

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

SCHEDULE 14A

PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934

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

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to sec. 240.14a-11(c) or sec. 240.14a-12

PHIO PHARMACEUTICALS CORP.
(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- Fee not 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:
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 - (1) Amount Previously Paid:
 - (2) Form, Schedule or Registration State No.:
 - (3) Filing Party:
 - (4) Date Filed:



257 Simarano Drive, Suite 101
Marlborough, MA 01752
NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on JUNE 15, 2021

Dear Stockholder:

You are cordially invited to attend the 2021 Annual Meeting of Stockholders (the “**Annual Meeting**”) of Phio Pharmaceuticals Corp., a Delaware corporation (the “**Company**”), which will be held on June 15, 2021, at 11:00 a.m. (Eastern Time). The meeting will be a completely virtual meeting of stockholders. You can attend the meeting by visiting www.meetingcenter.io/269777998 where you will be able to listen to the meeting live, submit questions, view the stockholder list, and vote online. The password for the meeting is PHIO2021. Because the meeting is completely virtual and being conducted via the internet, stockholders will not be able to attend the meeting in person physically.

Only stockholders who held stock at the close of business on the record date, April 16, 2021, may vote at the Annual Meeting, including any adjournment or postponement thereof. At the Annual Meeting, you will be asked to consider and vote upon:

- (1) the election of the seven director nominees named in the accompanying Proxy Statement; and
- (2) the ratification of BDO USA, LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2021.

The accompanying Proxy Statement more fully describes the details of the business to be conducted at the Annual Meeting. After careful consideration, our Board of Directors has unanimously approved the proposals and recommends that you vote FOR each nominee and proposal described in the Proxy Statement.

We are pleased to make use of the Securities and Exchange Commission rules that allow companies to furnish proxy materials to their stockholders via the Internet. We believe the ability to deliver proxy materials electronically allows us to provide our stockholders with the information they need, while lowering the costs of delivery and reducing the environmental impact from the distribution of our Annual Meeting materials.

We look forward to seeing you at the Annual Meeting.

Sincerely,

Gerrit Dispersyn, Dr. Med. Sc.
President and Chief Executive Officer

April 30, 2021

WHETHER OR NOT YOU EXPECT TO ATTEND THE MEETING, PLEASE VOTE VIA THE INTERNET OR OVER THE TELEPHONE AS INSTRUCTED IN THE **NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS** AND ON THE ENCLOSED PROXY CARD OR, IF YOU REQUESTED AND RECEIVED A PRINTED COPY OF THE PROXY STATEMENT, COMPLETE, DATE, SIGN AND RETURN THE ENCLOSED PROXY CARD USING THE ENCLOSED RETURN ENVELOPE, AS PROMPTLY AS POSSIBLE IN ORDER TO ENSURE YOUR REPRESENTATION AT THE MEETING. EVEN IF YOU HAVE VOTED BY PROXY, YOU MAY STILL VOTE AT THE MEETING IF YOU ATTEND THE MEETING VIRTUALLY. 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 CARD ISSUED IN YOUR NAME FROM THAT INTERMEDIARY.



257 Simarano Drive, Suite 101
Marlborough, MA 01752

**PROXY STATEMENT FOR
2021 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JUNE 15, 2021**

GENERAL INFORMATION

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors (the “**Board**”) of Phio Pharmaceuticals Corp. (“**Phio**” or the “**Company**”) for use at the Company’s 2021 Annual Meeting of Stockholders (the “**Annual Meeting**”).

The Company will hold the Annual Meeting virtually on Tuesday, June 15, 2021 at 11:00 a.m. (Eastern Time). You can attend the Annual Meeting by visiting www.meetingcenter.io/269777998, where you will be able to listen to the meeting live, submit questions and vote online. To participate in the Annual Meeting, you will need the control number included on your Notice or proxy card and the password: PHIO2021. Because the Annual Meeting is completely virtual and being conducted via the internet, stockholders will not be able to attend the meeting in person physically.

The Company anticipates that the Notice Regarding the Availability of Proxy Materials (the “**Notice**”) in connection with this Proxy Statement will first be mailed on or about May 6, 2021 to all stockholders entitled to vote at the Annual Meeting and we will post our proxy materials on the website referenced in the Notice.

