
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Under Rule 14a-12

SYNLOGIC, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

- 1) Title of each class of securities to which transaction applies:

- 2) Aggregate number of securities to which transaction applies:

- 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

- 4) Proposed maximum aggregate value of transaction:

- 5) Total fee paid:

- Fee paid previously with preliminary materials.
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing:

- 1) Amount previously paid:

 - 2) Form, Schedule or Registration Statement No:

 - 3) Filing party:

 - 4) Date Filed:

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To Our Stockholders:

You are cordially invited to attend the 2018 annual meeting of stockholders of Synlogic, Inc. to be held at 9:00 a.m. Eastern time on Wednesday, June 13, 2018 at 301 Binney Street, Suite 402, Cambridge, MA 02142.

Details regarding the meeting, the business to be conducted at the meeting, and information about Synlogic that you should consider when you vote your shares are described in this proxy statement.

At the annual meeting, two persons will be elected to our Board of Directors. In addition, we will ask stockholders to ratify the selection of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2018. The Board of Directors recommends the approval of each of the two proposals. Such other business will be transacted as may properly come before the annual meeting.

We hope you will be able to attend the annual meeting. Whether you plan to attend the annual meeting or not, it is important that you cast your vote either in person or by proxy. You may vote over the Internet as well as by telephone or by mail. When you have finished reading the proxy statement, you are urged to vote in accordance with the instructions set forth in this proxy statement. We encourage you to vote by proxy so that your shares will be represented and voted at the meeting, whether or not you can attend.

Thank you for your continued support of Synlogic. We look forward to seeing you at the annual meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "Jose-Carlos Gutiérrez-Ramos". The signature is written in a cursive style with a large initial "J" and "C".

Jose-Carlos Gutiérrez-Ramos
CEO



May 16, 2018

NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS

TIME: 9:00 a.m. Eastern time

DATE: Wednesday, June 13, 2018

PLACE: Synlogic, Inc., 301 Binney Street, Suite 402, Cambridge, MA 02142

PURPOSES:

1. To elect two Class III directors to serve three-year terms expiring in 2021;
2. To ratify the appointment of KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2018; and
3. To transact such other business that is properly presented at the annual meeting and any adjournments or postponements thereof.

WHO MAY VOTE:

You may vote if you were the record owner of Synlogic, Inc. common stock at the close of business on April 24, 2018. A list of stockholders of record will be available at the annual meeting and, during the 10 days prior to the annual meeting, at our principal executive offices located at 301 Binney Street, Suite 402, Cambridge, MA 02142.

All stockholders are cordially invited to attend the annual meeting. **Whether you plan to attend the annual meeting or not, we urge you to vote and submit your proxy by the Internet, telephone or mail in order to ensure the presence of a quorum.** You may change or revoke your proxy at any time before it is voted at the meeting.

BY ORDER OF THE BOARD OF DIRECTORS

A handwritten signature in black ink, appearing to read "Maiken Keson-Brookes". The signature is fluid and cursive, with a long, sweeping tail.

Maiken Keson-Brookes
Secretary

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SYNLOGIC, INC.
301 Binney Street, Suite 402
Cambridge, MA 02142

**PROXY STATEMENT FOR THE 2018 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JUNE 13, 2018**

This proxy statement, along with the accompanying notice of 2018 annual meeting of stockholders, contains information about the 2018 annual meeting of stockholders of Synlogic, Inc., including any adjournments or postponements of the annual meeting. We are holding the annual meeting at 9:00 a.m., Eastern time, on Wednesday, June 13, 2018, at our corporate offices located at 301 Binney Street, Suite 402, Cambridge, MA 02142.

In this proxy statement, we refer to Synlogic, Inc. as “Synlogic”, “the Company”, “we”, and “us.”

This proxy statement relates to the solicitation of proxies by our Board of Directors for use at the annual meeting.

On or about May 16, 2018, we intend to begin sending this proxy statement, the attached Notice of Annual Meeting of Stockholders and the enclosed proxy card to all stockholders entitled to vote at the annual meeting.

Although not part of this proxy statement, we are also sending, along with this proxy statement, our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, which includes our financial statements for the fiscal year ended December 31, 2017.

EXPLANATORY NOTE

On August 28, 2017, Synlogic, Inc., formerly known as Mirna Therapeutics, Inc. (NASDAQ: MIRN) (“Mirna”), completed its business combination with Synlogic, Inc. (“Private Synlogic”) in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated as of May 15, 2017, by and among Mirna, Meerkat Merger Sub, Inc. (“Merger Sub”), and Private Synlogic (the “Merger Agreement”), pursuant to which Merger Sub merged with and into Private Synlogic, with Private Synlogic surviving as a wholly owned subsidiary of Mirna (the “Merger”). On August 28, 2017, immediately after completion of the Merger, Mirna changed its name to “Synlogic, Inc.” (“Public Synlogic”) (NASDAQ: SYBX).

In this proxy statement, unless the context specifically indicates otherwise, “the Company”, “we”, “us”, “our”, and “Synlogic” refer to Public Synlogic and its subsidiaries following the Merger, effective on August 28, 2017, and to Private Synlogic and its subsidiaries prior to the Merger. References to “Pre-Merger Mirna” means Mirna prior to the Merger effective on August 28, 2017.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE
SHAREHOLDER MEETING TO BE HELD ON JUNE 13, 2018

This proxy statement and our 2017 annual report to stockholders are available for viewing, printing and downloading at www.astproxyproposal.com/ast/21687/. To view these materials please have your 12-digit control number(s) available that appears on your proxy card. On this website, you can also elect to receive future distributions of our proxy statements and annual reports to stockholders by electronic delivery.

Additionally, you can find a copy of our Annual Report on Form 10-K, which includes our financial statements, for the fiscal year ended December 31, 2017 on the website of the Securities and Exchange Commission, or the SEC, at www.sec.gov, or in the “Financials” section of the “Investors & Media” section of our website at www.synlogictx.com. You may also obtain a printed copy of our Annual Report on Form 10-K, including our financial statements, free of charge, from us by sending a written request to: Investor Relations, Synlogic, Inc., 301 Binney Street, Suite 402, Cambridge, MA 02142. Exhibits will be provided upon written request and payment of an appropriate processing fee.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why is the Company Soliciting My Proxy?

The Board of Directors of Synlogic is soliciting your proxy to vote at the 2018 annual meeting of stockholders to be held at 301 Binney Street, Suite 402, Cambridge MA 02142, on Wednesday, June 13, 2018, at 9:00 a.m. Eastern time and any adjournments of the meeting, which we refer to as the annual meeting. The proxy statement along with the accompanying Notice of Annual Meeting of Stockholders summarizes the purposes of the meeting and the information you need to know to vote at the Annual Meeting.

We have made available to you on the Internet or have sent you this proxy statement, the Notice of Annual Meeting of Stockholders, the proxy card and a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 because you owned shares of Synlogic, Inc. common stock on the record date. The Company intends to commence distribution of the proxy materials to stockholders on or about May 16, 2018.

Who Can Vote?

Only stockholders who owned our common stock at the close of business on April 24, 2018 are entitled to vote at the annual meeting. On this record date, there were 25,450,808 shares of our common stock outstanding and entitled to vote. Our common stock is our only class of voting stock.

You do not need to attend the annual meeting to vote your shares. Shares represented by valid proxies, received in time for the annual meeting and not revoked prior to the annual meeting, will be voted at the annual meeting. For instructions on how to change or revoke your proxy, see "May I Change or Revoke My Proxy?" below.

How Many Votes Do I Have?

Each share of our common stock that you own entitles you to one vote.

How Do I Vote?

Whether you plan to attend the annual meeting or not, we urge you to vote by proxy. All shares represented by valid proxies that we receive through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card or as instructed via Internet or telephone. You may specify whether your shares should be voted for or withheld for each nominee for director, and whether your shares should be voted for, against or abstain with respect to the other proposal. If you properly submit a proxy without giving specific voting instructions, your shares will be voted in accordance with the Board's recommendations as noted below. Voting by proxy will not affect your right to attend the annual meeting. If your shares are registered directly in your name through our stock transfer agent, American Stock Transfer & Trust Company, LLC, or you have stock certificates registered in your name, you may vote:

- **By Internet or by telephone.** Follow the instructions included in the Notice or, if you received printed materials, in the proxy card to vote by Internet or telephone.
- **By mail.** If you received a proxy card by mail, you can vote by mail by completing, signing, dating and returning the proxy card as instructed on the card. If you sign the proxy card but do not specify how you want your shares voted, they will be voted in accordance with the Board's recommendations as noted below.
- **In person at the meeting.** If you attend the meeting, you may deliver a completed proxy card in person or you may vote by completing a ballot, which will be available at the meeting.

Telephone and Internet voting facilities for stockholders of record will be available 24 hours a day and will close at 11:59 p.m. Eastern time on June 12, 2018.

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If your shares are held in “street name” (held in the name of a bank, broker or other holder of record), you will receive instructions from the holder of record. You must follow the instructions of the holder of record in order for your shares to be voted. Telephone and Internet voting also will be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you plan to vote your shares in person at the annual meeting, you should contact your broker or agent to obtain a legal proxy or broker’s proxy card and bring it to the annual meeting in order to vote.

How Does the Board of Directors Recommend That I Vote on the Proposals?

The Board of Directors recommends that you vote as follows:

- “**FOR**” the election of the nominees for director; and
- “**FOR**” the ratification of the selection of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2018.

If any other matter is presented at the annual meeting, your proxy provides that your shares will be voted by the proxy holder listed in the proxy in accordance with his or her best judgment. At the time this proxy statement was first made available, we knew of no matters that needed to be acted on at the annual meeting, other than those discussed in this proxy statement.

May I Change or Revoke My Proxy?

If you give us your proxy, you may change or revoke it at any time before the annual meeting. You may change or revoke your proxy in any one of the following ways:

- if you received a proxy card, by signing a new proxy card with a date later than your previously delivered proxy and submitting it as instructed above;
- by re-voting by Internet or by telephone as instructed above;
- by notifying Synlogic’s Secretary in writing before the annual meeting that you have revoked your proxy; or
- by attending the annual meeting in person and voting in person. Attending the annual meeting in person will not in and of itself revoke a previously submitted proxy. You must specifically request at the annual meeting that it be revoked.

