

**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 §240.14a-12

Lyra Therapeutics, 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 all boxes that apply):

- No fee required
 - Fee paid previously with preliminary materials
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11
-

Lyra Therapeutics, Inc.

NOTICE & PROXY STATEMENT

Annual Meeting of Stockholders

June 16, 2022

8:30 a.m. (Eastern time)

LYRA THERAPEUTICS, INC.
480 ARSENAL WAY
WATERTOWN, MASSACHUSETTS 02472

April 27, 2022

To Our Stockholders:

You are cordially invited to attend the 2022 Annual Meeting of Stockholders (the “Annual Meeting”) of Lyra Therapeutics, Inc. at 8:30 a.m. Eastern time, on Thursday, June 16, 2022. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast.

The Notice of Meeting and Proxy Statement on the following pages describe the matters to be presented at the Annual Meeting. Please see the section called “Who can attend the Annual Meeting?” on page 3 of the proxy statement for more information about how to attend the meeting online.

Whether or not you attend the Annual Meeting online, it is important that your shares be represented and voted at the Annual Meeting. Therefore, I urge you to promptly vote and submit your proxy by phone, via the Internet, or, if you received paper copies of these materials, by signing, dating and returning the enclosed proxy card in the enclosed envelope, which requires no postage if mailed in the United States. If you have previously received our Notice of Internet Availability of Proxy Materials, then instructions regarding how you can vote are contained in that notice. If you have received a proxy card, then instructions regarding how you can vote are contained on the proxy card. If you decide to attend the Annual Meeting, you will be able to vote online, even if you have previously submitted your proxy.

Thank you for your support.

Sincerely,

/s/ Maria Palasis, Ph.D.

Maria Palasis, Ph.D.
President and Chief Executive Officer

TABLE OF CONTENTS

	<u>Page</u>
<u>Notice of Annual Meeting of Stockholders To Be Held Thursday, June 16, 2022</u>	i
<u>Proxy Statement</u>	1
<u>Questions and Answers About the 2022 Annual Meeting of Stockholders</u>	3
<u>Proposals To Be Voted On</u>	7
<u>Report of the Audit Committee of the Board of Directors</u>	14
<u>Independent Registered Public Accounting Firm Fees and Other Matters</u>	15
<u>Executive Officers</u>	16
<u>Corporate Governance</u>	18
<u>Committees of the Board</u>	22
<u>Executive and Director Compensation</u>	25
<u>Security Ownership of Certain Beneficial Owners and Management</u>	32
<u>Certain Relationships and Related Person Transactions</u>	36
<u>Stockholder's Proposals</u>	39
<u>Other Matters</u>	39
<u>Solicitation of Proxies</u>	39
<u>Lyra's Annual Report on Form 10-K</u>	40



LYRA THERAPEUTICS, INC.
480 Arsenal Way
Watertown, Massachusetts 02472

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD THURSDAY, JUNE 16, 2022**

The Annual Meeting of Stockholders (the “Annual Meeting”) of Lyra Therapeutics, Inc., a Delaware corporation (the “Company”), will be held at 8:30 a.m. Eastern time on Thursday, June 16, 2022. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast. You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/LYRA2022 and entering your 16-digit control number included in your Notice of Internet Availability of Proxy Materials, on your proxy card or on the instructions that accompanied your proxy materials. The Annual Meeting will be held for the following purposes:

- To elect Michael Altman, C. Ann Merrifield and Harlan Waksal, M.D. as Class II Directors to serve until the Company’s 2025 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified;
- To ratify the appointment of BDO USA, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022; and
- To transact such other business as may properly come before the Annual Meeting or any continuation, postponement, or adjournment of the Annual Meeting.

Holders of record of our common stock as of the close of business on April 22, 2022 are entitled to notice of and to vote at the Annual Meeting, or any continuation, postponement or adjournment of the Annual Meeting. A complete list of such stockholders will be open to the examination of any stockholder for a period of ten days prior to the Annual Meeting for a purpose germane to the meeting by sending an email to Jason Cavalier, Chief Financial Officer, Treasurer and Secretary, at jcavalier@lyratx.com, stating the purpose of the request and providing proof of ownership of Company stock. The list of these stockholders will also be available during the Annual Meeting after entering the 16-digit control number included on your Notice of Internet Availability of Proxy Materials, on your proxy card or on the instructions that accompanied your proxy materials. The Annual Meeting may be continued or adjourned from time to time without notice other than by announcement at the Annual Meeting.

It is important that your shares be represented regardless of the number of shares you may hold. Whether or not you plan to attend the Annual Meeting online, we urge you to vote your shares via the toll-free telephone number or over the Internet, as described in the enclosed materials. If you received a copy of the proxy card by mail, you may sign, date and mail the proxy card in the enclosed return envelope. Promptly voting your shares will ensure the presence of a quorum at the Annual Meeting and will save us the expense of further solicitation. Submitting your proxy now will not prevent you from voting your shares at the Annual Meeting if you desire to do so, as your proxy is revocable at your option.

By Order of the Board of Directors

/s/ Jason Cavalier

Jason Cavalier
Chief Financial Officer, Treasurer and Secretary

Watertown, Massachusetts
April 27, 2022



LYRA THERAPEUTICS, INC.
480 Arsenal Way
Watertown, Massachusetts 02472
PROXY STATEMENT

This proxy statement is furnished in connection with the solicitation by the Board of Directors of Lyra Therapeutics, Inc. of proxies to be voted at our Annual Meeting of Stockholders to be held on Thursday, June 16, 2022 (the "Annual Meeting"), at 8:30 a.m. Eastern time, and at any continuation, postponement, or adjournment of the Annual Meeting. The Annual Meeting will be a completely virtual meeting, which will be conducted via live webcast. You will be able to attend the Annual Meeting online and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/LYRA2022 and entering your 16-digit control number included in your Notice of Internet Availability of Proxy Materials, on your proxy card or on the instructions that accompanied your proxy materials.

Holders of record of shares of our common stock, \$0.001 par value per share, as of the close of business on April 22, 2022 (the "Record Date"), will be entitled to notice of and to vote at the Annual Meeting and any continuation, postponement, or adjournment of the Annual Meeting. As of the Record Date, there were 31,825,055 shares of common stock outstanding and entitled to vote at the Annual Meeting. Each share of common stock is entitled to one vote on any matter presented to stockholders at the Annual Meeting.

This proxy statement and the Company's Annual Report to Stockholders for the year ended December 31, 2021 (the "2021 Annual Report") will be released on or about May 3, 2022 to our stockholders on the Record Date.

Unless otherwise indicated, in this proxy statement, "Lyra," "Company," "we," "us," and "our" refer to Lyra Therapeutics, Inc.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS
FOR THE STOCKHOLDER MEETING TO BE HELD ON THURSDAY, JUNE 16, 2022**

**This Proxy Statement and our 2021 Annual Report to Stockholders are available at
www.proxyvote.com**

Proposals

At the Annual Meeting, our stockholders will be asked:

- To elect Michael Altman, C. Ann Merrifield and Harlan Waksal, M.D. as Class II Directors to serve until the 2025 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified;
- To ratify the appointment of BDO USA, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022; and
- To transact such other business as may properly come before the Annual Meeting or any continuation, postponement, or adjournment of the Annual Meeting.

Recommendations of the Board

The Board of Directors (the “Board”) recommends that you vote your shares as indicated below. If you return a properly completed proxy card, or vote your shares by telephone or Internet, your shares of common stock will be voted on your behalf as you direct. If not otherwise specified, the shares of common stock represented by the proxies will be voted, and the Board recommends that you vote:

- FOR the election of Michael Altman, C. Ann Merrifield and Harlan Waksal, M.D. as Class II Directors; and
- FOR the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022.

We know of no other business that will be presented at the Annual Meeting. If any other matter properly comes before the stockholders for a vote at the Annual Meeting, the proxy holders named on the Company’s proxy card will vote your shares in accordance with their best judgment.

Information About This Proxy Statement

Why you received this proxy statement. You are viewing or have received these proxy materials because Lyra’s Board of Directors is soliciting your proxy to vote your shares at the Annual Meeting. This proxy statement includes information that we are required to provide to you under the rules of the Securities and Exchange Commission (“SEC”) and that is designed to assist you in voting your shares.

Notice of Internet Availability of Proxy Materials. As permitted by SEC rules, Lyra is making this proxy statement and its 2021 Annual Report available to its stockholders electronically via the Internet. On or about May 3, 2022, we will commence mailing to our stockholders a Notice of Internet Availability of Proxy Materials (the “Internet Notice”) containing instructions on how to access this proxy statement and our 2021 Annual Report and vote online. If you received an Internet Notice by mail, you will not receive a printed copy of the proxy materials in the mail unless you specifically request them. Instead, the Internet Notice instructs you on how to access and review all of the important information contained in the proxy statement and 2021 Annual Report. The Internet Notice also instructs you on how you may submit your proxy over the Internet. If you received an Internet Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials contained on the Internet Notice.

Printed Copies of Our Proxy Materials. If you received printed copies of our proxy materials, then instructions regarding how you can vote are contained on the proxy card included in the materials.

Householding. The SEC’s rules permit us to deliver a single set of proxy materials to one address shared by two or more of our stockholders. This delivery method is referred to as “householding” and can result in significant cost savings. To take advantage of this opportunity, we have delivered only one set of proxy materials to multiple stockholders who share an address, unless we received contrary instructions from the impacted stockholders prior to the mailing date. We agree to deliver promptly, upon written or oral request, a separate copy of the proxy materials, as requested, to any stockholder at the shared address to which a single copy of those documents was delivered. If you prefer to receive separate copies of the proxy materials, contact Broadridge Financial Solutions, Inc. at 1-866-540-7095 or in writing at Broadridge, Householding Department, 51 Mercedes Way, Edgewood, New York 11717.

If you are currently a stockholder sharing an address with another stockholder and wish to receive only one copy of future proxy materials for your household, please contact Broadridge at the above phone number or address.

QUESTIONS AND ANSWERS ABOUT THE 2022 ANNUAL MEETING OF STOCKHOLDERS

Who is entitled to vote at the Annual Meeting?

The Record Date for the Annual Meeting is April 22, 2022. You are entitled to vote at the Annual Meeting only if you were a stockholder of record at the close of business on that date, or if you hold a valid proxy for the Annual Meeting. Each outstanding share of common stock is entitled to one vote for all matters before the Annual Meeting. At the close of business on the Record Date, there were 31,825,055 shares of common stock outstanding and entitled to vote at the Annual Meeting.

What is the difference between being a “record holder” and holding shares in “street name”?

A record holder holds shares in his or her name. Shares held in “street name” means shares that are held in the name of a bank or broker on a person’s behalf.

Am I entitled to vote if my shares are held in “street name”?

Yes. If your shares are held by a bank or a brokerage firm, you are considered the “beneficial owner” of those shares held in “street name.” If your shares are held in street name, these proxy materials are being provided to you by your bank or brokerage firm, along with a voting instruction card if you received printed copies of our proxy materials. As the beneficial owner, you have the right to direct your bank or brokerage firm how to vote your shares, and the bank or brokerage firm is required to vote your shares in accordance with your instructions. If your shares are held in “street name” and you would like to vote your shares online at the Annual Meeting, you should contact your bank or brokerage firm to obtain your 16-digit control number or otherwise vote through the bank or brokerage firm.

How many shares must be present to hold the Annual Meeting?

A quorum must be present at the Annual Meeting for any business to be conducted. The presence at the Annual Meeting online or by proxy, of the holders of a majority in voting power of the common stock issued and outstanding and entitled to vote on the Record Date will constitute a quorum.

Who can attend the Annual Meeting?

You may attend and participate in the Annual Meeting by visiting the following website: www.virtualshareholdermeeting.com/LYRA2022. To attend and participate in the Annual Meeting, you will need the 16-digit control number included in your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials. If your shares are held in “street name,” you should contact your bank or broker to obtain your 16-digit control number or otherwise vote through the bank or broker. If you lose your 16-digit control number, you may join the Annual Meeting as a “Guest” but you will not be able to vote, ask questions or access the list of stockholders as of the Record Date. The meeting webcast will begin promptly at 8:30 a.m. Eastern time. We encourage you to access the meeting prior to the start time. Online check-in will begin at 8:15 a.m., Eastern time, and you should allow ample time for the check-in procedures.

What if a quorum is not present at the Annual Meeting?

If a quorum is not present at the scheduled time of the Annual Meeting, the Chairperson of the Annual Meeting is authorized by our Amended and Restated Bylaws to adjourn the meeting, without the vote of stockholders.

What does it mean if I receive more than one Internet Notice or more than one set of proxy materials?

It means that your shares are held in more than one account at the transfer agent and/or with banks or brokers. Please vote all of your shares. To ensure that all of your shares are voted, for each Internet Notice or set of proxy materials, please submit your proxy by phone, via the Internet, or, if you received printed copies of the proxy materials, by signing, dating and returning the enclosed proxy card in the enclosed envelope.

How do I vote?

