UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant \Box Filed by a Party other than the Registrant \Box

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 Pursuant to § 240.14a-12

LUMOS PHARMA, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box)

- \square No fee required.
- □ Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- 1. Title of each class of securities to which transaction applies:
- 2. Aggregate number of securities to which transaction applies:
- 3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (Set forth the amount on which the filing fee is calculated and state how it was determined):

4. Proposed maximum aggregate value of transaction:

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□ Fee paid previously with preliminary materials.

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

6. Amount Previously Paid:

7. Form, Schedule or Registration Statement No.:

8. Filing Party:

9. Date Filed:

LUMOS PHARMA, INC.

4200 Marathon Boulevard #200

Austin, Texas 78756

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON MAY 4, 2022

Dear Stockholder:

You are cordially invited to attend the 2022 Annual Meeting of Stockholders (the "Annual Meeting") of **LUMOS PHARMA, INC.**, a Delaware corporation (the "Company"). The Annual Meeting will be held via live webcast at www.virtualshareholdermeeting.com/LUMO2022, on Wednesday, May 4, 2022 at 11:00 a.m., Central Time, for the following purposes:

- 1. To elect the Board's nominees for director, An van Es-Johansson, Kevin Lalande and Joseph S. McCracken, to serve until the 2025 Annual Meeting of Stockholders.
- 2. To approve, on a non-binding, advisory basis, the compensation of our named executive officers, as disclosed in the proxy statement accompanying this notice.
- 3. To approve the amended Lumos Pharma, Inc. 2010 Employee Stock Purchase Plan.
- 4. To ratify the selection by the Audit Committee of the Board of Directors of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2022.
- 5. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the proxy statement accompanying this notice.

You will be able to participate in the Annual Meeting, vote your shares electronically and submit your questions during the live webcast by entering your 16-digit control number found on the voting form provided. Voting at www.proxyvote.com will ensure your representation at the Annual Meeting regardless of whether you participate in our live webcast.

The record date for the Annual Meeting is March 7, 2022. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof. All stockholders of the Company are invited to attend the Annual Meeting via live webcast. Under Delaware law, attendance at the annual meeting via live webcast is deemed "present in person." Whether or not you expect to attend the Annual Meeting in person via live webcast, please vote your shares as promptly as possible to ensure your representation at the Annual Meeting.

Pursuant to the internet proxy rules promulgated by the Securities and Exchange Commission, the Company has elected to provide access to its proxy materials for certain stockholders over the internet. Stockholders of record at the close of business on March 7, 2022 will receive a Notice of Internet Availability of Proxy Materials and may vote at the Annual Meeting and any adjournment or postponement thereof. The Company expects to mail the Notice of Internet Availability of Proxy Materials on or about March 25, 2022.

By Order of the Board of Directors

<u>/s/ Lori Lawley</u>

Lori Lawley Chief Financial Officer

Austin, Texas March 23, 2022 Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on May 4, 2022:

You are cordially invited to attend the meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the proxy mailed to you, or vote over the telephone or the internet as instructed in these materials, as promptly as possible so that your shares may be voted in accordance with your wishes and in order that the presence of a quorum may be assured. Even if you have voted by proxy, you may still vote in person if you attend the meeting via live webcast. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder. Your vote is important.

You may vote by proxy by completing and mailing the proxy card mailed to you. If you submit a proxy card, we will vote your shares as you direct. If you submit a proxy card without giving specific voting instructions for a particular proposal or nominee, those shares will be voted as recommended by our Board of Directors with respect to such proposal or nominee.

You may also vote by proxy via the Internet by going to the website *www.proxyvote.com*, and following the instructions provided there, or by telephone, by calling the following number: 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the control number found on the proxy card. Your proxy card, Internet or telephone vote must be received by 11:59 p.m., Eastern Time, on May 3, 2022, to be counted.

If your shares are held by a broker, bank, or other agent, you are considered the beneficial owner of those shares, and your shares are held in "street name." If you hold your shares in "street name" you will receive instructions from your broker, bank or other agent describing how to vote your shares. If you hold shares in "street name" and do not receive instructions on how to vote your shares, you should contact your broker, bank or other agent promptly and request this information.

Even if you have voted by proxy via one of the procedures listed above, you may still vote in person if you attend the Annual Meeting via live webcast. Please note, however, that if your shares are held of record by a broker, bank or other agent and you wish to vote at the Annual Meeting, you must obtain a proxy issued in your name from that record holder.

The Notice also provides instructions on how to inform us whether to send future proxy materials to you electronically by e-mail or in printed form by mail. If you choose to receive future proxy materials by e-mail, you will receive an e-mail next year with instructions containing a link to those materials and a link to the proxy voting site. Your election to receive proxy materials by e-mail or printed form will remain in effect until you terminate or change it.

Choosing to receive future proxy materials by e-mail allows us to provide you with the information you need in a more timely manner, saves us the cost of printing and mailing documents to you, and conserves natural resources.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by Lumos Pharma, Inc. in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

LUMOS PHARMA, INC.

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LUMOS PHARMA, INC. 4200 Marathon Boulevard #200 Austin, Texas 78756

PROXY STATEMENT FOR THE 2022 ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON MAY 4, 2022

Lumos Pharma, Inc., sometimes referred to as the Company, Lumos, we, us or our, is furnishing this proxy statement, or Proxy Statement, to holders of our common stock. Proxies are being solicited on behalf of the Board of Directors of Lumos, which we refer to as our Board, to be used at Lumos' 2022 Annual Meeting of Stockholders, or Annual Meeting, to be held via live webcast at www.virtualshareholdermeeting.com/LUMO2022 on May 4, 2022 at 11:00 a.m., Central Time. You will be able to participate in the Annual Meeting, vote your shares electronically and submit your questions during the live webcast by entering your 16-digit control number found on the voting form provided. Proxies also may be voted at any adjournments or postponements of the Annual Meeting. The information provided in the "question and answer" format below is for your convenience only and is merely a summary of the information contained in this proxy statement. You should read this entire proxy statement carefully.

Our principal executive offices are located at 4200 Marathon Boulevard #200, Austin, Texas 78756.

QUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why did I receive a notice regarding the availability of proxy materials on the internet?

Pursuant to rules adopted by the Securities and Exchange Commission, or the SEC, we have elected to provide access to our proxy materials over the internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials, which we refer to as the Notice, because our Board is soliciting your proxy to vote at the Annual Meeting, including at any adjournments or postponements of the meeting. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or to request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the internet or to request a printed copy of the proxy materials are contained in the Notice.

We intend to mail the Notice to all stockholders of record entitled to vote at the Annual Meeting on or about March 22, 2022. In addition, stockholders may request to receive future proxy materials in printed form by mail or electronically by e-mail. A stockholder's election to receive proxy materials by mail or e-mail will remain in effect until the stockholder terminates it.

How do I attend the Annual Meeting?

The Annual Meeting will be held via live webcast at www.virtualshareholdermeeting.com/LUMO2022 on Wednesday, May 4, 2022 at 11:00 a.m., Central Time. You will be able to participate in the Annual Meeting, vote your shares electronically and submit your questions during the live webcast by entering your 16-digit control number found on the Notice. Information on how to vote at the Annual Meeting is discussed below.

Who can vote at the Annual Meeting?

Only stockholders of record as of the Record Date will be entitled to vote at the Annual Meeting. On the Record Date, there were 8,358,625 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on March 7, 2022 your shares were registered directly in your name with our transfer agent, Computershare Shareowner Services LLC, then you are a stockholder of record. As a stockholder of record, you may vote at the Annual Meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to vote by proxy over the telephone or on the internet as instructed below, or to fill out and return a proxy card that you may request or that we may elect to deliver at a later time, to ensure your vote is counted.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on March 7, 2022 your shares were held, not in your name, but rather in an account at a brokerage firm, bank, dealer or other similar organization, then you are the beneficial owner of shares held in "street name" and the Notice is being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker or other agent regarding how to vote the shares in your account in accordance with the instructions you have received from your brokerage firm, bank, dealer or other similar organization. You are also invited to attend the meeting via live webcast. However, since you are not the stockholder of record, you may not vote your shares at the Annual Meeting unless you request and obtain a valid proxy from your broker or other agent.

What am I voting on?

There are four matters scheduled for a vote:

- 1. Election of the Board of Directors' nominees for director, An van Es-Johansson, Kevin Lalande and Joseph S. McCracken, to serve until the 2025 Annual Meeting of Stockholders;
- 2. Advisory approval of the compensation of our named executive officers, as disclosed in this proxy statement in accordance with SEC rules;
- 3. To approve the amended Lumos Pharma, Inc. 2010 Employee Stock Purchase Plan; and
- 4. Ratification of the selection, by the Audit Committee of our Board, of KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022.

What if another matter is properly brought before the meeting?

We know of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

With respect to Proposal No. 1 (Election of Directors), you may either vote "For" all the nominees to our Board or you may "Withhold" your vote for any nominee you specify. For each of the other matters to be voted on, you may vote "For" or "Against" or abstain from voting.

The procedures for voting are:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote at the Annual Meeting, vote by proxy over the telephone, vote by proxy through the internet, or vote by proxy using a proxy card that you may request or that we may elect to deliver at a later time. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure that your vote is counted. You may still attend the meeting and vote even if you have already voted by proxy.

- To vote at the Annual Meeting, visit the following website: www.virtualshareholdermeeting.com/LUMO2022. You will be able to participate in the
 Annual Meeting, vote your shares electronically and submit your questions during the live webcast by entering your 16-digit control number found on the
 voting form provided.
- To vote using a proxy card, simply complete, sign and date the proxy card that may be delivered to you and return it promptly in the envelope provided. If you return your signed proxy card to us before the meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the company number and control number from the Notice.
- To vote through the internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the control number from the Notice.

Your proxy, telephone or internet vote must be received by 11:59 p.m., Eastern Time, on May 3, 2022 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank, or other agent, you should have received a Notice containing voting instructions from that organization rather than from us. Simply follow the voting instructions in the Notice to ensure that your vote is counted. To vote in person at the Annual Meeting via live webcast, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker or bank included with these proxy materials, or contact your broker or bank to request a proxy form.

Internet proxy voting may be provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of March 7, 2022. Common stock is the only class of voting securities currently outstanding and entitled to vote.

What happens if I do not vote?

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record and do not vote (1) by completing and returning your proxy card, (2) by telephone, (3) through the internet or (4) in person at the Annual Meeting via live webcast, your shares will not be voted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the New York Stock Exchange (NYSE) deems the particular proposal to be a "routine" matter. Brokers and nominees can use their discretion to vote "uninstructed" shares with respect to matters that are considered to be "routine," but not with respect to "non-routine" matters. Under the rules and interpretations of the New York Stock Exchange, "non-routine" matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation (including any advisory stockholder votes on executive compensation and on the frequency of stockholder votes on executive compensation), and certain corporate governance proposals, even if management-supported. These rules apply to brokers holding our shares even though our common stock is traded on the NASDAQ Global Market. Accordingly, your broker or nominee may not vote your shares on Proposal No. 1 (Election of Directors), Proposal No. 2 (Advisory Vote on Compensation of Our Named Executive Officers) or Proposal No. 3 (Employee Stock Purchase Plan) but may vote your shares on Proposal No. 4 (Ratification of Selection of KPMG LLP as Our Independent Registered Public Accounting Firm) even in the absence of your instruction.

What if I return a proxy card or otherwise vote but do not make specific choices?

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable, "For" the election of the nominees for director, "For" the advisory approval of executive compensation, "For" the adoption of the amended Lumos Pharma, Inc. 2010 Employee Stock Purchase Plan, and "For" ratification of the selection, by the Audit Committee of our Board, of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2022. If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. For example, you may own some shares directly as a stockholder of record and other shares through a broker, or you may own shares through more than one broker. Please follow the voting instructions on each Notice to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the Annual Meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date;
- You may grant a subsequent proxy by telephone or through the internet;
- You may send a timely written notice that you are revoking your proxy to the Company's Secretary at 4200 Marathon Boulevard #200, Austin, TX 78756; or
- You may attend the Annual Meeting and vote in person via live webcast (simply attending the meeting will not, by itself, revoke your proxy).

Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker or bank as a nominee or agent, you should follow the instructions provided by your broker or bank.

When are stockholder proposals due for next year's annual meeting?

To be considered for inclusion in next year's proxy materials, your proposal must be submitted in writing and received by November 18, 2022 to Corporate Secretary, Lumos Pharma, Inc., 4200 Marathon Boulevard #200, Austin, TX 78756. If you wish to submit a director nomination or a proposal at next year's annual meeting that is not to be included in next year's proxy materials, you must do so by no later than the close of business on February 3, 2023, nor earlier than the close of business on January 4, 2023, and you must comply with the requirements of Section 5(b) in our Bylaws, including submitting written notice to our Corporate Secretary as set forth above. However, if the date of next year's annual meeting is more than 30 days before or more than 30 days after May 4, 2023, then we must receive your notice no earlier than the close of business on the one hundred twentieth (120th) day prior to such meeting and no later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. You are also advised to review our bylaws, which contain additional requirements regarding advance notice of stockholder proposals and director nominations.

What happens if I do not provide instructions on how to vote or if other matters are presented for determination at the Annual Meeting?

If you are a stockholder of record and return your proxy card without instructions, the persons named as proxy holders on the proxy card will vote in accordance with the recommendations of the Board of Directors.

If you are a beneficial owner as noted above you generally cannot vote your shares directly and must instead instruct your broker, trustee, bank or nominee how to vote your shares using the voting instructions form provided by that intermediary. If you do not provide voting instructions, whether your shares can be voted by your broker, bank or nominee depends on the type of item being considered.

- Non-Discretionary Items. If you do not provide voting instructions for any of the non-discretionary items at the Annual Meeting, your broker, bank or
 nominee cannot vote your shares, resulting in a "broker non-vote." All items of business other than Proposal No. 4 (Ratification of Selection of KPMG
 LLP as Our Independent Registered Public Accounting Firm) are non-discretionary items. Shares constituting broker non-votes will be counted as present
 for the purpose of determining a quorum at the Annual Meeting, but generally are not counted or deemed to be present in person or by proxy for the
 purpose of voting on any of the non-discretionary items.
- **Discretionary Items.** Even if you do not provide voting instructions, your broker, bank or nominee may vote in its discretion on Proposal No. 4 (Ratification of Selection of KPMG LLP as Our Independent Registered Public Accounting Firm) because it is a discretionary item.

What items are being voted upon, how does the Board recommend that you vote, and what are the standards for determining whether an item has been approved?

Proposal Number	Proposal Description	Board Recommendation	Vote Required for Approval	Effect of Abstentions	Effect of Broker Non-Vote
1	Election of Directors	FOR each director nominee	Nominees receiving the most "For" votes	No effect	None
2	Advisory Vote on Compensation of Our Named Executive Officers	FOR	"For" votes from a majority of the votes cast	Against	None
3	Amended Lumos Pharma, Inc. 2010 Employee Stock Purchase Plan	FOR	"For" votes from a majority of the votes cast	Against	None
4	Ratification of Selection of KPMG LLP as Our Independent Registered Public Accounting Firm	FOR	"For" votes from a majority of the votes cast	Against	Not applicable

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding a majority of the outstanding shares entitled to vote are present in person via live webcast or represented by proxy. On the Record Date, there were 8,358,625 shares outstanding and entitled to vote. Thus, the holders of 4,179,313 shares must be present at the meeting or represented by proxy at the meeting to have a quorum.