Your most current vote, whether by telephone, Internet or proxy card is the one that will be counted.

What if I Receive More Than One Notice or Proxy Card?

You may receive more than one Notice or proxy card if you hold shares of our common stock in more than one account, which may be in registered form or held in street name. Please vote in the manner described above under “How Do I Vote?” for each account to ensure that all of your shares are voted.

Will My Shares be Voted if I Do Not Vote?

If your shares are registered in your name or if you have stock certificates, they will not be counted if you do not vote as described above under “How Do I Vote?” If your shares are held in street name and you do not provide voting instructions to the bank, broker or other nominee that holds your shares as described above, the bank, broker or other nominee that holds your shares has the authority to vote your unvoted shares only with respect to Proposal 2. Therefore, we encourage you to provide voting instructions to your bank, broker or other nominee. This ensures your shares will be voted at the annual meeting and in the manner you desire. A “broker non-vote” will occur if your broker cannot vote your shares on a particular matter because it has not received instructions from you and does not have discretionary voting authority on that matter or because your broker chooses not to vote on a matter for which it does have discretionary voting authority.

What Vote is Required to Approve Each Proposal and How are Votes Counted?

Proposal 1: Elect Directors

The nominees for director who receive the most votes (also known as a “plurality” of the votes cast) will be elected. You may vote either FOR all of the nominees, WITHHOLD your vote from all of the nominees or WITHHOLD your vote from any one or more of the nominees. Votes that are withheld will not be included in the vote tally for the election of the directors. Brokerage firms do not have authority to vote customers’ unvoted shares held by the firms in street name for the election of the directors. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.

Proposal 2: Ratify Selection of Independent Registered Public Accounting Firm

The affirmative vote of a majority of the shares cast affirmatively or negatively for this proposal is required to ratify the selection of our independent registered public accounting firm. Abstentions will have no effect on the results of this vote. Brokerage firms have authority to vote customers’ unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes will have no effect on the results of this vote. We are not required to obtain the approval of our stockholders to select our independent registered public accounting firm. However, if our stockholders do not ratify the selection of KPMG LLP as our independent registered public accounting firm for 2018, our Audit Committee of our Board of Directors will reconsider its selection.

Is Voting Confidential?

We will keep all the proxies, ballots and voting tabulations private. We only let our Inspector of Election, our Secretary, examine these documents. Management will not know how you voted on a specific proposal unless it is necessary to meet legal requirements. We will, however, forward to management any written comments you make on the proxy card or otherwise provide.

Where Can I Find the Voting Results of the Annual Meeting?

The preliminary voting results will be announced at the annual meeting, and we will publish preliminary results, or final results if available, in a Current Report on Form 8-K within four business days of the annual meeting. If final results are unavailable at the time we file the Form 8-K, then we will file an amended report on Form 8-K to disclose the final voting results within four business days after the final voting results are known.

What Are the Costs of Soliciting these Proxies?

We will pay all of the costs of soliciting these proxies. Our directors and employees may solicit proxies in person or by telephone, fax or email. We will pay these employees and directors no additional compensation for these services. We will ask banks, brokers and other institutions, nominees and fiduciaries to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses.

What Constitutes a Quorum for the Annual Meeting?

The presence, in person or by proxy, of the holders of a majority of the voting power of all outstanding shares of our common stock entitled to vote at the annual meeting is necessary to constitute a quorum at the annual meeting. Votes of stockholders of record who are present at the annual meeting in person or by proxy, abstentions, and broker non-votes are counted for purposes of determining whether a quorum exists.

Attending the Annual Meeting

The annual meeting will be held at 9:00 a.m. Eastern time on Wednesday, June 13, 2018 at 301 Binney Street, Suite 402, Cambridge, MA 02142. When you arrive, signs will direct you to the appropriate meeting rooms. You do not need to attend the annual meeting in order to vote.

Householding of Annual Disclosure Documents

SEC rules concerning the delivery of annual disclosure documents allow us or your broker to send a single Notice or, if applicable, a single set of our proxy materials to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family. This practice, referred to as “householding,” benefits both you and us. It reduces the volume of duplicate information received at your household and helps to reduce our expenses. The rule applies to our Notices, annual reports, proxy statements and information statements. Once you receive notice from your broker or from us that communications to your address will be “household,” the practice will continue until you are otherwise notified or until you revoke your consent to the practice. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If your household received a single Notice or, if applicable, a single set of proxy materials this year, but you would prefer to receive your own copy, please contact our transfer agent, American Stock Transfer & Trust Company, LLC, by calling their toll-free number, 1-800-937-5449.

If you do not wish to participate in “householding” and would like to receive your own Notice or, if applicable, set of Synlogic’s proxy materials in future years, follow the instructions described below. Conversely, if you share an address with another Synlogic stockholder and together both of you would like to receive only a single Notice or, if applicable, set of proxy materials, follow these instructions:

- If your Synlogic shares are registered in your own name, please contact our transfer agent, American Stock Transfer & Trust Company, LLC, and inform them of your request by calling them at 1-800-937-5449 or writing to them at 6201 15th Avenue, Brooklyn, NY 11219.
- If a broker or other nominee holds your Synlogic shares, please contact the broker or other nominee directly and inform them of your request. Be sure to include your name, the name of your brokerage firm and your account number.

Electronic Delivery of Company Stockholder Communications

Most stockholders can elect to view or receive copies of future proxy materials over the Internet instead of receiving paper copies in the mail.

You can choose this option and save the Company the cost of producing and mailing these documents by:

- following the instructions provided on your proxy card; or
- following the instructions provided when you vote over the Internet.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of April 17, 2018 for (a) the executive officers named in the Summary Compensation Table on page 19 of this proxy statement, (b) each of our directors and director nominees, (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 of April 17, 2018 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 25,450,808 shares of common stock outstanding on April 17, 2018.

Name and Address of Beneficial Owner **	Shares Beneficially Owned (1)	
	Number	Percent
Directors and Named Executive Officers:		
Jose-Carlos Gutiérrez-Ramos, Ph.D. (2)	405,093	1.6%
Andrew Gengos (3)	624	*0%
Aoife M. Brennan, MB, BCh, BAO, MMSc (4)	85,047	*0%
Peter Barrett, Ph.D. (5)	2,654,856	10.4%
Chau Khuong (6)	2,029,996	8.0%
Nick Leschly (7)	33,816	*0%
Edward Mathers (8)	1,428	*0%
Michael Powell, Ph.D. (9)	576,400	2.3%
Richard P. Shea	0	*0%
All directors and current executive officers as a group (11 persons) (10)	5,961,293	23.3%
Five Percent Stockholders:		
New Enterprise Associates 14, L.P. (11) 1954 Greenspring Drive, Suite 600 Timonium, MD 21093	4,228,940	16.6%
Atlas Venture Fund IX, L.P.(12) 25 First Street, Suite 303 Cambridge, MA 02141	2,651,963	10.4%
OrbiMed Private Investments VI, L.P. (13) 601 Lexington Avenue, 54th Floor New York, NY 10022	2,029,996	8.0%
Deerfield Mgmt III, L.P. and related entities (14) 780 Third Avenue, 37th Floor New York, NY 10017	1,365,143	5.4%
Hawkes Bay Master Investors (Cayman) L.P. (15) c/o Wellington Management Group LLP 280 Congress Street Boston, MA 02210	1,350,075	5.3%

* 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 April 17, 2018.

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- (2) Consists of 352,619 shares of our common stock held by Dr. Gutiérrez-Ramos and 52,474 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 17, 2018.
- (3) Consists of 624 shares of our common stock issuable upon the exercise of options held by Mr. Gengos which are exercisable within 60 days following April 17, 2018.
- (4) Consists of 51,767 shares of our common stock held by Dr. Brennan and 33,280 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 17, 2018.
- (5) Consists of 2,651,963 shares of our common stock owned by Atlas Venture Fund IX, L.P. (“Atlas IX”) and 2,893 shares of our common stock issuable upon the exercise of options held by Dr. Barrett which are exercisable within 60 days following April 17, 2018. Atlas Venture Associates IX, L.P. (“AVA IX LP”), is the general partner of Atlas IX, and Atlas Venture Associates IX, LLC (“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.
- (6) Consists of 2,029,996 shares of our common stock held of record by OrbiMed Private Investments VI, LP (“OPI VI”). OrbiMed Capital GP VI LLC (“GP VI”) is the sole general partner of OPI VI, and OrbiMed Advisors LLC (“Advisors”), a registered adviser under the Investment Advisers Act of 1940, as amended, is the sole managing member of GP VI. By virtue of such relationships, GP VI and Advisors may be deemed to have voting and investment power with respect to the securities held by OPI VI noted above and as a result may be deemed to have beneficial ownership over such securities. Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho and Jonathan T. Silverstein, each of whom disclaims beneficial ownership of the shares held by OPI VI. Mr. Khuong is an employee of Advisors. Each of GP VI, Advisors and Mr. Khuong disclaims Section 16 beneficial ownership of the securities held by OPI VI, except to the extent of its or his pecuniary interest therein, if any. This report shall not be deemed an admission that any such entity or person is a beneficial owner of such securities for the purpose of Section 16 or for any other purpose.
- (7) Consists of 23,150 shares of our common stock held by Mr. Leschly and 10,666 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 17, 2018.
- (8) Consists of 1,428 shares of our common stock issuable upon the exercise of options held by Mr. Mathers which are exercisable within 60 days following April 17, 2018.
- (9) Consists of 574,972 shares of our common stock held by Sofinnova Venture Partners VIII, L.P. (“SVP VIII”) and 1,428 shares of our common stock issuable upon the exercise of options held by Dr. Powell which are exercisable within 60 days following April 17, 2018. Sofinnova Management VIII, L.L.C. (“SM VIII”), the general partner of SVP VIII, may be deemed to have sole voting and dispositive power with regard to these shares, and Dr. Powell, Dr. James I. Healy, and Dr. Anand Mehra, the managing members of SM VIII, may be deemed to have shared voting and dispositive power with regard to these shares.
- (10) See footnotes 2 through 8. Also includes 52,243 shares of our common stock and 29,948 shares of our common stock issuable upon the exercise of options held by Todd Shegog, our Chief Financial Officer, which are exercisable within 60 days following April 17, 2018; and 75,135 shares of our common stock and 16,707 shares of our common stock issuable upon the exercise of options held by Paul Miller, Ph.D., our Chief Scientific Officer, which are exercisable within 60 days following April 17, 2018.
- (11) This information is based solely on a Schedule 13D/A filed with the Securities and Exchange Commission on or about February 1, 2018. Consists of 4,228,940 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 and is also a member of the Synlogic Board of Directors.
- (12) This information is based solely on a Schedule 13D filed with the Securities and Exchange Commission on or about September 29, 2017. Consists of 2,651,963 shares of our common stock owned by Atlas IX. AVA IX LP is the general partner of Atlas IX, and AVA IX LLC is the general partner of AVA IX LP. Each of AVA IX LP and AVA IX LLC disclaims Section 16 beneficial ownership of the securities held by Atlas IX, except to the extent of its pecuniary interest therein, if any.