Stockholders of Record. If you are a stockholder of record, you may vote:

- By Internet—You can vote over the Internet at www.proxyvote.com by following the instructions on the Internet Notice or proxy card.
- By Telephone—You can vote by telephone by calling 1-800-690-6903 and following the instructions on the proxy card.
- By Mail—You can vote by mail by signing, dating and mailing the proxy card, which you may have received by mail.
- Electronically at the Meeting—If you attend the meeting online, you will need the 16-digit control number included in your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials to vote electronically during the meeting.

Internet and telephone voting facilities for stockholders of record will be made available 24 hours a day and will close at 11:59 p.m., Eastern time, on Wednesday, June 15, 2022. To participate in the Annual Meeting, including to vote via the Internet or telephone, you will need the 16-digit control number included on your Internet Notice, on your proxy card or on the instructions that accompanied your proxy materials.

Whether or not you expect to attend the Annual Meeting online, we urge you to vote your shares as promptly as possible to ensure your representation and the presence of a quorum at the Annual Meeting. If you submit your proxy, you may still decide to attend the Annual Meeting and vote your shares electronically.

Beneficial Owners of Shares Held in "Street Name." If your shares are held in "street name" through a bank or broker, you will receive instructions on how to vote from the bank or broker. You must follow their instructions in order for your shares to be voted. Internet and telephone voting also may be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you would like to vote your shares online at the Annual Meeting, you should contact your bank or broker to obtain your 16-digit control number or otherwise vote through the bank or broker. If you lose your 16-digit control number, you may join the Annual Meeting as a "Guest" but you will not be able to vote, ask questions or access the list of stockholders as of the Record Date. You will need to obtain your own Internet access if you choose to attend the Annual Meeting online and/or vote over the Internet.

Can I change my vote after I submit my proxy?

Yes.

If you are a registered stockholder, you may revoke your proxy and change your vote:

- by submitting a duly executed proxy bearing a later date;
- by granting a subsequent proxy through the Internet or telephone;
- by giving written notice of revocation to the Secretary of Lyra prior to or at the Annual Meeting; or
- by voting online at the Annual Meeting.

Your most recent proxy card or Internet or telephone proxy is the one that is counted. Your attendance at the Annual Meeting by itself will not revoke your proxy unless you give written notice of revocation to the Secretary before your proxy is voted or you vote online at the Annual Meeting.

If your shares are held in street name, you may change or revoke your voting instructions by following the specific directions provided to you by your bank or broker, or you may vote online at the Annual Meeting using your 16-digit control number or otherwise voting through your bank or broker.

Who will count the votes?

A representative of Broadridge Financial Solutions, Inc., our inspector of election, will tabulate and certify the votes.

What if I do not specify how my shares are to be voted?

If you submit a proxy but do not indicate any voting instructions, the persons named as proxies will vote in accordance with the recommendations of the Board. The Board's recommendations are indicated on page 2 of this proxy statement, as well as with the description of each proposal in this proxy statement.

Will any other business be conducted at the Annual Meeting?

We know of no other business that will be presented at the Annual Meeting. If any other matter properly comes before the stockholders for a vote at the Annual Meeting, however, the proxy holders named on the Company's proxy card will vote your shares in accordance with their best judgment.

Why hold a virtual meeting?

A virtual meeting enables increased stockholder attendance and participation because stockholders can participate from any location around the world. You will be able to attend the Annual Meeting online and submit your questions by visiting www.virtualshareholdermeeting.com/LYRA2022. You also will be able to vote your shares electronically at the Annual Meeting by following the instructions above.

What if during the check-in time or during the Annual Meeting I have technical difficulties or trouble accessing the virtual meeting website?

We will have technicians ready to assist you with any technical difficulties you may have accessing the virtual meeting website, and the information for assistance will be located on www.virtualshareholdermeeting.com/LYRA2022.

Will there be a question and answer session during the Annual Meeting?

As part of the Annual Meeting, we will hold a live Q&A session, during which we intend to answer appropriate questions submitted by stockholders during the meeting that are pertinent to the Company and the meeting matters. The Company will endeavor to answer as many questions submitted by stockholders as time permits. Only stockholders that have accessed the Annual Meeting as a stockholder (rather than a "Guest") by following the procedures outlined above in "Who can attend the Annual Meeting?" will be permitted to submit questions during the Annual Meeting. Each stockholder is limited to no more than two questions. Questions should be succinct and only cover a single topic. We will not address questions that are, among other things:

- irrelevant to the business of the Company or to the business of the Annual Meeting;
- related to material non-public information of the Company, including the status or results of our business since our last Quarterly Report on Form 10-Q;
- related to any pending, threatened or ongoing litigation;
- related to personal grievances;
- derogatory references to individuals or that are otherwise in bad taste;
- substantially repetitious of questions already made by another stockholder;
- in excess of the two question limit;
- in furtherance of the stockholder's personal or business interests; or

- out of order or not otherwise suitable for the conduct of the Annual Meeting as determined by the Chair or Secretary in their reasonable judgment.

Additional information regarding the Q&A session will be available in the “Rules of Conduct” available on the Annual Meeting webpage for stockholders that have accessed the Annual Meeting as a stockholder (rather than a “Guest”) by following the procedures outlined above in “Who can attend the Annual Meeting?”.

How many votes are required for the approval of the proposals to be voted upon and how will abstentions and broker non-votes be treated?

<u>Proposal</u>	<u>Votes required</u>	<u>Effect of Votes Withheld / Abstentions and Broker Non-Votes</u>
Proposal 1: Election of Directors	The plurality of the votes cast. This means that the three nominees receiving the highest number of affirmative “FOR” votes will be elected as Class II Directors.	Votes withheld and broker non-votes will have no effect.
Proposal 2: Ratification of Appointment of Independent Registered Public Accounting Firm	The affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively.	Abstentions will have no effect. We do not expect any broker non-votes on this proposal.

What is a “vote withheld” and an “abstention” and how will votes withheld and abstentions be treated?

A “vote withheld,” in the case of the proposal regarding the election of directors, or an “abstention,” in the case of the proposal regarding the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm, represents a stockholder’s affirmative choice to decline to vote on a proposal. Votes withheld and abstentions are counted as present and entitled to vote for purposes of determining a quorum. Votes withheld have no effect on the election of directors. Abstentions have no effect on the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm.

What are broker non-votes and do they count for determining a quorum?

Generally, broker non-votes occur when shares held by a broker in “street name” for a beneficial owner are not voted with respect to a particular proposal because the broker (1) has not received voting instructions from the beneficial owner and (2) lacks discretionary voting power to vote those shares. A broker is entitled to vote shares held for a beneficial owner on routine matters, such as the ratification of the appointment of BDO USA, LLP as our independent registered public accounting firm, without instructions from the beneficial owner of those shares. On the other hand, absent instructions from the beneficial owner of such shares, a broker is not entitled to vote shares held for a beneficial owner on non-routine matters, such as the election of directors. Broker non-votes count for purposes of determining whether a quorum is present.

Where can I find the voting results of the Annual Meeting?

We plan to announce preliminary voting results at the Annual Meeting and we will report the final results in a Current Report on Form 8-K, which we intend to file with the SEC after the Annual Meeting.

PROPOSALS TO BE VOTED ON

Proposal 1: Election of Directors

At the Annual Meeting, three (3) Class II Directors are to be elected to hold office until the Annual Meeting of Stockholders to be held in 2025 and until each such director's respective successor is elected and qualified or until each such director's earlier death, resignation or removal.

We currently have nine (9) directors on our Board, including three (3) Class II Directors. Our current Class II Directors are Michael Altman, C. Ann Merrifield and Harlan Waksal, M.D., who have served on our Board since June 2018, September 2019 and February 2022, respectively, each of whom has been nominated by the Board for election as Class II Directors at the Annual Meeting.

The proposal regarding the election of directors requires the approval of a plurality of the votes cast. This means that the three nominees receiving the highest number of affirmative "FOR" votes will be elected as Class II Directors. Votes withheld and broker non-votes are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal.

As set forth in our Restated Certificate of Incorporation, the Board of Directors is currently divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. The current class structure is as follows: Class I, whose term will expire at the 2024 Annual Meeting of Stockholders and whose subsequent term will expire at the 2027 Annual Meeting of Stockholders; Class II, whose current term will expire at the 2022 Annual Meeting of Stockholders and, if elected at the 2022 Annual Meeting, whose subsequent term will expire at the 2025 Annual Meeting of Stockholders; and Class III, whose term will expire at the 2023 Annual Meeting of Stockholders and whose subsequent term will expire at the 2026 Annual Meeting of Stockholders. The current Class I Directors are Edward T. Anderson, Konstantin Poukalov and Nancy L. Snyderman, M.D., FACS; the current Class II Directors are Michael Altman, C. Ann Merrifield and Harlan Waksal, M.D.; and the current Class III Directors are Maria Palasis, Ph.D., W. Bradford Smith and James R. Tobin.

On April 22, 2022, in order to achieve an equal balance of membership among the classes of directors, the Board determined to move Mr. Tobin from Class II with a term expiring at the 2022 Annual Meeting of Stockholders to Class III with a term expiring at the 2023 Annual Meeting of Stockholders. Accordingly, on the same date, Mr. Tobin, who was a Class II Director, resigned as a director and was immediately elected by the Board as a Class III Director. The resignation and re-election of Mr. Tobin was effected solely to rebalance the Board's classes and, for all other purposes, including committee service and compensation, Mr. Tobin's service on the Board is deemed to have continued uninterrupted. The Board now consists of three Class I Directors, three Class II Directors, and three Class III Directors.

Our Restated Certificate of Incorporation and Amended and Restated Bylaws provide that the authorized number of directors may be changed from time to time by the Board of Directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our Board of Directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our Company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of our outstanding voting stock entitled to vote in the election of directors.

If you submit a proxy but do not indicate any voting instructions, the persons named as proxies will vote the shares of common stock represented thereby for the election as Class II Directors of the persons whose names and biographies appear below. In the event that any of Mr. Altman, Ms. Merrifield or Dr. Waksal should become unable to serve, or for good cause will not serve, as a director, it is intended that votes will be cast for a substitute nominee designated by the Board of Directors or the Board may elect to reduce its size. The Board of Directors has no reason to believe that any of Mr. Altman, Ms. Merrifield or Dr. Waksal will be unable to serve if elected. Each of Mr. Altman, Ms. Merrifield and Dr. Waksal has consented to being named in this proxy statement and to serve if elected.

Vote required

The proposal regarding the election of directors requires the approval of a plurality of the votes cast. This means that the three nominees receiving the highest number of affirmative “FOR” votes will be elected as Class II Directors.

Votes withheld and broker non-votes are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal.

Recommendation of the Board of Directors



The Board of Directors unanimously recommends a vote FOR the election of each of the below Class II Director nominees.

Nominees For Class II Director (current terms to expire at the 2022 Annual Meeting of Stockholders)

The current members of the Board of Directors who are also nominees for election to the Board of Directors as Class II Directors are as follows:

Name	Age	Served as a Director Since	Position with Lyra
Michael Altman	40	2018	Director
C. Ann Merrifield	71	2019	Director
Harlan Waksal, M.D.	69	2022	Executive Chair and Chairperson of the Board

The principal occupations and business experience, for at least the past five years, of each Class II Director nominee for election at the 2022 Annual Meeting are as follows:

Michael Altman

Michael Altman has served as a member of our Board of Directors since June 2018. Since 2007, Mr. Altman has been employed on the investment team at Perceptive Advisors, a life sciences focused investment firm, where he currently serves as Managing Director and focuses on medical devices, diagnostics, digital health and specialty pharmaceutical investments. Since October 2018, Mr. Altman has also served as Chief Financial Officer and member of the board of directors of ARYA Sciences Acquisition Corp., a special purpose acquisition company. From October 2005 to October 2007, Mr. Altman served as a healthcare trader and analyst at First New York Securities. Since June 2021, Mr. Altman has served on the board of directors of Nautilus Biotechnologies, Inc., a biotechnology company. Mr. Altman has also served on the board of directors of Vitruvius Therapeutics, Inc., a pharmaceutical company, since January 2018, and Vensun Pharmaceuticals, Inc., a pharmaceutical company, from November 2016 to January 2019. Mr. Altman holds a B.S. in Business Administration from the University of Vermont. We believe that Mr. Altman’s broad operational and transactional experience qualifies him to serve on our Board of Directors.