Your shares will be counted toward the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you vote in person via live webcast at the meeting. Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present at the meeting in person or represented by proxy may adjourn the meeting to another date.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

Note Regarding Our Merger with NewLink Genetics

On March 18, 2020, the Company, formerly known as NewLink Genetics Corporation, merged Cyclone Merger Sub, Inc., its wholly-owned subsidiary, with what was then known as Lumos Pharma, Inc. and has since been renamed "Lumos Pharma Sub, Inc." ("Private Lumos"), and changed our name from "NewLink Genetics Corporation" to "Lumos Pharma, Inc." (the "Merger"). Unless otherwise indicated, references to the "Company," "Lumos," "we," "us" or "our" refer to Lumos Pharma, Inc., formerly known as NewLink Genetics Corporation. References to "NewLink" refer to NewLink Genetics Corporation prior to the Merger.

Also on March 18, 2020, and prior to the effective time of the Merger (the "Effective Time"), the Company effected a 1-for-9 reverse stock split of its common stock (the "Reverse Stock Split"). Unless otherwise noted herein, all references to share amounts give effect to the Reverse Stock Split. Following the completion of the Merger, the business being conducted by the Company became primarily the business conducted by Private Lumos, which is a biopharmaceutical company focused on the identification, acquisition, in-license, development, and commercialization of novel products for the treatment of rare diseases. Our current pipeline is focused on the development of an orally administered small molecule, the growth hormone secretagogue ibutamoren, for rare endocrine disorders.

As part of the Merger, we also assumed 26,248 stock options issued and outstanding under the Lumos 2012 Equity Incentive Plan (as amended, the "Lumos 2012 EIP"), with a weighted-average exercise price of \$1.39 per share and 163,864 stock options issued and outstanding under the Lumos 2016 Stock Plan (the "Lumos 2016 Plan," and together with the Lumos 2012 EIP, the "Lumos Plans"), with a weighted-average exercise price of \$3.66 per share. From and after the Effective Time, such options may be exercised for shares of our common stock.

Compensation information included herein for periods prior to the Merger is based on information from the accounting records of NewLink, except where noted with respect to information that reflects compensation paid by Private Lumos prior to the Merger.

PROPOSAL 1

ELECTION OF DIRECTORS

Our Board is divided into three classes. Each class consists, as nearly as possible, of one-third of the total number of directors, and each class has a threeyear term. Vacancies on our Board may be filled only by persons elected by a majority of the remaining directors. A director elected by our Board to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director's successor is duly elected and qualified.

Our Board presently has seven members. There are three directors in the class whose term of office expires in 2022, each of whom has been nominated for reelection. An van Es-Johansson currently serves on our Board and was appointed in 2021. Kevin Lalande has served on our Board since the Merger and served on the Board of Directors of Private Lumos (the "Private Lumos Board") from 2014 through the Merger. Joseph S. McCracken currently serves on our Board and has served since being appointed in 2020. If elected at the Annual Meeting, each nominee would serve until the 2025 Annual Meeting of Stockholders and until his or her successor has been duly elected and qualified, or, if sooner, until the director's death, resignation or removal.

Directors are elected by a plurality of the votes of the holders of shares present in person at the Annual Meeting or represented by proxy and entitled to vote on the election of directors. If a choice is specified on the proxy card by a stockholder, their shares will be voted as specified. If a choice is not specified on the proxy card, and authority to do so is not withheld, the shares will be voted "FOR" the election of nominees named below. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the nominees named below. If any nominee becomes unavailable for election as a result of an unexpected occurrence, shares that would have been voted for that nominee will instead be voted for the election of a substitute nominee proposed by us. Each person nominated for election has agreed to serve if elected. Our management has no reason to believe that any nominee will be unable to serve.

Class I Director Nominees

Below is a brief biography of each nominee and each director whose term will continue after the Annual Meeting, including the ages of each nominee and director as of April 1, 2022. Each individual listed below is nominated for election for a three-year term expiring at the 2025 Annual Meeting.

Name of Nominee	Age	Position Held with <u>Company</u>	Committees	Director <u>Since</u>
An van Es-Johansson	62	Director	Nominating and Corporate Governance Committee	2021
Kevin Lalande	49	Director	Compensation Committee	2020
Joseph S. McCracken	68	Director	Audit Committee	2020

An van Es-Johansson, M.D. age 62, has served as a member of our Board since February 2021. Dr. van Es-Johansson currently serves as a senior advisor for AlzeCure Pharma, a Swedish pharmaceutical company with a primary focus on Alzheimer's disease. Dr. van Es-Johansson was previously the Chief Medical Officer and Head of Development for AlzeCare Pharma from 2018 to 2021. From 2005 to 2018, Dr. van Es-Johansson served in a range of executive roles of increasing responsibility at Sobi, an international rare disease company headquartered in Stockholm, Sweden. Dr. van Es-Johansson also served as a member of the Scientific Advisory board for Uppsala Bio from 2004 to 2016 and currently serves on the Board of Directors at Medivir AB, Savara Inc., PLUS Therapeutics and Agendia BV. Dr. van Es-Johansson received an M.D. from Erasmus University, Rotterdam, The Netherlands.

Our Board believes that Dr. van Es-Johansson's vast experience in the pharmaceutical industry with a focus on growth hormone disorders and other rare diseases provides immense value to our Board.

Kevin Lalande, age 49, has served on our Board since the Merger and served as a member of the Private Lumos Board from 2014 through the Merger. Mr. Lalande is a Co-Founder and Managing Director of Santé Ventures, a healthcare and life science venture capital firm founded in 2006 which currently manages \$380 million across three funds with 30 portfolio company investments. Mr. Lalande is also the Founder and Chief Investment Officer of Santé Capital, a systematic machine learning hedge fund that began trading capital in 2015 after three years of research and development. Mr. Lalande conceived the investment strategy, designed the original MindRank algorithms, and assembled a seasoned team to help drive this related line of business. Before Santé Ventures and Santé Capital, Mr. Lalande spent seven years as an investment professional with Austin Ventures, a prominent venture capital firm with \$4.0 billion under management. Prior to Austin Ventures, he was a management consultant with McKinsey & Company. Before McKinsey, he founded, built and sold three internet-based companies in the 1990s. Mr. Lalande received a B.S. in electrical and computer engineering with honors in 1996 from Brigham Young University and an MBA with highest distinction from the Harvard Business School in 2001, where he was both a Baker Scholar and a Siebel Scholar.

Our Board believes that Mr. Lalande's extensive experience as an investor and board member in pharmaceutical and life sciences companies and his knowledge gained from service on such boards qualify him to be a member of our Board.

Joseph S. McCracken, age 68, has served as a member of our Board since March 2020. Dr. McCracken currently advises biopharmaceutical companies on the design and implementation of corporate strategy and business development initiatives. Dr. McCracken also serves on the board of Kindred Biosciences, Inc. (NASDAQ: KIN), Savara Inc. (NASDAQ: SVRA) and Modalis Therapeutics, Inc. (TSE: 4883.T), as well as the boards of privately held Regimmune Inc., and Neuropore Therapies, Inc. From July 2011 to September 2013, Dr. McCracken was Vice President and Global Head of Business Development & Licensing for Roche Pharma, a research-focused healthcare company, where he was responsible for Roche Pharma's global in-licensing and out-licensing activities. From October 2009 until July 2011, he was General Manager, Roche Pharma Japan & Asia Regional Head, Roche Partnering. Prior to joining Roche Pharma, Dr. McCracken held the position of Vice President, Business Development at Genentech for more than nine years, and previously held similar positions at Aventis Pharma and Rhone-Poulenc Rorer. Dr. McCracken holds a B.S. in microbiology, a Master of Science in pharmacology and a Doctorate of Veterinary Medicine from The Ohio State University.

Our Board believes that Dr. McCracken's extensive experience in the biotechnology and pharmaceutical industries qualifies him to serve on our Board.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF EACH DIRECTOR NOMINEE.

Class II Directors Continuing in Office Until the 2023 Annual Meeting of Stockholders

Richard J. Hawkins, age 73, has served as Chief Executive Officer and as a member of our Board since the Merger and served as a member of the Private Lumos Board from 2011 through the Merger. In addition, Mr. Hawkins currently serves on the board of directors of several life sciences companies, including Plus Therapeutics, Inc. (Nasdaq: PSTV) and Savara Inc. (Nasdaq: SVRA), and previously served on the board of directors of SciClone Pharmaceuticals, Inc. until its acquisition in October 2017. Mr. Hawkins also served as our President from the Merger through July 2021. From 2000 to 2010, Mr. Hawkins, founded and advised numerous pharmaceutical companies including Sensus, where he served as co-founder and Chair until it was sold to Pfizer. From 1981 to 2000, Mr. Hawkins was founder, President and CEO of Pharmaco. The company later merged with PPD of Wilmington, NC to form PPD Pharmaco, one of the largest clinical contract research organizations in the world. Mr. Hawkins received his B.S. degree in biology from Ohio University.

Our Board believes that Mr. Hawkins's experience in the pharmaceutical and life sciences industries as well as his broad management experience qualify him to serve on our Board.

Thomas A. Raffin, M.D., age 75, has served as a member of the Board since 1999 and has been the Board's Lead Independent Director since October 2010. Dr. Raffin has spent 30 years on the faculty at Stanford University School of Medicine, where he is the Colleen and Robert Haas Professor Emeritus of Medicine and Biomedical Ethics. Over the past two decades, Dr. Raffin has worked extensively in the healthcare and medical device business sectors and was an advisor to Cell Therapeutics Inc. from 1993 to 1997, Broncus Technologies from 1997 to 2004, iMedica from 1998 to 2002, and Inhale Technologies from 1998 to 2001. He co-founded Rigel Pharmaceuticals, a publicly traded company (Nasdaq: RIGL), in 1996. In 2001, he co-founded Telegraph Hill Partners, a San Francisco life sciences private equity firm as a General Partner. Dr. Raffin has been a director of the following Telegraph Hill Partners private portfolio companies: AngioScore, Inc., Confirma, Inc., Freedom Innovations, LDR Holding Corporation, PneumRx, Inc., Akoya BioSciences, Inc. and InvisALERT Solutions. Dr. Raffin received a B.A. from Stanford University and an M.D. from Stanford University School of Medicine and did his medical residency at the Peter Bent Brigham Hospital (now Brigham and Women's Hospital) in Boston, MA.

Our Board believes that Dr. Raffin's extensive medical and business background and experience provides important experience in business operations and medical technology and provides the background necessary for him to serve as a member of our Board and our Nominating and Corporate Governance Committee, and as the Chair of our Compensation Committee.

Class III Directors Continuing in Office Until the 2024 Annual Meeting of Stockholders

Chad A. Johnson, J.D., age 43, has served as a member of the Board since March 2018. Mr. Johnson is currently General Counsel at Stine Seed Company. From May 2015 to April 2017, Mr. Johnson was the Assistant Corporate Secretary and Senior Corporate Counsel for Renewable Energy Group, Inc., a supplier of advanced biofuels in North America. In addition to his role as a corporate officer, Mr. Johnson was a senior in-house attorney for the company. From 2007 to April 2015, he spent eight years in roles of increasing responsibility at DuPont Pioneer, a subsidiary of DuPont and a global leading seed and agriculture biotechnology company. Mr. Johnson is admitted to practice law in the State of Iowa and before the United States Patent and Trademark Office. Mr. Johnson graduated from Iowa State University with a Master of Science in Crop Production and Physiology and received his J.D. from Drake University Law School.

Our Board believes that Mr. Johnson's career at major biotechnology companies, service as a public company officer and experience overseeing various legal matters provide him with the background necessary for him to serve as a member of our Board, our Compensation Committee and our Nominating and Corporate Governance Committee.

Lota S. Zoth, CPA, age 62, has served as a member of the Board and Chair of the Audit Committee since November 2012. Ms. Zoth currently serves on the Board of Directors of Spark Therapeutics, Inc. (Nasdaq: ONCE), 89Bio, Inc., Zymeworks, Inc. and Inovio Pharmaceuticals, Inc. She also previously served on the Board of Directors for nonprofit Aeras from 2011 to 2018, Circassia Pharmaceuticals, PLC from 2015 to 2019, Hyperion Therapeutics, Inc. from 2008 to May 2015, Ikaria, Inc. from 2008 to 2014, Orexigen Therapeutics, Inc. from 2012 to 2019 and Spark Therapeutics, Inc. from 2018 to 2019. Prior to her board service, Ms. Zoth served as Chief Financial Officer of MedImmune, Inc. from 2004 through 2007, and as its Corporate Controller from 2002 to 2004. Prior to that, Ms. Zoth was a financial executive at several companies, including Sodexho Marriott Services, Inc., PSINet Inc., Marriott International, Inc. and PepsiCo, Inc. Ms. Zoth began her career as an auditor at Ernst & Young, LLP. Ms. Zoth received a BBA in accounting, summa cum laude, from Texas Tech University.

Our Board believes that Ms. Zoth's experience with us, as a director since 2012 and as the current chair of our Audit Committee of our Board and a member of our Compensation Committee of our Board, brings continuity to our Board. In addition, our Nominating and Corporate Governance Committee believes that Ms. Zoth's extensive financial background and experience provides important experience in corporate finance, corporate management, and investor relations and provides the background necessary for her to serve as a member of our Audit Committee and our Compensation Committee.

INFORMATION REGARDING OUR BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Independence of our Board of Directors

In determining independence, our Board considers the definition of "independent" set forth in the listing standards of the NASDAQ Stock Market, or NASDAQ, as well as other factors that contribute to effective oversight and decision-making by our Board. Our independence standards are set forth in our Corporate Governance Guidelines on our website at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section. As required under the NASDAQ listing standards, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by our Board. Our Board consults with our counsel to ensure that our Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of NASDAQ, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members and our Company, its senior management and its independent auditors, our Board has affirmatively determined that the following directors are independent directors within the meaning of the applicable NASDAQ listing standards: Dr. van Es-Johansson, Mr. Johnson, Mr. Lalande, Dr. McCracken, Dr. Raffin and Ms. Zoth. In making its independence assessments, our Board found that none of these directors or nominees for director had a material or other disqualifying relationship with our Company.

Mr. Hawkins is not an independent director by virtue of his employment with our Company.

There are no family relationships among any of our directors, director nominees and executive officers.

Board Leadership

Our Board is currently chaired by our Chief Executive Officer, Mr. Hawkins. Our Board has appointed Dr. Raffin as Lead Independent Director.

We believe that combining the positions of Chief Executive Officer and Chair of our Board, which we refer to as the Chair, helps to ensure that our Board and management act with a common purpose. We believe combining the positions of Chief Executive Officer and Chair is appropriate for a biopharmaceutical company focused on drug development in that it enhances our Board's focus on our progress on scientific research, clinical trials and commercialization as inputs to developing and implementing strategy. We believe that combining the positions of Chief Executive Officer and Chair provides a single, clear chain of command to execute our strategic initiatives and business plans related to drug development and commercialization. In addition, we believe that a combined Chief Executive Officer and Chair is well-positioned to act as a bridge between management and our Board, facilitating the regular flow of information. We also believe that it is advantageous to have a Chair with an extensive history with and knowledge of our Company (as is the case with our Chief Executive Officer) as compared to a relatively less informed independent Chair at this stage in our development.

Our Board appointed Dr. Raffin as the Lead Independent Director to help reinforce the independence of our Board as a whole. The position of Lead Independent Director has been structured to serve as an effective balance to a combined Chief Executive Officer and Chair. The Lead Independent Director is empowered, among other duties and responsibilities, to develop, together with the Chief Executive Officer, the agenda for meetings of our Board, to develop, together with committee chairs, the agendas for meetings of committees, to preside over Board meetings in the absence of the officers and to oversee our Board's annual evaluation of the Chief Executive Officer's performance.