The Notice instructs you as to how you may access and review important information contained in the proxy materials. The Notice also instructs you on how you may submit your proxy via the Internet. If you receive a Notice by mail and would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting such materials included in the Notice.

For a proxy to be effective, it must be properly executed and received prior to the Annual Meeting. Each proxy properly tendered will, unless otherwise directed by the stockholder, be voted for the proposals and nominees described in this Proxy Statement and at the discretion of the proxy holder(s) with regard to all other matters that may properly come before the meeting.

The Company will pay all of the costs of soliciting proxies and has engaged a proxy solicitor, Alliance Advisors, LLC, to assist in solicitation of proxies. It is estimated that the total cost for the solicitation campaign will be approximately \$10,000. In addition, we will provide copies of our proxy materials to brokerage firms, fiduciaries and custodians for forwarding to beneficial owners who request printed copies of these materials and will reimburse these persons for their costs of forwarding these materials. Our directors, officers and employees may also solicit proxies by telephone, facsimile or personal solicitation; however, we will not pay them additional compensation for any of these services.

Shares Outstanding and Voting Rights

Only holders of record of our Company’s common stock, par value \$0.0001 per share (the “**Common Stock**”) at the close of business on April 16, 2021 (the “**Record Date**”), are entitled to notice of and to vote at the Annual Meeting. On the Record Date, 13,534,389 shares of common stock were issued and outstanding. Each share of common stock is entitled to one vote on all matters to be voted upon at the Annual Meeting. Holders of Common Stock do not have the right to cumulative voting in the election of directors. The presence, in person or by proxy, of the holders of at least one-third of the outstanding shares on the Record Date will constitute a quorum for the transaction of business at the Annual Meeting and any adjournment thereof.

Persons who hold shares of our Common Stock directly on the Record Date (“**record holders**”) must return a proxy card or attend the Annual Meeting in person virtually in order to vote on the proposals. Persons who hold shares of our Common Stock indirectly on the Record Date through a brokerage firm, bank or other financial institution (“**beneficial holders**”) must return a voting instruction form to have their shares voted on their behalf. Brokerage firms, banks or other financial institutions that do not receive voting instructions from beneficial holders may either vote these shares on behalf of the beneficial holders on certain “routine” matters or return a proxy leaving these shares un-voted (a “**broker non-vote**”).

Abstentions and broker non-votes (if any) will be counted for the purpose of determining the presence or absence of a quorum, but will not be counted for the purpose of determining the number of votes cast on a given proposal. The required vote for each of the proposals expected to be acted upon at the Annual Meeting is described below:

Proposal No. 1 — Election of directors. Directors are elected by a plurality, with the seven nominees obtaining the most votes being elected. Because there is no minimum vote required, abstentions and broker non-votes (if any) will be entirely excluded from the vote and will have no effect on its outcome. Under the plurality vote standard, any shares that are not voted, whether by abstention, broker non-votes (if any) or otherwise, will not affect the election of directors.

Proposal No. 2 — Ratification of independent registered public accounting firm. This proposal must be approved by a majority of the votes cast on the matter affirmatively or negatively. As a result, abstentions and broker non-votes (if any) will be entirely excluded from the vote and will have no effect on its outcome.

We encourage you to vote by proxy, whether via telephone, through the Internet or mailing an executed proxy card. By voting in advance of the Annual Meeting, this ensures that your shares will be voted and reduces the likelihood that the Company will be forced to incur additional expenses soliciting proxies for the Annual Meeting. Any record holder of our Common Stock may attend the Annual Meeting in person virtually and may revoke the enclosed form of proxy at any time by:

- executing and delivering to the Corporate Secretary a later-dated proxy;
- delivering a written revocation to the Corporate Secretary before the meeting; or
- voting in person virtually at the Annual Meeting.

Beneficial holders of our Common Stock who wish to change or revoke their voting instructions should contact their brokerage firm, bank or other financial institution for information on how to do so. Beneficial holders who wish to attend the Annual Meeting and vote in person virtually should contact their brokerage firm, bank or other financial institution holding shares of our Common Stock on their behalf in order to obtain a “legal proxy,” which will allow them to both attend the Annual Meeting and vote in person virtually. Without a legal proxy, beneficial holders cannot vote at the Annual Meeting because their brokerage firm, bank or other financial institution may have already voted or returned a broker non-vote on their behalf.