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- (13) This information is based solely on a Schedule 13D/A filed with the Securities and Exchange Commission on or about April 12, 2018. Consists of 2,029,996 shares of our common stock held of record by OPI VI. GP VI is the sole general partner of OPI VI, and Advisers, a registered adviser under the Investment Advisers Act of 1940, as amended, is the sole managing member of GP VI. By virtue of such relationships, GP VI and Advisers may be deemed to have voting and investment power with respect to the securities held by OPI VI noted above and as a result may be deemed to have beneficial ownership over such securities. Advisers exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho and Jonathan T. Silverstein, each of whom disclaims beneficial ownership of the shares held by OPI VI. Each of GP VI and Advisers disclaims Section 16 beneficial ownership of the securities held by OPI VI, except to the extent of its or his pecuniary interest therein, if any. This report shall not be deemed an admission that any such entity or person is a beneficial owner of such securities for the purpose of Section 16 or for any other purpose.
- (14) This information is based solely on a Schedule 13G/A filed with the Securities and Exchange Commission on or about January 29, 2018. Consists of 1,107,643 shares of our common stock held by Deerfield Private Design Fund III, L.P. (“DPDF”) and 257,500 shares of our common stock held by Deerfield Special Situations Fund, L.P. (“DSSF”). Deerfield Mgmt III, L.P. (“DMIII”) is the general partner of DPDF and Deerfield Mgmt, L.P. (“DM”) is the general partner of DSSF. Deerfield Management Company, L.P. (“DMC”) is the investment advisor of DPDF and DSSF. James E. Flynn is the sole member of the general partner of DMIII, DM and DMC. DMIII, DMC and James E. Flynn may be deemed to beneficially own the shares held by DPDF and DSSF.
- (15) This information is based solely on a Schedule 13G filed with the Securities and Exchange Commission on or about April 16, 2018. Consists of 1,350,075 shares of our common stock held by Hawkes Bay Master Investors (Cayman) L.P.

MANAGEMENT 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 of Directors is divided into three classes for purposes of election. One class is elected at each annual meeting of stockholders to serve for a three-year term. Our Board of Directors currently consists of seven members, classified into three classes as follows: (1) Chau Khuong and Nick Leschly constitute a class with a term ending at the 2018 annual meeting; (2) Jose-Carlos Gutiérrez-Ramos and Richard P. Shea constitute a class with a term ending at the 2019 annual meeting; and (3) Peter Barrett, Edward Mathers and Michael Powell constitute a class with a term ending at the 2020 annual meeting.

On March 14, 2018, our Board of Directors accepted the recommendation of the Nominating and Governance Committee and voted to nominate Chau Khuong and Nick Leschly for election at the annual meeting for a term of three years to serve until the 2021 annual meeting of stockholders, and until their respective successors have been elected and qualified or until such director's earlier death, resignation or removal.

Set forth below are the names of the persons nominated as directors and directors whose terms do not expire this year, their ages, their offices in the Company, if any, their principal occupations or employment for at least the past five years, the length of their tenure as directors and the names of other public companies in which such persons hold or have held directorships during the past five years. Additionally, information about the specific experience, qualifications, attributes or skills that led to our Board of Directors' conclusion at the time of filing of this proxy statement that each person listed below should serve as a director is set forth below:

<u>Name</u>	<u>Age</u>	<u>Position with the Company</u>
Jose-Carlos Gutiérrez-Ramos, Ph.D.	56	President and Chief Executive Officer; Class I Director
Richard P. Shea	66	Class I Director
Peter Barrett, Ph.D.	65	Class II Director; Chairman of Board of Directors
Edward Mathers	58	Class II Director
Michael Powell, Ph.D.	63	Class II Director
Chau Khuong	42	Class III Director
Nick Leschly	45	Class III Director

Our Board of Directors 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, Edward Mathers, Michael Powell, Chau Khuong and Nick Leschly.

Jose-Carlos Gutiérrez-Ramos, Ph.D., age 56, has served as President and Chief Executive Officer and a member of our Board of Directors since the Merger closed on August 28, 2017. Dr. Gutiérrez-Ramos joined Private Synlogic in May 2015 and has served as a director and as Chief Executive Officer since such time. Dr. Gutiérrez-Ramos also served as President of Private Synlogic from May 2015 to September 2015 and from December 2016 to the present. Dr. Gutiérrez-Ramos joined Private Synlogic from Pfizer, a biopharmaceutical company, where he served as Group Senior Vice President and global head of BioTherapeutics Research from 2009 to May 2015. In that role, Dr. Gutiérrez-Ramos held responsibility for more than 25 novel programs across the full spectrum of clinical development, re-launched efforts in Rare Disease Discovery and Development and founded the Centers for Therapeutic Innovation. Dr. Gutiérrez-Ramos oversaw and enhanced the biologics platform for Pfizer from early discovery to entry in manufacturing. From 2007 to 2009, Dr. Gutiérrez-Ramos held the position of Senior Vice President and Head of the Immuno-inflammation Center for Drug Discovery (iiCEDD) at GlaxoSmithKline, a pharmaceutical company, where he founded entrepreneurial units such as Epinova and Tempero focused on translating novel areas of science (e.g. Epigenetics and Tregs) into therapeutics. From 1995 to 2007, Dr. Gutiérrez-Ramos was Senior Vice President and Head of Research &

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Development at Avidia Inc., a biopharmaceutical company, and Peptimmune Inc., a biotechnology company, where he led significant efforts focused on the discovery of novel protein therapeutics and peptides for autoimmune disease, including multiple sclerosis and diabetes. Dr. Gutiérrez-Ramos began his career in the drug industry at Millennium Pharmaceuticals (now a subsidiary of Takeda), a biopharmaceutical company, serving as Vice President of Inflammation Drug Discovery. In that capacity, Dr. Gutiérrez-Ramos was responsible for advancing pre-clinical candidates in inflammation and immunology into human clinical trials and advancing compounds (small molecules and antibodies) from discovery through clinical development. Dr. Gutiérrez-Ramos began his career in academia as part of the faculty at the Genetics department of Harvard Medical School. Dr. Gutiérrez-Ramos was also a member of the Basel Institute for Immunology in Basel, Switzerland, and a fellow at the Max-Planck Institute in Freiburg, Germany. Dr. Gutiérrez-Ramos received an M.S. in Biochemistry and Molecular Biology and a Ph.D. in Immunology from Universidad Autónoma de Madrid. Dr. Gutiérrez-Ramos serves on the board of directors of Momenta Pharmaceuticals, Inc., a publicly-traded biotechnology company. The board has concluded that Dr. Gutiérrez-Ramos possesses specific attributes that qualify him to serve as a member of our Board of Directors, including the perspective and experience he brings as our Chief Executive Officer, which brings operational expertise to our Board of Directors.

Richard P. Shea, age 66, has served as a member of our Board of Directors since the Merger closed on August 28, 2017. Mr. Shea has served as the Chief Financial Officer of Syndax Pharmaceuticals, Inc. since February 2017. 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 pharmacogenomics company, that was merged with Hyseq Pharmaceuticals Inc., and as Vice President, Finance of Genetics Institute, 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 Mr. Shea possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience with the healthcare and pharmaceutical industries and his broad life sciences industry knowledge.

Peter Barrett, Ph.D., age 65, has served as Chairman of our Board of Directors 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 joined Atlas Venture L.P., an early-stage venture capital fund, in 2002, and currently serves as a Partner. From 1998 to 2002, Dr. Barrett was Executive Vice President and Chief Business Officer of Celera Genomics Group (now Celera Corporation, a subsidiary of Quest Diagnostics), a biotechnology company which he co-founded. From 1979 to 1998, Dr. Barrett held senior management positions at Perkin-Elmer Corporation, most recently serving as Vice President, Corporate Planning and Business Development. Dr. Barrett currently serves on the boards of directors of PerkinElmer, Inc., Zafgen, Inc. and several privately held companies. Dr. Barrett is a Senior Fellow at Harvard Business School and is the faculty chair of the key advisory board of the Blavatnik Fellowship Program. Dr. Barrett is a member of the research council at Boston Children's Hospital. Dr. Barrett holds a B.S. in Chemistry from Lowell Technological Institute (now 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.

Edward Mathers, age 58, has served as a member of our Board of Directors since October 2012. Mr. Mathers previously served on the Private Synlogic Board of Directors since July 2014. Since 2008, Mr. Mathers has been a 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

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companies: ObsEva SA, Ra Pharmaceuticals, Inc. and Rhythm Pharmaceuticals, Inc. Mr. Mathers also serves on the board of directors of several privately held companies. 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 Corporate Licensing 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 our Board of Directors, including his experience with the healthcare and pharmaceutical industries and his broad management experience.