Role of Our Board of Directors on Risk Oversight

One of our Board's key functions is informed oversight of our risk management process. Our Board does not have a standing risk management committee, but rather administers this oversight function directly through our Board as a whole, as well as through various Board standing committees that address risks inherent in their respective areas of oversight. In particular, while our Board is responsible for monitoring and assessing strategic risk exposure, our Audit Committee has the responsibility to consider and discuss the major financial risk exposures and the steps management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. Our Audit Committee also monitors compliance with legal and regulatory requirements with respect to SEC regulations, NASDAQ listing standards, pharmaceutical industry regulations and corporate risk management, in addition to oversight of the performance of our accounting and financial reporting processes. Our Nominating and Corporate Governance Committee monitors the effectiveness of the corporate governance guidelines, including whether they are successful in preventing illegal or improper liability-creating conduct. Our Compensation Committee assesses and monitors whether any compensation policies and programs have the potential to encourage excessive risk-taking. The entire Board and its committees address risk management issues from time-to-time and meet at least annually with the employees responsible for risk management is a whole and the various standing committees receive periodic reports from the employees responsible for risk management, as well as incidental reports as matters may arise. It is the responsibility of the committee chairs to report findings regarding material risk exposures to our Board as quickly as possible.

Meeting Attendance

Our Board met five times during the fiscal year ended December 31, 2021. Our Audit Committee met four times during the 2021 fiscal year, our Compensation Committee met six times during the 2021 fiscal year, and our Nominating and Corporate Governance Committee met five times during the 2021 fiscal year. None of our incumbent directors attended fewer than 75% of the meetings of the Board and committee meetings of which he or she was a member.

It is our policy to encourage directors and nominees for director to attend the Annual Meeting. Each of our directors attended our virtual 2021 Annual Meeting of Stockholders.

Committees of our Board of Directors

The following table sets forth the current membership of each of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee:

Name	Audit	Compensation	Nominating and Corporate Governance
An van Es-Johansson, M.D.			Х
Chad A. Johnson	Х		Chair
Kevin Lalande		Х	
Joseph McCracken	Х		
Thomas A. Raffin, M.D.		Chair	Х
Lota S. Zoth	Chair	Х	

Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. Our Board has determined that, except as specifically described below, each current member of each committee meets the applicable NASDAQ rules and regulations regarding "independence" and that each member is free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Below is a description of each committee of our Board.

Board Diversity

We value diverse perspectives and believe different points of view brought through diverse representation lead to better business performance, decision making and understanding. Our Board takes a multi-dimensional approach to diversity. In addition to industry expertise and professional experience, our Board values representation that reflects diversity in other important categories including gender, race/ethnicity and sexual orientation.

The matrix below summarizes our current board composition:

Board Diversity Matrix (As of March 18, 2022)				
Board Size:				
Total Number of Directors	7			
Gender	Male	Female		
Number of directors based on gender identity	5	2		
Number of directors who identify in any of the categories below:				
White	5	2		
LGBTQ+	1	—		

Audit Committee

Our Audit Committee was established by our Board in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, to oversee our corporate accounting and financial reporting processes and audits of our financial statements. For this purpose, our Audit Committee performs several functions. Our Audit Committee evaluates the performance of and assesses the qualifications of the independent auditors; determines and approves the engagement of the independent auditors; determines whether to retain or terminate the existing independent auditors or to appoint and engage new independent auditors; reviews and approves the retention of the independent auditors to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent auditors on our audit engagement team as required by law; confers with management and the independent auditors regarding the effectiveness of internal controls over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting or auditing matters, oversees corporate risk management of the company as a whole; and meets to review our annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of our disclosures in our Annual Report on Form 10-K under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Our Audit Committee is currently comprised of three directors: Ms. Zoth, Mr. Johnson and Dr. McCracken. Our Board has adopted a written Audit Committee charter that is available to stockholders on our website at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section.

Our Board reviews the NASDAQ listing standards definition of independence for Audit Committee members on an annual basis and has determined that each current member of our Audit Committee meets the independence requirement (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the NASDAQ listing standards).

Our Board has also determined that Ms. Zoth qualifies as an "audit committee financial expert," as defined in applicable SEC rules. Our Board made a qualitative assessment of Ms. Zoth's level of knowledge and experience based on a number of factors, including her formal education and her years of experience.

Compensation Committee

The Compensation Committee of our Board is currently comprised of three directors: Dr. Raffin, Mr. Lalande, and Ms. Zoth. All current members of our Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2) of the NASDAQ listing standards). Additionally, all current members of our Compensation Committee are non-employee directors under Rule 16b-3 of the Exchange Act. Our Board has adopted a written Compensation Committee charter that is available to stockholders on our website at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section.

The purpose of our Compensation Committee is to discharge the responsibilities of our Board to oversee our compensation policies, plans and programs and to review and determine the compensation to be paid to our directors, executive officers and other senior management. The scope of authority and specific responsibilities of our Compensation Committee include:

- determining the compensation and other terms of employment of our executive officers and reviewing and approving corporate performance goals and objectives relevant to such compensation;
- evaluating and recommending to our Board the compensation plans and programs advisable for the Company, and evaluating and recommending the modification or termination of existing plans and programs;
- reviewing and approving the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- selecting, retaining and terminating compensation consultants to assist in its evaluation of executive and director compensation, including the sole authority to approve the consultant's reasonable fees and other retention terms; and
- reviewing and recommending to our Board the type and amount of compensation to be paid or awarded to members of our Board.

For fiscal year 2021, our Compensation Committee retained Setren & Associates, Inc. ("Setren & Associates"), as its independent compensation consultant to advise on various aspects of executive compensation and our overall equity practices. Setren & Associates was retained by and reported directly to our Compensation Committee. Setren & Associates did not provide any other consulting services to our Company.

Annually, our Compensation Committee has considered the following six factors, as set forth by the SEC and NASDAQ, when engaging Setren & Associates and evaluating its independence: (i) the provision of other services to our Company by Setren & Associates; (ii) the amount of fees from our Company paid to Setren & Associates as a percentage of Setren & Associates' total revenue; (iii) Setren & Associates' policies and procedures that are designed to prevent conflicts of interest; (iv) any business or personal relationship of Setren & Associates with an executive officer of our Company; (v) any business or personal relationship of the individual compensation advisor with any member of our Compensation Committee; and (vi) any stock of our Company owned by Setren & Associates. Based on its review, our Compensation Committee has determined that the work of Setren & Associates has not raised any conflict of interest that would adversely affect Setren & Associates' independence.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee of our Board is responsible for overseeing our corporate governance functions on behalf of our Board, making recommendations to our Board regarding corporate governance issues, identifying, reviewing and evaluating candidates to serve as directors of the Company consistent with criteria approved by our Board, reviewing and evaluating incumbent directors, recommending to our Board for selection candidates for election to our Board and making other recommendations to our Board regarding affairs relating to the directors of the Company, including director compensation.

Our Nominating and Corporate Governance Committee is currently comprised of three directors: Mr. Johnson, Dr. van Es-Johansson and Dr. Raffin. All current members of our Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the NASDAQ listing standards). Our Board has adopted a written Nominating and Corporate Governance Committee charter that is available to stockholders on our website at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section.

Our Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being over 21 years of age and having the highest personal integrity and ethics. Our Nominating and Corporate Governance Committee also considers whether the candidate possesses the following factors among others: relevant expertise upon which to base advice and guidance to management, sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, the ability to exercise sound business judgment and the commitment to rigorously represent the long-term interests of our stockholders. Candidates for director nominees are reviewed in the context of the current composition of our Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, our Nominating and Corporate Governance Committee typically considers diversity, age, skills and such other factors as it deems appropriate given the current needs of our Board and the Company to maintain a balance of knowledge, experience and capability. Our Nominating and Corporate Governance Committee does not have a policy regarding how it considers diversity in selecting candidates.

In the case of incumbent directors whose terms of office are set to expire, our Nominating and Corporate Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any relationships and transactions that might impair the directors' independence. Our Nominating and Corporate Governance Committee also takes into account the results of our Board's self-evaluation, conducted annually on a group and individual basis. In the case of new director candidates, our Nominating and Corporate Governance Committee also determines whether the nominee is independent for NASDAQ purposes, which determination is based upon applicable NASDAQ listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. Our Nominating and Corporate Governance Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. Our Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of our Board. Our Nominating and Corporate Governance Committee meets to discuss and consider the candidates' qualifications and then selects a nominee for recommendation to our Board by majority vote.

In identifying potential candidates for Board membership, our Nominating and Corporate Governance Committee relies on suggestions and recommendations from our Board, stockholders, management and others. Our Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. Our Nominating and Corporate Governance committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above based on whether or not the candidate was recommended by a stockholder.

Code of Business Conduct and Ethics

The Company has adopted its Code of Business Conduct and Ethics that applies to all officers, directors and employees. The Code of Business Conduct and Ethics is available on our website at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section. Any future amendments or waivers to our code of ethics will be promptly disclosed on our website and as required by applicable laws, rules and regulations of the SEC and NASDAQ.

Corporate Governance Guidelines

Our Board adopted Corporate Governance Guidelines to assure that our Board will have the necessary authority and practices in place to review and evaluate our business operations as needed and to make decisions that are independent of our management. The guidelines are also intended to align the interests of directors and management with those of our stockholders. The Corporate Governance Guidelines set forth the practices our Board intends to follow with respect to board composition and selection, board meetings and involvement of senior management, Chief Executive Officer performance evaluation and succession planning and board committees and compensation. The Corporate Governance Guidelines, as well as the charters for each committee of our Board, may be viewed at *www.lumos-pharma.com* in the "Investors & Media - Corporate Governance" section.

Executive Sessions of Independent Directors

To encourage and enhance communication among independent directors, and as required under applicable Nasdaq rules, our Corporate Governance Guidelines provide that the independent directors meet in executive sessions without management directors or management present on a periodic basis, no less than four times per year. These executive sessions are chaired by Dr. Raffin as Lead Independent Director.

PROPOSAL 2

ADVISORY VOTE ON COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

At the 2018 Annual Meeting of Stockholders, our stockholders indicated their preference that the Company solicit a non-binding advisory vote on the compensation of the named executive officers, commonly referred to as a "say-on-pay vote," every year. Our Board has adopted a policy that is consistent with that preference.

This vote is being provided pursuant to section 14A of the Exchange Act. It is not intended to address any specific item of compensation, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this proxy statement. The compensation of our named executive officers subject to the vote is disclosed in the compensation tables and the related narrative disclosure contained in this proxy statement. As discussed in those disclosures, the Company believes that its compensation policies and decisions are consistent with our strategic compensation and retention needs. Further, our compensation policies and decisions are designed to align our executive officers' compensation with our business objectives and the interests of its stockholders, to incentivize and reward our executive officers for our success and to promote teamwork within our executive management team. Compensation of our named executive officers is designed to enable the Company to attract and retain talented and experienced executives to lead the Company successfully in a competitive environment.

Accordingly, our Board is asking the stockholders to indicate their support for the compensation of our named executive officers as described in this proxy statement by casting a non-binding advisory vote "FOR" the following resolution:

"RESOLVED, that the compensation paid to our named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including the compensation tables and narrative discussion, is hereby APPROVED."

Because the vote is advisory, it is not binding on our Board or our Company. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and our Board and, accordingly, our Board and our Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

Advisory approval of this proposal requires the vote of the holders of a majority of the shares present in person at the Annual Meeting or represented by proxy and entitled to vote on the matter at the Annual Meeting. Abstentions will be counted toward the tabulation of votes on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted toward a quorum but are not counted for any purpose in determining whether this matter has been approved.

Unless our Board decides to modify its policy regarding the frequency of soliciting advisory votes on the compensation of our named executive officers, the next scheduled say-on-pay vote will be at the 2023 Annual Meeting of Stockholders.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 2.

PROPOSAL 3

APPROVAL OF AN AMENDMENT TO THE 2010 EMPLOYEE STOCK PURCHASE PLAN

We are asking stockholders to approve an amendment to our 2010 Employee Stock Purchase Plan (the "ESPP") to increase the number of shares made available for issuance under the ESPP by 60,000 so that we may continue to use the ESPP to assist us in recruiting, retaining and motivating qualified employees. Our ESPP allows eligible employees to purchase shares of our common stock ("Shares") at a price equal to 85% of the lower of the closing price of our common stock on the NASDAQ Global Market on either the opening or closing date of the respective offering period.

The Board of Directors has approved the amendment to the ESPP, subject to the approval of our stockholders at the 2022 Annual Meeting. The ESPP last was approved by our stockholders at the 2013 Annual Meeting and has not been amended in any material way since the 2013 Annual Meeting.

As of March 18, 2022, no Shares remain available for issuance under the ESPP. Assuming approval of the amendment to the ESPP at the 2022 Annual Meeting, the total number of Shares available to be issued under the ESPP would be 60,000 Shares. Approval of additional shares is needed to satisfy purchase rights outstanding under the ESPP for the current offering period, which are exercisable only if stockholders approve this proposal.

Without stockholder approval of this amendment, we believe our ability to attract and retain the individuals necessary to increase long-term stockholder value will be limited. Based on recent usage, we currently expect that the increased Share reserve would meet our anticipated needs under the ESPP for a period of approximately five years.

Approval of this proposal requires the vote of the holders of a majority of the shares present in person at the Annual Meeting or represented by proxy and entitled to vote on the matter at the Annual Meeting. Abstentions will be counted toward the tabulation of votes on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted toward a quorum but are not counted for any purpose in determining whether this matter has been approved.

Description of the ESPP

The following paragraphs provide a summary of the principal features of the ESPP and its operation. However, this summary is not a complete description of all of the provision of the ESPP, and is qualified in its entirety by the specific language of the ESPP. A copy of the amendment to the ESPP is provided as an Exhibit to this Proxy Statement.

Purpose

The purpose of the ESPP is to provide our eligible employees and employees of our participating affiliates with the opportunity to purchase Shares through payroll deductions or, if payroll deductions are not permitted under local laws, through other means as specified by the Compensation Committee. The ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended ("Section 423"). **Eligibility to Participate**

Most of our employees and employees of our participating affiliates are eligible to participate in the ESPP. However, an employee is not eligible if he or she has the right to acquire five percent (5%) or more of our voting stock or of the voting stock of any of our subsidiaries. We have discretion to exclude employees who normally are scheduled to work less than or equal to twenty hours per week or five months per calendar year, have worked for us for less than two years, or are officers or other highly compensated employees, provided that the exclusion of employees in such categories is not prohibited under applicable local law. As of March 18, 2022, approximately 31 employees were eligible to participate in the ESPP.

Administration, Amendment and Termination

The Compensation Committee administers the ESPP. The members of the Compensation Committee serve at the pleasure of our Board of Directors. Subject to the terms of the ESPP, the Compensation Committee has all discretion and authority necessary or appropriate to control and manage the operation and administration of the ESPP. The Compensation Committee also may establish a waiting period (not to exceed two years) before new employees may become eligible for the ESPP. The Compensation Committee may make whatever rules, interpretations, and computations, and take any other actions to administer the ESPP that it considers appropriate to promote our best interests, and to ensure that the ESPP remains qualified under Section 423 of the Internal Revenue Code. The Compensation Committee may delegate one or more of the ministerial duties in the administration of the ESPP. All decisions of the Compensation Committee are conclusive and binding on all persons and will be given the maximum deference permitted by law.

The Board of Directors may amend or terminate the ESPP at any time and for any reason. However, as required by Section 423 of the Internal Revenue Code, certain material amendments must be approved by our stockholders.

Number of Shares of Common Stock Available under the ESPP

Currently, a maximum of 50,000 Shares have been approved for issuance pursuant to the ESPP, of which no Shares remain available to be issued in the future. If stockholders approve the amendment to the ESPP, the number of Shares that may be issued under the ESPP would be increased to a total of 60,000 Shares. In the event of any stock split, stock dividend or other change in our capital structure, appropriate adjustments will be made in the number, kind and purchase price of the Shares available for purchase under the ESPP. As of March 18, 2022, the closing price of our common stock on the NASDAQ Global Market was \$9.62 per share.