C. Ann Merrifield

C. Ann Merrifield has served as a member of our Board of Directors since September 2019. Ms. Merrifield has also served as a member of the boards of directors for a portfolio of public and private companies in the life sciences sector, which include InVivo Therapeutics Holdings Corp., since November 2014, and Flexion Therapeutics, Inc., from June 2014 to November 2021. From July 2015 to August 2018, she served as a director of Juniper Pharmaceuticals, Inc., a healthcare company, until it was acquired by Catalent, Inc. and from December 2016 to January 2019, she served as a director of Veritas Genetics, Inc. Ms. Merrifield also serves as a Trustee for MassMutual Premier, Select and MML Series Investment Funds, Partners Continuing Care (the post-acute care services division of Partners HealthCare), the Huntington Theatre Company and the YMCA of Greater Boston. From November 2012 to July 2014, Ms. Merrifield served as President, Chief Executive Officer and director of PathoGenetix Inc., a genomics company, which voluntarily filed for Chapter 7 bankruptcy in July 2014. Before that, Ms. Merrifield spent 18 years at Genzyme Corporation, serving in several leadership roles, including President of Genzyme Biosurgery, President of Genzyme Genetics and Senior Vice President, Business Excellence. Ms. Merrifield holds a B.A. in Zoology and a Master of Education from the University of Maine and an M.B.A. from the Tuck School of Business at Dartmouth College. We believe that Ms. Merrifield's extensive industry experience qualifies her to serve on our Board of Directors.

Harlan Waksal, M.D.

Harlan Waksal, M.D. has served as our Executive Chair since February 2022 and was elected to our Board of Directors in February 2022. Prior to his role with us as Executive Chair, Dr. Waksal served as President and Chief Executive Officer of Kadmon Holdings, Inc., or Kadmon, a biopharmaceutical company, from August 2014 and a director since 2013 until its acquisition by Sanofi in November 2021. Prior to joining Kadmon as an employee, Dr. Waksal served as President and Sole Proprietor of Waksal Consulting LLC from 2003 to 2014. From 2011 to 2014, Dr. Waksal served as Executive Vice President, Business and Scientific Affairs at Acasti Pharma, Inc., a publicly traded biopharmaceutical company, and as a consultant to Neptune Technologies & Bioresources, Inc., a publicly traded life sciences company and the parent company of Acasti. Dr. Waksal co-founded ImClone Systems ("ImClone") in 1987, a publicly traded biopharmaceutical company acquired by Eli Lilly and Company in 2008. Dr. Waksal served in senior roles at ImClone, including: President (1987 to 1994); Executive Vice President and Chief Operating Officer (1994 to 2002); and President, Chief Executive Officer and Chief Operating Officer (2002 to 2003). Dr. Waksal also served as a Director of ImClone from 1987 to 2005. Dr. Waksal served on the boards of Oberlin College and Sevion Therapeutics through March 2016 and the boards of Acasti and Neptune through February 2016 and July 2015, respectively. Dr. Waksal's additional roles include serving as a Member of the Board of Directors at Neptune Technologies & Bioresources, Observer of the Board of Directors at NeuroBiopharm, Chairman of the American Committee for the Weizmann Institute of Science and Member of the Technology Advisory Board at the New Jersey Edison Innovation Fund. Dr. Waksal received his B.A. from Oberlin College and his M.D. from Tufts University School of Medicine. He completed his training in internal medicine at New England Medical Center and in pathology at Kings County Hospital Center in Brooklyn. We believe Dr. Waksal's extensive management experience in the life science industry and drug development experience provides him with the qualifications and skills to serve on our Board of Directors.

Continuing members of the Board of Directors:

Class I Directors (terms to expire at the 2024 Annual Meeting of Stockholders)

The current members of the Board of Directors who are Class I Directors are as follows:

Name	Age	Served as a Director Since	Position with Lyra
Edward T. Anderson	72	2019	Director
Konstantin Poukalov	38	2020	Director
Nancy L. Snyderman, M.D., FACS	70	2020	Director

The principal occupations and business experience, for at least the past five years, of each Class I Director are as follows:

Edward T. Anderson

Edward T. Anderson has served as a member of our Board of Directors since February 2019. Mr. Anderson founded two venture capital firms, North Bridge Venture Partners in May 1993, where he currently serves as a Managing Partner focusing on early-stage high-tech companies, and North Bridge Growth Equity in February 2007. Mr. Anderson currently serves as a member of the board of directors of Couchbase, Inc., a public software company, since January 2020. He also serves on the board of directors of several privately-held companies. Mr. Anderson holds an M.S. from Columbia Business School and a B.F.A. from University of Denver, where he has served on the board of trustees since 2011 and currently serves as chair on its Investment Committee. We believe that Mr. Anderson's extensive experience in venture capital investments qualifies him to serve on our Board of Directors.

Konstantin Poukalov

Konstantin Poukalov has served as a member of our Board of Directors since January 2020. Since March 2019, Mr. Poukalov has served as Managing Director at Perceptive Advisors, a life sciences focused investment firm. Since October 2019, Mr. Poukalov has served on the board of directors of LianBio, a biotechnology company, and from August 2019 to August 2021, Mr. Poukalov also served on the board of directors of Landos Biopharma, Inc., a biopharmaceutical company. From July 2012 to October 2018, Mr. Poukalov served in roles of increasing responsibility at Kadmon Holdings, Inc., a biopharmaceutical company, most recently serving as Executive Vice President and Chief Financial Officer from July 2014 to October 2018. Mr. Poukalov holds a B.S. in Electrical Engineering from Stony Brook University. We believe that Mr. Poukalov's extensive financial and industry experience qualify him to serve on our Board of Directors.

Nancy L. Snyderman, M.D., FACS

Nancy L. Snyderman, M.D., FACS has served as a member of our Board of Directors since October 2020. Dr. Snyderman has also served on the boards of directors of Axonics Modulation Technologies, Inc., a medical device company, since April 2019 and Alkermes plc, a biopharmaceutical company, since May 2016. From 2006 to 2018, Dr. Snyderman served as an advisory board member to GE's Healthymagination, General Electric Company's healthcare initiative. From 2003 to 2008, Dr. Snyderman also served as a vice president for corporate communications at Johnson & Johnson. Dr. Snyderman is a board-certified head and neck surgeon and has had academic appointments at the University of Pennsylvania and the University of California-San Francisco. From 2016 to 2018, she served as a professor at the Center for Innovation for Global Health at Stanford University. Dr. Snyderman is an Emmy award winning medical correspondent, having worked at ABC News from 1987 to 2003 and later as chief medical editor at NBC News from 2004 to 2015. Dr. Snyderman holds a B.A. in Microbiology from Indiana University and a M.D. from the University of Nebraska and has completed residencies in Pediatrics and Otolaryngology Head and Neck Surgery at the University of Pittsburgh. We believe that Dr. Snyderman's extensive experience as a veteran healthcare journalist, a practicing physician, and an executive at a pharmaceutical company, as well as her roles in academia and as advisor to policy organizations, qualify her to serve on our Board of Directors.

Class III Directors (terms to expire at the 2023 Annual Meeting of Stockholders)

The current members of the Board of Directors who are Class III Directors are as follows:

Name	Age	Served as a Director Since	Position with Lyra
Maria Palasis, Ph.D.	57	2015	President and Chief Executive Officer and Director
W. Bradford Smith	66	2019	Director
James R. Tobin	77	2022	Director

The principal occupations and business experience, for at least the past five years, of each Class III Director are as follows:

Maria Palasis, Ph.D.

Maria Palasis, Ph.D. has served as our President and Chief Executive Officer and a member of our Board of Directors since January 2015. Prior to her role with us as President and Chief Executive Officer, Dr. Palasis held positions of increasing responsibility, the most recent of which was Executive Vice President and Chief Technology Officer from 2011 to 2015. Before that, in 2008, Dr. Palasis joined Arsenal Medical, Inc., a biotechnology company, as Executive Vice President and subsequently served as President and Chief Executive Officer and a member of the board of directors of Arsenal Medical from January 2015 to June 2018. Before that, from November 1995 to January 2008, Dr. Palasis was employed with the title of Director at Boston Scientific Corporation, a medical device company, where she managed a portfolio of external biotech and medical device investments and led the development of several combination therapies. Dr. Palasis holds a B.S. and Ph.D. in Chemical Engineering from the University of Cincinnati, and she held a postdoctoral fellowship in molecular biology at the University of Cincinnati School of Medicine. We believe that Dr. Palasis' experience in the industry and knowledge of our Company qualifies her to serve on our Board of Directors.

W. Bradford Smith

W. Bradford Smith has served as a member of our Board of Directors since November 2019. Mr. Smith has served as Chief Financial Officer and Treasurer of Homology Medicines, Inc., a genetic medicines company, since April 2017 and as Secretary since July 2017. From March 2014 to April 2017, Mr. Smith was Chief Financial Officer of Ocular Therapeutix, Inc., a biopharmaceutical company. Prior to joining Ocular Therapeutix, Mr. Smith served as Chief Financial Officer of OmniGuide, Inc., a medical device company, from July 2008 to March 2014. Since May 2021, Mr. Smith has served on the board of directors of eGenesis, a private gene editing company. Mr. Smith holds a B.S. in Biology from Tufts University and an M.B.A. from the Whittemore School of Business and Economics at the University of New Hampshire. We believe that Mr. Smith's extensive financial and industry experience qualify him to serve on our Board of Directors.

James R. Tobin

James R. Tobin has served as a member of our Board of Directors since March 2022 and as our Lead Director since April 2022. Mr. Tobin is the retired President and CEO of Boston Scientific Corporation, a medical device company, where he served from 1999 to 2009. Prior to Boston Scientific, Mr. Tobin was the President and CEO of Biogen Inc., and, from 1994 to 1997, its President and Chief Operating Officer. Before Biogen, Mr. Tobin spent 22 years with Baxter International Inc., rising from Financial Analyst to President and Chief Operating Officer. Mr. Tobin currently serves as Chairman of the Board at TransMedics, Inc. and as a director of Globus Medical Inc., each of which are public companies, and as a director at Impulse Dynamics N.V. and Xenter, Inc., both private companies. Mr. Tobin has also served on the boards of Oxford Immunotec, Inc., from 2014 to 2021, Corindus Vascular Robotics, from 2018 to 2019, Curis, Inc., from 1995 to 2015, Medical Simulation Corp, from 2012 to 2018, CardioDX, Inc., from 2014 to 2017, Chiasma, Inc., from 2015 to 2016, and Aptus Endosystems, Inc. from 2011 to 2015. Mr. Tobin holds an AB from Harvard College and an M.B.A. from Harvard Business School. Mr. Tobin also served as a Lieutenant in the U.S. Navy. We believe Mr. Tobin is qualified to serve on our Board of

Directors because of his decades of experience as President and Chief Executive Officer or Chief Operating Officer of three large biotechnology and medical device companies.

Board Diversity Matrix

The following matrix is provided in accordance with applicable Nasdaq Stock Market LLC (“Nasdaq”) listing rules and presents our Board diversity statistics, as self-disclosed by our directors.

Board Diversity Matrix (As of April 27, 2022)

Total Number of Directors	9			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	6	0	0
Part II: Demographic Background				
African American or Black	0	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	0	0	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	3	6	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+			0	
Did Not Disclose Demographic Background			0	

Proposal 2: Ratification of Appointment of Independent Registered Public Accounting Firm

Our Audit Committee has appointed BDO USA, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022. Our Board has directed that this appointment be submitted to our stockholders for ratification at the Annual Meeting. Although ratification of our appointment of BDO USA, LLP is not required, we value the opinions of our stockholders and believe that stockholder ratification of our appointment is a good corporate governance practice.

BDO USA, LLP also served as our independent registered public accounting firm for the fiscal year ended December 31, 2021. Neither the accounting firm nor any of its members has any direct or indirect financial interest in or any connection with us in any capacity other than as our auditors, providing audit and non-audit related services. A representative of BDO USA, LLP is expected to attend the 2022 Annual Meeting and to have an opportunity to make a statement and be available to respond to appropriate questions from stockholders.

In the event that the appointment of BDO USA, LLP is not ratified by the stockholders, the Audit Committee will consider this fact when it appoints the independent registered public accounting firm for the fiscal year ending December 31, 2023. Even if the appointment of BDO USA, LLP is ratified, the Audit Committee retains the discretion to appoint a different independent auditor at any time if it determines that such a change is in the interest of the Company.

Vote Required

This proposal requires the affirmative vote of the holders of a majority in voting power of the votes cast affirmatively or negatively. Abstentions are not considered to be votes cast and, accordingly, will have no effect on the outcome of the vote on this proposal. Because brokers have discretionary authority to vote on the ratification of the appointment of BDO USA, LLP, we do not expect any broker non-votes in connection with this proposal.

Recommendation of the Board of Directors



The Board of Directors unanimously recommends a vote FOR the Ratification of the Appointment of BDO USA, LLP as our Independent Registered Public Accounting Firm for the fiscal year ending December 31, 2022.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee has reviewed the audited consolidated financial statements of Lyra Therapeutics, Inc., a Delaware corporation (the “Company”), for the fiscal year ended December 31, 2021 and has discussed these financial statements with management and the Company’s independent registered public accounting firm. The Audit Committee has also received from, and discussed with, the Company’s independent registered public accounting firm various communications that such independent registered public accounting firm is required to provide to the Audit Committee, including the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board (“PCAOB”) and the Securities and Exchange Commission.

The Company’s independent registered public accounting firm also provided the Audit Committee with a formal written statement required by PCAOB Rule 3526 (Communications with Audit Committees Concerning Independence) describing all relationships between the independent registered public accounting firm and the Company, including the disclosures required by the applicable requirements of the PCAOB regarding the independent registered public accounting firm’s communications with the Audit Committee concerning independence. In addition, the Audit Committee discussed with the independent registered public accounting firm its independence from the Company.