Michael Powell, Ph.D., age 63, has served as a member of our Board of Directors since October 2012. Dr. Powell previously served as Chairman of our Board of Directors from October 2012 until the Merger closed on August 28, 2017. Since 1997, Dr. Powell has been a General Partner of Sofinnova Ventures, a venture capital firm. Previously, Dr. Powell has held positions at Genentech, Inc., a biotechnology company, Cytel Inc., a research and development company, and Syntex Research Group, a pharmaceutical company. Dr. Powell currently serves on the board of directors of numerous privately-held companies. Dr. Powell is an Adjunct Professor at the University of Kansas. Dr. Powell is the Board President of the AIDS Vaccine Advocacy Coalition and serves on the advisory board of the Institute for the Advancement of Medical Innovation at the University of Kansas. Dr. Powell received a B.S. in Chemistry from Scarborough College, a Ph.D. in Physical Chemistry from the University of Toronto and completed his post-doctoral work in Bioorganic Chemistry at the University of California. The board has concluded that Dr. Powell possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience with the life sciences and pharmaceutical industries and the venture capital industry.

Chau Khuong, age 42, has served as a member of our Board of Directors since the Merger closed on August 28, 2017, and prior to that time served on the Private Synlogic Board of Directors since February 2016. Mr. Khuong has worked at OrbiMed Advisors LLC, a private equity and venture capital firm, since 2003 and is Private Equity Partner. Mr. Khuong gained experience in start-up operations and business development at Veritas Medicine, Inc., a healthcare company, and in basic science research at the Yale School of Medicine and Massachusetts General Hospital. Mr. Khuong currently serves as a director of Aerpio Therapeutics, a publicly traded company, and served as a director of Pieris Pharmaceuticals, Inc., a publicly traded company, from December 2014 to November 2017. Mr. Khuong also serves on the board of directors of several privately held companies. Mr. Khuong holds a B.S. in Molecular, Cellular and Developmental Biology with concentration in Biotechnology and an M.P.H. with concentration in Infectious diseases, both from Yale University. The board has concluded that Mr. Khuong possesses specific attributes that qualify him to serve as a member of our Board of Directors, including his experience as an investor, particularly with respect to healthcare companies, and his broad life sciences industry knowledge. Mr. Khuong also has extensive experience overseeing the operations and research and development of biotechnology companies.

Nick Leschly, age 45, has served as a member of our Board of Directors 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 has served as the President and Chief Executive Officer of bluebird bio, Inc. (“bluebird bio”), a publicly-traded clinical-stage biotechnology company, since September 2010. Previously, he served as the Interim Chief Executive Officer of bluebird bio from March 2010 to September 2010. Formerly a partner of Third Rock Ventures, L.P. (“Third Rock”) since its founding in 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, Inc. and Edimer Pharmaceuticals, Inc. 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 also founded and served as Chief Executive Officer of MedXtend Corporation. He received his B.S. in Molecular Biology from Princeton University and his M.B.A. from Wharton Business School. He serves on the board of Biotechnology Innovation Organization (BIO) and Proclara Biosciences. 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 of Directors, including his experience in the venture capital industry and drug research and development.

Committees of the Board of Directors and Meetings

Meeting Attendance. During the fiscal year ended December 31, 2017 and before the Merger, which was effective as of August 28, 2017, Private Synlogic's Board of Directors held seven meetings, and the various committees of the Board met a total of six 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 served during fiscal 2017. Private Synlogic did not hold an annual meeting in 2017.

During the fiscal year ended December 31, 2017 and before the Merger, Pre-Merger Mirna's Board of Directors held four meetings, and the various committees of the Board met a total of two 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 served during fiscal 2017, except for Edward Mathers, who attended two of the four meetings of the Board held during the period he has been a director. Mr. Mathers recused himself from the two Board meetings he did not attend due to his historical involvement with Private Synlogic and his inherent conflict.

After the Merger, which was effective as of August 28, 2017, our Board of Directors held two meetings, and the various committees of the Board met a total of six times. All directors attended at least 75% of the total number of board meetings held during such director's term and the total number of meetings of the committees on which such director served during such director's term. We encourage our directors to attend the Annual Meeting and two of Pre-Merger Mirna's directors attended Pre-Merger Mirna's 2017 annual meeting.

Audit Committee. Prior to the Merger, Pre-Merger Mirna's Audit Committee met two times during fiscal 2017. Prior to the Merger, Private Synlogic's Audit Committee met two times during fiscal 2017. Since the Merger, effective as of August 28, 2017, our Audit Committee met three times during fiscal 2017. This committee currently has three members, Richard P. Shea (Chairman), Peter Barrett and Michael Powell. 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. Barrett is independent even though he falls outside the "safe harbor" definition set forth in Rule 10A-3(e)(1)(ii) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") because Atlas Venture L.P. and its affiliates own in excess of 10% of our common stock. Among other things, the Board considered Mr. Barrett's history of service and the percentage of common stock held by others, and it determined that he is not an "affiliated person" of our company who would be ineligible to serve on the Audit Committee. 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. Prior to the Merger, Pre-Merger Mirna's Compensation Committee did not meet during fiscal 2017 as all actions of the Compensation Committee were taken via written consent. Prior to the Merger, Private Synlogic's Compensation Committee met one time during fiscal 2017. Since the Merger, effective as of August 28, 2017, our Compensation Committee met three times during fiscal 2017. This committee currently has three members, Edward Mathers (Chairman), Chau Khuong and Nick Leschly. Our

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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 of Directors 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 and 2017 Stock Incentive 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 Chief Executive Officer and other executive officers, evaluates the performance of these officers in light of those goals and objectives and recommends to the Board of Directors the compensation of these officers based on such evaluations. The Compensation Committee also recommends to the Board of Directors the issuance of stock options and other awards under our stock plans. The Board has delegated authority to our Chief Executive Officer to grant options to new hire employees as well as certain other employees in connection with their promotion who (i) are not then subject or who are reasonably expected to become subject to Section 16 of the Exchange Act, or (iii) persons then or who are reasonably expected to be "covered employees" for purposes of Section 162(m) of the Internal Revenue Code of 1986, as amended. The purpose of this delegation of authority is to enhance the flexibility of option administration within the Company and to facilitate the timely grant of options within specified limits approved by the Board of Directors. 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 Radford, a business unit of Aon plc ("Radford"), a national executive compensation consulting firm, to review and provide recommendations concerning all of the components of the Company's executive compensation program. Radford 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. Radford assists the 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. Radford also assists the 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, Radford provided the Compensation Committee with a letter addressing each of the six independence factors. Their responses affirm the independence of Radford 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. Prior to the Merger, Pre-Merger Mirna's Nominating and Governance Committee did not meet during fiscal 2017 as all action was taken via written consent. Prior to the Merger, Private Synlogic's Nominating and Governance Committee did not meet during fiscal 2017. Since the Merger, effective as of August 28, 2017, our Nominating and Governance Committee did not meet during fiscal 2017. This committee currently has three members, Michael Powell (Chairman), Peter Barrett and Chau Khuong. Our Board of Directors has determined that all members of the Nominating and Governance Committee qualify 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:

- (a) the identification of qualified candidates to become Board members consistent with criteria approved by the Board;
- (b) the selection, or recommendation of selection to the Board regarding the selection, of nominees for election as directors at the next annual meeting of stockholders (or special meeting of stockholders at which directors are to be elected);

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- (c) the selection, or recommendation of selection to the Board regarding the selection, of candidates to fill any vacancies on the Board;
- (d) the evaluation of and recommendation to the Board of any changes to the authorized size of the Board;
- (e) the assignment and rotation of Board members to various Board committees;
- (f) the review and recommendation to the Board of revisions to the Corporate Governance Guidelines;
- (g) oversight of the evaluation of the Board and its various committees; and
- (h) 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; 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 board members; 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 has not adopted a formal diversity policy in connection with the consideration of director nominations or the selection of nominees. However, the 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 and in "Stockholder Proposals and Nominations for Director" at the end of this proxy statement. 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;
- 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
- 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;

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- 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, including its appendices, is publicly available on the Company's website at www.synlogictx.com.

Board Leadership Structure and Role in Risk Oversight

Leadership Structure of the Board

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

Role of Board in Risk Oversight Process

Risk assessment and oversight are an integral part of our governance and management processes. Our Board of Directors 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 of Directors 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 of Directors does not have a standing risk management committee, but rather administers this oversight function directly through the Board of Directors as a whole, as well as through various standing committees of the Board of Directors that address risks inherent in their respective areas of oversight. In particular, our Board of Directors is responsible for monitoring and assessing strategic risk exposure and the Audit Committee is responsible for overseeing our major financial risk exposures 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 guidelines. The Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Stockholder Communications to the Board

Generally, stockholders who have questions or concerns should contact our Investor Relations department at (617) 639-9122. However, any stockholders who wish to address questions regarding our business directly with

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the Board of Directors, 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. We have employment agreements with each of our executive officers.

<u>Name</u>	<u>Age</u>	<u>Position</u>
Todd Shegog	53	Chief Financial Officer
Andrew Gengos	53	Chief Operating Officer and Head of Corporate Development
Aoife M. Brennan, MB, BCh, BAO, MMSc	43	Chief Medical Officer
Paul Miller, Ph.D.	58	Chief Scientific Officer

Todd Shegog, age 53, joined Private Synlogic in September 2016 as Chief Financial Officer and is responsible for the oversight and direction of our financial strategy and management as well as facilities and information systems. From April 2014 to August 2016, Mr. Shegog served as senior vice president and chief financial officer at Forum Pharmaceuticals Inc., a pharmaceutical company, where he was responsible for finance, operations and information systems in support of the pursuit of innovative therapies for schizophrenia and Alzheimer's disease. From 1998 to March 2014, Mr. Shegog worked in a variety of roles at Millennium Pharmaceuticals, including as Senior Vice President and Chief Financial Officer from 2008 to 2014, where he was responsible for management of Millennium's financial resources, corporate planning, financial reporting and compliance. During his tenure at Millennium Pharmaceuticals, Mr. Shegog held key leadership roles supporting the early evolution of Millennium and its transformation from a genomics company to a fully-integrated drug developer, the approval and launch of its flagship oncology product, VELCADE®, and the \$8.8 billion acquisition of Millennium Pharmaceuticals by Takeda Pharmaceutical Co Ltd. Mr. Shegog began his career in healthcare at Genetics Institute, Inc. (now Pfizer), a biotechnology research and development company, in a variety of financial positions supporting its research and development organizations and was a member of the commercial operations team that supported the launch of BeneFIX®. Mr. Shegog holds an M.B.A. from the Tepper School of Management at Carnegie Mellon University and a bachelor's degree in electrical engineering from Lafayette College.