Virtually Attending the Annual Meeting

You will be able to attend the Annual Meeting online, submit your questions during the meeting and vote your shares electronically at the meeting by visiting www.meetingcenter.io/269777998. Because the Annual Meeting is completely virtual and being conducted via the internet, stockholders will not be able to attend the meeting in person physically. However, we have designed the meeting to provide stockholders with the same rights and opportunities to participate as they would have at an in-person meeting. To participate in the Annual Meeting, you will need the control number included on your Notice, on your proxy card or on the instructions that accompanied your proxy materials. The password for the meeting is PHIO2021. If you hold your shares through an intermediary, such as a bank or broker, you must register in advance using the instructions below. The Annual Meeting webcast will begin promptly at 11:00 a.m. (Eastern Time). We encourage you to access the meeting prior to the start time. Online check-in will begin at 10:50 a.m. (Eastern Time), and you should allow ample time for the check-in procedures.

The virtual meeting platform is fully supported across Microsoft Edge, Firefox, Chrome and Safari browsers and devices (desktops, laptops, tablets and cell phones) running the most up-to-date version of applicable software and plugins. Please note that Internet Explorer is no longer supported. Participants should ensure that they have a strong WiFi connection wherever they intend to participate in the meeting. We encourage you to access the meeting prior to the start time. A link on the meeting page will provide further assistance should you need it or you may call 1-888-724-2416 or 1-781-575-2748.

If you are a registered shareholder (i.e. you hold your shares through our transfer agent, Computershare Trust Company, N.A. (“**Computershare**”), you do not need to register to attend the Annual Meeting virtually on the internet. Please follow the instructions on the Notice or proxy card that you received.

If you hold your shares through an intermediary, such as a bank or broker, you must register in advance to attend the Annual Meeting virtually on the internet. To register to attend the Annual Meeting online by webcast you must submit proof of your proxy power (legal proxy) reflecting your Company holdings along with your name and email address to Computershare. Requests for registration must be labeled as “Legal Proxy” and be received no later than 5:00 p.m., Eastern Time, on June 9, 2021. You will receive a confirmation of your registration by email after we receive your registration materials. Requests for registration should be directed by (i) email to legalproxy@computershare.com, with a forward of the email from your broker, or attach an image of your legal proxy or (ii) mail to Computershare, Phio Pharmaceuticals Corp. Legal Proxy, P.O. Box 43001, Providence, Rhode Island 02940-3001.

You may submit questions at the Annual Meeting through any of the following methods:

Prior to the Annual Meeting, by logging on to www.meetingcenter.io/269777998 using the control number included on your Notice, proxy card or on the instructions that accompanied your proxy materials or accessing the site via your email. The password for the meeting is PHIO2021. You can then click on the “Messages” icon on the right-hand side of the page. A pop-up window will appear where you may type your question in the text box. Once done, click “Submit” to submit your question, after which a confirmation message will be displayed.

During the Annual Meeting, by accessing the meeting website above using the control number included on your Notice, proxy card or on the instructions that accompanied your proxy materials. The password for the meeting is PHIO2021. You can then submit a live text question by clicking the “Messages” icon on the right-hand side of the page where you may type your question in the text box by typing in the “Ask a Question” box.

PROPOSAL NO. 1

ELECTION OF DIRECTORS

The Amended and Restated Bylaws of the Company (the “**Bylaws**”) provide that the number of directors shall be not fewer than two and not more than seven, with directors serving one-year terms. The total Board size is currently fixed at seven directors. Currently, the directors (whose terms expire at the Annual Meeting) are Robert J. Bitterman, Geert Cauwenbergh, Dr. Med. Sc., Gerrit Dispersyn, Dr. Med. Sc., H. Paul Dorman, Robert L. Ferrara, Jonathan E. Freeman, Ph.D. and Curtis A. Lockshin, Ph.D.