Based on its discussions with management and the independent registered public accounting firm, and its review of the representations and information provided by management and the independent registered public accounting firm, the Audit Committee recommended to the Board of Directors that the audited consolidated financial statements be included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

W. Bradford Smith (Chair)
Edward T. Anderson
C. Ann Merrifield

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FEES AND OTHER MATTERS

The following table summarizes the fees of BDO USA, LLP, our independent registered public accounting firm, billed to us for each of the last two fiscal years for audit services and billed to us in each of the last two fiscal years for other services:

Fee Category	Fiscal 2021	Fiscal 2020
Audit Fees (1)	\$ 297,607	\$ 237,725
Audit-Related Fees (2)	\$ —	\$ —
Tax Fees (3)	\$ 10,900	\$ 8,700
All Other Fees (4)	\$ —	\$ —
Total Fees	\$ 308,507	\$ 246,425

- (1) Audit fees consist of fees for the audit of our financial statements, the review of the interim financial statements included in our quarterly reports on Form 10-Q, and other professional services provided in connection with statutory and regulatory filings or engagements. Audit fees in 2021 also include fees for services incurred in connection with our Registration Statement on Form S-3 and audit fees in 2020 include fees associated with our initial public offering.
- (2) Audit-related fees consist of fees that are reasonably related to the performance of the audit and the review of our financial statements and which are not reported under "Audit Fees." There were no audit-related fees incurred in 2021 or 2020.
- (3) Tax fees consist of fees for tax-related services, including tax compliance and tax advice.
- (4) All other fees consist of fees for all other services that are not reported above. There were no other fees incurred in 2021 or 2020.

Audit Committee Pre-Approval Policy and Procedures

The Audit Committee has adopted a policy (the "Pre-Approval Policy") that sets forth the procedures and conditions pursuant to which audit and non-audit services proposed to be performed by the independent auditor may be pre-approved. The Pre-Approval Policy generally provides that we will not engage BDO USA, LLP to render any audit, audit-related, tax or permissible non-audit service unless the service is either (i) explicitly approved by the Audit Committee ("specific pre-approval") or (ii) entered into pursuant to the pre-approval policies and procedures described in the Pre-Approval Policy ("general pre-approval"). Unless a type of service to be provided by BDO USA, LLP has received general pre-approval under the Pre-Approval Policy, it requires specific pre-approval by the Audit Committee or by a designated member of the Audit Committee to whom the committee has delegated the authority to grant pre-approvals. Any proposed services exceeding pre-approved cost levels or budgeted amounts will also require specific pre-approval. For both types of pre-approval, the Audit Committee will consider whether such services are consistent with the SEC's rules on auditor independence. The Audit Committee will also consider whether the independent auditor is best positioned to provide the most effective and efficient service, for reasons such as its familiarity with the Company's business, people, culture, accounting systems, risk profile and other factors, and whether the service might enhance the Company's ability to manage or control risk or improve audit quality. All such factors will be considered as a whole, and no one factor should necessarily be determinative. The Audit Committee periodically reviews and generally pre-approves any services (and related fee levels or budgeted amounts) that may be provided by BDO USA, LLP without first obtaining specific pre-approvals from the Audit Committee or the Chair of the Audit Committee. The Audit Committee may revise the list of general pre-approved services from time to time, based on subsequent determinations.

EXECUTIVE OFFICERS

The following table identifies our current executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Harlan Waksal, M.D. (1)	69	Executive Chair and Chairperson of the Board
Maria Palasis, Ph.D. (2)	57	President, Chief Executive Officer and Director
Jason Cavalier (3)	49	Chief Financial Officer, Treasurer and Secretary
Robert Richard, Ph.D. (4)	65	Senior Vice President of Technical Operations
Pamela Nelson (5)	52	Senior Vice President of Regulatory Affairs
Corinne Noyes (6)	54	Senior Vice President of Commercial Strategy and Market Development

- (1) See biography on page 9 of this proxy statement.
- (2) See biography on page 11 of this proxy statement.
- (3) Jason Cavalier has served as our Chief Financial Officer, Treasurer, and Secretary since September 2021. Prior to joining our Company, Mr. Cavalier served as a Managing Director and the Head of Life Sciences Mergers and Acquisitions at Cantor Fitzgerald & Co., where he led transactions across the medical technology, diagnostics and biopharma sectors, from April 2017 to May 2021. Prior to that, Mr. Cavalier served as a Director, Mergers and Acquisitions, at RBC Capital Markets LLC from August 2009 to April 2017, where he primarily focused on advising senior management and boards of directors on a range of strategic advisory assignments including mergers, acquisitions, divestitures and leveraged buyouts. Mr. Cavalier has also held positions of increasing responsibility within the investment banking divisions of Barclays Capital Inc., Bear Stearns & Co. Inc., and Lehman Brothers Inc. Mr. Cavalier received a B.S. in Applied Economics and Business Management from Cornell University and an M.B.A. from Columbia University Business School.
- (4) Robert Richard, Ph.D. has served as our Senior Vice President of Technical Operations since June 2020. Prior to joining our Company, from February 2019 to May 2020 Dr. Richard served as Vice President of Research and Development at Anika Therapeutics, Inc., a therapeutics company. Prior to that, he held research and development leadership positions at Hyalex Orthopaedics, Inc., a medical device company, from November 2017 to February 2019, C.R. Bard, Inc., a medical device company, from June 2008 to November 2017, Boston Scientific Corporation, a global medical device company, from September 2000 to June 2008, and Johnson & Johnson, a global medical device, pharmaceutical and consumer product company, from September 1991 to August 2000. Dr. Richard holds a B.S. in chemistry and a B.S. in biology from University of Massachusetts at Dartmouth and a Ph.D. in polymer chemistry and plastics engineering from the University of Massachusetts at Lowell.
- (5) Pamela Nelson has served as our Senior Vice President of Regulatory Affairs since August 2020. Prior to joining our Company, from January 2011 to July 2020, Ms. Nelson served as Vice President, Regulatory Affairs at Avedro, Inc., a medical technology company. Prior to that, she held regulatory positions at Alnara Pharmaceuticals, Inc., a biotechnology company from June 2009 to December 2010, Altus Pharmaceuticals Inc., a biopharmaceutical company from February 2006 to May 2009, Alkermes PLC, a global biopharmaceutical company July 1998 to January 2006 and Genzyme Corporation, a global biotechnology company January 1995 to June 1998. Ms. Nelson holds a B.A. in English and an M.A. in education administration from the University of Massachusetts at Amherst.

- (6) Corinne Noyes has served as our Senior Vice President of Commercial Strategy and Market Development since September 2018. Prior to joining our Company, from January 2018 to August 2018, Ms. Noyes served as an independent contractor to our Company, providing biopharmaceutical consulting services. Before that, from January 2005 to August 2018, Ms. Noyes worked as a strategic advisor and independent biopharmaceutical consultant providing commercial leadership to emerging life sciences companies, including, among others, AMAG Pharmaceuticals, Inc., Avila Therapeutics, Inc. (Celgene Corporation), Adnexus Therapeutics Inc. (Bristol-Myers Squibb Company), Constellation Pharmaceuticals, Inc. and Editas Medicine, Inc. Before that, from 1997 to 2004, Ms. Noyes held various commercial leadership positions at Biogen Inc., a biotechnology company. Prior to joining Biogen Inc., from 1992 to 1996, Ms. Noyes worked as a health care strategy consultant at Deloitte & Touche LLP. Ms. Noyes holds a B.A. in Humanities and a B.B.A. in Business from St. Mary's College of Notre Dame and an M.B.A. in finance from University of Chicago Graduate School of Business.

General

Our Board of Directors has adopted Corporate Governance Guidelines, a Code of Business Conduct and Ethics, and charters for our Nominating and Corporate Governance Committee, Audit Committee and Compensation Committee to assist the Board in the exercise of its responsibilities and to serve as a framework for the effective governance of the Company. You can access our current committee charters, our Corporate Governance Guidelines, and our Code of Business Conduct and Ethics in the “Governance” section of the “Investors & News” page of our website located at www.lyratherapeutics.com, or by writing to our Secretary at our offices at 480 Arsenal Way, Watertown, Massachusetts 02472.

Board Composition

Our Board of Directors currently consists of nine (9) members: Michael Altman, Edward T. Anderson, C. Ann Merrifield, Maria Palasis, Ph.D., Konstantin Poukalov, W. Bradford Smith, Nancy L. Snyderman, M.D., FACS, James R. Tobin and Harlan Waksal, M.D. As set forth in our Restated Certificate of Incorporation, the Board of Directors is currently divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our Restated Certificate of Incorporation and Amended and Restated Bylaws provide that the authorized number of directors may be changed only by resolution of the Board of Directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our Board of Directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our Company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of our capital stock entitled to vote in the election of directors.

Director Independence

Our Board of Directors has determined that each of Michael Altman, Edward T. Anderson, C. Ann Merrifield, Konstantin Poukalov, W. Bradford Smith, Nancy L. Snyderman, M.D., FACS and James R. Tobin qualify as “independent” in accordance with the listing requirements of Nasdaq. The Nasdaq independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his family members has engaged in various types of business dealings with us. In addition, as required by Nasdaq rules, our Board of Directors has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our Board of Directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our Board of Directors reviewed and discussed information provided by the directors and us with regard to each director’s business and personal activities and relationships as they may relate to us and our management, including that Mr. Altman, Mr. Anderson and Mr. Poukalov are affiliated with certain of our significant stockholders. Maria Palasis, Ph.D. and Harlan Waksal, M.D. are not independent. There are no family relationships among any of our directors or executive officers.

Director Candidates

The Nominating and Corporate Governance Committee is primarily responsible for searching for qualified director candidates for election to the Board and filling vacancies on the Board. To facilitate the search process, the Nominating and Corporate Governance Committee may solicit current directors and executives of the Company for the names of potentially qualified candidates or ask directors and executives to pursue their own business contacts for the names of potentially qualified candidates. The Nominating and Corporate Governance Committee may also consult with outside advisors or retain search firms to assist in the search for qualified candidates, or consider director candidates recommended by our stockholders. Once potential candidates are identified, the Nominating and Corporate Governance Committee reviews the backgrounds of those candidates, evaluates candidates’ independence from the Company and potential conflicts of interest and determines if candidates meet the qualifications desired by the Nominating and Corporate Governance Committee for candidates for election as a director. In addition, Harlan

Waksal, M.D., one of our Class II Director Nominees, was initially recommended to serve as a member of our Board by Perceptive, a significant stockholder.

In evaluating the suitability of individual candidates (both new candidates and current Board members), the Nominating and Corporate Governance Committee, in recommending candidates for election, and the Board, in approving (and, in the case of vacancies, appointing) such candidates, may take into account many factors, including: 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; relevant social policy concerns; experience relevant to the Company's industry; experience as a board member or executive officer of another publicly held company; relevant academic expertise or other proficiency in an area of the Company's operations; 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, but not limited to, with respect to age, gender, race, place of residence and specialized experience; practical and mature business judgment, including, but not limited to, the ability to make independent analytical inquiries; and any other relevant qualifications, attributes or skills. The Board evaluates each individual in the context of the Board as a whole, with the objective of assembling a group that can best perpetuate the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas. In determining whether to recommend a director for re-election, the Nominating and Corporate Governance Committee may also consider the director's past attendance at meetings and participation in and contributions to the activities of the Board.

Stockholders may recommend individuals to the Nominating and Corporate Governance Committee for consideration as potential director candidates by submitting the names of the recommended individuals, together with appropriate biographical information and background materials, to the Nominating and Corporate Governance Committee, c/o Secretary, Lyra Therapeutics, Inc., 480 Arsenal Way, Watertown, Massachusetts 02472. In the event there is a vacancy, and assuming that appropriate biographical and background material has been provided on a timely basis, the Nominating and Corporate Governance Committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

Communications from Stockholders

The Board will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. Our Secretary is primarily responsible for monitoring communications from stockholders and for providing copies or summaries to the directors as he considers appropriate.

Communications are forwarded to all directors if they relate to important substantive matters and include suggestions or comments that our Secretary and Chairperson of the Board consider to be important for the directors to know. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances and matters as to which we tend to receive repetitive or duplicative communications. Stockholders who wish to send communications on any topic to the Board should address such communications to the Board of Directors in writing: c/o Secretary, Lyra Therapeutics, Inc., 480 Arsenal Way, Watertown, Massachusetts 02472.