Andrew Gengos, age 53, joined us in October 2017 as Chief Operating Officer and Head of Corporate Development. Mr. Gengos most recently served as President, Chief Executive Officer and as a director of ImmunoCellular Therapeutics, a publicly-traded immune-oncology company pursuing treatments for glioblastoma from December 2012 to December 2016. Previously, Mr. Gengos was the President and Chief Executive Officer of Neuraltus Pharmaceuticals from February 2010 to August 2012. Prior to his service with Neuraltus, Mr. Gengos served for more than seven years with Amgen where, as Vice President, Strategy and Corporate Development, he managed Amgen's worldwide in-and-outbound business development activities, including a broad slate of acquisitions, licensing, spin-outs, divestitures, corporate venture capital investments, which included board of director positions and alliance management. In addition, he led the execution of strategic

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projects and supported the long-range planning process for the company. Before joining Amgen, Mr. Gengos was Vice President, Chief Financial Officer, and Chief Business Officer of Dynavax Technologies, where he led the company's business functions, including finance and accounting, fundraising, budgeting and planning, and business development. Earlier in his career, Mr. Gengos served as Vice President of Strategy at the Chiron Corporation and as Senior Engagement Manager at McKinsey & Company. Mr. Gengos holds an M.B.A. from the UCLA Anderson School of Management and a B.S. in chemical engineering from the Massachusetts Institute of Technology.

Aoife M. Brennan, MB, BCh, BAO, MMSc, age 43, joined Private Synlogic in September 2016 as Chief Medical Officer and is responsible for the oversight and direction of our clinical development strategy and operations. From May 2011 to August 2016, Dr. Brennan was Vice President and Head of the Rare Disease Innovation Unit at Biogen, a biotechnology company, where she was responsible for research and development of the Biogen rare disease portfolio, which involved programs ranging from pre-clinical to commercial, including the approval of ALPROLIX™, ELOCTATE™ and SPINRAZA™. From 2008 to 2011, Dr. Brennan was director of clinical development at Tolerx, Inc., a start-up biotechnology company focusing on immunotherapy for Type 1 diabetes. Dr. Brennan holds a medical degree from Trinity College in Dublin, Ireland and completed post-graduate training in internal medicine, endocrinology and metabolism. Dr. Brennan also completed post-doctoral training in clinical research and metabolism at the Beth Israel Deaconess Medical Center in Boston and is a graduate of the Harvard Medical School Scholars in Clinical Science Program.

Paul Miller, Ph.D., age 58, joined Private Synlogic in September 2014 as Chief Scientific Officer and is accountable for all aspects of discovery research and platform expansion. From 2011 to September 2014, Dr. Miller was Vice President of Infection Biology at AstraZeneca, a biopharmaceutical company, where he was responsible for the early discovery portfolio and strategy while also leading several external collaborations. Prior to AstraZeneca, Dr. Miller led various aspects of antibacterials research at Pfizer, a biopharmaceutical company, beginning in 1997 and became Chief Scientific Officer for antibacterial research from 2008 to 2011, leading discovery teams that produced eight drug development candidates, provided critical research support for several successful marketed antibiotics including Zithromax and Zyvox, and also successfully advanced a novel oxazolidinone (sutezolid) for tuberculosis into Phase 2 studies. A microbial geneticist by training, Dr. Miller began his professional career at the Warner-Lambert Company, a pharmaceutical company that merged with Pfizer in 2000, where he integrated modern molecular-genetic approaches into a traditional antibacterial drug discovery program and established novel target discovery projects. Dr. Miller's work at Warner-Lambert led to new insights into the mechanisms by which bacteria sense and respond to antibiotics and other environmental agents. Dr. Miller received a Ph.D. in microbiology and immunology from the Albany Medical College and conducted post-doctoral studies at NIH. Dr. Miller has also served as a member of the Institute of Medicine's Forum on Microbial Threats and as a grant reviewer to the Bill & Melinda Gates Foundation and the European Union's Innovative Medicines Initiative.

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) our Chief Executive Officer, (2) our two next most highly compensated executive officers who earned more than \$100,000 during the fiscal year ended December 31, 2017 and were serving as executive officers as of such date and (3) the Company's former Chief Executive Officer (collectively the "Named Executive Officers").

	Year	Salary (\$)	Bonus 1 (\$)	Stock Awards 2 (\$)	Option Awards 3 (\$)	Non-Equity Incentive Plan Compensation 4 (\$)	All Other Compensation 5 (\$)	Total (\$)
Jose Carlos Gutiérrez-Ramos, Ph.D. <i>President and Chief Executive Officer</i>	2017	438,325	202,944	—	1,433,894	176,000	—	2,251,164
	2016	412,000	—	—	—	116,802	—	528,802
Andrew Gengos 6 <i>Chief Operating Officer and Head of Corporate Development</i>	2017	89,040	100,000	—	1,479,840	34,268	—	1,703,148
	2016	—	—	—	—	—	—	—
Aoife M. Brennan, MB, BCh, BAO, MMSc 7 <i>Chief Medical Officer</i>	2017	348,363	—	—	744,339	111,412	—	1,204,115
	2016	115,000	85,000	100,935	—	31,395	53,492	385,821
Paul Lammers, M.D., M.Sc. <i>Former President and Chief Executive Officer</i>	2017	276,733	—	—	—	—	977,806	1,254,540
	2016	461,516	—	—	484,697	—	10,600	956,813

- (1) The amount reported for Dr. Gutiérrez-Ramos represents a one-time special bonus to compensate Dr. Gutiérrez-Ramos for the loss in value from his initial 2015 equity award due to the revised fair market value of the Company's common stock as of the grant date. The amount reported for Mr. Gengos and Dr. Brennan represent forfeitable signing bonuses received in connection with the commencement of employment.
- (2) The amounts reported represent the aggregate grant date fair value of stock awards granted as estimated pursuant to FASB ASC 718, Compensation—Share based compensation (ASC 718). See Note 12 of the Company's Annual Report on Form 10-K.
- (3) 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). See Note 12 of the Company's Annual Report on Form 10-K.
- (4) The amounts reported represent bonuses based upon the discretion of the Board and as outlined in each individual employment agreement for the years ended December 31, 2017 and 2016, as indicated, and were paid in the subsequent year.
- (5) The amount reported for Dr. Brennan for 2016 represents the tax gross up payment made in connection with the payment of her signing bonus. The amount reported for Dr. Lammers in 2017 represents payment of change in control related severance (\$933,975) and COBRA (\$43,831) and in 2016 payment of matching contributions under the Company's 401K plan then in effect.
- (6) Mr. Gengos commenced employment with the Company in October 2017 and salary and non-equity incentive plan compensation payments were prorated for this initial year of employment.
- (7) Dr. Brennan commenced employment with Private Synlogic in September 2016 and salary and non-equity incentive plan compensation payments were prorated for this initial year of employment.

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 of the Board of Directors. As part of this review process, the Board of Directors and Compensation Committee will apply the values and 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.

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Base Salary

In 2017, the Compensation Committee and the Board of Directors of Private Synlogic approved an annual increase in base salaries for all employees, including the named executive officers resulting in an annual base salary of \$450,000 for Dr. Gutiérrez-Ramos and \$349,036 for Dr. Brennan. Mr. Gengos joined the Company in October 2017 with an annual base salary of \$398,000 which was prorated based on service for 2017. In March 2018, the Compensation Committee and the Board approved base salary increases for the Company's management team effective January 1, 2018, resulting in an annual base salary of \$486,000 for Dr. Gutiérrez-Ramos, \$401,980 for Mr. Gengos and \$397,901 for Dr. Brennan.

Annual Bonuses

The Company 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 of Directors in its discretion based on a target percentage of annual base salary. In March 2018, the Board of Directors awarded Dr. Gutiérrez-Ramos a cash bonus of \$176,000, which represented 39.1% of his annual base salary, in recognition of his services provided in the year ended December 31, 2017 and in accordance with the terms of his employment agreement and bonus assessment. In March 2018, the Compensation Committee awarded Mr. Gengos a cash bonus of \$34,268, prorated for the number of months in the year he was employed by the Company, which represented 34.4% of his prorated annual base salary in recognition of his services provided in the year ended December 31, 2017 and in accordance with the terms of his employment agreement and bonus assessment. In addition, Mr. Gengos also received a signing bonus of \$100,000 in connection with his commencement of employment. With respect to his signing bonus, Mr. Gengos will be required to reimburse the Company if he voluntarily resigns within 12 months following the commencement of his employment or is terminated for cause. In March 2018, the Compensation Committee awarded Dr. Brennan a cash bonus of \$111,412, which represented 31.9% of her annual base salary in recognition of her services provided in the year ended December 31, 2017 and in accordance with the terms of her employment agreement and bonus assessment. In March 2017, the Compensation Committee of Private Synlogic awarded Dr. Gutiérrez-Ramos a cash bonus of \$116,802, prorated for the number of months in the year he was employed by Private Synlogic, which represented 28.4% of his annual base salary, in recognition of his services provided to Private Synlogic in the year ended December 31, 2016 and in accordance with the terms of his employment agreement and bonus assessment. In March 2017, the Compensation Committee of Private Synlogic awarded Dr. Brennan a cash bonus of \$31,395, which represented 27.3% of her annual base salary, in recognition of her services provided to Private Synlogic in the year ended December 31, 2016, prorated for the number of months in the year she was employed by Private Synlogic and in accordance with the terms of her employment agreement and bonus assessment. In addition, Dr. Brennan also received a signing bonus of \$85,000 plus a gross up for taxes to be paid on such compensation in connection with her commencement of employment.

2018 Stock Awards

In 2018 in connection with the Compensation Committee and the Board's assessment of 2017 performance the Company granted the following options to its named executive officers: Dr. Gutiérrez-Ramos was granted an option to purchase 120,540 shares of common stock, Mr. Gengos was granted an option to purchase 10,000 shares of common stock and Dr. Brennan was granted an option to purchase 56,000 shares of common stock. Each option has an exercise price of \$9.95 per share and is subject to vesting at a rate of one forty-eighth (1/48th) of the total number of shares subject thereto per month over four years.