Enrollment and Contributions

Eligible employees voluntarily elect whether or not to enroll in the ESPP. Employees who join the ESPP participate during an initial offering period, with a duration determined by the Compensation Committee not to exceed twenty seven (27) months. Employees who have joined the ESPP automatically are reenrolled for additional offering periods; provided, however, that an employee may cancel his or her enrollment at any time (subject to ESPP rules).

Employees contribute to the ESPP through payroll deductions or, if payroll withholding is not permitted under local laws, through such other means as specified by the Compensation Committee. Participating employees generally may contribute up to 15% of their eligible compensation through after-tax payroll deductions. From time to time, the Compensation Committee may establish a different maximum permitted contribution percentage, change the definition of eligible compensation, or change the length of the offering periods (but in no event may such periods exceed nine months). An employee later may increase or decrease his or her contribution percentage, subject to ESPP rules.

Purchase of Shares

On the last business day of each purchase period, we use each participating employee's payroll deductions or contribution to purchase Shares for the employee. The price of the Shares purchased will be determined under a formula established in advance by the Compensation Committee. However, in no event may the purchase price be less than 85% of the lower of (1) the stock's market value on the first day of the offering period, or (2) the stock market's value on the purchase date. Market value under the ESPP means the closing price of our common stock on the NASDAQ Global Market for the day in question. In any single year, no employee may purchase more than \$25,000 of common stock (based on market value on the applicable enrollment date(s)). The Compensation Committee also has discretion to set a limit on the number of Shares that any participant may purchase on any purchase date, to set a lower (but not higher) limit on the dollar value of Shares that may be purchased, and to change the dates on which Shares are purchased.

Termination of Participation

Participation in the ESPP generally terminates when a participating employee's employment with us or one of our affiliates ceases for any reason, the employee withdraws from the ESPP, or we terminate or amend the ESPP such that the employee no longer is eligible to participate.

Number of Shares Purchased by Certain Individuals and Groups

Given that the number of Shares that may be purchased under the ESPP is determined, in part, by the stock's market value on the first and last day of the offering period and given that participation in the ESPP is voluntary on the part of employees, the actual number of Shares that may be purchased by any individual is not determinable. For illustrative purposes, the following table sets forth (a) the number of Shares that were purchased during our 2021 fiscal year under the ESPP, and (b) the average per share purchase price paid for such Shares.

Name of Individual or Identity of Group and Position	Number of Shares Purchased (#)	Weighted Average Purchase Price Per Share (\$)
John McKew, Ph.D., President and Chief Scientific Officer	109	\$8.50
All non-employee directors as a group ⁽¹⁾		\$—
All other employees (including all current officers who are not executive officers)	586	\$8.50

(1) Non-employee directors are not eligible to participate in the ESPP.

Tax Aspects

Based on management's understanding of current federal income tax laws, the tax consequences of the purchase of Shares under the ESPP are as follows.

An employee will not have taxable income when the shares of our common stock are purchased for him or her, but the employee generally will have taxable income when the employee sells or otherwise disposes of stock purchased through the ESPP.

For shares that the employee does not dispose of until more than 24 months after the applicable enrollment date and more than 12 months after the purchase date (the "holding period"), gain up to the amount of the discount (if any) from the market price of the stock on the enrollment date (or re-enrollment date) is taxed as ordinary income. Any additional gain above that amount is taxed at long-term capital gain rates. If, after the holding period, the employee sells the stock for less than the purchase price, the difference is a long-term capital loss. Shares sold within the holding period are taxed at ordinary income rates on the amount of discount received from the stock's market price on the purchase date. Any additional gain (or loss) is taxed to the stockholder as long-term or short-term capital gain (or loss). The purchase date begins the period for determining whether the gain (or loss) is short-term or long-term.

We may deduct for federal income tax purposes an amount equal to the ordinary income an employee must recognize when he or she disposes of stock purchased under the ESPP within the holding period. We may not deduct any amount for shares disposed of after the holding period.

Required Vote

Approval of the ESPP requires the affirmative vote of the holders of a majority of votes cast on the proposal. If stockholders do not approve the ESPP, the ESPP will continue under its current terms until it is terminated in accordance with the terms of the ESPP but there will not be any shares available for issuance under the ESPP.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 3.

PROPOSAL 4

RATIFICATION OF SELECTION OF KPMG LLP AS INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has selected KPMG LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022 and has further directed that management submit the selection of independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. KPMG LLP has audited our financial statements since 1999. From 2015 through the Merger, KPMG LLP audited Private Lumos' financial statements. Representatives of KPMG LLP are expected to be available at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither our Bylaws nor other governing documents or law require stockholder ratification of the selection of KPMG LLP as our independent registered public accounting firm. However, our Audit Committee is submitting the selection of KPMG LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, our Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, our Audit Committee in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of our Company and our stockholders.

The affirmative vote of the holders of a majority of the shares present at the Annual Meeting or represented by proxy and entitled to vote on the matter at the Annual Meeting will be required to ratify the selection of KPMG LLP. Abstentions will be counted toward the tabulation of votes on proposals presented to the stockholders and will have the same effect as negative votes. Broker non-votes are counted towards a quorum but are not counted for any purpose in determining whether this matter has been approved.

Principal Accountant Services and Fees

The following table presents the aggregate fees billed to the Company for the fiscal years ended December 31, 2021 and December 31, 2020, by KPMG LLP, our principal accountant. All tax fees described below were pre-approved by our Audit Committee.

	Year Ended D	ecember 31,
	2021	2020
Audit Fees ⁽¹⁾	\$373,500	\$638,500
Audit-related Fees	0	0
Tax Fees ⁽²⁾	\$127,000	\$261,517
All Other Fees	0	0
Total Fees	\$500,500	\$900,017

⁽¹⁾ Represents fees for the audit of our annual financial statements, review of our quarterly financial statements included in our Forms 10-Q, accounting consultations and the issuance of consents and comfort letters.

⁽²⁾ Consists of fees for tax services provided to the Company, including tax planning and compliance services and the review of certain tax returns.

Prior to the completion of the Merger, KPMG LLP served as the independent registered accounting firm of Private Lumos, including for the period from January 1, 2020 through the completion of the Merger on March 18, 2020. The following table presents the aggregate fees billed by KPMG LLP to Private Lumos during such period:

	January 1, 2020 through March 18, 2020
Audit Fees ⁽¹⁾	\$120,000
Audit-related Fees	0
Tax Fees	0
All Other Fees	0
Total Fees	\$120,000

⁽¹⁾ Represents fees for the audit of Private Lumos' annual financial statements, review of Private Lumos' quarterly financial statements, accounting consultations and the issuance of consents and comfort letters.

Pre-Approval Policies and Procedures

Our Audit Committee has adopted a policy and procedures for the pre-approval of audit services, audit-related services and tax services rendered by our independent registered public accounting firm. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services, and tax services up to specified amounts. Pre-approval may also be given as part of our Audit Committee's approval of the scope of the engagement of the independent registered public accounting firm or on an individual explicit case-by-case basis before the independent registered public accounting firm is engaged to provide each service. The pre-approval of services has been delegated to the Chair of our Audit Committee, but the decision must be reported to the full Audit Committee at its next scheduled meeting.

In connection with the audit of the 2021 financial statements, our Audit Committee entered into an engagement agreement with KPMG LLP that sets forth the terms by which KPMG LLP was to perform audit services for the Company.

Report of Our Audit Committee (1)

Our Audit Committee reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2021 with management of the Company. Our Audit Committee discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard 1301, *Communications with Audit Committee*, as adopted by the Public Company Accounting Oversight Board, or PCAOB. Our Audit Committee also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with our Audit Committee concerning independence, and discussed with the independent registered public accounting firm the accounting firm's independence.

Based on the foregoing, our Audit Committee recommended to our Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed March 11, 2022.

AUDIT COMMITTEE

Ms. Lota Zoth (Chair) Chad A. Johnson

Joseph S. McCracken

⁽¹⁾ The material in this Audit Committee report is not "soliciting material," is not deemed "filed" with the Commission and is not to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 4.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of our common stock as of March 1, 2022, except as set forth below, by: (i) each current director and nominee for director; (ii) each of the named executive officers specified in the Summary Compensation Table; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than 5% of its common stock. The percentage of shares beneficially owned is computed on the basis of 8,358,625 shares of our common stock outstanding as of March 1, 2022. Shares of our common stock that a person has the right to acquire within 60 days of March 1, 2022 are deemed outstanding for purposes of computing the percentage ownership of any other person.

Name and Address of Beneficial Owner ⁽¹⁾	Shares (#)	Percent (%)
5% and Greater Stockholders		
Stine Seed Farm, Inc. ⁽²⁾	873,081	10.4%
Richard J. Hawkins ⁽³⁾	826,210	9.8%
Kevin Lalande ⁽⁴⁾	734,707	8.8%
Daniel Farb ⁽⁵⁾	496,811	5.9%
Clarus Lifesciences III, L.P. ⁽⁶⁾	468,145	5.6%
Named Executive Officers and Directors		
Richard J. Hawkins ⁽³⁾	826,210	9.8%
Kevin Lalande ⁽⁴⁾	734,707	8.8%
John McKew, Ph.D. ⁽⁷⁾	141,367	1.7%
Bradley J. Powers ⁽⁸⁾	31,223	*
Lori D. Lawley ⁽⁹⁾	29,602	*
Aaron Schuchart ⁽¹⁰⁾	28,521	*
Thomas A. Raffin, M.D. ⁽¹¹⁾	24,657	*
Lota S. Zoth ⁽¹²⁾	13,473	*
Chad A. Johnson ⁽¹³⁾	10,519	*
Joseph McCracken ⁽¹⁴⁾	4,261	*
An van Es-Johansson, M.D. ⁽¹⁵⁾	2,471	*
David Karpf, M.D. ⁽¹⁶⁾	208	*
All current executive officers and directors as a group (12 persons) ⁽¹⁷⁾	1,847,219	21.2%

* Indicates beneficial ownership of less than 1% of the outstanding shares of the Company's common stock.

(1) Unless otherwise indicated, the address of such individual is Lumos Pharma, Inc., 4200 Marathon Boulevard, Suite 200, Austin, Texas 78756.

(2) Address is 22555 Laredo Trail, Adel, Iowa 50003. Information presented is based solely upon a Schedule 13D filed with the SEC on October 6, 2017. Harry H. Stine, the CEO of Stine Seed Farm, Inc., may be deemed to beneficially own such shares.

(3) Includes 95,248 shares Mr. Hawkins has the right to acquire through the exercise of stock options and 6,250 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.

(4) Consists of the shares held by Sante Health Ventures II, L.P. Mr. Lalande may be deemed to beneficially own such shares. Mr. Lalande, Joe Cunningham, M.D. and Douglas D. French, are managing directors (the "SHV Directors") of SHV Management Services, LLC ("SHV Management"). SHV Management is the general partner of SHV Management Services, LP, which is the general partner of Santé Health Ventures II, L.P. Each of the SHV Directors, SHV Management, and SHV Management Services, LP disclaims beneficial ownership of these securities except to the extent of its or his pecuniary interest therein. The address for this entity is 201 W 5th Street, Suite 1500, Austin, TX 78701. Infomation presented is based solely upon a Schedule 13D filed with the SEC on August 30, 2021.

(5) Address is 38 Newbury St., 5th Fl., Boston, Massachusetts 02116. Information presented is based solely upon a Schedule 13D filed with the SEC on January 27, 2022. Daniel Farb, may be deemed to beneficially own such shares.

- (6) Consists of shares held by Clarus Lifesciences III, L.P. ("Clarus"). Clarus Ventures III GP, L.P. is the sole general partner of Clarus. Blackstone Clarus III L.L.C. is the sole general partner of Clarus Ventures III GP, L.P. The sole member of Blackstone Clarus III L.L.C. is Blackstone Holdings II L.P. is Blackstone Holdings I/II GP Inc. The controlling shareholder of Blackstone Holdings I/II GP Inc. is The Blackstone Group L.P. The sole general partner of The Blackstone Group L.P. is Blackstone Group Management L.L.C. Blackstone Group Management L.L.C., Blackstone Group L.P. is Blackstone Clarus III L.P., is Blackstone Group L.P. is Blackstone Group Management L.L.C., Blackstone Group L.P. is Blackstone Group L.P. is Blackstone Group L.P., is Group L.P., is Blackstone Group L.P., Blackstone Clarus III L.L.C., Blackstone Holdings I/II GP Inc., The Blackstone Group L.P., Blackstone Group Management L.L.C. and Stephen A. Schwarzman may be deemed to beneficially own the common stock beneficially owned by Clarus and each disclaim beneficial ownership of all shares held by Clarus. The address for the entities is 101 Main Street, Suite 1210, Cambridge, MA 02142. Information presented is based solely upon a Schedule 13D filed with the SEC on March 30, 2020.
- (7) Includes 137,655 shares Dr. McKew has the right to acquire through the exercise of stock options and 3,250 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (8) Includes 29,094 shares Mr. Powers has the right to acquire through the exercise of stock options and 1,125 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (9) Includes 27,132 shares Ms. Lawley has the right to acquire through the exercise of stock options and 1,125 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (10) Includes 26,167 shares Mr. Schuchart has the right to acquire through the exercise of stock options within 60 days of March 1, 2022.
- (11) Includes 17,005 shares Dr. Raffin has the right to acquire through the exercise of stock options and 236 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (12) Includes 11,890 shares Ms. Zoth has the right to acquire through the exercise of stock options and 236 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (13) Includes 10,047 shares Mr. Johnson has the right to acquire through the exercise of stock options and 236 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (14) Includes 3,789 shares Mr. McCracken has the right to acquire through the exercise of stock options and 236 RSUs that are scheduled to vest, each within 60 days of March 1, 2022.
- (15) Includes 2,227 shares Ms. va Es-Johansson has the right to acquire through the exercise of stock options within 60 days of March 1, 2022.
- (16) Includes 208 shares Dr. Karpf has the right to acquire through the exercise of stock options within 60 days of March 1, 2022.
- (17) Includes 364,251 shares issuable pursuant to stock options that the executive officers and directors of the Company have the right to acquire, and 12,930 RSUs owned by the executive officers and directors that vest, within 60 days of March 1, 2022.

Securities Authorized For Issuance Under Equity Compensation Plans

We maintain our 2019 Equity Incentive Plan, 2010 Non-Employee Directors' Stock Award Plan and the ESPP, each of which was approved by our security holders, pursuant to which we may grant equity awards to eligible persons. We also maintain the Lumos Plans that were assumed at the closing of the Merger approved by our security holders.

The following table gives information about equity awards under the applicable foregoing plans as of December 31, 2021:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))
Equity compensation plans approved by security holders	1,032,699	\$ 9.47	522,749 (1)(2)
Equity compensation plans not approved by security holders	—	\$	—
Total	1,032,699	-	522,749

(1) The 2009 Equity Incentive Plan incorporated an evergreen formula pursuant to which, on each January 1st, the aggregate number of shares reserved for issuance under the plan will increase by a number equal to 4% of the outstanding shares on December 31st of the preceding calendar year, or such lesser amount (or no shares) as determined by our Board. On May 9, 2019, the Company's stockholders approved a proposal to amend and extend the 2009 Plan (the "2019 Plan") which, among other modifications, included decreasing the automatic annual "evergreen provision" from 4% to 3%, in accordance with which, on January 1 of each year, from 2020 to (and including) 2029, a number of shares of common stock in an amount equal to 3% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year, or such lesser amount of shares (or no shares) approved by the Company's Board of Directors, was added or will be added to the shares reserved under the 2019 Plan.