Board Leadership Structure and Role in Risk Oversight

Our Board of Directors is currently chaired by Harlan Waksal, M.D., our Executive Chair. Our Corporate Governance Guidelines provide that, if the chairperson of the Board is a member of management or does not otherwise qualify as independent, the independent directors of the Board may elect an independent lead director. James R. Tobin currently serves as our lead director. The lead director's responsibilities include, but are not limited to: presiding over all meetings of the Board of Directors at which the chairperson is not present, including any executive sessions of the independent directors; approving Board meeting schedules and agendas; and acting as the liaison between the independent directors and the chief executive officer and chairperson of the Board. Our Corporate Governance Guidelines further provide flexibility for our Board of Directors to modify our leadership structure in the future as it deems appropriate. Our Board has determined that combining the roles of Chairperson of the Board and Executive Chair is in the best interests of our Company and its stockholders at this time because it promotes unified leadership by Dr. Waksal and allows for a single, clear focus for management to execute the Company's strategy and business plans. For these reasons and because of the strong leadership of Dr. Waksal, our Board has concluded that our current leadership structure is appropriate at this time. 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.

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 the 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, including business continuity risks, and our Audit Committee is responsible for overseeing our financial and cybersecurity risk exposures and the steps our 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 person transactions. Our Nominating and Corporate Governance Committee manages risks associated with the Company's corporate governance framework and the Board's leadership structure, and monitors the effectiveness of the Corporate Governance Guidelines. Our Compensation Committee oversees the management of risks relating to the Company's executive compensation plans and arrangements. The Board does not believe that its role in the oversight of our risks affects the Board's leadership structure.

Code of Ethics

The Board has adopted a written code of business conduct, the "Code of Business Conduct and Ethics," that applies to all of our directors, officers and employees, including our principal executive officer, principal financial officer and principal accounting officer. A copy of the code is available on our website at www.lyratherapeutics.com in the "Governance" section of the "Investors & News" page. In addition, we intend to post on our website all disclosures that are required by law or The Nasdaq Stock Market LLC concerning any amendments to, or waivers from, any provision of our Code of Business Conduct and Ethics.

Anti-Hedging Policy

Our Board of Directors has adopted an Insider Trading Compliance Policy, which applies to all of our directors, officers and employees. The policy prohibits our directors, officers and employees and any entities they control from purchasing financial instruments such as prepaid variable forward contracts, equity swaps, collars, and exchange funds, or otherwise engaging in transactions that hedge or offset, or are designed to hedge or offset, any decrease in the market value of the Company's equity securities, or that may cause an officer, director, or employee to no longer have the same objectives as the Company's other stockholders.

Attendance by Members of the Board of Directors at Meetings

There were seven (7) meetings of the Board of Directors during the fiscal year ended December 31, 2021. During the fiscal year ended December 31, 2021, each director, during the period in which he or she served as a director, attended at least 85% of the aggregate of (i) all meetings of the Board of Directors and (ii) all meetings of the committees on which the director served.

Under our Corporate Governance Guidelines, which is available on our website at www.lyratherapeutics.com, a director is expected to spend the time and effort necessary to properly discharge his or her responsibilities. Accordingly, a director is expected to regularly prepare for and attend meetings of the Board and all committees on which the director sits (including separate meetings of the independent directors), with the understanding that, on occasion, a director may be unable to attend a meeting. A director who is unable to attend a meeting of the Board or a committee of the Board is expected to notify the Chairperson of the Board or the Chairperson of the appropriate committee in advance of such meeting, and, whenever possible, participate in such meeting via teleconference in the case of an in-person meeting. We do not maintain a formal policy regarding director attendance at the Annual Meeting; however, it is expected that absent compelling circumstances directors will attend. All of our then incumbent directors of the Board attended the 2021 Annual Meeting of Stockholders.

COMMITTEES OF THE BOARD

Our Board has established three standing committees—Audit, Compensation and Nominating and Corporate Governance—each of which operates under a written charter that has been approved by our Board.

The members of each of the Board committees and committee Chairpersons are set forth in the following chart.

Name	Audit	Compensation	Nominating and Corporate Governance
Edward T. Anderson	X		
C. Ann Merrifield		X	Chairperson
W. Bradford Smith	Chairperson		X
Nancy L. Snyderman, M.D., FACS		X	X
James R. Tobin	X	Chairperson	

Audit Committee

Our Audit Committee’s responsibilities include, among other things:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- coordinating our Board’s oversight of our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies;
- meeting independently with our internal auditing staff, if any, registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules.

The Audit Committee charter is available on our website at www.lyratherapeutics.com. The members of the Audit Committee are Mr. Anderson, Mr. Smith and Mr. Tobin. Mr. Smith serves as the Chairperson of the committee. Our Board has affirmatively determined that each of Mr. Anderson, Mr. Smith, Mr. Tobin, and for the period of time in which she served on the Audit Committee, Ms. Merrifield, is independent for purposes of serving on an audit committee under Rule 10A-3 promulgated under the Securities and Exchange Act of 1934, as amended (the “Exchange Act”) and Nasdaq rules, including those related to Audit Committee membership.

The members of our Audit Committee meet the requirements for financial literacy under the applicable Nasdaq rules. In addition, our Board of Directors has determined that each of Mr. Smith and Mr. Tobin qualifies as an “audit committee financial expert,” as such term is defined in Item 407(d)(5) of Regulation S-K, and under the similar Nasdaq rules requirement that the Audit Committee have a financially sophisticated member.

The Audit Committee met seven (7) times in 2021.

Compensation Committee

Our Compensation Committee's responsibilities include, among other things:

- reviewing, modifying (as needed) and approving (or if it deems appropriate, making recommendations to our Board regarding) the overall compensation strategy and policies for the Company;
- evaluating and making recommendations to our Board regarding the compensation plans and programs advisable for the Company, as well as the modification or termination of existing plans and programs;
- determining and recommending to our Board for determination and approval the compensation and other terms of employment of our CEO;
- determining and approving the compensation and other terms of employment for each executive officer;
- making recommendations to our Board regarding the type and amount of compensation to be paid or awarded to non-employee members of our Board;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis," to the extent required; and
- preparing the annual compensation committee report required by SEC rules, to the extent required.

The Compensation Committee generally considers the Chief Executive Officer's recommendations when making decisions regarding the compensation of non-employee directors and executive officers (other than the Chief Executive Officer). Pursuant to the Compensation Committee's charter, which is available on our website at www.lyratherapeutics.com, the Compensation Committee has the authority to retain or obtain the advice of compensation consultants, legal counsel and other advisors to assist in carrying out its responsibilities. In 2021, the Compensation Committee engaged Pearl Meyer, a compensation consulting firm ("Pearl Meyer"), to assist in making decisions regarding the amount and types of compensation to provide our executive officers and non-employee directors. As part of this process, the Compensation Committee reviewed a compensation assessment provided by Pearl Meyer comparing our compensation to that of a group of peer companies within our industry and met with Pearl Meyer to discuss our executive and non-employee director compensation and to receive input and advice. Pearl Meyer reports directly to the Compensation Committee. The Compensation Committee has considered the adviser independence factors required under SEC rules as they relate to Pearl Meyer and has determined that Pearl Meyer's work does not raise a conflict of interest.

The Compensation Committee may delegate its authority under its charter to one or more subcommittees as it deems appropriate from time to time. The Compensation Committee may also delegate to an officer the authority to grant equity awards to certain employees, as further described in its charter and subject to the terms of our equity plans.

The members of our Compensation Committee are Ms. Merrifield, Dr. Snyderman and Mr. Tobin. Mr. Tobin serves as the Chairperson of the Compensation Committee. Each member of the Compensation Committee, and Mr. Smith for the period of time in which served on the Compensation Committee, qualifies as an independent director under Nasdaq's heightened independence standards for members of a compensation committee and as a "non-employee director" as defined in Rule 16b-3 of the Exchange Act.

The Compensation Committee met five (5) times in 2021.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee's responsibilities include, among other things:

- identifying individuals qualified to become board members;
- recommending to our Board the persons to be nominated for election as directors and to be appointed to each board committee;
- developing and recommending to our Board corporate governance guidelines, and reviewing and recommending to our Board proposed changes to our corporate governance guidelines from time to time;
- reviewing the Board's leadership structure; and
- overseeing a periodic evaluation of our Board.

The Nominating and Corporate Governance Committee charter is available on our website at www.lyratherapeutics.com. The members of our Nominating and Corporate Governance Committee are Ms. Merrifield, Mr. Smith and Dr. Snyderman. Ms. Merrifield serves as the Chairperson of the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee has the authority to consult with outside advisors or retain search firms to assist in the search for qualified candidates, or consider director candidates recommended by our stockholders. In 2021, the Nominating and Corporate Governance Committee retained an outside search firm to help identify potential director candidates.

The Nominating and Corporate Governance Committee met two (2) times in 2021.

EXECUTIVE AND DIRECTOR COMPENSATION

This section discusses the material components of the executive compensation program for our executive officers who are named in the “2021 Summary Compensation Table” below. In 2021, our “named executive officers” and their positions were as follows:

- Maria Palasis, Ph.D., President and Chief Executive Officer;
- Jason Cavalier, Chief Financial Officer;
- R. Don Elsey, former Chief Financial Officer; and
- Corinne Noyes, Senior Vice President of Commercial Strategy and Market Development.

Mr. Cavalier commenced employment with us effective September 13, 2021. Mr. Elsey ceased being our Chief Financial Officer effective September 12, 2021 and resigned from the Company on December 31, 2021.

2021 Summary Compensation Table

The following table sets forth information concerning the compensation of our named executive officers for the years shown.

Name and Principal Position	Year	Salary (\$)	Option Awards(1) (\$)	Non-Equity Incentive Plan Compensation(2) (\$)	All Other Compensation (\$)	Total (\$)
Maria Palasis, Ph.D. <i>President and Chief Executive Officer</i>	2021	552,115	906,410	287,374	8,700 (3)	1,754,599
	2020	470,520	3,547,671	275,000	8,550	4,301,741
Jason Cavalier (4) <i>Chief Financial Officer</i>	2021	123,077	605,892	51,200	2,692 (3)	782,861
R. Don Elsey (5) <i>Former Chief Financial Officer</i>	2021	350,978	339,904	129,860	8,700 (3)	829,442
	2020	362,558	224,350	150,000	23,778	760,686
Corinne Noyes <i>Senior Vice President of Commercial Strategy and Market Development</i>	2021	313,200	226,602	104,832	8,700 (3)	653,334

(1) Amounts represent the full grant date fair value of stock options granted during 2021 computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual. We provide information regarding the assumptions used to calculate the value of all option awards made to named executive officers in Note 7 to the consolidated financial statements included in our Annual Report on Form 10-K filed on March 9, 2022.

(2) Amounts represent performance-based annual cash bonuses determined by our Board of Directors for the named executive officers for fiscal year 2021.

(3) Amounts represent company 401(k) matching contributions.

(4) Mr. Cavalier commenced employment with us in September 2021.

(5) Mr. Elsey provided transition services as a part-time employee from October 6, 2021 through December 31, 2021. During this period, his base salary was prorated based on his level of part-time employment.

Narrative to Summary Compensation Table

2021 Salaries

The named executive officers receive a base salary to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. For 2021, the base salaries for Dr. Palasis, Mr. Elsey and Ms. Noyes were \$550,000, 390,000 and \$312,000, respectively. Mr. Cavalier's base salary was set at \$400,000 in connection with his commencement of employment with us in September 2021.

2021 Bonuses

We offer our named executive officers the opportunity to earn annual cash bonuses to compensate them for attaining short-term company goals as approved by our Board of Directors. For 2021, bonuses were based entirely on attaining clinical, regulatory, research and development, strategic and financial goals. The 2021 target bonuses for each of Dr. Palasis, Mr. Elsey, Mr. Cavalier and Ms. Noyes were 55%, 40%, 40% and 35%, respectively, of his or her annual base salary (or for Mr. Elsey, his base salary actually earned for the year). Dr. Palasis's, Mr. Elsey's and Ms. Noyes's target bonuses were set by the board of directors. Mr. Cavalier's target bonus was set in connection with his commencement of employment with us in September 2021. Mr. Cavalier's bonus for 2021 was prorated to reflect his partial year of employment. The actual annual cash bonuses awarded to each named executive officer for 2021 performance are set forth above in the 2021 Summary Compensation Table in the column titled "Non-Equity Incentive Plan Compensation."

Equity Compensation

We offer stock options to our employees, including our named executive officers, as the long-term incentive component of our compensation program. Our stock options generally allow employees to purchase shares of our common stock at a price equal to the fair market value of our common stock on the date of grant. With respect to grants made in connection with the commencement of employment, our stock options typically vest as to 25% of the underlying shares on the first anniversary of the vesting commencement date and in equal monthly installments over the following three years, subject to the holder's continued service with us. From time to time, our Board of Directors may also construct alternate vesting schedules as it determines are appropriate to motivate particular employees. Historically, our stock options have been intended to qualify as "incentive stock options" to the extent permitted under the Internal Revenue Code.

The following table sets forth the stock options granted to our named executive officers during the fiscal year ended December 31, 2021.