Outstanding Equity Awards at Fiscal Year End

The following table presents the outstanding equity awards held by each of the named executive officers as of December 31, 2017. All equity awards set forth in the table below were granted under the 2017 Stock Incentive Plan except for the option granted to Andrew Gengos which was granted under the 2015 Equity Incentive Award Plan.

		Grant Date (1)	Option Awards				Stock Awards	
			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 (2) (\$)
Jose Carlos Gutiérrez-Ramos, Ph.D. <i>President and Chief Executive Officer</i>	(3)	5/15/2017	24,199	141,761	\$ 13.53	5/15/2027	—	—
	(4)	5/15/2017	—	—	—	—	128,439	1,245,858
Andrew Gengos <i>Chief Operating Officer and Head of Corporate Development</i>	(5)	10/9/2017	—	154,000	\$ 14.71	10/31/2027	—	—
Aoife M. Brennan, MMB, BCh, BAO, MMSc <i>Chief Medical Officer</i>	(6)	5/15/2017	13,252	29,161	\$ 13.53	5/15/2027	—	—
	(7)	5/15/2017	6,048	35,442	\$ 13.53	5/15/2027	—	—
	(8)	5/15/2017	—	—	—	—	35,592	345,242
Paul Lammers, M.D., M.Sc. <i>Former President and Chief Executive Officer</i>			—	—	—	—	—	—

- (1) All awards granted on May 15, 2017 were granted by Private Synlogic and such awards were assumed in the Merger as described above.
- (2) The market value of the stock awards is determined by multiplying the number of shares by \$9.70, the closing price of our common stock on the Nasdaq Capital Market on December 29, 2017, the last trading day of our fiscal year.
- (3) Unvested shares under this option are scheduled to vest 1/48th each month through May 15, 2021.
- (4) Unvested restricted stock under this award vests monthly on a pro rata basis through May 14, 2019.
- (5) The option shall vest as to 25% of the shares on October 9, 2018 and the remainder shall vest 1/48th each month thereafter through October 9, 2021.
- (6) Unvested shares under this option are scheduled to vest 1/48th each month through September 1, 2020.
- (7) Unvested shares under this option are scheduled to vest 1/48th each month through May 15, 2021.
- (8) Unvested restricted stock under this award vests monthly on a pro rata basis through September 1, 2020.

Synlogic Reorganization and Merger

Synlogic, LLC completed a corporate reorganization from an LLC to a corporation on May 15, 2017 (the “2017 Reorganization”). As part of the 2017 Reorganization, equity incentive awards granted by Synlogic, LLC were converted into equity incentive awards for shares of Private Synlogic common stock. Common units of Synlogic, LLC were converted one for one into shares of Private Synlogic common stock and incentive units of Synlogic, LLC were converted into a number of shares of Private Synlogic common stock equal to (x) the value of the appreciation of such incentive units between the date of grant and immediately prior to the 2017 Reorganization divided by (y) the value of a share of Private Synlogic common stock on the date of the 2017 Reorganization. To the extent that such shares of Private Synlogic common stock were unvested, they remained Private Synlogic restricted stock. All shares of Private Synlogic restricted stock were issued under the Private Synlogic 2017 Stock Incentive Plan which was assumed by the Company in the Merger and continue to vest on the same schedule as the original restricted stock awards.

All equity awards set forth above are set forth on a post-Merger basis. Pursuant to the terms of the Merger Agreement and after giving effect to the 1:7 reverse stock split, at the effective time of the Merger, each outstanding share of capital stock of Private Synlogic was converted into the right to receive approximately 0.5532 shares of Company common stock on a post-Merger basis (the “Exchange Ratio”). In addition, at the

effective time of the Merger, the Company assumed all outstanding options to purchase shares of common stock of Private Synlogic, which were exchanged for options to purchase shares of the Company's common stock, in each case appropriately adjusted based on the Exchange Ratio and all shares of Private Synlogic restricted stock were exchanged for shares of Company common stock in accordance with the Exchange Ratio and continue to vest on the same schedule as the original restricted stock awards.

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

The Company has entered into employment agreements with each of its 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.

Jose-Carlos Gutiérrez-Ramos, Ph.D.

Private Synlogic entered into an employment agreement with Dr. Gutiérrez-Ramos in 2015 that was subsequently amended on May 8, 2017 to increase Dr. Gutiérrez-Ramos' base salary to \$450,000 and to make him eligible to earn an annual cash incentive bonus of up to 40% of his base salary based on the achievement of corporate and/or individual performance goals, as determined by our Board of Directors. Dr. Gutiérrez-Ramos is also eligible to participate in the employee benefit plans available to employees, subject to the terms of those plans. In March 2018, Dr. Gutiérrez-Ramos received an increase in annual base salary to \$486,000.

Dr. Gutiérrez-Ramos' employment agreement also provides that, in the event that his employment is terminated for any reason other than for "cause," death or "disability," or by Dr. Gutiérrez-Ramos for "good reason" (each as defined in his employment agreement), subject to the execution and effectiveness of a separation agreement and release, he will be entitled to receive (i) continuing severance pay at a rate equal to 100% of his base salary, as then in effect (less applicable withholding), 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 continued health care benefits under COBRA, paid by the Company at a cost similar for active and similarly situated employees who receive the same type of coverage until the earlier of (a) 12 months after termination, or (b) the date on which Dr. Gutiérrez-Ramos 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. Gutiérrez-Ramos is terminated.

Dr. Gutiérrez-Ramos' employment agreement provides that, in the event his 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 Dr. Gutiérrez-Ramos' outstanding unvested restricted stock and/or options shall become fully vested.

In addition, Dr. Gutiérrez-Ramos has entered into a non-solicitation and non-competition agreement that applies during the term of Dr. Gutiérrez-Ramos' employment and for 12 months thereafter.

Andrew Gengos

We entered into an employment agreement with Mr. Gengos in September 2017 that initially provided for a base salary of \$398,000, subject to review and adjustment. The agreement also provides that he is eligible to earn an annual cash incentive bonus of up to 35% of his base salary based on the achievement of corporate and/or individual performance goals, as determined by the Board of Directors. Mr. Gengos is also eligible to participate in the employee benefit plans available to employees, subject to the terms of those plans. In addition, Mr. Gengos' employment agreement also provided him with a signing bonus of \$100,000, in connection with commencement of employment and that he will be required to reimburse the Company those amounts if he voluntarily resigns within 12 months following the commencement of his employment or is terminated for cause. In March 2018, Mr. Gengos received an increase in annual base salary to \$401,980.

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Mr. Gengos' employment agreement provides that, in the event that Mr. Gengos' employment is terminated for any reason other than for "cause," death or "disability," or by Mr. Gengos for "good reason" (each as defined in his employment agreement), subject to the execution and effectiveness of a separation agreement and release, he will be entitled to receive (i) continuing severance pay at a rate equal to 100% of his base salary, as then in effect (less applicable withholding), 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 at a cost similar for active and similarly situated employees who receive the same type of coverage until the earlier of (a) six months from termination, or (b) the date on which Mr. Gengos 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. Gengos is terminated.

Mr. Gengos' employment agreement provides that, in the event Mr. Gengos' 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 Mr. Gengos' outstanding unvested restricted stock and/or options shall become fully vested.

In addition, Mr. Gengos has entered into a non-solicitation and non-competition agreement that applies during the term of Mr. Gengos' employment and for 12 months thereafter.

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

Private Synlogic entered into an employment agreement with Dr. Brennan in September 2016 that initially provided for a base salary of \$345,000, subject to review and adjustment. Dr. Brennan's base salary was increased to \$349,036 for 2017 and \$397,901 for 2018. Pursuant to her May 8, 2017 amended employment agreement, Dr. Brennan is eligible to earn an annual cash incentive bonus of up to 30% of her base salary based on the achievement of corporate and/or individual performance goals, as determined by the Board of Directors. Dr. Brennan is also eligible to participate in the employee benefit plans available to employees, subject to the terms of those plans. In addition, Dr. Brennan's amended employment agreement also provided her with a signing bonus of \$85,000, plus a gross up for taxes to be paid on such compensation in connection with her commencement of employment and that she will be required to reimburse the Company those amounts if she voluntarily resigns within 12 months following the commencement of her employment or is terminated for cause.

Dr. Brennan's employment agreement provides that, in the event that Dr. Brennan's employment is terminated for any reason other than for "cause," death or "disability," or by Dr. Brennan for "good reason" (each as defined in her employment agreement), subject to the execution and effectiveness of a separation agreement and release, she will be entitled to receive (i) continuing severance pay at a rate equal to 100% of her base salary, as then in effect (less applicable withholding), 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 at a cost similar for active and similarly situated employees who receive the same type of coverage until the earlier of (a) six 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.

Dr. Brennan's employment agreement provides that, in the event Dr. Brennan'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 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 during the term of Dr. Brennan's employment and for 12 months thereafter.

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The following definitions apply to Dr. Gutiérrez-Ramos', Mr. Gengos' and Dr. Brennan's employment agreements:

"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; (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 Synlogic; (iii) failure, refusal or unwillingness to perform, to the reasonable satisfaction of the Board of Directors 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 of Directors, 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.

"Change in control" is defined as (i) the sale of the Company by merger in which the stockholders of the Company 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, or a reorganization required to affect an initial public offering, be deemed a "change in control."

Other Benefits

Executive officers are eligible to participate in all of the Company's employee benefit plans, including life insurance, medical, dental and vision, a 401(k)-retirement plan and a flex spending account plan. We also provide paid-time-off benefits to all similarly-situated employees.

Terms and Conditions of Paul Lammers' Separation Agreement

On August 28, 2017, immediately prior to the effective time of the Merger, Dr. Lammers ceased serving as the Company's President and Chief Executive Officer. In connection with his resignation, Dr. Lammers entered into a Separation Agreement with the Company pursuant to which he received (i) a severance payment equal to \$933,975, which represents eighteen months of Dr. Lammers' base salary in effect as of immediately prior to the separation date and one and one half times his target annual bonus, (ii) payment of his COBRA premiums equal to \$43,831 for up to eighteen months following the separation date, and (iii) 100% vesting acceleration on his outstanding equity awards as of the separation date.

