com.

Board Leadership Structure and Role in Risk Oversight

Leadership Structure of the Board

Our Board has separated the positions of Chairman of the Board and Principal Executive Officer. Separating these positions allows our Principal Executive Officer to focus on our day-to-day business, while allowing the Chairman of our Board to lead the Board in its fundamental role of providing advice to and independent oversight of management. Our Board recognizes the time, effort and energy that the Principal Executive Officer is required to devote to such position in the current business environment, as well as the commitment required to serve as Chairman of our Board, particularly as the Board's oversight responsibilities continue to grow. While our bylaws and corporate governance guidelines do not require that the Chairman and Principal Executive Officer positions be separate, our Board believes that having separate positions and having an independent outside director serve as Chairman is the appropriate leadership structure for us currently. Our Board will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Board Diversity

Our Board of Directors believes that a diverse board is better able to effectively oversee our management and strategy, and position us to deliver long-term value for our stockholders. Our Board of Directors considers diversity, including gender and ethnic diversity, as adding to the overall mix of perspectives of our Board of Directors as a whole. The Board diversity matrix, below, provides the diversity statistics for our Board of Directors.

Board Diversity Matrix (As of March 31, 2024)						
Total Number of Directors			6			
	Female	Male	Non- Binary	Did Not Disclose Gender		
Part I: Gender Identity						
Directors	-	6	-	_		
Part II: Demographic Background						
African American or Black	-	-	-	_		
Alaskan Native or American Indian	-	-	-	_		
Asian	-	-	-	_		
Hispanic or Latin	-	-	-	_		
Native Hawaiian or Pacific Islander	-	-	-	_		
White	-	6	-	_		
Two or More Races or Ethnicities	-	-	-	_		
LGBTQ+			-			
Did Not Disclose Demographic Background			-			

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our Board encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings and conducts specific strategic planning and review sessions during the year that include a focused discussion and analysis of the risks facing us. Throughout the year, senior management reviews these risks with our Board at regular Board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks.

Our Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various standing committees of the Board that address risks inherent in their respective areas of oversight. In particular, our Board is responsible for monitoring and assessing strategic risk exposure and the Audit Committee is responsible for overseeing our major financial risk exposures, information technology, cybersecurity and other risks, and the steps management has taken to monitor and control these exposures. The Audit Committee also monitors compliance with legal and regulatory requirements and considers and approves or disapproves any related-persons transactions. Our Nominating and Governance Committee monitors the effectiveness of our corporate governance. The Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Corporate Responsibility

We are committed to developing transformative medicines for patients in a socially responsible and sustainable manner.

Environmental Awareness: We lease our office and manufacturing facilities. Nevertheless, we recognize the importance of taking other measures to reduce our environmental footprint. Some of our efforts include our commitment to reduce, reuse or recycle where possible or appropriate.

Social and Human Capital: At Synlogic, we believe in fostering diversity, equity and inclusion (DEI) as it is critical to our success. Strengthening our diversity is an expression of our values and imperative for our business. We believe our science has the potential to deliver transformative benefit to patients, and we are committed to bringing innovation forward by embracing the diversity of our team and the patients we serve, and by ensuring all of our community has access to opportunities and innovative therapies.

We are committed to creating a diverse and inclusive environment, embracing individuality in all forms including ability, age, color, ethnicity, family or marital status, gender identity or expression, genetics, language, national origin, political affiliation, race, religion, sexual orientation, socio-economic status, veteran status, and any other individual differences or characteristics, education, skill sets and experience. We are focused on inclusive hiring practices, fair and equitable treatment, organizational flexibility and training and resources.

We recognize that our employees are essential to our success. To this end, we support business growth by seeking to attract and retain best-in-class talent. We use internal and external resources to recruit highly skilled candidates for open positions. We believe that we are able to attract and retain the talent that is required to meet our business goals. In addition to full-time hiring, we partner with several organizations focused on under-represented and underserved communities to provide internship opportunities.

While we strive to provide real-time recognition of employee performance, we have a formal annual review process not only to determine pay and equity adjustments tied to individual contributions, but to identify areas where employees may benefit from additional training and development opportunities.

We believe in encouraging employees to be lifelong learners by providing ongoing learning and leadership training opportunities which helps us to promote key talent from within. Our total rewards philosophy has been to invest in our workforce by offering a competitive compensation and benefits package. We provide employees with compensation packages that include base salary, annual incentive bonuses and long-term equity incentive awards. Our equity incentive awards ensure alignment between our employees and shareholders and encourage an ownership mentality. We also recognize success through an ongoing peer-to-peer and manager-led recognition program, and annual awards aligned to our goals and values.

We also offer comprehensive employee benefits, such as life, disability and health insurance, health savings and flexible spending accounts, paid time off, a 401(k) plan with market-competitive company matching contributions, and an Employee Stock Purchase Plan (ESPP). It is our express intent to be an employer of choice in our industry by providing a market-competitive compensation and benefits package.

We also conduct employee engagement surveys on a periodic basis to help us understand employee satisfaction and how best to improve as an organization. Our Social Committee, consisting of employees from various functions, is dedicated to organizing activities, such as themed social gatherings, volunteer opportunities, and other events that enrich our culture and bring employees together. We also encourage employees to take one paid day off a calendar year to volunteer for the organization of their choice.

We also have an Equity, Diversity, and Inclusion Committee, comprised of employees at various levels of our organization, focused on increasing the inclusive culture of the company, and diversity of our workforce.

We have always invested, and will continue to invest, in the health, safety, and wellness of our employees. We provide our employees with access to a variety of innovative, flexible, and convenient health and wellness programs. Program benefits are intended to provide protection and security, so employees can have peace of mind concerning events that may require time away from work or that may impact their financial well-being. We provide an Employee Assistance Program ("EAP") which provides consultation, referrals and resources to help employees and their household manage everyday life and work challenges. We also reimburse for fitness and other similar programs, as well as offer periodic health challenges to encourage health and well-being.

We have occupational health and safety measures that apply to all our employees, contractors and visitors. We have convened a cross-functional Safety Committee to identity and address concerns and look for areas to improve. We train individuals commensurate with their level of risk and employees are required to report incidents and are encouraged to voice any health or safety concerns to management or a Safety team member. To protect and support out team members we have created a cross-functional COVID response team and implemented health and safety measures where appropriate during the pandemic.

We are committed to our communities and we engage in multiple philanthropic endeavors each year. We partner with external non-profits, such as Life Science Cares, to provide further opportunities to engage with our local community. We also regularly engage directly with patients to better understand the lives of people living with rare disease which we believe can help us discover and develop potential therapies, design and execute our clinical trials, and enrich our culture. We benefit from periodic company-wide patient speaking events to ensure all our employees understand the challenges faced by the patients we serve.

Governance, Ethics, and Compliance: Our Board is committed to corporate governance, risk oversight, and ethics and compliance. Our Board has adopted Corporate Governance Guidelines, which present a framework for good corporate governance practices. The Board has also adopted a Code of Conduct and Business Ethics for all directors, officers and employees as well as a hotline and Whistleblower Policy applicable to its employees that provides for protection from retaliation due to reporting issues relating to compliance with applicable laws and regulations. We also provide for continuing education for Directors, have ensured we maintain a separate CEO and Chair Role, and have full independence among standing members of Audit, Compensation and Nominating and Corporate Governance committees, and regular Board and Committee self-evaluation.

We will continue to evolve and strengthen our corporate responsibility efforts and anticipate reporting on other measures over time.

Policy Prohibiting Hedging and Pledging

Pursuant to our Insider Trading Policy, our officers, directors, employees and consultants are prohibited from engaging in transactions in publicly traded options, such as puts and calls, and other derivative securities with respect to our common stock at any time. This prohibition extends to any hedging, pledging or similar transaction designed to decrease the risks associated with holding our securities

Clawback Policy

On September 20, 2023, our Board adopted a Clawback Policy to comply with the new Clawback rules ad listing standards promulgated by the SEC and Nasdaq Stock Market, respectively. The Clawback Policy generally provides that we will seek to recover, in the event of a required accounting restatement, excess incentive compensation received by covered officers where that compensation is based on erroneously reported financial information, regardless of fault or misconduct.