Named Executive Officer	2021 Stock Options Granted
Maria Palasis, Ph.D.	120,000
Jason Cavalier	104,000
R. Don Elsey	45,000
Corinne Noyes	30,000

The stock option awards to Dr. Palasis, Mr. Elsey and Ms. Noyes were made in connection with the annual performance review and vest in 48 equal monthly installments following the effective date of grant, subject to the continued service of the applicable named executive officer. The stock option award to Mr. Cavalier was made in September 2021 in connection with his commencement of employment with us and is subject to our standard vesting schedule for grants made in connection with the commencement of employment described above.

Other Elements of Compensation

Retirement Plan

We maintain a 401(k) retirement savings plan for our employees, including our named executive officers, who satisfy certain eligibility requirements. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees. We believe that providing a vehicle for tax-deferred retirement savings through our 401(k) plan adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our named executive officers, in accordance with our compensation policies. For 2021, we made matching contributions of 50% of the first 6% of eligible compensation contributed under our 401(k) plan.

Employee Benefits and Perquisites

All of our full-time employees, including our named executive officers, are eligible to participate in our employee benefit plans and programs, including medical, dental, and vision benefits, health spending accounts, and short- and long-term disability, accidental death and dismemberment, and life insurance, to the same extent as our other full-time employees, subject to the terms and eligibility requirements of those plans.

Outstanding Equity Awards at 2021 Fiscal Year-End

The following table summarizes the number of shares of common stock underlying outstanding equity incentive plan awards for each named executive officer as of December 31, 2021.

Name	Vesting Commencement Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date
Maria Palasis, Ph.D.	2/26/2013	24,358	—	—	21.73	6/26/2023
	1/1/2015	94,287	—	—	22.76	9/23/2025
	6/13/2017	31,429	—	31,429 (2)	1.73	6/13/2027
	3/6/2019	117,188	53,267 (1)	—	2.76	3/6/2029
	4/30/2020	135,959	190,344 (1)	—	16.00	4/29/2030
	2/8/2021	25,000	95,000 (1)	—	10.63	2/7/2031
Jason Cavalier	9/13/2021	—	104,000 (3)	—	8.22	9/12/2031
R. Don Elsey	7/29/2019	26,485	48,298 (3)	—	4.49	9/24/2029
	4/30/2020	3,439	17,196 (1)	—	16.00	4/29/2030
	2/8/2021	9,375	5,625 (1)	—	10.63	2/7/2031
Corinne Noyes	9/24/2018	45,663	10,538 (3)	—	2.76	11/5/2028
	4/30/2020	4,075	5,707 (1)	—	16.00	4/29/2030
	2/8/2021	6,250	23,750 (1)	—	10.63	2/7/2031

- (1) Options vest and become exercisable in equal monthly installments over four years following the vesting commencement date, subject to the named executive officer's continued service with us on each applicable vesting date.
- (2) Options vest and become exercisable at the end of any given three-month period occurring prior to six years from the vesting commencement date in which we recognize revenue from the commercial sale of an FDA-approved product each month and in amounts, with respect to the second and third months of such period that increase from the revenue recognized from such product sales in the immediately preceding month, subject to Dr. Palasis' continued employment with us on each applicable vesting date.

- (3) Options vest and become exercisable as to 25% of the underlying shares on the first anniversary of the vesting commencement date and in 36 equal monthly installments over the following three years, subject to the named executive officer's continued service with us on each applicable vesting date.

Executive Employment Agreements

We entered into new employment agreements with Dr. Palasis, Mr. Elsey and Ms. Noyes in connection with our initial public offering that superseded their prior employment arrangements with us, and we entered into an employment agreement with Mr. Cavalier in connection with his commencement of employment with us in September 2021. On February 16, 2022, we entered into an amendment to the employment agreement with Dr. Palasis, the terms of which are reflected in the description of her agreement below. The employment agreements provide for the annual base salaries and annual target bonus opportunities described above under the headings “—2021 Salaries” and “—2021 Bonuses.” Until June 30, 2025, and thereafter subject to the discretion of the board of directors, Mr. Cavalier is also entitled to (i) reimbursement of reasonable travel expenses from his home to our offices in Massachusetts, and (ii) use of a corporate apartment while working in Massachusetts or reimbursement for reasonable hotel costs while working in Massachusetts; provided, that for each calendar month during which he is entitled to such commuting and housing benefits, the sum of the amount of any such expenses eligible for reimbursement and the cost to the Company of providing a corporate apartment shall not exceed \$6,250. Mr. Cavalier is also eligible for reimbursement for income and employment taxes incurred by him as a result of the above commuting payments and benefits. Dr. Palasis is also entitled to a cash bonus in the amount of 1% of our market capitalization, in the event we consummate a change in control where such market capitalization equals or exceeds a minimum value of \$750,000,000 (the “Palasis Transaction Bonus”).

On September 12, 2021, we entered into a transition agreement (the “Transition Agreement”) with Mr. Elsey, whereby Mr. Elsey continued to be employed by us on a full-time basis until October 6, 2021 (the “Initial Transition Period”) and, for the period from October 6, 2021 until December 31, 2021, on a part-time basis (the “Part-Time Transition Period”) and, together with the Initial Transition Period, the “Transition Period”). The Transition Agreement superseded Mr. Elsey's employment agreement. During the Transition Period, Mr. Elsey continued to be paid his base salary of \$390,000, less applicable withholdings, and in the case of the Part-Time Transition Period, such salary was prorated based on Mr. Elsey's level of part-time employment. While he remained employed, Mr. Elsey also continued to participate in our employee plans, received reimbursements for reasonable out-of-pocket business expenses, and was entitled to vacation or paid time off in accordance with our applicable policy. Mr. Elsey is eligible to receive an annual performance bonus for our 2021 fiscal year of up to 40% of his actual base salary earned during the 2021 fiscal year, based on our achievement of our performance objectives, as determined by the board of directors. Mr. Elsey's status as our employee terminated on December 31, 2021 and, following that date, he will continue to serve as a consultant to us for an hourly fee. While Mr. Elsey is providing services to us, his equity awards will remain outstanding and eligible to vest in accordance with their existing terms. Through December 31, 2021, and subject to renewal by our Board of Directors thereafter, Mr. Elsey was also entitled to (i) reimbursement of reasonable travel expenses from his home to our offices in Massachusetts, (ii) use of a corporate apartment while working in Massachusetts and (iii) reimbursement for income and employment taxes incurred by Mr. Elsey as a result of these commuting payments and benefits. The total amount for (i) through (iii) may not exceed \$75,000.

Under the employment agreements, if we terminate the employment of Dr. Palasis, Mr. Cavalier or Ms. Noyes without “cause” or the executive resigns for “good reason” (each as defined below), subject to the executive's timely execution of a release of claims and continued compliance with a separate restrictive covenant agreement (described below), the executive is entitled to receive (i) base salary continuation for a period of 12 months for Dr. Palasis, 9 months for Mr. Cavalier and 6 months for Ms. Noyes; (ii) payment of any annual bonus for the prior year earned but unpaid as of the date of termination, (iii) direct payment of or reimbursement for continued medical, dental or vision coverage pursuant to COBRA for up to 12 months for Dr. Palasis, 9 months for Mr. Cavalier and 6 months for Ms. Noyes, less the amount each named executive officer would have had to pay to receive such coverage as an active employee based on the cost sharing levels in effect on the named executive officer's termination date, and (iv) in the case of Dr. Palasis only, any options issued to Dr. Palasis will remain exercisable (to the extent vested) until the earlier of 15 months from her termination date or the expiration date set forth in the applicable option award agreement.

If we terminate Dr. Palasis, Mr. Cavalier or Ms. Noyes without “cause” or the executive resigns for “good reason,” in either case, on or within three months prior to or 12 months following a change in control, then, in lieu of the severance benefits described above, subject to the executive’s timely execution of a release of claims, the executive is entitled to receive (i) an amount equal in cash equal to 1.5 times for Dr. Palasis, one times for Mr. Cavalier and 0.75 times for Ms. Noyes the sum of the named executive officer’s annual base salary plus target annual bonus for the year of termination, (ii) payment of any annual bonus for the prior year earned but unpaid as of the date of termination, (iii) direct payment of or reimbursement for continued medical, dental or vision coverage pursuant to COBRA for up to 18 months for Dr. Palasis and 9 months for each of Mr. Cavalier and Ms. Noyes, less the amount each named executive officer would have had to pay to receive such coverage as an active employee based on the cost sharing levels in effect on the named executive officer’s termination date, (iv) accelerated vesting of all unvested equity or equity-based awards held by the named executive officer that vest solely based on the passage of time, with any such awards that vest based on the attainment of performance-vesting conditions being governed by the terms of the applicable award agreement, and (v) in the case of Dr. Palasis only, the Palasis Transaction Bonus, to the extent the conditions for payment are otherwise satisfied. Each of our named executive officers has agreed to refrain from competing with us while employed and following his or her termination of employment for any reason for a period of one year and to refrain from soliciting our employees or customers while employed and following his or her termination of employment for any reason for a period of two years in the case of Dr. Palasis and Mr. Elsey, one year in the case of Mr. Cavalier and Ms. Noyes.

For purposes of the employment agreements, “cause” generally means the named executive officer’s refusal to substantially perform the duties associated with his or her position with our Company or to carry out the reasonable and lawful instructions of our Board of Directors concerning duties or actions consistent with his or her position, his or her breach of a material provision of the employment agreement which remains uncured (to the extent capable of cure) for a period of 30 days following written notice from our Company, his or her conviction, plea of no contest or nolo contendere or imposition of unadjudicated probation for any felony or crime involving moral turpitude, his or her unlawful use (including being under the influence) or possession of illegal drugs on our premises or while performing his or her duties and responsibilities under the employment agreement, or his or her commission of any act of fraud, embezzlement, misappropriation, willful misconduct, or breach of fiduciary duty against us.

For purposes of the employment agreements, “good reason” generally means, subject to certain cure rights, the named executive officer’s termination of employment due to a reduction in salary or target bonus (other than a reduction of 20% or less of the named executive officer’s base salary implemented as part of an across the board, proportionate reduction of base salaries for other members of our management team), a material decrease in authority or areas of responsibility, our Company’s breach of any one or more of the material provisions of the employment agreement, or a relocation by our Company of the named executive officer’s primary office to a location more than 50 miles from the named executive officer’s primary office on the date of the agreement.

Director Compensation

2021 Director Compensation Table

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	Total (\$)
Michael Altman	40,000	—	36,083	76,083
Edward T. Anderson	47,500	—	36,083	83,583
C. Ann Merrifield	95,500	—	36,083	131,583
Konstantin Poukalov	40,000	—	36,083	76,083
W. Bradford Smith	69,000	—	36,083	105,083
Nancy L. Snyderman, M.D., FACS	48,028	—	36,083	84,111

- (1) Amounts reflect the full grant-date fair value of stock awards and stock options granted during 2021 computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual. We provide information regarding the assumptions used to calculate the value of all stock awards and option awards made to our directors in Note 7 to the consolidated financial statements included in our Annual Report on Form 10-K filed on March 9, 2022.

The table below shows the aggregate numbers of option awards (exercisable and unexercisable) held as of December 31, 2021 by each non-employee director. None of our non-employee directors held unvested stock awards as of December 31, 2021.

Name	Options Outstanding at Fiscal Year End
Michael Altman	21,750
Edward T. Anderson	21,750
C. Ann Merrifield	20,538
Konstantin Poukalov	21,750
W. Bradford Smith	20,539
Nancy L. Snyderman, M.D., FACS	21,750

Non-Employee Director Compensation Program

In connection with our initial public offering, we adopted, and our stockholders approved, a compensation program for our non-employee directors under which each non-employee director receives the following amounts for their services on our Board of Directors:

- Upon the director's initial election or appointment to our Board of Directors, an option to purchase 14,500 shares of our common stock;
- If the director has served on our Board of Directors for at least six months as of the date of an annual meeting of stockholders and will continue to serve as a director immediately following such meeting, an option to purchase 7,250 shares of our common stock on the date of the annual meeting;
- An annual director fee of \$40,000;
- If the director serves as lead independent director or chair or on a committee of our Board of Directors, an additional annual fee as follows:
 - Chair of the board or lead independent director: \$25,000;

- Chair of the audit committee: \$20,000;
- Audit committee member other than the chair, \$7,500;
- Chair of the compensation committee, \$15,000;
- Compensation committee member other than the chair, \$5,000;
- Chair of the nominating and corporate governance committee, \$8,000; and
- Nominating and corporate governance committee member other than the chair, \$4,000.

Director fees under the program are payable in arrears in four equal quarterly installments not later than the fifteenth day following the final day of each calendar quarter, provided that the amount of each payment is prorated for any portion of a quarter that a director is not serving on our Board of Directors and no fee was payable in respect of any period prior to the effective date of the registration statement relating to our initial public offering.