SYNOLOGIC DIRECTOR COMPENSATION

Director Compensation Policy

The following is a description of the standard compensation arrangements under which our directors are compensated for their service as directors, including as members of the various committees of our board.

The Company generally provides its non-employee directors with cash and equity compensation for their service on the Board. The Board is responsible for considering and approving the compensation paid to the Company's non-employee directors, upon recommendation from the Compensation Committee. The Compensation Committee reviews the compensation paid to the Company's non-employee directors with input and market data provided by the Compensation Committee's outside compensation consultant. In October 2015, in connection with Pre-Merger Mirna's initial public offering, the Board approved a non-employee director compensation policy that set forth the terms of the cash and equity compensation to be paid to the Company's non-employee directors beginning in October 2015. In December 2017, the Board amended and restated the director compensation policy to account for the changes in the Company as a result of the Merger. Directors who are also our employees, such as Dr. Gutiérrez-Ramos, will not receive additional compensation for their services as directors.

In 2017, no director of Pre-Merger Mirna was paid equity compensation prior to the Merger. On August 28, 2017, in connection with the consummation of the Merger pursuant to the director compensation policy in effect prior to the Merger, the Board made yearly equity grants as follows: Initial Awards (as defined below) of 2,857 options to Dr. Barrett and Messrs. Khuong, Leschly and Shea as they became directors of the Company for the first time in connection with the Merger and Annual Awards (as defined below) of 1,428 options to Mr. Mathers and Dr. Powell who continued as directors of the Company following the Merger. Following the Merger, the Board hired Radford to review and provide recommendations concerning all of the components of the Company's executive compensation program. Based on Radford's review and recommendations, the Board revised the director compensation policy. In connection with the amendment and restatement of the non-employee director compensation policy in December 2017, on December 29, 2017, the Board issued pro rata grants of (a) 18,572 options to Mr. Mathers and Dr. Powell and (b) 17,143 options to Dr. Barrett and Messrs. Khuong, Leschly and Shea to true them up to the amounts reflected in the amended and restated director compensation policy. The vesting of the equity awards remained the same prior to and following the Merger and is discussed in more detail below.

Pursuant to our director compensation policy, until December 13, 2017, each non-employee director was paid an annual cash retainer of \$35,000 for their services and any non-employee director serving as Chairman of the Board was paid an additional annual cash retainer of \$25,000 for such service. Committee members received additional annual cash retainers as follows:

Committee	Type of Fee	Amount (Per Year)
Audit Committee	Chair Retainer Fee	\$15,000
	Non-Chair Retainer Fee	\$ 7,500
Compensation Committee	Chair Retainer Fee	\$10,000
	Non-Chair Retainer Fee	\$ 5,000
Nominating and Governance Committee	Chair Retainer Fee	\$ 7,500
	Non-Chair Retainer Fee	\$ 3,750

On December 13, 2017, our director compensation policy was amended and restated to (a) increase the annual cash retainer for the Chairman of the Board by \$5,000 to \$30,000 for such service, with no other changes to the cash component of the director compensation policy, (b) provide that the Initial Award granted to non-employee directors shall be an option to purchase 20,000 shares of the Company's common stock and (c) provide that the Annual Award granted to non-employee directors shall be an option to purchase 10,000 shares of the Company's common stock.

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Under the amended and restated non-employee director compensation policy, upon a director's initial appointment or election to our Board of Directors, such non-employee director will receive an option (the "Initial Award") to purchase 20,000 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 following the date of this offering and will continue to serve as a director immediately following such annual stockholder meeting will be automatically granted, on the date of such annual stockholder meeting, an option (the "Annual Award") to purchase 10,000 shares of our common stock (subject to adjustment as provided in the applicable equity plan). The Initial Award 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 Award 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 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.

Director Compensation for the Year Ended December 31, 2017

The following table sets forth information for the year ended December 31, 2017 regarding the compensation awarded to, earned by or paid to our non-employee directors:

	Fees Earned or Paid in Cash (\$)	Option Awards ¹ (\$)
Peter Barrett, Ph.D.	25,153	128,966
Chau Khuong	15,024	128,966
Nick Leschly ²	13,736	301,525
Edward Mathers	47,120	126,610
Michael Powell, Ph.D.	63,837	126,610
Richard P. Shea	17,170	128,966
<i><u>Former Directors</u></i> ³		
Lawrence M. Alleva	35,833	—
Peter S. Greenleaf	28,333	—
Perry Nisen, M.D., Ph.D	28,333	—
Matthew Winkler, Ph.D.	23,333	—

- (1) The amount reported represents the aggregate grant date fair value of stock awards granted as estimated pursuant to FASB ASC 718, *Compensation—Share based compensation* (ASC 718). See Note 12 of our Annual Report on Form 10-K for the assumptions used in calculating this amount. Initial Director grants occurred in August 2017 following the Merger and were followed with additional grants in December 2017 to align the total number of options granted to each director with the Amended and Restated Non-Employee Director Compensation Program to a total of 20,000 options per Director on a post-merger basis.
- (2) The amount reported under for Mr. Leschly's option awards includes \$10,771 related to the one-time modification of previously issued awards in connection with the 2017 Reorganization. In addition, in 2017, Mr. Leschly was granted an option under the 2017 Plan to purchase 18,967 shares of our common stock at an exercise price of \$13.53 per share, which was 29.17% vested on the date of the grant and the balance of which will vest monthly through March 15, 2020.
- (3) Mr. Alleva, Mr. Greenleaf, Dr. Nisen and Dr. Winkler resigned from the Board of Directors in connection with the completion of the Merger on August 28, 2017.

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, 2017.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) 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)	631,942	\$13.71	12,707
Equity compensation plans not approved by security holders (2)	635,279	\$13.53	73,102
Total	1,267,221	\$13.62	85,809

(1) Consists of the 2015 Equity Incentive Award Plan.

(2) Consists of the Synlogic 2017 Stock Incentive Plan.

Summary Description of the Company's Non-Stockholder Approved Equity Compensation Plans

Private Synlogic adopted the Synlogic, Inc. 2017 Stock Incentive Plan (the "2017 Plan") on May 11, 2017. The 2017 Plan will expire in 2027. Pursuant to the 2017 Reorganization, Private Synlogic issued restricted common stock awards under the 2017 Plan to replace the canceled incentive units pursuant to the termination of the 2015 LLC Plan. In addition, Private Synlogic also issued stock options to certain employees prior to the Merger. Pursuant to the Merger Agreement, each restricted common stock award of Private Synlogic under the 2017 Plan that was outstanding immediately prior to the Merger and each option to purchase common stock of Private Synlogic under the 2017 Plan that was outstanding and unexercised immediately prior to the Merger was converted into and became restricted common stock and options to purchase shares of the Company's common stock, respectively, based on the merger exchange ratio of 0.5532. In connection with the Merger, the Company assumed the 2017 Plan.

Under the 2017 Plan, we may grant incentive stock options, non-qualified stock options, restricted and unrestricted stock awards and other stock-based awards. There are 1,753,061 shares of our common stock authorized for issuance under the 2017 Plan. The Board of Directors is authorized to administer the 2017 Plan. In accordance with the provisions of the 2017 Plan, the Board of Directors determines the terms of options and other awards issued pursuant thereto, including the following:

- which employees, directors and consultants shall be granted awards;
- the number of shares of our common stock subject to options and other awards;
- the exercise price of each option, which generally shall not be less than fair market value of our common stock on the date of grant;
- the termination or cancellation provisions applicable to options;
- the terms and conditions of other awards, including conditions for repurchase, termination or cancellation, issue price and repurchase price; and
- all other terms and conditions upon which each award may be granted in accordance with the 2017 Plan.

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In addition, the Board of Directors or any committee to which the Board of Directors delegates authority may, with the consent of the affected plan participants, re-price or otherwise amend outstanding awards consistent with the terms of the 2017 Plan.

Upon a merger, consolidation or sale of all or substantially all of our assets, the Board of Directors or any committee to which the Board of Directors delegates authority, or the board of directors of any corporation assuming our obligations, may, in its sole discretion, take any one or more of the following actions pursuant to the 2017 Plan, as to some or all outstanding awards, to the extent not otherwise agreed under any individual agreement:

- provide that outstanding options will be assumed or substituted for options of the successor corporation;
- provide that the outstanding options must be exercised within a certain number of days, either to the extent the options are then exercisable, or at the Board of Directors' discretion, any such options being made partially or fully exercisable;
- terminate outstanding options in exchange for a cash payment of an amount equal to the difference between (a) the consideration payable upon consummation of the corporate transaction to a holder of the number of shares into which such option would have been exercisable to the extent then exercisable, or in the Board of Directors' discretion, any such options being made partially or fully exercisable, and (b) the aggregate exercise price of those options;
- provide that outstanding stock grants will be substituted for shares of the successor corporation or consideration payable with respect to our outstanding stock in connection with the corporate transaction; and
- terminate outstanding stock grants in exchange for payment of an amount equal to the consideration payable upon consummation of the corporate transaction to a holder of the same number of shares comprising the stock grant, to the extent the stock grant is no longer subject to any forfeiture or repurchase rights, or at the Board of Directors' discretion, all forfeiture and repurchase rights being waived upon the corporate transaction. For purposes of determining such payments, in the case of a corporate transaction the consideration for which, in whole or in part, is other than cash, the consideration other than cash shall be valued at the fair market value thereof as determined in good faith by the Board of Directors.

REPORT OF AUDIT COMMITTEE

The Audit Committee of the Board of Directors, which consists entirely of directors who meet the independence and experience requirements of Nasdaq, has furnished the following report:

The Audit Committee assists the Board of Directors in overseeing and monitoring the integrity of our financial reporting process, compliance with legal and regulatory requirements and the quality of internal and external audit processes. This committee's role and responsibilities are set forth in our charter adopted by the Board of Directors, which is available on our website at www.synlogictx.com. This committee reviews and reassesses our charter annually and recommends any changes to the Board of Directors for approval. The Audit Committee is responsible for overseeing our overall financial reporting process, and for the appointment, compensation, retention, and oversight of the work of KPMG LLP. In fulfilling its responsibilities for the financial statements for fiscal year 2017, the Audit Committee took the following actions:

- Reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2017 with management and KPMG LLP, our independent registered public accounting firm;
- Discussed with KPMG LLP the matters required to be discussed in accordance with Auditing Standard No. 16- *Communications with Audit Committees*; and
- Received written disclosures and the letter from KPMG LLP regarding its independence as required by applicable requirements of the Public Company Accounting Oversight Board regarding KPMG LLP communications with the Audit Committee and the Audit Committee further discussed with KPMG LLP their independence. The Audit Committee also considered the status of pending litigation, taxation matters and other areas of oversight relating to the financial reporting and audit process that the committee determined appropriate.