Stockholder Communications to the Board

Generally, stockholders who have questions or concerns should contact our Investor Relations department at (617) 401-9975. However, any stockholders who wish to address questions regarding our business directly with the Board, or any individual director, should direct his or her questions in writing to the Chairman of the Board at Synlogic, Inc., 301 Binney Street, Suite 402, Cambridge MA 02142. Communications will be distributed to the Board, or to any individual director or directors as appropriate, depending on the facts and circumstances outlined in the communications. Items that are unrelated to the duties and responsibilities of the Board may be excluded, such as: junk mail and mass mailings, resumes and other forms of job inquiries, surveys, and solicitations or advertisements.

In addition, any material that is unduly hostile, threatening, or illegal in nature may be excluded, provided that any communication that is filtered out will be made available to any outside director upon request.

Executive Officers

The following table sets forth certain information regarding our executive officers who are not also directors as of March 31, 2024. We have employment agreements with each of our executive officers.

Name	Age	Position
Antoine Awad	44	Principal Executive Officer
Mary Beth Dooley	43	Head of Finance



Antoine (Tony) Awad joined Synlogic as a consultant in October 2018 and became a full-time employee in December 2018 as Head of Technical Operations, as Synlogic's Chief Operating Officer in July 2020 and Principal Executive Officer in March 2024. He is responsible for process sciences and manufacturing functions for the Company, as well as operations, information technology and facilities. Mr. Awad has over 20 years of experience in the biotechnology and pharmaceutical industry with substantial and notable experience in the development and manufacturing of multiple modalities of novel therapeutics from pre-IND studies through global commercialization. Prior to joining Synlogic, Mr. Awad was most recently at Abpro Therapeutics and served as Senior Vice President of CMC and Operations, from October 2017 to October 2018, where he was responsible for the development of bi-specific antibodies for oncology focused therapeutics while leading corporate operational functions, including HR, IT and facilities. Prior to that, from March 2017 to May 2017, he served as Senior Vice President of Technical Operations and Manufacturing at L.E.A.F. Pharmaceuticals focused on developing small molecules and nanotechonology based drugs for solid tumors. Previously, Mr. Awad led CMC development, manufacturing of ONIVYDE® for treatment of advanced pancreatic cancer and transitioned to Ipsen Bioscience to integrate and lead commercial manufacturing of ONIVYDE®. Mr. Awad has broad experience in partnerships, collaboration and M&A, most notably with Sanofi, Baxalta/Shire plc, Actavis Pharma/Teva Pharmaceutical Industries and Ipsen Bioscience. Mr. Awad is a graduate of Boston University and holds degree in biochemistry and molecular biology and conducted graduate research at Boston University School of Dental Medicine.

Mary Beth Dooley has served as our Head of Finance since November 2023 and prior to that as our Controller since June 2018. She is responsible for leading the Company's financial strategy, planning, corporate accounting and operations. Prior to joining Synlogic, Ms. Dooley worked as a senior manager of financial planning analysis at Idera Pharmaceuticals from July 2014 to May 2018, and prior to that, as an associate with PricewaterhouseCoopers from September 2012 to July 2014. Prior to joining PricewaterhouseCoopers, she served as an Assistant Vice President at Boston Private Bank & Trust Company, in the Investment Management & Trust Department. Ms. Dooley received a B.S. in Economics from Bates College and an M.B.A. and a M.S. in Accounting from Northeastern University.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a Code of Business Conduct and Ethics that applies to all of our employees, including our principal executive officer and principal financial and accounting officer. The text of the Code of Business Conduct and Ethics is posted on our website at www.synlogictx.com. Disclosure regarding any amendments to, or waivers from, provisions of the Code of Conduct and Ethics that apply to our directors, principal executive and financial officers will be included in a Current Report on Form 8-K within four (4) business days following the date of the amendment or waiver, unless website posting or the issuance of a press release of such amendments or waivers is then permitted by the rules of the Nasdaq Stock Market.

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Item 11. Executive Compensation.

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

Summary Compensation Table

The following table presents information regarding the total compensation paid or accrued during the last two fiscal years for (1) each person who served as our Chief Executive Officer during the year ended December 31, 2023, (2) our next most highly-compensated executive officers during the year ended December 31, 2023, who were serving as executive officers as of December 31, 2023, and (3) a former executive officer of the Company who was one of our two next most highly-compensated executive officers during the year ended December 31, 2023, but was not serving as an executive officer as of December 31, 2023 (collectively the "Named Executive Officers"). There were only three persons that served as executive officers of the Company during 2023, one of whom resigned prior to December 31, 2023.

	Year	Salary (\$)	Stock Awards (1) (\$)	Option Awards (2) (\$)	Non-Equity Incentive Plan Compensation (3) (\$)	All Other Compensation (4) (\$)	Total (\$)
Antoine Awad	2023	422,910	-	121,208	148,864	8,552	701,534
Principal Executive Officer	2022	410,592	79,599	230,179	147,200	8,763	876,333
Aoife M. Brennan, MB, BCh, BAO, MMSc	2023	612,981	-	312,723	286,569	9,900	1,222,173
Former President and Chief Executive Officer (5)	2022	595,128	208,494	603,870	267,808	9,150	1,684,449
Michael Jensen	2023	374,511	-	96,961	-	160,193	631,665
Former Chief Financial Officer (6)	2022	326,381	66,900	365,536	112,300	6,254	877,371

⁽¹⁾ The amounts reported represent the aggregate grant date fair value of restricted stock awards granted as estimated pursuant to FASB ASC 718, Compensation—Share based compensation (ASC 718). See Note 9 of the Company's Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2023 for the assumptions used in calculating this amount.

(3) The amounts reported represent bonuses paid based on the Board's determination of achievement of pre-established performance criteria as outlined in each individual employment agreement for the years ended December 31, 2023 and 2022, as indicated.

(4) Amount represents employer matching contribution to the named executive officer's account under the 401(k) plan. For Mr. Jensen, this amount also consists of a lump-sum payment equal to \$149,178 and continued health insurance coverage received in connection with his separation agreement.

(5) Dr. Brennan's resigned as our President and Chief Executive Officer on and effective as of March 9, 2024.

(6) Mr. Jensen resigned as our Chief Financial Officer, effective December 1, 2023.

Narrative Disclosure to Summary Compensation Table

Historically, the Company's executive compensation program has reflected our innovative and growth-oriented corporate culture and is designed to attract, retain and incentivize and align executives with both short- and long-term company objectives. To date, the compensation of the Company's Chief Executive Officer and our other executive officers has consisted of a combination of base salary, cash bonuses and long-term incentive compensation paid in the form of equity. The named executive officers, like all full-time employees, are eligible to participate in the Company's health and welfare benefit plans. The Company will continue to evaluate its compensation values and philosophy and compensation plans and arrangements as circumstances require. The Company will review executive compensation from time to time at the discretion of the Compensation Committee. As part of this review process, the Board and Compensation Committee will apply our Company values and compensation philosophy, while considering the compensation levels needed to ensure the organization's executive compensation program remains competitive and aligns incentives with the goals of the organization.

Base Salary

In February 2024, the Compensation Committee and the Board approved an annual increase in base salaries for certain employees effective as of January 1, 2024, resulting in an annual base salary of \$628,306 for Dr. Brennan, and an annual base salary of \$437,712 for Mr. Awad.

Annual Bonuses

The Company's employment agreements with its executive officers provide for the opportunity to earn a cash bonus based upon achievement of both corporate and individual goals determined by the Board based on a target percentage of annual base salary. In March 2024, the Board awarded Dr. Brennan a cash bonus of \$286,569, which represented 47% of her annual base salary, in recognition of her services provided in the year ended December 31, 2023 and in accordance with the terms of her employment agreement and bonus assessment. In March 2024, the Compensation Committee awarded Mr. Awad a cash bonus of \$148,864, which represented 35% of his annual base salary in recognition of his services provided in the year ended December 31, 2023 and in accordance with the terms of his employment agreement and bonus assessment.