(2) Of these shares, as of December 31, 2021, 455,532 shares remained available under the 2019 Equity Incentive Plan, 5,624 shares remained available under the 2010 Non-Employee Directors' Stock Award Plan and 0 shares remained available under the ESPP. If the amended ESPP is approved at the Annual Meeting, the number of shares available under the ESPP will increase to 60,000.

DIRECTOR COMPENSATION

The following table shows certain information with respect to the compensation of all of our non-employee directors for the fiscal year ended December 31, 2021.

	Cash Compensation	Option Awards				
Name	(1)	(\$) (2)(3)		Stock Awards		Total (\$)
Chad A. Johnson	\$55,500	\$21,509	(4)	\$3,802	(6)	\$80,811
Thomas A. Raffin, M.D.	\$78,000	\$21,509	(4)	\$3,802	(6)	\$103,311
An van Es-Johansson*	\$38,744	\$95,800	(5)	\$16,894	(7)	\$151,438
Lota S. Zoth	\$60,500	\$21,509	(4)	\$3,802	(6)	\$85,811
Kevin Lalande	\$45,500	\$21,509	(4)	\$3,802	(6)	\$70,811
Joseph S. McCracken	\$47,500	\$21,509	(4)	\$3,802	(6)	\$72,811

* Appointed to the Board of Directors in February 2021.

(1) Cash compensation is paid quarterly based on the annual amount of \$40,000 for all non-employee directors with additional annual cash compensation of \$22,000 for Lead Independent Director, \$15,000, \$12,000 and \$8,000 for the Chairs of the Audit, Compensation and Nominating and Corporate Governance Committees, respectively; and \$7,500, \$5,500 and \$4,000 for members of the Audit, Compensation and Nominating and Corporate Governance Committees, respectively.

(2) The assumptions we used in valuing options are described under the caption "Share-Based Compensation" in note 2 to our financial statements included in our Annual Report on Form 10-K filed on March 11, 2022. This column reflects compensation expense that would be recorded under FASB ASC topic 718 as stock-based compensation in our financial statements for the indicated year in connection with options we granted in the indicated year, disregarding the effects of any estimate of forfeitures related to service-based vesting.

(3) The aggregate number of shares subject to stock option awards outstanding for each non-employee director as of December 31, 2021 are as follows:

	Option Awards
Chad A. Johnson	15,598
Thomas A. Raffin, M.D.	21,810
An van Es-Johansson	8,639
Kevin Lalande	8,594
Joseph S. McCracken	8,594
Lota Zoth	16,695

(4) Reflects the grant date fair value of 2,910 options granted at an exercise price of \$10.36, which was the per share closing price of our common stock on the NASDAQ Global Market on the date of grant.

(5) Reflects the grant date fair value of 5,729 options granted in February 2021 and 2,910 options granted in May 2021 at exercise prices of \$17.86 and \$10.36, respectively, which were the per share closing price of our common stock on the NASDAQ Global Market on the applicable date of grant.

(6) Reflects the grant date fair value of 367 restricted stock units ("RSUs") granted at a per share price of \$10.36, which was the per share closing price of our common stock on the NASDAQ Global Market on the date of grant.

(7) Reflects the grant date fair value of 733 RSUs granted in February 2021 and 367 RSUs granted in May 2021 at a per share price of \$17.86 and \$10.36, respectively, which was the per share closing price of our common stock on the NASDAQ Global Market on the applicable date of grant.

Non-Employee Director Compensation

The following compensation components are paid to our non-employee directors:

- Annual cash retainer fees;
- An equity grant upon initial election or appointment to our Board; and
- An annual equity grant.

Our non-employee director compensation program as in effect for the fiscal year ended December 31, 2021 is described below. For a description of our compensation program in effect for prior years, please refer to the proxy statement for our 2021 Annual Meeting of stockholders. Under our program, each non-employee director was entitled to receive annual cash retainer fees in the amounts set forth below and were paid in cash quarterly on the first day of each quarter during their annual



term commencing upon their election or re-election at each Annual Meeting of Stockholders. Such amounts were pro-rated for appointments made to our Board between our annual meetings.

Director Compensation

Director Compensation	2021
Annual retainer fee payable to all non-employee directors	\$ 40,000
Additional annual retainer fee payable to the Lead Independent Director of our Board	\$ 22,000
Additional annual retainer fee payable to our Audit Committee Chair	\$ 15,000
Additional annual retainer fee payable to other Audit Committee members	\$ 7,500
Additional annual retainer fee payable to our Compensation Committee Chair	\$ 12,000
Additional annual retainer fee payable to other Compensation Committee members	\$ 5,500
Additional annual retainer fee payable to our Nominating and Corporate Governance Committee Chair	\$ 8,000
Additional annual retainer fee payable to other Nominating and Corporate Governance Committee members	\$ 4,000

During the term of his or her service on our Board, each non-employee director receives an annual grant comprised of stock options and RSUs for a number of shares equal to 0.041% of the number of shares outstanding at the date of grant, with the number of shares split as to 85% stock options and 15% RSUs. Additionally, any newly appointed director to our Board will receive an initial grant of stock options and RSUs for a number of shares equal to 0.081% of the number of shares outstanding at the time of appointment, with the number of shares split as to 85% stock options and 15% RSUs. The annual grant vests 100% on the earlier of the first anniversary of grant date and the first Annual Meeting following the date of grant, and the initial grant vests 1/3 annually over three years.

We also reimburse our directors, including our employee directors, for their reasonable expenses incurred in attending meetings of our Board and the committees of our Board. Other than reimbursement of any such reasonable expenses, our employee directors do not receive compensation for their service on our Board.

EXECUTIVE OFFICERS

Our executive officers are appointed by and serve at the direction of our Board. The following table lists the names and positions of our current executive officers:

Name	Age	Position(s)
Richard J. Hawkins	73	Chief Executive Officer and Chair
Lori D. Lawley	38	Chief Financial Officer
John McKew, Ph.D.	57	President and Chief Scientific Officer
David Karpf, M.D.	67	Chief Medical Officer
Bradley J. Powers	43	General Counsel

Richard J. Hawkins, see Mr. Hawkin's biography in "Proposal Number 1-Election of Directors."

Lori D. Lawley has served as our Chief Financial Officer since July 2021. Previously, Ms. Lawley was Senior Vice President - Finance and Controller and the principal accounting officer since March 2020 and served the Company in various roles of increasing responsibilities from 2015 to 2020. Prior to joining the Company, Ms. Lawley worked at Ernst and Young LLP for over 8 years where she was a Senior Manager. Ms. Lawley is a licensed certified public accountant. Ms. Lawley received her Bachelor of Business Administration and Master's in Professional Accounting from the University of Texas.

John McKew, Ph.D., has served as our Chief Scientific Officer since March 2020 and as President since August 2021. Dr. McKew served as our Chief Operating Officer from March 2020 until August 2021 and served as the Chief Scientific Officer of Private Lumos from 2016 through the Merger in March 2020. From 2014 until 2016, Dr. McKew was V.P. of research for aTyr Pharma where he led research aimed at understanding and harnessing the therapeutic potential of tRNA synthetases. From 2010 until 2014, Dr. McKew worked for the NIH, during which time he served as a branch chief at the National Human Genome Research Institute Home (the "NHGRI") from 2010 until 2013, and as the acting Scientific Director of the Division of Preclinical Innovation at the National Center for Advancing Translational Sciences ("NCATS") from 2013 until 2014. His responsibilities included developing both the Therapeutics for Rare and Neglected Disease ("TRND") and the Bridging Interventional Development Gaps ("BrIDGs") programs. The department he led also included NCATS's high throughput screening center and its Tox21 in vitro toxicology initiative. Before joining the NIH, Dr. McKew held a director level position at Wyeth Research in Cambridge, Massachusetts. Dr. McKew is also currently an Adjunct Associate Professor at the Boston University School of Medicine. Dr. McKew received a B.S. degree in chemistry and biochemistry from State University of New York at Stony Brook, a Ph.D. in organic chemistry from the University of California, Davis, and held post-doctoral research positions at the University of Geneva and Firmenich, SA.

David Karpf, M.D., has served as our Chief Medical Officer since August 2021. Previously, Dr. Karpf served as Vice President of Clinical Development at Ascendis Pharma from 2015 to 2020. Prior to that, Dr. Karpf served as Chief Medical officer at Virobay, Inc. from 2011 to 2015 and Metabolex from 2004 to 2010. Dr. Karpf has also served as an Adjunct Clinical Professor in the Division of Endocrinology at Stanford University School of Medicine since 1997. Dr. received his B.A. from the University of California, Berkley and his M.D. from the University of California, San Diego. He completed both his internal medicine residency and fellowship in Endocrinology, Diabetes & Metabolism at the UCLA School of Medicine/Cedars-Sinai Medical Center and completed a post-fellowship program in metabolic bone disease at the UCSF School of Medicine.

Bradley J. Powers has served as our General Counsel since August 2015. Prior to joining the Company, Mr. Powers served as the General Counsel of Kinze Manufacturing, an agricultural equipment manufacturer in North America, since March 2013. Mr. Powers received a B.S. degree in biology and a M.S. degree in bioinformatics and computational biology from Iowa State University and a J.D. from Drake University Law School.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth information regarding compensation earned during the years ended December 31, 2021 and December 31, 2020, by the executive officers identified below, who are referred to in this proxy statement as our "named executive officers."

Name and Principal Position	Year	Salary(\$)	Stock Awards (\$) (1)	Option Awards (\$) (2)	Non-Equity Incentive Plan Compensation (\$)(3)	All Other Compensation (\$)(4)		Total (\$)
Richard J. Hawkins*	2021	570,769	40,408	362,710	314,160	65,392	(5)	1,353,439
Chief Executive Officer	2020	516,380	196,750	759,063	686,336	63,500		2,222,029
John C. McKew*	2021	490,308	170,703	420,881	262,500	52,176	(6)	1,396,568
President and Chief Scientific Officer	2020	436,300	102,310	365,475	276,044	35,641		1,215,770
Lori Lawley	2021	324,438	43,577	254,588	145,200	49,472	(7)	817,275
Chief Financial Officer	2020	300,000	35,415	140,567	214,660	48,050		738,692

*The amounts disclosed for Mr. Hawkins and Dr. McKew for amounts paid in 2020 prior to March 17, were paid by Private Lumos prior to the Merger and prior to their service in the combined Company

- (1) This column reflects compensation expense that would be recorded under FASB ASC topic 718 as stock-based compensation in our financial statements for the indicated year in connection with RSUs we granted in the indicated year. The assumptions we used in valuing RSUs are described under the caption "Share-Based Compensation" in note 2 to our financial statements included in our Annual Report on Form 10-K filed March 11, 2022.
- (2) This column reflects compensation expense that would be recorded under FASB ASC topic 718 as stock-based compensation in our financial statements for the indicated year in connection with options we granted in the indicated year, disregarding the effects of any estimate of forfeitures related to service-based vesting. The assumptions we used in valuing options are described under the caption "Share-Based Compensation" in note 2 to our financial statements included in our Annual Report on Form 10-K filed on March 11, 2022.

(3) The amounts shown in this column represent the cash bonuses earned by the named executive officers with respect to the fiscal year under our performance-based cash bonus program. Amounts earned with respect to the fiscal year are generally paid in the first quarter following the close of the fiscal year.

- (4) Unless otherwise indicated, amounts in this column represent our contributions under our 401(k) plan.
- (5) Includes \$100 vaccine bonus and \$727 in life insurance premiums.
- (6) Includes \$100 vaccine bonus and \$1,106 in life insurance premiums.
- (7) Includes \$100 vaccine bonus and \$1,199 in life insurance premiums.

Narrative Disclosure to Summary Compensation Table

Our executive compensation program consists of three primary components: base salary, short-term incentives, and long-term equity incentives.

Base Salary

Base salary is the primary fixed element of our executive compensation program. We use base salary to compensate our executive officers for services rendered during the fiscal year, and to ensure that we remain competitive in attracting and retaining executive talent.

Upon joining us, each of our executive officers, received an offer letter that provided for an initial base salary. These initial base salaries are the product of negotiation with the executive, but we generally seek to establish salaries that we believe are commensurate with the salaries paid to industry peers with comparable qualifications, experience, responsibilities and performance at similar companies. Our Compensation Committee has also relied on its members' collective experience in the marketplace for determining what they believe to be the market rate of salaries for executives of comparable companies.

Historically, we have not applied, nor do we intend to apply, specific formulas to determine base salary increases. Instead, we annually review corporate and individual performance. Our Compensation Committee examines numerous factors, including the executive's expertise, seniority, position, functional role, level of responsibility and individual performance

during the previous year. Further, our Compensation Committee reviews peer and market data as provided by Setren & Associates.

Short-Term Cash Incentives

Our performance-based cash incentives are designed to provide executive officers with the opportunity to earn annual cash awards based upon the achievement of pre-specified corporate and individual performance objectives which align with and support our business strategy.

Shortly before the end of each fiscal year, our Board determines the annual target bonus percentages for our executive officers for the upcoming fiscal year based on the recommendations of our Compensation Committee. Generally, each executive officer is eligible for a discretionary annual cash incentive payment up to a specified percentage of the executive officer's salary. Our Board sets these annual target bonus percentages at levels that, upon achievement of the target percentage, are likely to result in cash bonus payments that our Board believes to be approximately the level paid to high-performing executives of comparable companies in the biopharmaceutical industry.

For 2021, based upon recommendations of our Compensation Committee with the assistance of Setren & Associates, our Board maintained target bonus amounts for Mr. Hawkins, Mr. McKew and Ms. Lawley equal to 55%, 50% and 40% of their respective base salaries. Our Board reserved the ability to grant bonuses in excess of the executives' target bonus percentages for extraordinary performance.

2021 Performance Objectives

The performance goals for each fiscal year are determined by the Board in the first quarter of each fiscal year, and typically include corporate and individual performance objectives which are tailored to each executive's role and responsibilities.

For 2021, the Company had the following corporate goals:

Metric				
Clinical: Execute enrollment strategy for qualified patients for LUM-201 study bearing in mind any potential Covid-19 impact to site access Due to ongoing impact of Covid-19, goal was revised in September 2021 to address slow site initiation and enrollment 	45%			
Business Development: Continued evaluation of in-license or other opportunities through presentation of two or more opportunities to Board of Director for review 	20%			
 Finance: All SEC filings on time and accurate Cash use targets per the operating plan, excluding effect of new acquisitions or business development initiatives 	20%			
 R&D and Business Development: Develop integrated life cycle management plan for LUM-201. Analyze and integrate scientific and commercial data to definitively prioritize potential indications for LUM-201 beyond PGHD 	15%			

At the end of the fiscal year, our Compensation Committee assesses the accomplishments of each executive versus each of the aforementioned goals and recommends earned bonus amounts to the Board for approval. The Compensation Committee retains the ability to apply negative discretion to adjust bonus amounts lower based on other corporate performance factors.

2021 Earned Bonuses

For 2021, the Compensation Committee took a two-tiered approach at determining the amount of earned bonus for each executive based on the current company conditions as well as actual performance. First, the Compensation Committee looked at the performance of each executive against each of the stated performance goals. Secondly, in light of current events and the refocus of the company as a whole, the Compensation Committee determined it to be in the best interests of the company and its stockholders to use the bonus earning as a retention device in efforts to retain key personnel. For 2021, the Compensation Committee determined that executives had met each of the company objectives for 2021, and bonuses were paid accordingly.

Final bonus payouts for 2021 performance were as follows:

	2021 Tar	2021 Earned Bonus			
Executive	% (1)	\$	% (2)	%(3)	\$
Richard J. Hawkins	55	\$314,160	100	55	\$314,160
John C. McKew	50	\$262,500	100	50	\$262,500
Lori Lawley	40	\$145,200	100	40	\$145,200

(1) Target bonus percentage represents a percentage of base salary.