Based on the Audit Committee's review of the audited financial statements and discussions with management and KPMG LLP, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 for filing with the SEC.

Members of the Synlogic Audit Committee
Richard P. Shea, Peter Barrett, Michael Powell

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our records reflect that all reports which were required to be filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, as amended, were filed on a timely basis, except that one report, covering one transaction, was filed late by Andrew Gengos.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

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 proxy statement.

Policies and Procedures for Related Party Transactions

Our Board of Directors 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.

ELECTION OF DIRECTORS

(Notice Item 1)

On March 14, 2018, the Board of Directors nominated Chau Khuong and Nick Leschly for election at the annual meeting. The Board of Directors currently consists of seven members, classified into three classes as follows: Jose-Carlos Gutiérrez-Ramos and Richard P. Shea constitute a class with a term ending in 2019; Peter Barrett, Edward Mathers, and Michael Powell constitute a class with a term ending in 2020; Chau Khuong and Nick Leschly constitute a class with a term which expires at the upcoming annual meeting. At each annual meeting of stockholders, directors are elected for a full term of three years to succeed those directors whose terms are expiring.

The Board of Directors has voted (i) to set the size of the Board of Directors at seven members and (ii) to nominate Chau Khuong and Nick Leschly for election at the annual meeting for a term of three years to serve until the 2021 Annual Meeting of Stockholders, and until their respective successors are elected and qualified. The Class I directors (Jose-Carlos Gutiérrez-Ramos and Richard P. Shea) and the Class II directors (Peter Barrett, Edward Mathers, and Michael Powell) will serve until the Annual Meetings of Stockholders to be held in 2019 and 2020, respectively, and until their respective successors have been elected and qualified.

Unless authority to vote for any of these nominees is withheld, the shares represented by the enclosed proxy will be voted **FOR** the election as directors of Chau Khuong and Nick Leschly. In the event that either nominee becomes unable or unwilling to serve, the shares represented by the enclosed proxy will be voted for the election of such other person as the Board of Directors may recommend in that nominee's place. We have no reason to believe that any nominee will be unable or unwilling to serve as a director.

A plurality of the shares voted for each nominee at the Meeting is required to elect each nominee as a director.

THE BOARD OF DIRECTORS RECOMMENDS THE ELECTION OF CHAU KHUONG AND NICK LESCHLY AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**(Notice Item 2)**

The Audit Committee has appointed KPMG LLP, as our independent registered public accounting firm to audit our financial statements for the fiscal year ending December 31, 2018. The Board proposes that the stockholders ratify this appointment. KPMG LLP audited our financial statements for the fiscal year ended December 31, 2017. We expect that representatives of KPMG LLP will be present at the annual meeting, will be able to make a statement if they so desire, and will be available to respond to appropriate questions.

In deciding to appoint KPMG LLP, the Audit Committee reviewed auditor independence issues and existing commercial relationships with KPMG LLP and concluded that KPMG LLP has no commercial relationship with the Company that would impair its independence for the fiscal year ending December 31, 2018.

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, 2017, and December 31, 2016, and fees billed for other services rendered by KPMG LLP during those periods.

	<u>2017</u>	<u>2016</u>
Audit fees: (1)	\$ 1,192,960	\$ 200,000
Audit related fees: (2)	—	—
Tax fees: (3)	\$ 46,000	\$ 16,000
All other fees: (4)	\$ 1,780	\$ 1,780
Total	<u>\$ 1,240,740</u>	<u>\$ 217,780</u>

- (1) Audit fees in 2017 and 2016 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 fees in 2017 or 2016.
- (3) Tax fees in 2017 and 2016 were for professional fees rendered for matters related to filing our federal and state tax returns, as well as documentation of our research and development credit and tax compliance and reporting.
- (4) All other fees in 2017 and 2016 consisted of a subscription to KPMG's online research tool.

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.

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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. The Company generally does not request such services from our independent registered public accounting firm.

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.

In the event the stockholders do not ratify the appointment of KPMG LLP as our independent registered public accounting firm, the Audit Committee will reconsider its appointment.

The affirmative vote of a majority of the shares cast affirmatively or negatively at the annual meeting is required to ratify the appointment of the independent registered public accounting firm.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO RATIFY THE APPOINTMENT OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH RATIFICATION UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.

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 Chief Executive Officer and Chief Financial and Accounting Officers. 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 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.

OTHER MATTERS

The Board of Directors knows of no other business which will be presented to the annual meeting. If any other business is properly brought before the annual meeting, proxies will be voted in accordance with the judgment of the persons named therein.

STOCKHOLDER PROPOSALS AND NOMINATIONS FOR DIRECTOR

To be considered for inclusion in the proxy statement relating to our 2019 Annual Meeting of Stockholders, we must receive stockholder proposals (other than for director nominations) no later than January 16, 2019. To be considered for presentation at the 2019 Annual Meeting, although not included in the proxy statement, proposals (including director nominations that are not requested to be included in our proxy statement) must be received no earlier than 120 days prior to the date that is one year from this year's meeting date and no later than 90 days prior to the date that is one year from this year's meeting date. Therefore, to be presented at our 2019 Annual Meeting of Stockholders, such a proposal must be received on or after February 13, 2019 but no later than March 15, 2019. Proposals that are not received in a timely manner will not be voted on at the 2019 Annual Meeting. If a proposal is received on time, the proxies that management solicits for the meeting may still exercise discretionary voting authority on the proposal under circumstances consistent with the proxy rules of the SEC. All stockholder proposals should be marked for the attention of Company Secretary, Synlogic, Inc., 301 Binney Street, Suite 402, Cambridge MA 02142.

Cambridge, MA
May 16, 2018



SYNLOGIC, INC.

Proxy for Annual Meeting of Stockholders on June 13, 2018

Solicited on Behalf of the Board of Directors

The undersigned hereby appoints Jose Carlos Gutiérrez-Ramos, Ph.D. and Todd Shegog, and each of them, with full power of substitution and power to act alone, as proxies to vote all the shares of Common Stock which the undersigned would be entitled to vote if personally present and acting at the Annual Meeting of Stockholders of Synlogic, Inc., to be held June 13, 2018 at 301 Binney Street, Suite 402, Cambridge, Massachusetts 02142, and at any adjournments or postponements thereof, as follows:

(Continued and to be signed on the reverse side.)

ANNUAL MEETING OF STOCKHOLDERS OF

SYNOLOGIC, INC.

June 13, 2018

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NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, proxy statement and proxy card are available at <http://www.astproxyportal.com/ast/21687/>

Please sign, date and mail your proxy card in the envelope provided as soon as possible.

↓ Please detach along perforated line and mail in the envelope provided. ↓

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THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. Election of Directors:

FOR ALL NOMINEES

NOMINEES:

- Chau Khuong
- Nick Leschly

Class III director
Class III director

WITHHOLD AUTHORITY FOR ALL NOMINEES

FOR ALL EXCEPT (See instructions below)

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: ●

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

2. RATIFICATION OF APPOINTMENT OF KPMG LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR ENDED DECEMBER 31, 2018. FOR AGAINST ABSTAIN

In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned shareholder. **If no direction is made, this proxy will be voted FOR ALL NOMINEES in Proposal 1 and FOR Proposal 2.**

MARK "X" HERE IF YOU PLAN TO ATTEND THE MEETING.

Signature of Stockholder _____ Date: _____ Signature of Stockholder _____ Date: _____

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

ANNUAL MEETING OF STOCKHOLDERS OF SYNOLOGIC, INC.

June 13, 2018

PROXY VOTING INSTRUCTIONS

INTERNET - Access "www.voteproxy.com" and follow the on-screen instructions or scan the QR code with your smartphone. Have your proxy card available when you access the web page.



TELEPHONE - Call toll-free **1-800-PROXIES** (1-800-776-9437) in the United States or **1-718-921-8500** from foreign countries from any touch-tone telephone and follow the instructions. Have your proxy card available when you call.

Vote online/phone until 11:59 PM EST the day before the meeting.

MAIL - Sign, date and mail your proxy card in the envelope provided as soon as possible.

IN PERSON - You may vote your shares in person by attending the Annual Meeting.

GO GREEN - e-Consent makes it easy to go paperless. With e-Consent, you can quickly access your proxy material, statements and other eligible documents online, while reducing costs, clutter and paper waste. Enroll today via www.astfinancial.com to enjoy online access.

COMPANY NUMBER	
ACCOUNT NUMBER	

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL: The Notice of Meeting, proxy statement and proxy card are available at <http://www.astproxyportal.com/ast/21687/>

↓ Please detach along perforated line and mail in the envelope provided IF you are not voting via telephone or the Internet. ↓

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THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. Election of Directors:

- FOR ALL NOMINEES
- WITHHOLD AUTHORITY FOR ALL NOMINEES
- FOR ALL EXCEPT (See instructions below)
- NOMINEES:**
- | | |
|------------------------------------|--------------------|
| <input type="radio"/> Chau Khuong | Class III director |
| <input type="radio"/> Nick Leschly | Class III director |

2. RATIFICATION OF APPOINTMENT OF KPMG LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR FISCAL YEAR ENDED DECEMBER 31, 2018.

FOR AGAINST ABSTAIN

In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned shareholder. **If no direction is made, this proxy will be voted FOR ALL NOMINEES in Proposal 1 and FOR Proposal 2.**

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: ●

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

MARK "X" HERE IF YOU PLAN TO ATTEND THE MEETING.

Signature of Stockholder _____ Date: _____ Signature of Stockholder _____ Date: _____

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.