Equity Awards



⁽²⁾ The amounts reported represent the aggregate grant date fair value of option awards granted as estimated pursuant to FASB ASC 718, Compensation—Share based compensation (ASC 718) and for 2023, the incremental fair value of option awards computed as of the repricing date in accordance with ASC 718. See Note 9 of the Company's Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2023 for the assumptions used in calculating this amount.

In March 2023, the Company granted the following options to its named executive officers: Dr. Brennan was granted 42,999 time-based vesting options and 8,666 performance-based vesting option; Mr. Awad was granted 16,666 time-based vesting options, and Mr. Jensen was granted 13,332 time-based vesting options and 6,666 performance-based vesting options. Each option award had an exercise price of \$9.30 per share. The time-based vesting options vest in equal monthly installments over four years and the performance-based vesting options vest upon achievement of certain clinical and regulatory developments. In November 2023, as previously reported, we approved a one-time stock option repricing of outstanding options, including certain options held by our named executive officers. The exercise price of each repriced option was amended to reduce such exercise price to \$1.85, the closing price per share of our common stock on November 10, 2023, the repricing date.

Outstanding Equity Awards at Fiscal Year End

The following table presents the equity awards outstanding on the last day of December 31, 2023 to each of the NEOs. All equity awards set forth in the table below were granted under the 2015 Stock Incentive Plan except for the awards with a grant date of May 15, 2017 which were granted under the 2017 Equity Incentive Award Plan.

			Option Awards					Stock	. Awar	ds
		Grant Date	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)		Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)		Market Value of Shares or Units of Stock That Have Not Vested (1) (\$)
Aoife M. Brennan, MB, BCh, BAO, MMSc		5/15/2017	5,591	-	\$	1.85	5/15/2027			
Former President and Chief Executive Officer		3/14/2018	3,733	-	\$	1.85	3/14/2028			
		6/5/2018	3,600	-	\$	1.85	6/5/2028			
		10/31/2018	9,999	-	\$	1.85	10/31/2028			
		3/5/2019	12,332	-	\$	1.85	3/5/2029			
	(2)	3/10/2020	11,322	1,030	\$	1.85	3/10/2030			
	(3)	3/10/2020						771	\$	2,968
	(4)	3/10/2021	12,672	6,327	s	1.85	3/10/2031			,
	(5)	3/10/2021	,					1,187	\$	4,570
	(6)	2/4/2022	13,266	15,677	s	1.85	2/4/2032	-,		.,
	(7)	2/4/2022	10,200	10,077	Ŷ	1.00	2112002	5,346	\$	20,582
	(7) (8)	3/16/2023	7,168	35,831	¢	1.85	3/16/2033	5,540	Φ	20,362
			7,108							
Antoine Awad	(9)	3/16/2023 2/28/2019	3,666	8,666	5	1.85 1.85	3/16/2033 2/28/2029			
Chief Operating Officer		3/5/2019	666		\$	1.85	3/5/2029			
endy of the angle of the	(2)	3/10/2020	4,276		ŝ	1.85	3/10/2030			
	(3)	3/10/2020						291	\$	1,120
	(10)	7/14/2020	3,985		\$	1.85	7/14/2030			
	(4)	3/10/2021	3,112	1,554	\$	1.85	3/10/2031			
	(5)	3/10/2021						583	\$	2,245
	(6)	2/4/2022	5,060	5,971	\$	1.85	2/4/2032			
	(7)	2/4/2022		10.00.0		1.05	2/1//2000	2,041		7,858
	(8) (9)	3/16/2023 3/16/2023	2,782	13,884 6,666	\$ \$	1.85 1.85	3/16/2033 3/16/2033			
Michael Jensen	(9)	3/3/2022	6,393		\$ \$	1.85	3/16/2033 3/1/2024			
Former Chief Financial Officer	(11)	3/16/2023	2,224	-	s	1.85	3/1/2024			
i anno i manorar oggioco	()	5/10/2025	2,224		Ŷ	1.00	5/1/2524			

(1) The market value of the stock awards is determined by multiplying the number of shares by \$3.85, the closing price of our common stock on the Nasdaq Global Market on December 31, 2023, the last trading day of our fiscal year.

(2) The unvested shares under this option are scheduled to vest in approximately equal monthly installments through April 1, 2024.

(3) The restricted shares under this award are scheduled to vest in equal annual installments starting April 1, 2020 through April 1, 2024.

(4) The unvested shares under this option are scheduled to vest in approximately equal monthly installments through April 1, 2025.

(5) The restricted shares under this award are scheduled to vest in equal annual installments starting April 1, 2021 through April 1, 2025.

(6) The unvested shares under this option are scheduled to vest in approximately equal monthly installments through February 4, 2026.

(7) The restricted shares under this award are scheduled to vest in equal annual installments starting April 1, 2022 through April 1, 2026.

(8) The unvested shares under this option are scheduled to vest in approximately equal monthly installments through April 1, 2027.

(9) The unvested performance-based stock options, vest when the achievement of certain clinical and regulatory development milestones are met.

(10) The unvested shares under this option are scheduled to vest in approximately equal monthly installments through July 1, 2024.

(11) Upon the resignation of Mr. Jensen effective December 1, 2023, all unvested shares were cancelled and vested shares were cancelled on March 1, 2024.

Employment Agreements and Potential Payments Upon Termination of Employment or Change in Control

The Company has entered into employment agreements with each of our named executive officers as described below, as well as standard confidential information and/or inventions assignment agreements under which each of the named executive officers has agreed not to disclose confidential information. These employment agreements provide for "at will" employment.

Aoife M. Brennan, MB, BCh, BAO, MMSc

In connection with her appointment as President and Chief Executive Officer in October 2018, we entered into an amended and restated employment arrangement with Dr. Brennan, which was further amended in December 2023 (the "Amended and Restated Employment Agreement"), pursuant to which Dr. Brennan was entitled to receive (i) an annual base salary of \$490,000 commencing as of October 2, 2018 (the "CEO Salary"), (ii) a target bonus of 40% of the CEO Salary and (iii) a one-time grant of an option to purchase an aggregate of 150,000 shares of common stock at an exercise price of \$7.91 (the fair market value on the date of the grant), which option vests as to one-fourth of the shares on the first anniversary of Dr. Brennan's start date as President and Chief Executive Officer and as to the remainder in equal monthly installments for the following 36 months. In March 2024, the Board, upon recommendation of the Compensation Committee, approved an increase in Dr. Brennan's base salary to \$628,306, effective as of January 1, 2024.

In addition, the Amended and Restated Employment Agreement provided that, in the event that Dr. Brennan's employment was terminated for any reason other than for "cause," death or "disability," or by Dr. Brennan for "good reason" (each as defined in the Amended and Restated Employment Agreement), she was entitled to receive (i) continuing severance pay at a rate equal to 100% of her base salary, as then in effect, for a period of 12 months from the date of such termination, to be paid periodically in accordance with normal Company payroll practices; (ii) the right to continue health care benefits under COBRA, paid by the Company until the earlier of (a) 12 months from termination, or (b) the date on which Dr. Brennan becomes eligible for healthcare insurance with a subsequent employer, and (iii) a lump-sum payment equal to the prorated portion of the target bonus for the fiscal year in which Dr. Brennan is terminated.