(2) Bonus awarded at 100% in consideration of meeting corporate objectives.

(3) Represents bonus percentage actually awarded.

Long-Term Equity Compensation

Equity incentives represent the largest at-risk element of our executive compensation program. Our equity incentives are designed to align the interests of our executive officers with those of our stockholders by creating an incentive for our executive officers to maximize stockholder value and to remain employed with us despite a competitive labor market.

In 2021, target long-term incentive awards were delivered in the form of time-based stock options and RSUs. The Compensation Committee looked to the successful nature of meeting company objectives and granted stock options and RSUs are a means to help retain executives and drive the company into the future. The Compensation Committee believes this vehicle mix further reinforces our pay for performance philosophy, as value is only provided to executives if stockholder value is created and the executive remains with the company.

2021 Equity Grants

On February 1, 2021, our Compensation Committee granted the following equity awards to our executives as follows:

Executive	Time-vesting Stock Options (#)	RSUs (#)
Richard J. Hawkins	28,475	2,329
John C. McKew	23,175	1,078
Lori Lawley	10,625	869

Additional 2021 Equity Grants

Additional equity awards were granted in 2021 in connection with retention efforts, promotions and new hires as follows:

Executive	Time-vesting Stock Options (#)	Performance-based Stock Options ⁽¹⁾	RSUs (#)
John C. McKew	_	10,000	20,000
Lori Lawley	21,250	—	3,750

(1) These options vest and become exercisable as follows: (a) 50% of such shares shall vest on the first of the month following enrollment reaching 50% of the 80 total patient goal being enrolled for the LUM-201 trial, and (b) 50% of such shares shall vest on the first of the month following completion of the LUM-201 trial, in each case as determined by the Board.

Anti-Hedging and Anti-Pledging Policies

We have adopted a Policy on Stock Trading by Employees, Officers and Directors. That policy expressly prohibits our employees and directors from: (i) engaging in hedging transactions or (ii) pledging our stock as collateral.



Federal Tax Considerations

Section 162(m) of the Internal Revenue Code generally disallows public companies a tax deduction for federal income tax purposes of remuneration in excess of \$1 million paid to the chief executive officer and certain other highly compensated executive officers in any taxable year. While our Compensation Committee considers tax deductibility as one of the factors in determining executive compensation, the Compensation Committee believes that we should retain the flexibility to provide compensation to our named executive officers that is not fully tax deductible when it believes that such payments are appropriate to attract and retain executive talent or meet other business objectives. Our Compensation Committee intends to continue to compensate our named executive officers in a manner consistent with the best interests of our Company and our stockholders even if any portion of such compensation is non-deductible.

In addition to considering the tax consequences, the Compensation Committee considers the accounting consequences of its decisions, including the impact of expenses being recognized in connection with equity-based awards, in determining the size and form of different equity-based awards.

Accounting Considerations

We account for equity compensation paid to our employees in accordance with Accounting Standards Codification, or ASC, topic 718, which requires us to measure and recognize compensation expense in our financial statements for all share-based payments based upon an estimate of their fair value over the service period of the award. We record cash compensation as an expense at the time the obligation is incurred.

401(k) Plan

Our employees, including our executive officers, are eligible to participate in our 401(k) plan. Our 401(k) plan is intended to qualify as a tax qualified plan under Section 401 of the Code. Pursuant to the terms of our 401(k) plan, we provide a non-elective employer contribution of up to 5% of each participant's eligible compensation, with a possibility of additional discretionary contributions.

Other Benefits and Perquisites

We pay at least a portion of the premiums for medical insurance, dental insurance, life insurance and accidental death and dismemberment insurance benefits to all full-time employees, including our executive officers. These benefits are available to all employees, subject to applicable laws.

Employment Agreements

We have entered into employment agreements with each of the named executive officers. The material terms of the agreements that were in effect during fiscal 2021 for the named executive officers are summarized below. Each of these agreements also contains severance and change of control provisions discussed under the heading "Potential Payments Upon Termination or Change in Control" beginning on page 34 of this proxy statement.

Employment Agreement with Richard J. Hawkins

Pursuant to the employment agreement between us and Mr. Hawkins dated March 27, 2020, Mr. Hawkins earns an annual base salary, which is subject to annual review and adjustment by our Board. For 2021, Mr. Hawkins earned an annual base salary of \$571,200. Mr. Hawkins is also eligible to receive an annual performance bonus based on his achievement of certain milestones and performance objectives. In 2021, Mr. Hawkins' target bonus was set at 55% of his annual base salary.

The employment agreement with Mr. Hawkins also provides that his employment with us is at-will and may be altered or terminated by either Mr. Hawkins or us at any time. However, if we terminate Mr. Hawkins' employment without just cause or if he resigns for good reason (other than in connection with a change in control of us), as long as Mr. Hawkins executes a general release in favor of us, he will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

The employment agreement with Mr. Hawkins further provides that if we (or any surviving or acquiring corporation) terminate Mr. Hawkins' employment without just cause or if he resigns for good reason within one month prior to or 13 months following the effective date of a change in control, as long as Mr. Hawkins executes a general release in favor of us (or any

surviving or acquiring corporation), he will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

Employment Agreement with John C. McKew

Pursuant to the employment agreement between us and Dr. McKew dated March 27, 2020, as amended, Dr. McKew earns an annual base salary, which is subject to annual review and adjustment by our Board. For 2021, Dr. McKew earned an annual base salary of \$525,000. Dr. McKew is also eligible to receive an annual performance bonus based on his achievement of certain milestones and performance objectives. In 2021, Dr. McKew's target bonus was set at 50% of his annual base salary.

The employment agreement with Dr. McKew also provides that his employment with us is at-will and may be altered or terminated by either Dr. McKew or us at any time. However, if we terminate Dr. McKew's employment without just cause or if he resigns for good reason (other than in connection with a change in control of us), as long as Dr. McKew executes a general release in favor of us, he will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

The employment agreement with Dr. McKew further provides that if we (or any surviving or acquiring corporation) terminate Dr. McKew's employment without just cause or if he resigns for good reason within one month prior to or 13 months following the effective date of a change in control, as long as Dr. McKew executes a general release in favor of us (or any surviving or acquiring corporation), he will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

Employment Agreement with Lori Lawley

Pursuant to the employment agreement between us and Ms. Lawley dated September 30, 2019, as amended, Ms. Lawley earns an annual base salary, which is subject to annual review and adjustment by our Board. For 2021, Ms. Lawley earned an annual base salary of \$363,000. Ms. Lawley is also eligible to receive an annual performance bonus based on her achievement of certain milestones and performance objectives. For 2021, Ms. Lawley' target bonus was set at 40% of her annual base salary.

The employment agreement with Ms. Lawley also provides that her employment with us is at-will and may be altered or terminated by either Ms. Lawley or us at any time. However, if we terminate Ms. Lawley' employment without just cause or if she resigns for good reason (other than in connection with a change in control of us), as long as Ms. Lawley executes a general release in favor of us, she will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

The employment agreement with Ms. Lawley further provides that if we (or any surviving or acquiring corporation) terminate Ms. Lawley' employment without just cause or if she resigns for good reason within one month prior to or 13 months following the effective date of a change in control, as long as Ms. Lawley executes a general release in favor of us (or any surviving or acquiring corporation), he will be entitled to receive certain payments and other benefits, which are described in more detail under the heading "Potential Payments Upon Termination or Change in Control."

Confidential Information and Inventions Agreement

Each of our named executive officers has entered into a form agreement with respect to confidential information and inventions. Among other things, this agreement obligates each named executive officer to refrain from disclosing any of our confidential information received during the course of employment and, with some exceptions, to assign to us any inventions conceived or developed during the course of employment.

Outstanding Equity Awards at December 31, 2021

The following table provides information about outstanding stock options and RSUs held by each of our named executive officers at December 31, 2021. All of these options or RSUs were granted under our 2019 Plan.

	1	n Awards			Stock Awards			
Name	Number of Shares Underly (#) Exercisable	ying Unexercised Options(1 (#) Unexercisable	<u>, </u>	Option Exercise Price	Option Expiration Date	Stock That Have	Market Value of Shares or Units of Stock That Have Not Vested (\$)(4)	
Richard J. Hawkins	17,140	2.484	6/27/2019 \$	1.84	6/26/2029	, , , , ,		
	25,412	36,662	4/1/2020 \$	7.87	3/31/2030		_	
	30,838	42,088	4/1/2020 \$	7.87	3/31/2030		_	
		,	4/1/2020			18,750	129,938	
	5,932	22,543	2/1/2021 \$	17.35	1/31/2031	,		
		,	2/1/2021			2,329	16,140	
John C. McKew	66,697	_	7/11/2016 \$	4.82	7/10/2026		_	
	14,993	_	7/11/2016 \$	4.82	7/10/2026		_	
	9,583	_	1/18/2018 \$	2.45	1/17/2028		_	
	56	_	8/29/2018 \$	2.45	8/28/2028		_	
	6,485	_	8/29/2018 \$	2.45	8/28/2028		_	
	25,829	37,917	4/1/2020 \$	7.87	3/31/2030		_	
	1,254		4/1/2020 \$	7.87	3/31/2030		_	
	_, ·		4/1/2020		0,00,000	9,750	67,568	
	2,083	7,917	2/1/2021 \$	17.35	1/31/2031	,		
	2,744	10,431	2/1/2021 \$	17.35	1/31/2031	_	_	
		5,000 (5)		17.35	1/31/2031	_	_	
	_	5,000 (6)		17.35	1/31/2031	_	_	
		c, (0,	2/1/2021			1,078	7,471	
			8/1/2021			20,000	138,600	
Lori Lawley	_	8 (7)		70.65	3/8/2028			
	2,512	264 (8)		28.53	7/31/2028		_	
	1,662	595	3/1/2019 \$	16.20	2/28/2029			
	520	_	3/1/2019 \$	16.20	2/28/2029		_	
		462 (7)		16.20	2/28/2029			
	694		3/1/2019 \$	16.20	2/28/2029		_	
		462 (8)		16.20	2/28/2029		—	
	_	694 (9)		16.20	2/28/2029		_	
	463	_	3/1/2019 \$	16.20	2/28/2029		_	
	1,051	231 (10		15.93	7/30/2026		_	
	10,416	14,584	4/1/2020 \$	7.87	3/31/2030		_	
		/	4/1/2020			3,375	23,389	
	2,213	8,412	2/1/2021 \$	17.35	1/31/2031			
	, -		2/1/2021			869	6,022	
	1,770	19,480	8/1/2021 \$	7.60	7/31/2031			
		-,	8/1/2021			3,750	25,988	
			0.0.0001			2,780	,000	

(1) Unless otherwise indicated, these options have a 10-year term and vest in substantially equal monthly installments over a four-year period, subject to the recipient's continued employment with us through such vesting dates.

(2) This column shows options that were unvested as of December 31, 2021.

(3) Unless otherwise indicated, these RSUs vest annually over a four-year period, with 25% vesting on each of the first, second, third and fourth anniversaries of grant date, subject to the recipient's continued employment with us through such vesting dates.

(4) Calculated by multiplying the number of RSUs by \$6.93, the closing market price of our common stock on December 31, 2021.

- (5) These options vest following enrollment reaching 50% of total patients enrolled for the LUM-201 trial as defined by the Board.
- (6) These options vest following completion of the LUM-201 trial as defined by the Board.
- (7) These options will vest upon an increase of closing share price of the Company's common stock on the Nasdaq Stock Market by at least 66.66% above exercise price of the stock options, when measured over 30 consecutive calendar days (must occur within four years of the Date of Grant or such shares will be forfeited).
- (8) These options will vest upon an increase of closing share price of the Company's common stock on the Nasdaq Stock Market by at least 100% above exercise price of the stock options, when measured over 30 consecutive calendar days (must occur within four years of the Date of Grant or such shares will be forfeited).
- (9) These options vest upon enrollment of the first patient in a clinical trial that is registration eligible.
- (10) These options were granted in connection with the forfeiture of previously held options under the stock option exchange program described in more detail and approved by stockholders at our 2019 Annual Meeting.

Potential Payments Upon Termination or Change in Control

Under our 2019 Plan, the vesting of stock options granted to our employees and officers may be accelerated in connection with specified corporate transactions and change in control transactions. Other than as set forth in the tables below, none of our other option grants provide for acceleration of vesting of any options in connection with such a transaction, except for certain options originally granted under our 2000 Equity Incentive Plan that may vest upon a change in control if the acquirer does not assume outstanding option grants. In addition, under our 2010 Non-Employee Directors' Stock Award Plan, in the event of a change in control, 100% of the shares subject to each director's options will vest.

Under the terms of employment agreements with certain of our named executive officers in effect as of December 31, 2020, if we terminate such named executive officer's employment for "cause" or such named executive officer resigns without "good reason," such named executive officer is entitled to the following: (i) any salary earned but unpaid prior to termination; (ii) any benefits accrued prior to termination; (iii) all accrued but unused vacation; and (iv) any business expenses that were incurred but not reimbursed as of the date of termination (collectively, the "Accrued Obligations"). Following such termination, vesting of such named executive officer's then outstanding stock options shall cease on the date of such termination.

Under the terms of employment agreements with such named executive officers, if we terminate such named executive officer's employment without cause or such named executive officer resigns with good reason (other than in connection with a change in control), and in each case such named executive officer signs a general release and written acknowledgment of his or her continuing obligations under his or her confidentiality and inventions assignment agreement with us, such named executive officer is entitled to the following: (i) payment of the Accrued Obligations; (ii) depending on the named executive officer and as described in the tables below, the equivalent of 12 or months of such named executive officer's base salary as in effect immediately prior to the termination date, payable on the same basis and at the same time as previously paid and subject to employment tax withholdings and deductions; (iii) for certain of the named executive officers and as described in the tables below, a bonus payout equal to the most recent annual bonus paid to the named executive officer or a portion thereof; (iv) depending on the named executive officer and as described in the tables below, payment of such named executive officer's COBRA premiums for 12 or 6 months to be paid in order for such named executive officer to maintain medical insurance coverage that is substantially equivalent to that which such named executive officer received immediately prior to the termination payment of premiums for his or her group health insurance and (v) 12 months accelerated vesting of such named executive officer's equity compensation awards (so such executive becomes vested in the portion of such awards that would have become vested if executive remained employed for 365 days after the termination date) and depending on the named executive officer and as described in the tables below, extension of the window to exercise such options for up to 12 months. In the event that such named executive officer breaches his or her confidentiality, noncompete or non-solicitation obligations under his or her confidentiality and inventions assignment agreement with us, the payments described above, except for the Accrued Obligations, shall cease, and we shall have no further obligations to such named executive officer with respect thereto. Our obligation to pay such named executive officer's COBRA premiums ceases upon such named executive officer's eligibility for comparable coverage provided by a new employer.

Under the terms of the employment agreements with the named executive officers in effect as of December 31, 2021, if we (or any surviving or acquiring corporation) terminate a named executive officer's employment without cause or a named executive officer resigns with good reason within one month prior to or 13 months following the effective date of a change in control (either constituting a "Change of Control Termination"), and in each case such named executive officer signs a general release and written acknowledgment of his or her continuing obligations under his or her confidentiality and inventions assignment agreement with us, such named executive officer is entitled to the following: (i) payment of the Accrued Obligations; (ii) depending on the named executive officer and as described in the tables below, the equivalent of 24, 18 or 12 months of such named executive officer's base salary as in effect immediately prior to the termination date, payable on the same basis and at the same time as previously paid and subject to employment tax withholdings and deductions; (iii) depending

on the named executive officer and as described in the tables below, a bonus payout equal to two, one and one-half or one times the most recent annual cash bonus paid to the named executive officer; (iv) depending on the named executive officer as described in the tables below, payment of such named executive officer's COBRA premiums for 24, 18 or 12 months to be paid in order for such named executive officer to maintain medical insurance coverage that is substantially equivalent to that which such named executive officer received immediately prior to the termination payment of premiums for his or her group health insurance; and (v) we will vest 100% of the shares subject to such named executive officer's equity compensation awards and such vesting shall occur upon the occurrence of the change of control in the case of a Change of Control Termination occurring prior to the change in control or upon termination in the case of a Change of Control Termination occurring prior to the change in control or upon termination in the case of a Change of control. If a named executive officer breaches his or her confidentiality, non-compete or non-solicitation obligations under his or her confidentiality and inventions assignment agreement with us, the payments described above, except for the Accrued Obligations, shall cease, and we shall have no further obligations to such named executive officer with respect thereto. Our obligation to pay such named executive officer's eligibility for comparable coverage provided by a new employer.