Stock options granted to our non-employee directors under the program have an exercise price equal to the fair market value of our common stock on the date of grant and expire not later than ten years after the date of grant. The stock options granted upon a director's initial election or appointment vest in 36 substantially equal monthly installments following the date of grant. The stock options granted annually to directors vest in a single installment on the earlier of the day before the next annual meeting or the first anniversary of the date of grant. In addition, all unvested stock options vest in full upon the occurrence of a change in control.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information with respect to the beneficial ownership of our common stock by (i) each person or group of affiliated persons known by us to beneficially own more than 5% of our common stock and (ii) each of our named executive officers, each of our directors and all of our current executive officers and directors as a group as of April 22, 2022, unless otherwise indicated.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Applicable percentage ownership is based on 31,825,055 shares of common stock outstanding as of April 22, 2022. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options and warrants held by such person that are currently exercisable or will become exercisable within 60 days of April 22, 2022 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless noted otherwise, the address of all listed stockholders is 480 Arsenal Way, Watertown, MA 02472. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

Name of Beneficial Owner	Shares of Common Stock Beneficially Owned	Percentage
5% or Greater Stockholders		
Entities Affiliated with Perceptive Advisors, LLC (1)	9,146,731	28.7%
Entities Affiliated with North Bridge Venture Partners (2)	4,083,000	12.8%
Entities Affiliated with Venrock Healthcare Capital Partners (3)	3,433,050	9.9%
Entities Affiliated with Nantahala Capital Partners (4)	2,369,668	7.5%
Entities Affiliated with Pura Vida (5)	2,369,668	7.4%
Samsara BioCapital, L.P. (6)	1,777,251	5.6%
Named Executive Officers and Directors		
Harlan Waksal, M.D. (7)	236,966	*
Maria Palasis, Ph.D. (8)	509,134	1.6%
Jason Cavalier (9)	1,300	*
R. Don Elsey (10)	78,718	*
Corinne Noyes (11)	69,278	*
Michael Altman (12)	17,319	*
Edward T. Anderson (2) (18)	4,218,802	13.3%
C. Ann Merrifield (13)	19,431	*
Konstantin Poukalov (14)	17,319	*
W. Bradford Smith (15)	18,693	*
Nancy L. Snyderman, M.D., FACS (16)	15,927	*
James R. Tobin (17)	1,208	*
All current executive officers and directors as a group (13 persons) (19)	5,173,937	15.9%

* Less than 1%.

- (1) Pursuant to a Schedule 13D/A filed with the SEC on April 14, 2022, Perceptive Life Sciences Master Fund, Ltd. (“Perceptive Life”) reported shared voting power and shared dispositive power over 7,858,285 shares of common stock; Perceptive LS (A), LLC (“Perceptive LS”) reported shared voting power and shared dispositive power over 1,288,446 shares of common stock; Joseph Edelman reported shared voting power and shared dispositive power over 3,223,561 shares of common stock; and Perceptive Advisors LLC reported shared voting power and shared dispositive power over 3,223,561 shares of common stock. Perceptive Advisors LLC serves as the investment advisor to Perceptive Life. Perceptive LS GP, LLC is the manager of Perceptive LS. Joseph Edelman is the managing member of Perceptive Advisors LLC and

the sole member of Perceptive LS GP, LLC. The address of the aforementioned individuals and entities is c/o Perceptive Advisors, LLC, 51 Astor Place, 10th Floor, New York, New York 10003.

- (2) Pursuant to a Schedule 13D/A filed with the SEC on April 22, 2022, North Bridge Venture Partners V-A, L.P. (“NBVP V-A”) has shared voting power and shared dispositive power over 1,855,443 shares of common stock; North Bridge Venture Partners V-B, L.P. (“NBVP V-B”) reported shared voting power and shared dispositive power over 909,424 shares of common stock; and North Bridge Venture Partners VI, L.P. (“NBVP VI”) reported shared voting power and shared dispositive power over 1,318,133 shares of common stock. North Bridge Venture Management V, L.P. (“NBVM V”), is the sole General Partner of NBVP V-A and NBVP V-B and may be deemed to have voting and dispositive power with respect to the shares held by those entities. NBVM GP, LLC, the General Partner of NBVM V, may be deemed to have voting and dispositive power over the shares held of record by NBVP VA and NBVP V-B. Shared voting and dispositive power of such shares are vested in Edward T. Anderson and Richard A. D’Amore. North Bridge Venture Management VI, L.P. (“NBVM VI”), is the sole General Partner of NBVP VI. NBVM GP, LLC, the General Partner of NBVM VI, and may be deemed to have voting and dispositive power over the shares held of record by NBVP VI. Shared voting and dispositive power of such shares are vested in Edward T. Anderson and Richard A. D’Amore. Mr. Anderson, a member of our Board of Directors and a manager of NBVM GP, LLC, disclaims beneficial ownership over such shares, except to the extent of his pecuniary interest therein. Mr. Anderson has sole voting power and sole dispositive power over 118,483 shares of common stock and 17,319 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022. The address of all entities affiliated with North Bridge Venture Partners is 60 William Street, Suite 350, Wellesley, MA 02481.
- (3) Pursuant to a Schedule 13G filed with the SEC on April 22, 2022, Venrock Healthcare Capital Partners EG, L.P. has shared voting power and shared dispositive power over 361,628 shares of common stock; Venrock Healthcare Capital Partners III, L.P. has shared voting power and shared dispositive power over 321,426 shares of common stock; VHCP Co-Investment Holdings III, LLC has shared voting power and shared dispositive power over 32,161 shares of common stock; Venrock Healthcare Capital Partners II, L.P. has shared voting power and shared dispositive power over 148,699 shares of common stock; and VHCP Co-Investment Holdings II, LLC has shared voting power and shared dispositive power over 60,256 shares of common stock. VHCP Management II, LLC is the general partner of Venrock Healthcare Capital Partners II, L.P. and the manager of VHCP Co-Investment Holdings II, LLC. VHCP Management III, LLC is the general partner of Venrock Healthcare Capital Partners III, L.P. and the manager of VHCP Co-Investment Holdings III, LLC. VHCP Management EG, LLC is the general partner of Venrock Healthcare Capital Partners EG, L.P. Messrs. Shah and Koh are the voting members of VHCP Management II, LLC, VHCP Management III, LLC and VHCP Management EG, LLC. Includes 981,725 shares underlying warrants to purchase common stock within 60 days of April 22, 2022 held by Venrock Healthcare Capital Partners EG, L.P.; 872,589 shares underlying warrants to purchase common stock within 60 days of April 22, 2022 held by Venrock Healthcare Capital Partners III, L.P.; 87,309 shares underlying warrants to purchase common stock within 60 days of April 22, 2022 held by VHCP Co-Investment Holdings III, LLC; 403,678 shares underlying warrants to purchase common stock within 60 days of April 22, 2022 held by Venrock Healthcare Capital Partners II, L.P.; and 163,579 shares underlying warrants to purchase common stock within 60 days of April 22, 2022 held by VHCP Co-Investment Holdings II, LLC. Under the terms of the Warrants, the Company may not effect the exercise of any such warrant, and a holder will not be entitled to exercise any portion of such warrant, if, upon giving effect to such exercise, the aggregate number of shares of common stock beneficially owned by the holder (together with its affiliates and other attribution parties) would exceed 9.999% of the number of shares of common stock outstanding immediately after giving effect to the exercise. The addresses of the entities referenced in this footnote is 7 Bryant Park, 23rd Floor New York, NY 10018.

- (4) Based on the information known to the Company, Nantahala Capital Partners SI, LP has shared voting power and shared dispositive power over 1,186,041 shares of common stock; NCP RFM LP has shared voting power and shared dispositive power over 129,108 shares of common stock; NCP CB LP has shared voting power and shared dispositive power over 350,558 shares of common stock; Pinehurst Partners, L.P., solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its Sub-Advisor has shared voting power and shared dispositive power over 66,464 shares of common stock; Nantahala Capital Partners Limited Partnership has shared voting power and shared dispositive power over 116,430 shares of common stock; Nantahala Capital Partners II Limited Partnership has shared voting power and shared dispositive power over 165,008 shares of common stock; Corbin Hedged Equity Fund, L.P., solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its sub-advisor has shared voting power and shared dispositive power over 23,231 shares of common stock; and Blackwell Partners LLC—Series A, solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its investment manager has shared voting power and shared dispositive power over 332,828 shares of common stock. Nantahala Capital Management, LLC is the investment manager of Nantahala Capital Partners SI, LP; NCP RFM LP; NCP CB LP; and Blackwell Partners LLC—Series A, solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its investment manager. Nantahala Capital Management, LLC is the sub-advisor of Pinehurst Partners, L.P., solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its sub-advisor and Corbin Hedged Equity Fund, L.P., solely with respect to the portion of its assets for which Nantahala Capital Management, LLC acts as its sub-advisor. Nantahala Capital Management, LLC is the general partner of Nantahala Capital Partners Limited Partnership and Nantahala Capital Partners II Limited Partnership. The mailing address of the aforementioned entities is c/o Nantahala Capital Management, LLC 130 Main St. 2nd Floor New Canaan, CT 06840.
- (5) Based on the information known to the Company, Pura Vida Master Fund, Ltd. has shared voting power and shared dispositive power over 729,621 shares of common stock; Highmark Limited, in respect of its Segregated Account Highmark Long/Short Equity 20 has shared voting power and shared dispositive power over 318,483 shares of common stock; Walleye Opportunities Master Fund Ltd has shared voting power and shared dispositive power over 63,389 shares of common stock; Sea Hawk Multi-Strategy Master Fund Ltd has shared voting power and shared dispositive power over 31,398 shares of common stock; Walleye Manager Opportunities LLC has shared voting power and shared dispositive power over 41,943 shares of common stock; Pura Vida X Fund LP has shared voting power and shared dispositive power over 423,327 shares of common stock; and Lockheed Martin Corporation Master Retirement Trust has shared voting power and shared dispositive power over 761,507 shares of common stock. Efreem Kamen serves as the managing member of Pura Vida Investments, LLC, in its capacity as investment manager to Pura Vida Master Fund, Ltd.; Highmark Limited, in respect of its Segregated Account Highmark Long/Short Equity 20; Pura Vida X Fund LP; and Lockheed Martin Corporation Master Retirement Trust. Efreem Kamen serves as the managing member of Pura Vida Investments, LLC, in its capacity as sub-advisor to Walleye Opportunities Master Fund Ltd; Sea Hawk Multi-Strategy Master Fund Ltd; and Walleye Manager Opportunities LLC. The mailing address of the aforementioned entities is c/o Pura Vida Investments, LLC 512 West 22nd Street, 7th Floor New York, NY 10011.
- (6) Based on the information known to the Company, Samsara BioCapital, L.P. has shared voting power and shared dispositive power over 1,777,251 shares of common stock. Srinivas Akkaraju, MD, PhD is the managing member of Samsara BioCapital, L.P. The mailing address of Samsara BioCapital, L.P. is 628 Middlefield Road, Palo Alto, California 94301.
- (7) Consists of 236,966 shares of common stock and does not include his 520,000 shares underlying performance-based stock options that may vest within 60 days of April 22, 2022, to the extent those performance objectives are achieved.
- (8) Consists of options to purchase 509,134 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022 and does not include her 175,000 shares underlying performance-based stock options that may vest within 60 days of April 22, 2022, to the extent those performance objectives are achieved.
- (9) Consists of options to purchase 1,300 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.

- (10) Consists of options to purchase 78,718 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (11) Consists of options to purchase 69,278 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (12) Consists of options to purchase 17,319 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (13) Consists of options to purchase 19,431 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (14) Consists of options to purchase 17,319 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (15) Consists of options to purchase 18,693 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (16) Consists of 1,025 shares of common stock and 14,902 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (17) Consists of options to purchase 1,208 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (18) Consists of (i) 4,083,000 shares of common stock held by North Bridge Venture Partners and its affiliates, as disclosed in footnote (2) above, (ii) sole voting power and sole dispositive power over 118,483 shares of common stock and (iii) 17,319 shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.
- (19) Consists of 4,439,474 shares of common stock and 734,463 options to purchase shares of common stock that are or will be immediately exercisable within 60 days of April 22, 2022.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Our Board of Directors recognizes the fact that transactions with related persons present a heightened risk of conflicts of interests (or the perception thereof) and has adopted a written related person transactions policy to comply with Section 404 of the Exchange Act. Under the policy, our finance team is primarily responsible for developing and implementing processes and procedures to obtain information regarding related persons with respect to potential related person transactions and then determining, based on the facts and circumstances, whether such potential related person transactions do, in fact, constitute related person transactions requiring compliance with the policy. In addition, any potential related person transaction that is proposed to be entered into by the Company must be reported to the Company's Chief Financial Officer, by both the related person and the person at the Company responsible for such potential related person transaction.

If our finance team determines that a transaction or relationship is a related person transaction requiring compliance with the policy, our Chief Financial Officer is required to present to the Audit Committee all relevant facts and circumstances relating to the related person transaction. Our Audit Committee must review the relevant facts and circumstances of each related person transaction, including if the transaction is on terms comparable to those that could be obtained in arm's length dealings with an unrelated third party and the extent of the related person's interest in the transaction, take into account the conflicts of interest and corporate opportunity provisions of our Code of Business Conduct and Ethics, and either approve or disapprove the related person transaction. If advance Audit Committee approval of a related person transaction requiring the Audit Committee's approval is not feasible, then the transaction may be preliminarily entered into by management upon prior approval of the transaction by the chair of the Audit Committee subject to ratification of the transaction by the Audit Committee at the Audit Committee's next regularly scheduled meeting; provided, that if ratification is not forthcoming, management will make all reasonable efforts to cancel or annul the transaction. If a transaction was not initially recognized as a related person transaction, then upon such recognition the transaction will be presented to the Audit Committee for ratification at the Audit Committee's next regularly scheduled meeting; provided, that if ratification is not forthcoming, management will make all reasonable efforts to cancel or annul the transaction.