The Amended and Restated Employment Agreement provided that, in the event Dr. Brennan's employment was terminated on account of death, "disability," resignation for "good reason" or without "cause," in any case, within the 12-month period immediately following or the 30-day period immediately prior to a "change in control," then she was entitled to receive (i) continuing severance pay at a rate equal to 100% of her base salary, as then in effect, for a period of 18 months from the date of such termination, to be paid periodically in accordance with normal Company payroll practices; (ii) the right to continue health care benefits under COBRA, paid by the Company until the earlier of (a) 18 months from termination, or (b) the date on which Dr. Brennan becomes eligible for healthcare insurance with a subsequent employer, (iii) a lump-sum payment equal to the prorated portion of the target bonus for the fiscal year in which Dr. Brennan is terminated, and (iv) then Dr. Brennan's outstanding unvested restricted stock and/or options shall become fully vested.

In addition, Dr. Brennan has entered into a non-solicitation and non-competition agreement that applies for 12 months following her employment.

On February 17, 2024, we entered into a separation agreement with Dr. Brennan, pursuant to which Dr. Brennan's employment terminated effective March 9, 2024 (the "Brennan Separation Agreement"). Pursuant to the Brennan Separation Agreement, Dr. Brennan received a lump-sum payment equal to \$628,305, which is equivalent to twelve months of her base salary. Additionally, Dr. Brennan will be eligible for consideration of 100% of her target 2024 bonus, pro-rated by the number of days employed in 2024, in the amount of \$65,327. The determination of whether to award a bonus and the amount of bonus shall be in the sole discretion of the Company. Dr. Brennan is also entitled to continued health insurance coverage for up to twelve months following her departure.

Antoine (Tony) Awad

We entered into an employment agreement with Mr. Awad in December 2018 as Head of Technical Operations, which initially provided for (i) an annual base salary of \$325,000 commencing as of December 17, 2018, (ii) a target bonus of 30% of his base salary based on the achievement of corporate and/or individual performance goals, as determined by the Board, (iii) a one-time grant of an option to purchase an aggregate of 55,000 shares of common stock at an exercise price of \$8.69 (the fair market value on the date of the grant), which option vests as to one-fourth of the shares on the first anniversary of Mr. Awad's start date as Head of Technical Operations and as to the remainder in equal monthly installments for the following 36 months, and (iv) a sign-on bonus in the amount of \$25,000, less any applicable withholding or other taxes, paid out by December 31, 2018.

In connection with his appointment as Chief Operating Officer in July 2020, the Compensation Committee, approved: (1) an increase in Mr. Awad's base salary to \$376,000, effective as of July 1, 2020, (ii) a target bonus of 40% and (iii) a grant of an option to purchase an aggregate of 70,000 shares of the Company's common stock at an exercise price of \$1.85 (the fair market value on the date of the grant) which option vests in equal monthly installments for 48 months. In March 2024, the Board, upon recommendation of the Compensation Committee, approved an increase in Mr. Awad's base salary to \$437,712, effective as of January 1, 2024.

Mr. Awad's employment agreement, as amended, provides that, in the event that Mr. Awad's employment is terminated for any reason other than for "cause," death or "disability," or by Mr. Awad for "good reason" (each as defined in his employment agreement), he will be entitled to receive (i) continuing severance pay at a rate equal to 100% of his base salary, as then in effect, for a period of six months from the date of such termination, to be paid periodically in accordance with normal Company payroll practices; (ii) the right to continue health care benefits under COBRA, paid by the



Company until the earlier of (a) six months from termination, or (b) the date on which Mr. Awad becomes eligible for healthcare insurance with a subsequent employer, and (iii) a lump-sum payment equal to the protected portion of the target bonus for the fiscal year in which Mr. Awad is terminated.

In addition, Mr. Awad's employment agreement provides that, in the event Mr. Awad's employment is terminated on account of death, "disability," resignation for "good reason" or without "cause," in any case, within the 12-month period immediately following or the 30-day period immediately prior to a "change in control," then he will be entitled to receive (i) continuing severance pay at a rate equal to 100% of his base salary, as then in effect, for a period of 12 months from the date of such termination, to be paid periodically in accordance with normal Company payroll practices; (ii) the right to continue health care benefits under COBRA, paid by the Company until the earlier of (a) 12 months from termination, or (b) the date on which Mr. Awad becomes eligible for healthcare insurance with a subsequent employer, (iii) a lump-sum payment equal to the prorated portion of the target bonus for the fiscal year in which Mr. Awad is terminated, and (iv) Mr. Awad's outstanding unvested restricted stock and/or options shall become fully vested.

On February 17, 2024, the Company entered into a separation agreement with Antoine Awad, Chief Operating Officer, to be effective on February 25, 2024 (the "Awad Separation Agreement"), pursuant to which, Mr. Awad's employment with the Company will end on May 30, 2024 (the "Awad Departure Date"). Mr. Awad will assist the Company through the Awad Departure Date in the transition of work in connection with his duties as Chief Operating Officer of the Company.

In consideration for, among other things, his compliance with certain restrictive covenants and a typical release of claims, Mr. Awad shall receive a lump-sum payment equal to \$218,856, which is equivalent to six months of his base salary. Additionally, Mr. Awad will be eligible for consideration of 100% of his target 2024 bonus, pro-rated by the number of days employed in 2024, in the amount of \$87,302. The determination of whether to award a bonus and the amount of bonus shall be in the sole discretion of the Company. Mr. Awad is also entitled to continued health insurance coverage for up to six months following the Awad Departure Date.

Michael Jensen

We entered into an employment agreement with Mr. Jensen in January 2022 as Chief Financial Officer, that initially provided for (i) an annual base salary of \$395,000 commencing as of March 3, 2022, (ii) a target bonus of 40% of his base salary based on the achievement of corporate and/or individual performance goals, as determined by the Board, (iii) a one-time grant of an option to purchase an aggregate of 230,000 shares of common stock at an exercise price of \$2.23 (the fair market value on the date of the grant), which option vests as to one-fourth of the shares on the first anniversary of Mr. Jensen's start date as Chief Financial Officer and as to the remainder in equal monthly installments for the following 36 months, continuing for so long as Mr. Jensen continues to serve as the Company's Chief Financial Officer, and (iv) an aggregate of 30,000 shares of restricted common stock, vesting in equal annual installments over four years.

In March 2023, the Compensation Committee, approved an increase in Mr. Jensen's base salary to \$406,850, effective as of January 1, 2023.

In addition, Mr. Jensen's employment agreement provided that, in the event that Mr. Jensen's employment was terminated for any reason other than for "cause," death or "disability," or by Mr. Jensen for "good reason" (each as defined in his employment agreement), he would be entitled to receive (i) continuing severance pay at a rate equal to 100% of his base salary, as then in effect, for a period of six months from the date of such termination, to be paid periodically in accordance with normal Company payroll practices; (ii) the right to continue health care benefits under COBRA, paid by the Company until the earlier of (a) six months from termination, or (b) the date on which Mr. Jensen becomes eligible for healthcare insurance with a subsequent employer, and (iii) a lump-sum payment equal to the prorated portion of the target bonus for the fiscal year in which Mr. Jensen is terminated.

Mr. Jensen's employment agreement provided that, in the event Mr. Jensen's employment was terminated on account of death, "disability," resignation for "good reason" or without "cause," in any case, within the 12-month period immediately following or the 30-day period immediately prior to a "change in control," then Mr. Jensen's outstanding unvested restricted stock and/or options would become fully vested.

On November 13, 2023, Mr. Jensen and the Company entered into a voluntary separation agreement and release of claims (the "Jensen Separation Agreement"). Pursuant to the terms of the Jensen Separation Agreement, Mr. Jensen resigned as an officer and employee of the Company effective at the close of business on December 1, 2023. Pursuant to the Jensen Separation Agreement, Mr. Jensen received a lump-sum payment equal to \$149,178 in lieu of any other bonus that Mr. Jensen would be eligible for the fiscal year ending December 31, 2023. Mr. Jensen is also entitled to continued health insurance coverage for up to six months following his departure date.