The following tables reflect the estimated potential payments that would be payable to each named executive officer, upon a termination or change in control of us under the terms of his or her employment agreement in effect as of December 31, 2021. The amounts shown below reflect only the additional payments or benefits that each named executive officer would have received upon the occurrence of the respective triggering events listed below, but they do not include the value of payments or benefits that would have been earned, or any amounts associated with equity awards that would have vested, absent the triggering event. For purposes of calculating the potential payments set forth in the tables below, we have assumed that (i) the date of termination was December 31, 2021 and (ii) the stock price was \$6.93, which was the per share closing price of our common stock on the NASDAQ Global Market on December 31, 2021.

Richard J. Hawkins	For Just Resig Withou	nation Cause or nation It Good Ison	Termination Without Just Cause or Resignation With Good Reason	Termination Without Just Cause or Resignation With Good Reason (in connection with a Change in Control)			
Cash Payments							
Cash Severance	-	_	\$ 885,360 ⁽¹⁾	\$	1,770,720 (2)		
Long-Term Incentives							
RSUs and Stock Options (Unvested and Accelerated)	-	_	158,721 (3)(4)		158,721 (3)(4)		
Benefits and Perquisites							
Accrued Obligations		98,862 ⁽⁵⁾	98,862 ⁽⁵⁾		98,862 ⁽⁵⁾		
Benefits Continuation	-	_	19,682 (6)		39 , 364 ⁽⁷⁾		
Total Payments Upon Termination	\$	98,862	\$ 1,162,625	\$	2,067,667		

(1) Amount represents 12 months of his base salary in effect as of January 1, 2021 and an amount equal to his most recent annual bonus.

(2) Amount represents 24 months of his base salary in effect as of January 1, 2021 and an amount equal to two times his most recent annual bonus.

(3) Amount represents the value of unvested RSUs as of December 31, 2021, using the closing price per share of our common stock on December 31, 2021. As per the terms of Mr. Hawkins' employment agreement, the unvested RSUs would accelerate and immediately vest under either a termination without just cause or resignation with good reason or a termination without just cause or resignation with good reason in connection with a change of control.

(4) Amount represents the value of in-the-money unvested stock options as of December 31, 2021, using the intrinsic value of the options calculated using the spread between the exercise price of each option and the closing price per share of our common stock on December 31, 2021. The number of shares underlying such stock options and the exercise price thereof are reflected in the Outstanding Equity Awards section of this proxy statement.

(5) Amount represents accrued vacation.

(6) Amount represents 12 months of COBRA premiums.

(7) Amount represents 24 months of COBRA premiums.

John C. McKew	Termination For Just Cause or Resignation Without Good Reason			Termination Without Just Cause or Resignation With Good Reason	Without Just Cause or Resignation With Good Reason (in connection with a Change in Control)		
Cash Payments							
Cash Severance		_	\$	525,000 (1)	\$	1,181,250 (2)	
Long-Term Incentives							
RSUs and Stock Options (Unvested and Accelerated)		—	213,638 (3)(4)			213,638 (3)(4)	
Benefits and Perquisites							
Accrued Obligations		89,472 ⁽⁵⁾		89,472 ⁽⁵⁾		89,472 ⁽⁵⁾	
Benefits Continuation		—		19,682 (6)		29,523 (7)	
Total Payments Upon Termination	\$	89,472	\$	847,792	\$	1,513,883	

Termination

(1) Amount represents 12 months of his base salary in effect as of January 1, 2021.

(2) Amount represents 18 months of his base salary in effect as of January 1, 2021 and an amount equal to one and one half times his most recent annual bonus.

(3) Amount represents the value of unvested RSUs as of December 31, 2021, using the closing price per share of our common stock on December 31, 2021. As per the terms of Dr. McKews' employment agreement, the unvested RSUs would accelerate and immediately vest under either a termination without just cause or resignation with good reason or a termination without just cause or resignation with good reason in connection with a change of control.

(4) Amount represents the value of in-the-money unvested stock options as of December 31, 2021, using the intrinsic value of the options calculated using the spread between the exercise price of each option and the closing price per share of our common stock on December 31, 2021. The number of shares underlying such stock options and the exercise price thereof are reflected in the Outstanding Equity Awards section of this proxy statement.

(5) Amount represents accrued vacation.

(6) Amount represents 12 months of COBRA premiums.

(7) Amount represents 18 months of COBRA premiums.

Lori Lawley	For Ju Re Wit	mination ust Cause or signation hout Good Reason		W F	ermination /ithout Just Cause or tesignation With Good Reason		W Resi Goo conn	Termination Without Just Cause or Resignation With Good Reason (in connection with a Change in Control)			
Cash Payments											
Cash Severance				\$	363,000	(1)	\$	508,200			
Long-Term Incentives											
RSUs and Stock Options (Unvested and Accelerated)		_			55,398 ⁽⁴⁾	(3)		55,398 ⁽⁴⁾			
Benefits and Perquisites											
Accrued Obligations	60,467		(5)		60,467	(5)		60,467			
Benefits Continuation ⁽⁶⁾		_			12,252			12,252			
Total Payments Upon Termination	\$	60,467		\$	491,117		\$	636,317			

(1) Amount represents 12 months of her base salary in effect as of January 1, 2021.

(2) Amount represents 12 months of her base salary in effect as of January 1, 2021 and an amount equal to her most recent annual bonus.

(3) Amount represents the value of unvested RSUs as of December 31, 2021, using the closing price per share of our common stock on December 31, 2021. As per the terms of Ms. Lawley's employment agreement, the unvested RSUs would accelerate and immediately vest under either a termination without just cause or resignation with good reason or a termination without just cause or resignation with good reason in connection with a change of control.

(4) Amount represents the value of in-the-money unvested stock options as of December 31, 2021, using the intrinsic value of the options calculated using the spread between the exercise price of each option and the closing price per share of our common stock on December 31, 2021. The number of shares underlying such stock options and the exercise price thereof are reflected in the Outstanding Equity Awards section of this proxy statement.

(5) Amount represents accrued vacation.

(6) Amount represents 12 months of COBRA premiums.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

We have not been a party since January 1, 2021 to any transactions, in which the amount involved in the transaction exceeds \$120,000 (which is less than 1% of the average of our total assets at the end of the last two completed fiscal years), and in which any of our directors, executive officers or to our knowledge, beneficial owners of more than 5% of our capital stock had or will have a direct or indirect material interest, other than compensation, termination and change in control arrangements, which are described in more detail in the section entitled "Executive Compensation" beginning on page 28 of this proxy statement.

Policies and Procedures for Related Person Transactions

Our Board has adopted written policies and procedures for the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds \$120,000 and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our Audit Committee. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by our Audit Committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, our Audit Committee will review, and, in its discretion, may ratify the related person transaction. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by our Audit Committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, our Audit Committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unaffiliated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to
 investors in light of the circumstances of the particular transaction.

Our Audit Committee may approve or ratify the transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests. Our Audit Committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC's related person transaction disclosure rule, our Board has determined that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising solely from the related person's position as an executive officer of another entity (whether or not the person is also a director of such entity), that is a participant in the transaction, where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, (b) the related person and his or her immediate family members are not involved in the negotiation of the transaction and do not receive any special benefits as a result of the transaction or (c) the amount involved in the transaction equals less than the greater of \$200,000 or 5% of the annual consolidated gross revenues of our receiving payment under the transaction; and
- a transaction that is specifically contemplated by provisions of our certificate of incorporation or bylaws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by our Compensation Committee in the manner specified in its charter.

Limitation of Liability and Indemnification

Our amended and restated bylaws require us to indemnify our directors to the fullest extent not prohibited by law and permit us to indemnify our officers, employees and other agents as set forth under Delaware law. We will indemnify any such person in connection with a proceeding initiated by such person only if such indemnification is expressly required by law, the proceeding was authorized by our Board, the indemnification is provided by us, in our sole discretion, pursuant to the Delaware General Corporation Law or other applicable law or is otherwise expressly required by our amended and restated bylaws. Section 145 of the Delaware General Corporation Law permits indemnification of officers, directors and other agents under specified circumstances and subject to specified limitations. Delaware law also permits a corporation not to hold its directors personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for:

- breach of their duty of loyalty to the corporation or its stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; and
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity. We have obtained directors' and officers' liability insurance to cover certain liabilities described above.

We have entered into indemnity agreements with each of our directors that require us to indemnify such persons against any and all expenses, including attorneys' fees, witness fees, judgments, fines, settlements and other amounts incurred, including expenses of a derivative action, in connection with any action, suit or proceeding or alternative dispute resolution mechanism, inquiry hearing or investigation, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was one of our directors, officers or employees, provided that such person's conduct did not constitute a breach of his or her duty of loyalty to us or our stockholders, and was not an act or omission not in good faith or which involved intentional misconduct or a knowing violation of laws. The indemnity agreements also set forth procedures that will apply in the event of a claim for indemnification thereunder. We believe that these provisions and agreements are necessary to attract and retain qualified persons as our directors.

On or about May 12, 2016, Trevor Abramson filed a putative securities class action lawsuit in the United States District Court for the Southern District of New York (the Court), captioned Abramson v. NewLink Genetics Corp., et al., Case 1:16-cv-3545 (the Securities Action). Subsequently, the Court appointed Michael and Kelly Nguyen as lead plaintiffs and approved their selection of Kahn, Swick & Foti, LLC as lead counsel in the Securities Action. On October 31, 2016, the lead plaintiffs filed an amended complaint asserting claims under the federal securities laws against the Company, the Company's Chief Executive Officer Charles J. Link, Jr., and the Company's Chief Medical Officer and President Nicholas Vahanian (collectively, the Defendants). The amended complaint alleges the Defendants made material false and/or misleading statements that caused losses to the Company's investors. The Defendants filed a motion to dismiss the amended complaint on July 14, 2017. On March 29, 2018, the Court dismissed the amended complaint for failure to state a claim, without prejudice, and gave the lead plaintiffs until May 4, 2018 to file any amended complaint attempting to remedy the defects in their claims. On May 4, 2018, the lead plaintiffs filed a second amended complaint asserting claims under the federal securities laws against the Defendants. Like the first amended complaint, the second amended complaint alleges that the Defendants made material false and/or misleading statements or omissions relating to the Phase 2 and 3 trials and efficacy of the product candidate algenpantucel-L that caused losses to the Company's investors. The lead plaintiffs do not quantify any alleged damages in the second amended complaint but, in addition to attorneys' fees and costs, they sought to recover damages on behalf of themselves and other persons who purchased or otherwise acquired the Company's stock during the putative class period of September 17, 2013 through May 9, 2016, inclusive, at allegedly inflated prices and purportedly suffered financial harm as a result. The Defendants filed a motion to dismiss the second amended complaint on July 31, 2018. On February 13, 2019, the Court dismissed the second amended complaint for failure to state a claim, with prejudice, and closed the case. On March 14, 2019, lead plaintiffs filed a notice of appeal. The briefing on lead plaintiffs' appeal was completed in early July 2019 and oral argument before the Second Circuit Court of Appeals was held on October 21, 2019. In an opinion dated July 13, 2020, the Second Circuit Court of Appeals affirmed the district court's dismissal of the second amended complaint in part, vacated the district court's dismissal of the second amended complaint in part, and remanded the matter to the district court for further proceedings. On August 6, 2020, the Defendants filed a Petition for Rehearing en banc requesting reconsideration of portions of the opinion from the Second Circuit Court of Appeals. The Second Circuit Court of Appeals denied the Petition on September 8, 2020 and issued a mandate to the district court (the Court for the Southern District of New York) on September 15, 2020. On December 16, 2020, the Company reached a settlement in principle to fully resolve the Securities Action, and on February 1, 2021, a motion for preliminary approval of the settlement was filed in the Court for the Southern District of New

York. On February 25, 2021 the Court for the Southern District of New York denied the motion for preliminary approval and directed the parties to re-submit the motion with certain revisions. On March 24, 2021 the parties re-submitted the motion for preliminary approval. The parties' agreement, which remains subject to court approval and certain other conditions, provides in part for a \$13.5 million settlement payment in exchange for the dismissal and a release of all claims against the Defendants in connection with the Securities Action. The full amount of the settlement payment is expected to be paid by the Company's insurance provider under its insurance policy. The terms of the settlement and the final plan of allocation of settlement proceeds was approved by the Court for the Southern District of NY on September 22, 2021. On that date, the Court for the Southern District of NY dismissed the Securities Action with prejudice and released all of the claims against the Defendants in connection with the Securities Action.

On or about April 26, 2017, Ronald Morrow filed a shareholder derivative lawsuit on behalf of the Company in the United States District Court for the Southern District of New York, or the Court, against the Company's Chief Executive Officer Charles J. Link, Jr., the Company's Chief Medical Officer and President Nicholas Vahanian, and Company directors Thomas A. Raffin, Joseph Saluri, Ernest J. Talarico, III, Paul R. Edick, Paolo Pucci, and Lota S. Zoth (collectively, the Morrow Defendants), captioned Morrow v. Link., et al., Case 1:17-cv-03039 (the Morrow Action). The complaint alleges that the Morrow Defendants caused the Company to issue false statements in its 2016 proxy statement regarding risk management and compensation matters in violation of federal securities law. The complaint also asserts state law claims against the Morrow Defendants for breaches of fiduciary duties, unjust enrichment, abuse of control, insider trading, gross mismanagement, and corporate waste, alleging that the Morrow Defendants made material misstatements or omissions related to the Phase 2 and 3 trials and efficacy of the product candidate algenpantucel-L, awarded themselves excessive compensation, engaged in illegal insider trading, and grossly mismanaged the Company. The plaintiff does not quantify any alleged damages in the complaint but seeks restitution for damages to the Company's stockholders. The language for such proposals is not specified in the complaint. The plaintiff also contemporaneously filed a statement of relatedness, informing the Court that the Morrow Action is related to Abramson v. NewLink Genetics Corp., et al., Case 1:16-cv-3545. On May 19, 2017, the plaintiff dismissed the Morrow Action without prejudice. Also on May 19, 2017, plaintiffs' counsel in the Morrow Action filed a new shareholder derivative complaint that is substantively identical to the Morrow Action, except that the plaintiff is Rickey Ely. The latter action is captioned Ely v. Link, et al., Case 17-cv-3799, or the Ely Action. By agreement o

On December 11, 2020, the Company reached a settlement in principle to resolve the substantive claims asserted in the Ely Action, and on February 26, 2021, the Company reached an agreement with the plaintiff with respect to an award for plaintiff's counsel's attorneys' fees and expenses in the total amount of \$375,000. In addition to this award for fees and expenses, the parties' agreement provides for the adoption and/or enactment of certain corporate governance reforms at both the Board of Directors and management levels, in exchange for the dismissal and a release of all claims against the Defendants in connection with the Ely Action. On June 3, 2021, a motion for preliminary approval of the settlement was filed in the Court for the Southern District of NY. On August 10, 2021, the Court for the Southern District of NY granted the motion for preliminary approval of the settlement. Thereafter, the full amount of the fees and expenses award was paid by the Company's insurance provider under its insurance policy.