Our management will update the Audit Committee as to any material changes to any approved or ratified related person transaction and will provide a status report at least annually of all then current related person transactions. No director may participate in approval of a related person transaction for which he or she is a related person.

The following are certain transactions, arrangements and relationships with our directors, executive officers and stockholders owning 5% or more of our outstanding common stock, or any member of the immediate family of any of the foregoing persons, since January 1, 2020.

Series C Preferred Stock Financing. At various closings between January 10, 2020 and January 31, 2020, we issued and sold to investors an aggregate of 78,306,611 shares of our Series C preferred stock at a price per share of \$0.38811, for aggregate consideration of approximately \$30.4 million. We also issued to such investors warrants to purchase up to an aggregate of 681,256 shares of common stock, at an exercise price per share equal to the fair market value of our common stock following January 10, 2020 (as determined by our Board of Directors, in good faith, based on the most recent independent third party valuation of our company available following January 10, 2020 performed pursuant to Section 409A of the Internal Revenue Code, and taking into account any changes to our business between the date of such third party valuation and January 10, 2020). In accordance with such terms, on February 6, 2020, our Board of Directors determined such fair market value of our common stock to be \$8.63 per share. Certain holders of 5% or more of our common stock at the time of the transactions, on an as-converted basis, including entities affiliated with Polaris Venture Partners, North Bridge Venture Partners, Intersouth Partners VII, L.P., Perceptive Advisors, LLC, RA Capital Healthcare Fund, L.P., ArrowMark Partners and Soleus Private Equity Fund I, L.P., participated in the Series C preferred stock financing, including the issuance of the warrants to purchase common stock.

The following table sets forth the aggregate number of shares of our capital stock acquired by beneficial owners of more than 5% of our common stock at the time of the Series C preferred stock financing transaction described above. Each share of our Series C preferred stock identified in the following table converted into 0.0289998 shares of common stock immediately prior to the closing of our initial public offering.

Participants	Series C Preferred Stock	Warrants to Purchase Common Stock
5% or Greater Stockholders⁽¹⁾		
Entities affiliated with Polaris Venture Partners ⁽²⁾	2,061,271	17,932
Intersouth Partners VII, L.P.	1,030,635	8,966
Entities affiliated with North Bridge Venture Partners ⁽³⁾	5,153,178	44,831
Entities affiliated with Perceptive Advisors, LLC ⁽⁴⁾	55,267,836	480,825
RA Capital Healthcare Fund, L.P.	1,288,294	11,208
Entities Affiliated with ArrowMark Partners ⁽⁵⁾	3,864,883	33,624
Soleus Private Equity Fund I, L.P.	3,607,224	31,382

- (1) Additional details regarding certain of these stockholders and their equity holdings are provided in this proxy statement under the caption “Security Ownership of Certain Beneficial Owners and Management.”
- (2) Represents securities acquired by (i) Polaris Venture Partners Entrepreneurs’ Fund V, L.P., (ii) Polaris Venture Partners V, L.P., (iii) Polaris Venture Partners Founders’ Fund V, L.P. and (iv) Polaris Venture Partners Special Founders’ Fund V, L.P.
- (3) Represents securities acquired by (i) North Bridge Venture Partners V-A, L.P., (ii) North Bridge Venture Partners V-B, L.P. and (iii) North Bridge Venture Partners VI, L.P.
- (4) Represents securities acquired by (i) Perceptive Life Sciences Master Fund, Ltd. and (ii) Perceptive LS (A), LLC.
- (5) Represents securities acquired by (i) ArrowMark Fundamental Opportunity Fund, L.P. and (ii) Meridian Small Cap Growth Fund.

Some of our directors are associated with our principal stockholders as indicated in the table below:

Director	Principal Stockholder
Michael Altman	Entities affiliated with Perceptive Advisors, LLC
Edward T. Anderson	Entities affiliated with North Bridge Venture Partners
Konstantin Poukalov	Entities affiliated with Perceptive Advisors, LLC

LianBio License Agreement

Entities affiliated with Perceptive Advisors, LLC are shareholders of both us and LianBio. Additionally, Konstantin Poukalov and Michael Altman are each a Managing Director at Perceptive Advisors, LLC and Mr. Poukalov is also the Executive Chairman of LianBio’s board of directors. See “Management’s Discussion and Analysis—Financial Operations Overview” for a description of the LianBio License Agreement.

Private Placement and Investor Rights Agreement

On April 7, 2022, we entered into a securities purchase agreement (the “Purchase Agreement”) with certain accredited investors named therein (the “Investors”) pursuant to which we agreed to sell (i) an aggregate of 18,815,159 shares of common stock to the Investors at a purchase price of \$4.22 per share and (ii) warrants (the “Warrants”) to purchase an aggregate of 5,000,000 shares of common stock (the “Warrant Shares”) with an exercise price of \$0.001 per share, at a purchase price of \$4.219 per share, for aggregate gross proceeds of approximately \$100.5 million, before deducting private placement expenses. Investors included, but were not limited to, Harlan Waksal, our Executive Chair, and Edward T. Anderson, a Director, and Investor funds affiliated with Perceptive Advisors, LLC, North Bridge Venture Partners, Venrock Healthcare Capital Partners, Nantahala Capital Partners,

Pura Vida, and Samsara BioCapital, L.P., each of which are 5% or greater holders of our common stock. The closing of the Private Placement occurred on April 12, 2022. On April 7, 2022, in connection with the Purchase Agreement, we entered into a Ninth Amended and Restated Investor Rights Agreement with certain Investor funds affiliated with Perceptive Advisors and North Bridge Venture Partners.

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 in certain cases their related venture capital funds) and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, 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 us, arising out of the person's services as a director or executive officer.

STOCKHOLDERS' PROPOSALS

Stockholders who intend to have a proposal considered for inclusion in our proxy materials for presentation at our 2023 Annual Meeting of Stockholders pursuant to Rule 14a-8 under the Exchange Act must submit the proposal to our Secretary at our offices at 480 Arsenal Way, Watertown, Massachusetts 02472 in writing not later than January 3, 2023.

Stockholders intending to present a proposal at the 2023 Annual Meeting of Stockholders, but not to include the proposal in our proxy statement, or to nominate a person for election as a director, must comply with the requirements set forth in our Amended and Restated Bylaws. Our Amended and Restated Bylaws require, among other things, that our Secretary receive written notice from the stockholder of record of their intent to present such proposal or nomination not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting. Therefore, we must receive notice of such a proposal or nomination for the 2023 Annual Meeting of Stockholders no earlier than February 16, 2023 and no later than March 18, 2023. The notice must contain the information required by the Amended and Restated Bylaws, a copy of which is available upon request to our Secretary. In the event that the date of the 2023 Annual Meeting of Stockholders is more than 30 days before or more than 60 days after June 16, 2023, then our Secretary must receive such written notice not earlier than the 120th day prior to the 2023 Annual Meeting and not later than the 90th day prior to the 2023 Annual Meeting or, if later, the 10th day following the day on which public disclosure of the date of such meeting is first made by us.

In addition to satisfying the foregoing requirements under our Amended and Restated Bylaws, to comply with the universal proxy rules (once they become effective), stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than Monday, April 17, 2023.

We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these or other applicable requirements.

OTHER MATTERS

Our Board of Directors is not aware of any matter to be presented for action at the Annual Meeting other than the matters referred to above and does not intend to bring any other matters before the Annual Meeting. However, if other matters should come before the Annual Meeting, it is intended that holders of the proxies named on the Company's proxy card will vote thereon in their discretion.

SOLICITATION OF PROXIES

The accompanying proxy is solicited by and on behalf of our Board of Directors, whose Notice of Annual Meeting is attached to this proxy statement, and the entire cost of our solicitation will be borne by us. In addition to the use of mail, proxies may be solicited by personal interview, telephone, e-mail and facsimile by our directors, officers and other employees who will not be specially compensated for these services. We will also request that brokers, nominees, custodians and other fiduciaries forward soliciting materials to the beneficial owners of shares held by the brokers, nominees, custodians and other fiduciaries. We will reimburse these persons for their reasonable expenses in connection with these activities.

Certain information contained in this proxy statement relating to the occupations and security holdings of our directors and officers is based upon information received from the individual directors and officers.

We intend to file a proxy statement and WHITE proxy card with the SEC in connection with the solicitation of proxies for our 2023 Annual Meeting of Stockholders. Stockholders may obtain our proxy statement (and any amendments and supplements thereto) and other documents as and when filed by us with the SEC without charge from the SEC's website at: www.sec.gov.

LYRA'S ANNUAL REPORT ON FORM 10-K

A copy of Lyra's Annual Report on Form 10-K for the fiscal year ended December 31, 2021, including financial statements and schedules thereto but not including exhibits, as filed with the SEC, will be sent to any stockholder of record as of April 22, 2022 without charge upon written request addressed to:

Lyra Therapeutics, Inc.
Attention: Secretary
480 Arsenal Way
Watertown, Massachusetts 02472

A reasonable fee will be charged for copies of exhibits. You also may access this proxy statement and our Annual Report on Form 10-K at www.proxyvote.com. You also may access our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 at www.lyratherapeutics.com.

WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING ONLINE, WE URGE YOU TO VOTE YOUR SHARES VIA THE TOLL-FREE TELEPHONE NUMBER OR OVER THE INTERNET, AS DESCRIBED IN THIS PROXY STATEMENT. IF YOU RECEIVED A COPY OF THE PROXY CARD BY MAIL, YOU MAY SIGN, DATE AND MAIL THE PROXY CARD IN THE ENCLOSED RETURN ENVELOPE. PROMPTLY VOTING YOUR SHARES WILL ENSURE THE PRESENCE OF A QUORUM AT THE ANNUAL MEETING AND WILL SAVE US THE EXPENSE OF FURTHER SOLICITATION.

By Order of the Board of Directors

/s/ Jason Cavalier
Jason Cavalier, Chief Financial Officer, Treasurer and Secretary

Watertown, Massachusetts
April 27, 2022



LYRA THERAPEUTICS, INC.
480 JEROME WAY
WATERTOWN, MASSACHUSETTS 02472



VOTE BY INTERNET
Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the internet to transmit your voting instructions and for electronic delivery of information up until 11:59 PM Eastern Daylight Time on June 15, 2022. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/LYRA2022

You may attend the meeting via the Internet and vote during the meeting. We recommend, however, that you vote before the meeting even if you plan to participate in the meeting, since you can change your vote during the meeting by voting when the polls are open. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 PM Eastern Daylight Time on June 15, 2022. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

D84781-P69059

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

LYRA THERAPEUTICS, INC. The Board of Directors recommends you vote FOR the following proposal:		For All <input type="checkbox"/>	Withhold All <input type="checkbox"/>	For All Except <input type="checkbox"/>	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.
1. Election of Class II Directors to serve until the 2025 Annual Meeting of Stockholders, and until their respective successors shall have been duly elected and qualified.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Nominees: 01) Michael Altman 02) C. Ann Merrifield 03) Harlan Waksal, M.D.					
The Board of Directors recommends you vote FOR the following proposal:					For Against Abstain
2. To ratify the appointment of BDO USA, LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2022.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: Such other business as may properly come before the Annual Meeting or any continuation, postponement or adjournment thereof.					
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.					
<input type="text"/> Signature [PLEASE SIGN WITHIN BOX]		<input type="text"/> Date		<input type="text"/> Signature (Joint Owners)	
				<input type="text"/> Date	

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement and Form 10-K are available at www.proxyvote.com.

D84782-P69059

LYRA THERAPEUTICS, INC.
Annual Meeting of Stockholders
June 16, 2022 8:30 AM EDT
This proxy is solicited by the Board of Directors

The undersigned stockholder(s) of Lyra Therapeutics, Inc. hereby appoint(s) Maria Palasis, Ph.D. and Jason Cavalier, or either of them, as proxies, each with the power to appoint his/her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this proxy card, all of the shares of common stock of Lyra Therapeutics, Inc. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 8:30 AM EDT on June 16, 2022, via live webcast at www.virtualshareholdermeeting.com/LYRA2022, and any continuation, adjournment or postponement thereof.

Such proxies are authorized to vote in their discretion (x) for the election of any person to the Board of Directors if any nominee named herein becomes unable to serve or for good cause will not serve, (y) on any matter that the Board of Directors did not know would be presented at the Annual Meeting by a reasonable time before the proxy solicitation was made, and (z) on such other business as may properly be brought before the meeting or any continuation, adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein by the undersigned stockholder(s). If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side