The following definitions apply to the employment agreements with Dr. Brennan, Mr. Awad and Mr. Jensen:

"Cause" is defined as the executive's (i) conviction of a felony, plea of guilty or "no contest" to a felony, or confession of guilt to a felony, in each case whether or not in connection with the performance of the executive's duties to the Company;; (ii) act or omission which constitutes willful misconduct or negligence that results in loss, damage or injury to the Company or its prospects, including, but not limited to (A) disloyalty, dishonesty or a breach of fiduciary duty to the Company or Stockholders, (B) theft, fraud, embezzlement or other illegal conduct, or (C) deliberate disregard of a rule or policy of the Company; (iii) failure, refusal or unwillingness to perform, to the reasonable satisfaction of the Board determined in good faith, any duty or responsibility assigned to the executive, which failure of performance continues for a period of more than two weeks after written notice thereof has been provided by the Board, setting forth in reasonable detail the nature of such failure of performance; or (iv) the material breach by the executive of any of the provisions of the employment agreement or its related agreements.

"Good reason" is defined as a resignation that occurs within 30 days following: (i) a change in the principal location at which the executive provides services to the Company beyond 50 miles from Cambridge, Massachusetts; (ii) a reduction in the executive's compensation or a material reduction in the executive's benefits, except such a reduction in connection with a general reduction in compensation or other benefits of all senior executives of the Company; (iii) a material breach of the executive's employment agreement by the Company that has not been cured within 10 days after written notice thereof by the executive; or (iv) a failure by the Company to obtain the assumption of the employment agreement by any successor of the Company.

"Disability" is defined as the executive's inability, due to physical or mental illness or disease, to perform the functions then performed by the executive for 180 consecutive days, accompanied by the likelihood, in the opinion of a physician chosen by the Company and reasonably acceptable to the executive, that the executive will be unable to perform such functions within the reasonably foreseeable future, provided that the foregoing definition shall not include a disability for which the Company is required to provide reasonable accommodation pursuant to the Americans with Disabilities Act or other similar statute or regulation.

"Change in control" is defined as (i) the sale of the Company by merger in which the stockholders in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the board of directors in its sole discretion. For the avoidance of doubt, in no event shall a bona fide equity or debt financing, including a financing in which greater than 50% of the Company's outstanding equity securities are acquired by a third-party, be deemed a "change in control."

Other Benefits

Executive officers are eligible to participate in all of the Company's employee benefit plans, including medical, dental, vision, group life, short and long-term disability, a 401(k) retirement plan, an Employee Stock Purchase Plan (ESPP), and a flex spending account plan, in each case on the same basis as other employees, subject to applicable laws. We also provide paid-time-off benefits to all employees, including our executive officers.

401(k) Retirement Plan

We maintain a defined contribution retirement plan for our eligible employees. Employees are eligible to participate in the plan beginning on their date of hire. Under the terms of the plan, employees may make voluntary contributions as a percentage of compensation, up to statutory limits. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan's trustee. Our 401(k) plan also permits us to make discretionary and matching contributions, subject to established limits. We started to match employee contributions effective January 1, 2019. We match 50% of the employee contributions to the 401(k) plan up to a maximum of 6% of the participating employee's eligible earnings, resulting in a maximum company match of 3% of the participating employee's eligible earnings, and subject to certain additional statutory dollar limitations.

SYNLOGIC DIRECTOR COMPENSATION

The following table shows the total compensation paid or accrued during the fiscal year ended December 31, 2023 to each of our non-employee directors. Directors who are employed by us are not compensated for their service on our Board.

	Fees Earned or Paid in Cash (1)	Option Awards (2)
	(\$)	(\$)
Peter Barrett, Ph.D. (3)	81,500	10,697
Michael Burgess, MB, CHB, Ph.D. (4)	55,500	10,697
Michael Heffernan (5)	55,500	10,697
Patricia Hurter, Ph.D. (3) (6)	48,000	10,697
Lisa Kelly-Croswell (5) (7)	56,000	10,697
Nick Leschly (8)	45,000	10,697
Edward Mathers (9)	45,000	10,697
Richard P. Shea (10)	55,000	10,697

- (1) Amounts represent fees earned during 2023 under our Non-Employee Director Compensation Policy.
- (2) The amount reported represents the aggregate grant date fair value of option awards granted as estimated pursuant to FASB ASC 718, Compensation—Share based compensation (ASC 718). See Note 9 of the Company's Financial Statement included in our Annual Report on Form 10-K for the year ended December 31, 2023 for the assumptions used in calculating this amount. Pursuant to the Amended and Restated Non-Employee Director Compensation Program each non-employee director was granted an option to purchase 2,000 shares of our common stock in June 2023.
- (3) Dr. Barrett and Dr. Hurter elected to receive their 2023 compensation in the form of a stock grant pursuant to the Company's Amended and Restated Non-Employee Director Compensation Program. Dr. Barrett had 31,121 option awards outstanding at December 31, 2023 and Dr. Hurter had 13,929 option awards outstanding at December 31, 2023.
- (4) Dr. Burgess resigned from the Board on March 20, 2024. Dr. Burgess had 7,800 option awards outstanding at December 31, 2023.
- (5) Mr. Heffernan and Ms. Lisa Kelly-Croswell had 6,800 options outstanding at December 31, 2023.

- (6) Dr. Hurter resigned from the Board on March 20, 2024.
- (7) Ms. Lisa Kelly-Croswell resigned from the Board on March 20, 2024.
- (8) Mr. Leschly had 9,728 option awards and 1,543 restricted shares outstanding at December 31, 2023.
- (9) Mr. Mathers had 8,465 option awards outstanding at December 31, 2023.
- (10) Mr. Shea had 8,464 option awards outstanding at December 31, 2023.

Pursuant to our Amended and Restated Non-Employee Director Compensation Program, which was effective as of January 1, 2020, and updated as to amounts by the Board effective January 1, 2023, our non-employee directors are entitled to receive cash compensation, paid quarterly in arrears, as follows:

- Each non-employee director receives an annual cash retainer in the amount of \$40,000 per year.
- Any non-employee Chairman receives an additional annual cash retainer in the amount of \$30,000 per year.
- The chairperson of the Audit Committee receives additional annual cash compensation in the amount of \$15,000 per year for such chairperson's service on the Audit Committee. Each non-chairperson member of the Audit Committee receives additional annual cash compensation in the amount of \$7,500 per year for such member's service on the Audit Committee.
- The chairperson of the Compensation Committee receives additional annual cash compensation in the amount of \$12,000 per year for such chairperson's service on the Compensation Committee. Each non-chairperson member of the Compensation Committee receives additional annual cash compensation in the amount of \$5,000 per year for such member's service on the Compensation Committee.
- The chairperson of the Nominating and Corporate Governance Committee receives additional annual cash compensation in the amount of \$8,000 per year for such chairperson's service on the Nominating and Corporate Governance Committee. Each non-chairperson member of the Nominating and Corporate Governance Committee receives additional annual cash compensation in the amount of \$4,000 per year for such member's service on the Nominating and Corporate Governance Committee.
- The chairperson of the Science and Technology Committee receives additional annual cash compensation in the amount of \$8,000 per year for such chairperson's service on the Science and Technology Committee. Each non-chairperson member of the Science and Technology Committee receives additional annual cash compensation in the amount of \$4,000 per year for such member's service on the Science and Technology Committee.

Under the Amended and Restated Director Compensation Program, upon a director's initial appointment or election to our Board, such non-employee director will receive an option (the Initial Grant) to purchase 4,000 shares of our common stock (subject to adjustment as provided in the applicable equity plan). In addition, each non-employee director who has been serving as a director for at least three months prior to any annual stockholder meeting and will continue to serve as a director immediately following such annual stockholder meeting, an option (the Annual Grant) to purchase 2,000 shares of our common stock (subject to adjustment as provided in the applicable equity plan). The Initial Grant will vest in substantially equal installments on each of the first three anniversaries of the applicable grant date, subject to continued service through each applicable vesting date, and the Annual Grant will vest in full on the earlier of the first anniversary of the applicable grant date or immediately prior to the next annual stockholder meeting after the applicable grant date, subject to continued service through such vesting date. In addition, pursuant to the terms of the Amended and Restated Director Compensation Program, all equity awards outstanding and held by a non-employee director will vest in full immediately prior to the occurrence of a change in control.