On November 10, 2021, the Court for the Southern District of NY approved the settlements in both the Securities Action and the Ely Action and signed dismissals with prejudice in both cases.

At present, other than the previously mentioned matters, there is no pending litigation or proceeding involving any or our directors or officers for which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted by directors, executive officers or persons controlling us, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

OTHER INFORMATION

Stockholder Communications with Our Board of Directors

Our Board has adopted a formal process by which stockholders may communicate with our Board or any of its directors. This information is available on our website at www.lumos-pharma.com in the "Investors & Media - Corporate Governance - Contact the Board" section.

Stockholder Proposals and Nominations of Directors

Stockholders who wish to submit a proposal for our 2023 Annual Meeting of Stockholders must submit any such proposal by November 18, 2022, to Corporate Secretary, Lumos Pharma, Inc., 4200 Marathon Boulevard #200, Austin, TX 78756. If you wish to submit a director nomination or a proposal at next year's annual meeting that is not to be included in next year's proxy materials, you must do so by no later than the close of business on February 3, 2023, nor earlier than the close of business on January 4, 2023, and you must comply with the requirements of Section 5(b) in our Bylaws, including submitting written notice to our Corporate Secretary as set forth above.

The Company has not yet selected the date of the annual meeting of stockholders for next year but is considering holding the meeting in May 2023. If the date of the 2023 annual meeting is advanced or delayed more than 30 days before or after the anniversary of the date of this Annual Meeting, notice by the stockholder to be timely must be so received no earlier than the close of business on the 120th day prior to such 2023 annual meeting and not later than the close of business on the later of the 90th day prior to such 2023 annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. Submissions must include the full name of the proposed nominee, a description of the proposed nominee's business experience for at least the previous five years, complete biographical information, a description of the proposed nominee's qualifications as a director, a representation that the nominating stockholder is a beneficial or record holder of our common stock and such other information as is required under Section 5(b) of our Bylaws. Any such submission must be accompanied by the written consent of the proposed nominee to be named as a nominee and to serve as a director if elected.

Householding of Proxy Materials

The SEC has adopted rules that permit companies and intermediaries (e.g., brokers) to satisfy the delivery requirements for Notice of Internet Availability of Proxy Materials or other Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Lumos stockholders will be "householding" our proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Notice of Internet Availability of Proxy Materials, please notify your broker or Lumos. Direct your written request to Corporate Secretary, Lumos Pharma, Inc., 4200 Marathon Boulevard #200, Austin, TX 78756 or contact our Corporate Secretary at (512) 215-2630. We undertake to promptly deliver, upon written or oral request, a separate copy of our Notice of Internet Availability of Proxy Materials to stockholders at a shared address to which a single copy of such documents was delivered. Stockholders who currently receive multiple copies of Notice of Internet Availability of Proxy Materials at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

Our Board knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors

<u>/s/ Lori Lawley_</u>

Lori Lawley Chief Financial Officer

March 23, 2022

A copy of our Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2021 is available without charge upon written request to: Corporate Secretary, Lumos Pharma, Inc., 4200 Marathon Boulevard #200, Austin TX 78756.

EXHIBIT A

LUMOS PHARMA, INC.

2010 EMPLOYEE STOCK PURCHASE PLAN ADOPTED BY THE BOARD OF DIRECTORS: OCTOBER 29, 2010 APPROVED BY THE STOCKHOLDERS: JANUARY 7, 2011 AMENDED BY THE BOARD OF DIRECTORS: FEBRUARY 22, 2013 APPROVED BY THE STOCKHOLDERS: MAY 9, 2013 AMENDED BY THE BOARD OF DIRECTORS: JULY 22, 2021

1. GENERAL.

(a) The purpose of the Plan is to provide a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan is intended to permit the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.

(b) The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board shall administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights to purchase shares of Common Stock shall be granted and the provisions of each Offering of such Purchase Rights (which need not be identical).

(ii) To designate from time to time which Related Corporations of the Company shall be eligible to participate in the

Plan.

(2) To accogniate more thank to make themen resulted corporations of the company shall be englose to participate in a

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under it.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.

(viii) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees who are foreign nationals or employed outside the United States.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board shall thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board shall have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the shares of Common Stock that may be sold pursuant to Purchase Rights shall not exceed in the aggregate sixty thousand (60,000) shares of Common Stock.

(b) If any Purchase Right granted under the Plan shall for any reason terminate without having been exercised, the shares of Common Stock not purchased under such Purchase Right shall again become available for issuance under the Plan.

(c) The stock purchasable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to purchase shares of Common Stock under the Plan to Eligible Employees in an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate, which shall comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights shall have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering shall include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering shall be effective, which period shall not exceed twenty-seven (27) months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in agreements or notices delivered hereunder: (i) each agreement or notice delivered by that Participant shall be deemed to apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) shall be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercised.

(c) The Board shall have the discretion to structure an Offering so that if the Fair Market Value of the shares of Common Stock on the first day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of the shares of Common Stock on the Offering Date, then (i) that Offering shall terminate immediately, and (ii) the Participants in such terminated Offering shall be automatically enrolled in a new Offering beginning on the first day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate as provided in Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee shall not be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event shall the required period of continuous employment be greater than two (2) years. In addition, the Board may provide that no Employee shall be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than twenty (20) hours per week and more than five (5) months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee shall, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right shall thereafter be deemed to be a part of that Offering. Such Purchase Right shall have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted shall be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right shall begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she shall not receive any Purchase Right under that Offering.

(c) No Employee shall be eligible for the grant of any Purchase Rights under the Plan if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code shall apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options shall be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights under the Plan only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which exceeds twenty five thousand dollars (\$25,000) of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, shall be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, shall be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code shall not be eligible to participate.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, shall be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding fifteen percent (15%) of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date shall be no later than the end of the Offering.

(b) The Board shall establish one (1) or more Purchase Dates during an Offering as of which Purchase Rights granted pursuant to that Offering shall be exercised and purchases of shares of Common Stock shall be carried out in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering. In connection with each Offering made under the Plan, the Board may specify a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering. In addition, in connection with each Offering that contains more than one Purchase Date, the Board may specify a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata allocation of the shares of Common Stock available shall be made in as nearly a uniform manner as shall be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights shall be not less than the lesser of:

(i) an amount equal to eighty-five percent (85%) of the Fair Market Value of the shares of Common Stock on the Offering Date; or

(ii) an amount equal to eighty-five percent (85%) of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) A Participant may elect to authorize payroll deductions pursuant to an Offering under the Plan by completing and delivering to the Company, within the time specified in the Offering, an enrollment form (in such form as the Company may provide). Each such enrollment form shall authorize an amount of Contributions expressed as a percentage of the submitting Participant's earnings (as defined in each Offering) during the Offering (not to exceed the maximum percentage specified by the Board). Each Participant's Contributions shall be credited to a bookkeeping account for such Participant under the Plan and shall be deposited with the general funds of the Company except where applicable law requires that Contributions be deposited with a third party. To the extent provided in the Offering, a Participant may begin such Contributions after the beginning of the Offering. To the extent provided in the Offering, a

Participant may thereafter reduce (including to zero) or increase his or her Contributions. To the extent specifically provided in the Offering, in addition to making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash or check prior to each Purchase Date of the Offering.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a notice of withdrawal in such form as the Company may provide. Such withdrawal may be elected at any time prior to the end of the Offering, except as provided otherwise in the Offering. Upon such withdrawal from the Offering by a Participant, the Company shall distribute to such Participant all of his or her accumulated Contributions (reduced to the extent, if any, such Contributions have been used to acquire shares of Common Stock for the Participant) under the Offering, and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from an Offering shall have no effect upon such Participant's eligibility to participate in any other Offerings under the Plan, but such Participant shall be required to deliver a new enrollment form in order to participate in subsequent Offerings.

(c) Purchase Rights granted pursuant to any Offering under the Plan shall terminate immediately upon a Participant ceasing to be an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or other lack of eligibility. The Company shall distribute to such terminated or otherwise ineligible Employee all of his or her accumulated Contributions (reduced to the extent, if any, such Contributions have been used to acquire shares of Common Stock for the terminated or otherwise ineligible Employee) under the Offering.

(d) Purchase Rights shall not be transferable by a Participant except by will, the laws of descent and distribution, or by a beneficiary designation as provided in Section 10. During a Participant's lifetime, Purchase Rights shall be exercisable only by such Participant.

(e) Unless otherwise specified in an Offering, the Company shall have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date during an Offering, each Participant's accumulated Contributions shall be applied to the purchase of shares of Common Stock up to the maximum number of shares of Common Stock permitted pursuant to the terms of the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares shall be issued upon the exercise of Purchase Rights unless specifically provided for in the Offering.

(b) If any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount shall be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from such next Offering, as provided in Section 7(b), or is not eligible to participate in such Offering, as provided in Section 5, in which case such amount shall be distributed to such Participant after the final Purchase Date, without interest. If the amount of Contributions remaining in a Participant's account after the purchase of shares of shares of Common Stock on the final Purchase Date of the Offering, then such remaining amount shall be distributed in full to such Participant at the end of the Offering without interest.

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the

Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date during any Offering hereunder the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights or any Offering shall be exercised on such Purchase Date, and the Purchase Date shall be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in such compliance, except that the Purchase Date shall not be delayed more than twelve (12) months and the Purchase Date shall in no event be more than twenty-seven (27) months from the Offering Date. If, on the Purchase Date under any Offering hereunder, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in such compliance, no Purchase Rights or any Offering shall be exercised and all Contributions accumulated during the Offering (reduced to the extent, if any, such Contributions have been used to acquire shares of Common Stock) shall be distributed to the Participants without interest.

9. COVENANTS OF THE COMPANY.

The Company shall seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of Common Stock upon exercise of the Purchase Rights. If, after commercially reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Purchase Rights unless and until such authority is obtained.

10. DESIGNATION OF BENEFICIARY.

(a) A Participant may file a written designation of a beneficiary who is to receive any shares of Common Stock and/or cash, if any, from the Participant's account under the Plan in the event of such Participant's death subsequent to the end of an Offering but prior to delivery to the Participant of such shares of Common Stock or cash. In addition, a Participant may file a written designation of a beneficiary who is to receive any cash from the Participant's account under the Plan in the event of such Participant is death during an Offering. Any such designation shall be on a form provided by or otherwise acceptable to the Company.

(b) The Participant may change such designation of beneficiary at any time by written notice to the Company. In the event of the death of a Participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such Participant's death, the Company shall deliver such shares of Common Stock and/or cash to the executor or administrator of the estate of the Participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or cash to the spouse or to any one or more dependents or relatives of the Participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities imposed by purchase limits under each ongoing Offering. The Board shall make such adjustments, and its determination shall be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue Purchase Rights outstanding under the Plan or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for those outstanding under the Plan, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for Purchase Rights outstanding under the Plan, then the Participants' accumulated Contributions shall be used to purchase shares of Common Stock within ten (10) business days prior to the Corporate Transaction under any ongoing Offerings, and the Participants' Purchase Rights under the ongoing Offerings shall terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(i) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval shall be required for any amendment of the Plan for which stockholder approval is required by applicable law or listing requirements, including any amendment that either (i) materially increases the number of shares of Common Stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to become Participants and receive Purchase Rights under the Plan, (iii) materially increases the benefits accruing to Participants under the Plan or materially reduces the price at which shares of Common Stock may be purchased under the Plan, (iv) materially extends the term of the Plan, or (v) expands the types of awards available for issuance under the Plan, but in each of (i) through (v) above only to the extent stockholder approval is required by applicable law or listing requirements.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan shall not be impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the Effective Date, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment.

13. EFFECTIVE DATE OF PLAN.

The Plan shall become effective on the IPO Date, but no Purchase Rights shall be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

14. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights shall constitute general funds of the Company.

(b) A Participant shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's

shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering shall in any way alter the at will nature of a Participant's employment or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.

(d) The provisions of the Plan shall be governed by the laws of the State of Iowa without resort to that state's conflicts of laws rules.

15. DEFINITIONS.

As used in the Plan, the following definitions shall apply to the capitalized terms indicated below:

(a) "Board" means the Board of Directors of the Company.

(b) "*Capitalization Adjustment*" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the Effective Date without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar transaction). Notwithstanding the foregoing, the conversion of any convertible securities of the Company shall not be treated as a Capitalization Adjustment.

(c) "*Code*" means the Internal Revenue Code of 1986, as amended.

(d) *"Committee"* means a committee of one (1) or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(e) "Common Stock" means the common stock of the Company.

(f) "*Company*" means Lumos Pharma, Inc., a Delaware corporation.

(g) "*Contributions*" means the payroll deductions and other additional payments specifically provided for in the Offering, that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account, if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions.

(h) "*Corporate Transaction*" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) the consummation of a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) the consummation of a sale or other disposition of at least ninety percent (90%) of the outstanding securities of the Company;

(iii) the consummation of a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) the consummation of a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(i) "Director" means a member of the Board.

(j) *"Eligible Employee"* means an Employee who meets the requirements set forth in the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(k) "*Employee*" means any person, including Officers and Directors, who is employed for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, shall not cause a Director to be considered an "Employee" for purposes of the Plan.

(I) *"Employee Stock Purchase Plan"* means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.

(m) *"Exchange Act"* means the Securities Exchange Act of 1934, as amended.

(n) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value shall be the closing selling price (or closing bid if no sales were reported) on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined by the Board in good faith.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock at the time when the Offering commences shall be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.

(o) "*IPO Date*" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(p) "Offering" means the grant of Purchase Rights to purchase shares of Common Stock under the Plan to Eligible Employees.

(q) "Offering Date" means a date selected by the Board for an Offering to commence.

(r) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(s) "Participant" means an Eligible Employee who holds an outstanding Purchase Right granted pursuant to the Plan.

(t) "Plan" means this Lumos Pharma, Inc. 2010 Employee Stock Purchase Plan.

(u) "*Purchase Date*" means one or more dates during an Offering established by the Board on which Purchase Rights shall be exercised and as of which purchases of shares of Common Stock shall be carried out in accordance with such Offering.

(v) "*Purchase Period*" means a period of time specified within an Offering beginning on the Offering Date or on the next day following a Purchase Date within an Offering and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(w) "Purchase Right" means an option to purchase shares of Common Stock granted pursuant to the Plan.

(x) "*Related Corporation*" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(y) "Securities Act" means the Securities Act of 1933, as amended.

(z) "*Trading Day*" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including the Nasdaq Global Select Market, the Nasdaq Global Market, or the Nasdaq Capital Market, is open for trading.

LUMOS PHARMA, INC. 4200 MARATHON BLVD., SUITE 200 AUSTIN, TX 78756



VOTE BY INTERNET - 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 p.m. Eastern Time the day before the meeting date. 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/LUMO2022

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

instructions. VOTE BY PHONE - 1-800-690-6903 Use any touch-done telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time the day before the meeting date. 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 Broadnidge, 51 Mercedes Way, Edgewood, NY 11717.

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

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Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: The Proxy Statement and Annual Report are available at <u>www.proxyvote.com</u>

LUMOS PHARMA, INC. Annual Meeting of Stockholders May 04, 2022 11:00 AM CDT This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Lori Lawley, Bradley J. Powers and Ryan D. Trytten, or any of them, as proxies, each with the power to appoint their substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of LUMOS PHARMA, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 11:00 AM, CDT on May 04, 2022, via www.virtualshareholdermeeting.com/LUMO2022, and any adjournment or postponement thereof.

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

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Continued and to be signed on reverse side