We reimburse our non-employee directors for all reasonable and customary business expenses incurred providing services to us in accordance with Company policy.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of March 31, 2024 for (a) the executive officers named in the Summary Compensation Table appearing elsewhere in this Amendment, (b) each of our directors, (c) all of our current directors and executive officers as a group and (d) each stockholder known by us to own beneficially more than 5% of our common stock. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. We deem shares of common stock that may be acquired by an individual or group within 60 days after March 31, 2024 pursuant to the exercise of options to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table. Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them based on information provided to us by these stockholders. Percentage of ownership is based on 11,627,216 shares of common stock

	Shares Beneficia Owned (1)	ally
	Number	Percent
Name and Address of Beneficial Owner**		
Directors and Named Executive Officers:		
Peter Barrett, Ph.D. (2)	205,919	1.77%
Aoife Brennan, MB, BCh, BAO, MMSc (3)	104,983	*
Antoine Awad (4)	32,400	*
Mary Beth Dooley (5)	23,423	*
James Flynn (6)	-	*
Nick Leschly (7)	9,271	*
Richard P. Shea (8)	6,964	*
Edward Mathers (9)	6,465	*
Michael Heffernan (10)	4,800	*
Michael Jensen (11)	803	*
All directors and current executive officers as a group	289,242	2.48%
(8 persons) (12)		
Five Percent Stockholders:		
Funicular Funds (13)	3,312,219	28.49%
601 California Street, Suite 1151		
San Francisco, California 94108		
New Enterprise Associates 14, L.P. (14)	2,922,774	25.14%
1954 Greenspring Drive, Suite 600		
Timonium, MD 21093		
Armistice Capital LLC (15)	1,285,542	11.06%
501 Madison Avenue, 7th Floor		
New York, New York 10022		
John A. Kryzanowski (16)	873,722	7.51%
c/o Shartsis Friese LLP		
One Maritime Plaza, 18th Floor		
San Francisco, CA 94111		
Ginkgo Bioworks, Inc. (17)	592,592	5.02%
27 Drydock Avenue, 8 th Floor		
Boston, MA 02210		

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

** Addresses are given for beneficial owners of more than 5% of the outstanding common stock only.

- (1) Includes shares issuable upon the exercise of options to purchase shares of common stock within 60 days following March 31, 2024.
- (2) Consists of 176,798 shares of our common stock owned by Atlas Venture Fund IX, L.P. ("Atlas IX") and 29,121 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024. Atlas Venture Associates IX, L.P. ("AVA IX LP"), is the general partner of Atlas IX, and Atlas Venture Associates IX, L.LC ("AVA IX LLC"), is the general partner of AVA IX LP. Dr. Barrett disclaims Section 16 beneficial ownership of the securities held by Atlas IX, except to the extent of his pecuniary interest therein, if any.
- (3) Consists of 14,796 shares of our common stock held by Dr. Brennan and 90,187 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024.
- (4) Consists of 4,609 shares of our common stock held by Mr. Awad and 27,791 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024.
- (5) Consists of 15,232 shares of our common stock held by Ms. Dooley and 8,191 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024.



- (6) Mr. Flynn was granted the right to purchase 4,000 shares of our common stock, upon Mr. Flynn's appointment to our Board on March 19, 2024. The option vests and becomes exercisable in substantially equal installments on each of the first three anniversaries of March 19, 2024, subject to Mr. Flynn continuing to provide services to the Issuer through such vesting date.
- (7) Consists of 1,543 shares of our common stock held by Mr. Leschly and 7,728 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024.
- (8) Consists of 500 shares of our common stock held by Mr. Shea and 6,464 shares of our common stock issuable upon the exercise of options exercisable within 60 days following March 31, 2024.
- (9) Consists of 6,465 shares of our common stock issuable upon the exercise of options held by Mr. Mathers exercisable within 60 days following March 31, 2024.
- (10) Consists of 4,800 shares of our common stock held by Mr. Heffernan issuable upon the exercise of options exercisable within 60 days following March 31, 2024.
- (11) Consists of 803 shares of our common stock held by Mr. Jensen.
- (12) See footnotes 2, 4 through 10.
- (13) This information is based solely on a Schedule 13D filed with the Securities and Exchange Commission on or about February 16, 2024. Consists of 3,312,219 shares held by Funicular Funds, LP. (the Fund), a Delaware limited partnership, with respect to the Common Stock beneficially owned and held of record by the Fund. The General Partner of the Fund is Cable Car Capital LLC (Cable Car), a California limited liability company which serves as investment adviser to the Fund pursuant to a written advisory agreement. Jacob Ma-Weaver, a United States citizen, is the Managing Member of Cable Car and the ultimate individual responsible for directing the voting and disposition of Common Stock held by the Fund. Each of the Fund and Mr. Ma-Weaver are referred to as a Reporting Person and collectively as the Reporting Persons.
- (14) This information is based solely on a Schedule 13D filed with the Securities and Exchange Commission on or about October 13, 2023. Consists of 2,922,774 shares held by New Enterprise Associates 14, L.P. ("NEA 14"). NEA Partners 14, L.P. ("NEA Partners 14") is the sole general partner of NEA 14. NEA 14 GP, LTD ("NEA 14 LTD") is the sole general partner of NEA Partners 14. The individual Directors (the "Directors") of NEA 14 LTD are M. James Barrett, Peter J. Barris, Forest Baskett, Anthony A. Florence, Jr., Patrick J. Kerins, David M. Mott, Scott D. Sandell, Peter Sonsini and Ravi Viswanathan. The Directors share voting and dispositive power with regard to shares held directly by NEA 14. Edward Mathers is a partner at NEA.
- (15) This information is based solely on a Schedule 13G filed with the Securities and Exchange Commission on or about February 14, 2024. Consists of 1,285,542 shares held by Armistice Capital, LLC ("Armistice Capital"). Armistice Capital is the investment manager of Armistice Capital Master Fund Ltd. (the "Master Fund"), the direct holder of the Shares, and pursuant to an Investment Management Agreement, Armistice Capital exercises voting and investment power over the securities of the Issuer held by the Master Fund and thus may be deemed to beneficially own the securities of the Issuer held by the Master Fund. Mr. Boyd, as the managing member of Armistice Capital, may be deemed to beneficially own the securities of the Issuer held by the Master Fund. The Master Fund specifically disclaims beneficial ownership of the securities of the Issuer directly held by it by virtue of its inability to vote or dispose of such securities as a result of its Investment Management Agreement with Armistice Capital.
- (16) This information is based solely on a Schedule 13G/A filed with the Securities and Exchange Commission on or about January 20, 2023. Consists of 4,439,690 shares of our common stock held of record by John A. Kryzanowski.
- (17) This information is based solely on a Schedule 13G filed with the Securities and Exchange Commission on or about June 21, 2019. Shares reported as beneficially owned by Ginkgo Bioworks, Inc. ("Ginkgo") include (i) 6,340,771 shares of common stock held by Ginkgo and (ii) a warrant to purchase 2,548,117 shares of common stock held by Ginkgo.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain aggregate information with respect to all of the Company's equity compensation plans in effect as of December 31, 2023.

	(a) (b)		(c)
Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (1)	619,900	\$ 8.5	4 279,799
Equity compensation plans not approved by security holders (2)	12,612	\$ 24.2	1 81,366
Total	632,512	\$ 8.8	6 361,165

(1) Consists of the 2015 Equity Incentive Award Plan (the "2015 Plan") and the Synlogic, Inc. 2015 Employee Stock Purchase Plan, as amended (the "ESPP"). The 2015 Plan includes an "evergreen provision" that allows for an annual increase in the number of shares of common stock available for issuance under the 2015 Plan, which annual increase will be added on the first day of each fiscal year from

2016 through 2025, inclusive, and will be equal to the lesser of (i) five percent of the shares outstanding on the last day of the immediately preceding fiscal year and (ii) such smaller number of shares as determined by the Board of Directors. The ESPP includes an "evergreen provision," allowing for an annual increase in the number of shares of common stock available for issuance on the first day of each year beginning in 2016 and ending in 2025 equal to the lesser of one percent (1%) of the shares outstanding (on an as converted basis) on the last day of the immediately preceding fiscal year and such smaller number of shares as determined by the Board.

(2) Consists of the Synlogic 2017 Stock Incentive Plan and the 2023 Inducement Equity Incentive Award Plan. See Note 9 of the Company's Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2023 for descriptions of the plans.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Indemnification Agreements

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, penalties, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of the Company, arising out of the person's services as a director or executive officer.

Change of Control and Severance Benefits Agreements

See the section entitled "Employment Agreements and Potential Payments Upon Termination of Employment or Change in Control" in this amendment.

Policies and Procedures for Related Party Transactions

Our Board has adopted a written related person transaction policy setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our Audit Committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction with an unrelated third party and the extent of the related person's interest in the transaction.

Item 14. Principal Accounting Fees and Services.

Our independent registered public accounting firm is KPMG LLP, Boston, MA, Auditor Firm ID: 185.

The following table presents fees for professional audit services rendered by KPMG LLP for the audit of the Company's annual financial statements for the years ended December 31, 2023, and December 31, 2022, and fees billed for other services rendered by KPMG LLP during those periods.

	 2023		2022
Audit fees: ⁽¹⁾	\$ 743,440	\$	649,720
Audit related fees: ⁽²⁾	—		
Tax fees: ⁽³⁾	27,940		22,500
Other fees: ⁽²⁾	—		—
Total	\$ 771,380	\$	672,220

- (1) Audit fees in 2023 and 2022 were for professional fees rendered for the audits of our financial statements, including accounting consultation, and reviews of quarterly financial statements, as well as for services that are normally provided in connection with regulatory filings or engagements, including comfort letters.
- (2) There were no audit-related or other fees in 2023 or 2022.
- (3) Tax fees in 2023 and 2022 were for professional fees rendered for matters related to filing our federal and state tax returns and permissible tax consultation services.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-audit Services of Independent Public Accountant

Consistent with SEC policies regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of our independent registered public accounting firm. In recognition of this responsibility, the Audit Committee has established a policy to pre-approve all audit and permissible non-audit services provided by our independent registered public accounting firm.



Prior to engagement of an independent registered public accounting firm for the next year's audit, management will submit an aggregate of services expected to be rendered during that year for each of four categories of services to the Audit Committee for approval.

- 1. *Audit* services include audit work performed in the preparation of financial statements, as well as work that generally only an independent registered public accounting firm can reasonably be expected to provide, including comfort letters, statutory audits, and attestation services and consultation regarding financial accounting and/or reporting standards.
- 2. Audit-Related services are for assurance and related services that are traditionally performed by an independent registered public accounting firm, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.
- 3. *Tax* services include all services performed by an independent registered public accounting firm's tax personnel except those services specifically related to the audit of the financial statements, and includes fees in the areas of tax compliance, tax planning, and tax advice.
- 4. *Other Fees* are those associated with services not captured in the other categories.

Prior to engagement, the Audit Committee pre-approves these services by category of service. The fees are budgeted and the Audit Committee requires our independent registered public accounting firm and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage our independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the Audit Committee requires specific pre-approval before engaging our independent registered public accounting firm.

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

PART IV

Item 15. Exhibits, Financial Statement Schedules.

Item 15(a). The following documents are filed as part of this Amendment No. 1 to Annual Report on Form 10-K/A:

Item 15(a)(1) and (2) See "Consolidated Financial Statements and Supplementary Data" at Item 8 of the Original Filing. Other financial statement schedules have not been included because they are not applicable, or the information is included in the financial statements or notes thereto.

Item 15(a)(3) The following exhibits are filed as part of, or incorporated by reference into, this Amendment No. 1 to Annual Report on Form 10-K. Exhibit Index

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
2.1^	Agreement and Plan of Merger and Reorganization, dated as of May 15, 2017, by and among Mirna Therapeutics, Inc., Meerkat Merger Sub, Inc. and Synlogic, Inc.		8-K (Exhibit 2.1)	05/16/2017	001-37566
3.1	Amended and Restated Certificate of Incorporation		8-K (Exhibit 3.1)	10/6/2015	001-37566
3.2	Certificate of Amendment (Reverse Stock Split) to the Amended and Restated Certificate of Incorporation, dated August 25, 2017		8-K (Exhibit 3.1)	08/28/2017	001-37566
3.3	Certificate of Amendment (Name Change) to the Amended and Restated Certificate of Incorporation		8-K (Exhibit 3.2)	08/28/2017	001-37566
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Synlogic, Inc., dated June 15, 2023		8-K (Exhibit 3.1)	6/15/2023	001-37566
3.5	<u>Certificate of Amendment (Reverse Stock Split) to the</u> <u>Amended and Restated Certificate of Incorporation of</u> <u>Synlogic, Inc., dated September 27, 2023</u>		8-K (Exhibit 3.1)	9/28/2023	001-37566
3.6	Amended and Restated Bylaws		8-K (Exhibit 3.2)	10/6/2015	001-37566
3.7	<u>Certificate of Designation of Series A Junior Participating</u> <u>Preferred Stock of Synlogic, Inc., as filed with the Secretary</u> of State of the State of Delaware on February 20, 2024.		8-K (Exhibit 3.1)	2/20/2024	001-37566
4.1	Form of Common Stock Certificate		S-1/A (Exhibit 4.2)	09/18/2015	333-206544
4.2	Pre-Funded Warrant		8-K (Exhibit 4.1)	06/12/2019	001-37566
4.3	Form of Pre-Funded Warrant		8-K (Exhibit 4.1)	9/29/2023	001-37566

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
4.4	Form of Purchase Warrant		8-K (Exhibit 4.2)	9/29/2023	001-37566
4.5	Description of Securities		10-K (Exhibit 4.3)	03/12/2020	001-37566
4.6	Rights Agreement, dated as of February 20, 2024, between Synlogic, Inc. and Equiniti Trust Company LLC, as rights agent.		8-K (Exhibit 4.1)	2/20/2024	001-37566
10.1#	2015 Equity Incentive Award Plan		10-K (Exhibit 10.1)	03/20/2018	001-37566
10.2#	Form of Stock Option Grant Notice and Stock Option Agreement under the 2015 Equity Incentive Award Plan.		S-1/A (Exhibit 10.9(B))	09/11/2015	333-206544
10.3#	Form of Restricted Stock Award Agreement and Restricted Stock Unit Award Grant Notice under the 2015 Equity Incentive Award Plan.		S-1/A (Exhibit 10.9(C))	09/11/2015	333-206544
10.4#	2017 Stock Incentive Plan		10-K (Exhibit 10.4)	03/20/2018	001-37566
10.5#	Form of Stock Option Grant Notice and Stock Option Agreement under 2017 Stock Incentive Plan.		10-Q (Exhibit 10.17)	11/13/2017	001-37566
10.6#	2023 Inducement Equity Incentive Award Plan		10-K (Exhibit 10.6)	03/19/2024	001-37566
10.7#	Form of Stock Option Grant Notice and Stock Option Agreement under 2023 Inducement Equity Incentive Award Plan		10-K (Exhibit 10.7)	03/19/2024	001-37566
10.8#	Non-Employee Director Compensation Program.		8-K (Exhibit 10.1)	01/31/2020	001-37566
10.9#	Form of Indemnification Agreement between the Company and each of its directors and officers		S-1/A (Exhibit 10.13)	09/11/2015	333-206544
10.10#	Offer Letter by and between Synlogic and Aoife M. Brennan, MB, BCh, BAO, MMSc, dated as of June 22, 2016		8-K (Exhibit 10.6)	08/28/2017	001-37566
10.11#	First Amendment to Offer Letter by and between Synlogic and Aoife M. Brennan, MB, BCh, BAO, MMSc, dated as of November 7, 2016		8-K (Exhibit 10.7)	08/28/2017	001-37566
10.12#	Second Amendment to Offer Letter by and between. Synlogic and Aoife M. Brennan, MB, BCh, BAO, MMSc, dated as of May 8, 2017		8-K (Exhibit 10.8)	08/28/2017	001-37566

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.13#	Third Amendment to Offer Letter dated as of June 5, 2018, between Synlogic, Inc. and Aoife Brennan, MB, BCh, BAO, MMSc		10-Q (Exhibit 10.1)	08/9/2018	001-37566
10.14#	Amended and Restated Letter Agreement by and between Synlogic, Inc. and Aoife M. Brennan, MB, BCh, BAO, MMSc, dated as of October 1, 2018		10-Q (Exhibit 10.1)	11/13/2018	001-37566
10.15#	Amendment to Employment Agreement dated December 26, 2023, by and between the Company, and Aoife Brennan		8-K (Exhibit 10.1)	12/29/2023	001-37566
10.16#	<u>Separation Agreement by and between Synlogic, Inc. and Aoife M. Brennan, MB, BCh, BAO, MMSc, dated as of February 17, 2024</u>		10-K (Exhibit 10.16)	03/19/2024	001-37566
10.17#	Employment Agreement dated as of January 24, 2022, by and between Synlogic and Michael Jensen		8-K (Exhibit 10.1)	03/03/2022	001-37566
10.18#	Separation Agreement by and between Synlogic, Inc. and Michael Jensen, dated as of November 13, 2023		10-K (Exhibit 10.18)	03/19/2024	001-37566
10.19#	Employment Letter Agreement dated November 28, 2018, by and between Synlogic and Antoine Awad		10-K (Exhibit 10.14.1)	03/25/2021	001-37566
10.20#	Promotion Letter, dated July 21, 2020, for Antoine Awad		10-K (Exhibit 10.14.2)	03/25/2021	001-37566
10.21#	Amendment to Employment Agreement dated December 16, 2023, by and between the Company and Antoine Awad		8-K (Exhibit 10.2)	12/29/2023	001-37566
10.22#	Separation Agreement by and between Synlogic, Inc. and Antoine Awad, dated as of February 17, 2024		10-K (Exhibit 10.22)	03/19/2024	001-37566
10.23#	Retention Bonus Agreement by and between Synlogic, Inc. and Antoine Awad, dated as of March 7, 2024		10-K (Exhibit 10.23)	03/19/2024	001-37566
10.24#	Employment Letter Agreement dated April 11, 2018 by and between Synlogic, Inc. and Mary Beth Dooley		10-K (Exhibit 10.24)	03/19/2024	001-37566
10.25#	Retention Bonus Agreement by and between Synlogic, Inc. and Mary Beth Dooley, dated as of March 7, 2024		10-K (Exhibit 10.25)	03/19/2024	001-37566
10.26†	License Agreement by and between Synlogic, Inc. and Synlogic IBDCo, Inc., dated as of July 16, 2015		8-K (Exhibit 10.13)	08/28/2017	001-37566
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Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.27	Sales Agreement, dated as of July 23, 2021 by and between the registrant and Jefferies LLC		10-Q (Exhibit 1.1)	11/10/2021	001-37566
10.28†	Master Contract Services Agreement, dated as of September 8, 2018, between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC).		10-K (Exhibit 10.29)	03/12/2019	001-37566
10.29†	Statement of Work dated September 10, 2018 pursuant to. Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC).		10-K (Exhibit 10.30)	03/12/2019	001-37566
10.30†	Statement of Work dated December 7, 2018 pursuant to Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC).		10-K (Exhibit 10.31)	03/12/2019	001-37566
10.31	Subscription Agreement dated June 11, 2019 by and between the Company and Ginkgo Bioworks, Inc.		8-K (Exhibit 10.1)	06/12/2019	001-37566
10.32†	Foundry Terms of Service Agreement dated June 11, 2019 by and between Synlogic Operating Company Inc. and Ginkgo Bioworks, Inc.		10-Q (Exhibit 10.2)	08/08/2019	001-37566
10.33#	Synlogic, Inc. 2015 Employee Stock Purchase Plan, as amended		8-K (Exhibit 10.1)	12/20/2019	001-37566
10.34†	License and Services Agreement and Statement of Work, dated April 28, 2021, by and between Synlogic Operating Company, Inc. and Azzur Cleanrooms-On-Demand – Boston, LLC.		10-Q (Exhibit 10.1)	08/12/2021	001-37566
10.35†	<u>Pilot Collaboration and Option Agreement, dated June 16,</u> 2021, among Synlogic Operating Company, Inc. and Hoffman-La Roche Inc.		10-Q (Exhibit 10.2)	08/12/2021	001-37566
10.36	Amendment to Pilot Collaboration and Option Agreement, dated as of August 16, 2023, among Synlogic Operating Company, Inc. and Hoffman-La Roche Inc.		10-Q (Exhibit 10.1)	11/09/2023	001-37566
10.37†	Statement of Work dated January 21, 2022 pursuant to Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC), SOW P-10558-01		10-K (Exhibit 10.30)	03/17/2022	001-37566

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
10.38†	Statement of Work dated January 21, 2022 pursuant to Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC), SOW P-10558-2		10-K (Exhibit 10.31)	03/17/2022	001-37566
10.39†	Statement of Work dated November 22, 2022 pursuant to Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC), SOW P-10558-01 Extension A		10-K (Exhibit 10.32)	03/29/2023	001-37566
10.40†	Addendum to Statement of Work dated December 8, 2023 pursuant to Master Contract Services Agreement between Synlogic, Inc. and Azzur Group (d/b/a Azzur of New England LLC), SOW P-10558-01 Addendum		10-K (Exhibit 10.40)	03/19/2024	001-37566
21.1	Subsidiaries of the registrant		10-K (Exhibit 21.1)	03/19/2024	001-37566
23.1	Consent of Independent Registered Public Accounting Firm		10-K (Exhibit 23.1)	03/19/2024	001-37566
24.1	Power of Attorney (included in the signature page hereto)		10-K (Exhibit 24.1)	03/19/2024	001-37566
31.1	Certification of Chief Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a).	Х			
31.2	Certification of Chief Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a).	Х			
32.1	Certification required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350).		10-K (Exhibit 32.1)	03/19/2024	001-37566
32.2	Certification required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350).		10-K (Exhibit 32.2)	03/19/2024	001-37566
101.INS	Inline XBRL Instance Document - – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.		10-K (Exhibit 101.INS)	03/19/2024	001-37566
101.SCH	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents		10-K (Exhibit 101.SCH)	03/19/2024	001-37566
104	Cover page Interactive Data File (embedded within the Inline XBRL document)		10-K (Exhibit 104)	03/19/2024	001-37566
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^ The schedules and exhibits to this exhibit have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

Management contract or compensatory plans or arrangements.

Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the Securities and Exchange Commission.
The certification incorporated by reference as Exhibit 32 that was attached to the Original 10-K is not deemed filed with the SEC and is not to be incorporated by reference into any filing of Synlogic, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of the Original 10-K, irrespective of any general incorporation language contained in such filing.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Amendment No. 1 to Annual Report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized.

Synlogic, Inc.

Date: April 29, 2024

By: /s/ ANTOINE AWAD

Antoine Awad Principal Executive Officer (principal executive officer)

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Antoine Awad, certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Synlogic, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: April 29, 2024

/s/ Antoine Awad

Antoine Awad Principal Executive Officer (principal executive officer)

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mary Beth Dooley, certify that:

1. I have reviewed this Amendment No. 1 to Annual Report on Form 10-K/A of Synlogic, Inc.; and

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report.

Date: April 29, 2024

/s/ Mary Beth Dooley

Mary Beth Dooley Head of Finance (principal financial officer and principal accounting officer)