As described below, the Board has nominated Drs. Cauwenbergh, Dispersyn, Freeman and Lockshin and Messrs. Bitterman, Dorman and Ferrara for reelection, as directors at the Annual Meeting. All nominees have indicated their willingness to serve if elected. Directors elected at the Annual Meeting will hold office until the 2022 Annual Meeting of Stockholders and until their successors are elected and qualified, unless they resign or their seats become vacant due to death, removal or other cause in accordance with the Bylaws. Should any nominee become unavailable for election at the Annual Meeting, the persons named on the enclosed proxy as proxy holders may vote all proxies given in response to this solicitation for the election of a substitute nominee chosen by the Board.

Nomination of Directors

The Nominating and Governance Committee reviews and recommends to the Board potential nominees for election to the Board. In reviewing potential nominees, the Nominating and Governance Committee considers the qualifications of each potential nominee in light of the Board’s existing and desired mix of experience and expertise. The Nominating and Governance Committee considers many factors when making a determination to nominate a candidate for a director position on the Board, such as integrity and character, prior business experience, including experience relating to the biotechnology industry, financial literacy and the nominee’s willingness to commit substantial time to the Company. After reviewing the qualifications of potential Board candidates, the Nominating and Governance Committee presents its recommendations to the Board, which selects the final director nominees. Upon the recommendation of the Nominating and Governance Committee, the Board nominated Drs. Cauwenbergh, Dispersyn, Freeman and Lockshin and Messrs. Bitterman, Dorman and Ferrara for reelection. The Company did not pay any fees to any third parties to identify or assist in identifying or evaluating nominees for the Annual Meeting.

The Nominating and Governance Committee considers stockholder nominees using the same criteria set forth above. Stockholders who wish to present a potential nominee to the Nominating and Governance Committee for consideration for election at a future annual meeting of stockholders must provide the Nominating and Governance Committee with notice of the nomination and certain information regarding the candidate within the time periods set forth below under the caption “Stockholder Proposals.”

Although the Nominating and Governance Committee considers whether nominees assist in achieving a mix of Board members that represents a diversity of background and experience, including but not limited to race, gender or national origin, we have no formal policy regarding Board diversity. The Nominating and Governance Committee assesses its effectiveness in achieving these goals in the course of assessing director candidates, which is an ongoing process.

Nominees and Incumbent Directors

The Nominating and Governance Committee has recommended and the Board has nominated Drs. Cauwenbergh, Dispersyn, Freeman and Lockshin and Messrs. Bitterman, Dorman and Ferrara to be reelected as directors at the Annual Meeting. The following table sets forth the following information for these nominees: the year each was first elected a director of the Company, if applicable; their respective ages as of the date of filing of this Proxy Statement; the positions currently held with the Company, if any, and the year their current term will expire, if applicable:

| Nominee / Director Name and Year First Became a Director | Age | Position(s) with the Company | Year Current Term Expires |
|---|------------|---|--------------------------------------|
| <i>Nominees for Directors:</i> | | | |
| Robert J. Bitterman (2012) | 70 | Chairman of the Board of Directors | 2021 |
| Geert Cauwenbergh, Dr. Med. Sc. (2012) | 67 | Director | 2021 |
| Gerrit Dispersyn, Dr. Med. Sc. (2020) | 46 | President and Chief Executive Officer | 2021 |
| H. Paul Dorman (2013) | 84 | Director | 2021 |
| Robert L. Ferrara (2019) | 70 | Director | 2021 |
| Jonathan E. Freeman, Ph.D. (2017) | 53 | Director | 2021 |
| Curtis A. Lockshin, Ph.D. (2013) | 60 | Director | 2021 |

Directors Nominated for Election

The following persons have been nominated by the Board to be elected as directors at the Annual Meeting.

Robert J. Bitterman has served as a member and the Chairman of our Board since 2012. Mr. Bitterman served as the President and Chief Executive Officer of Cutanea Life Sciences, Inc., a private company he founded in 2005 that focused on developing innovative technologies to treat diseases and disorders of the skin and subcutaneous tissue, until its acquisition by Biofrontera, Inc., USA in March 2019. Prior to his role at Cutanea Life Sciences, Inc., Mr. Bitterman also held the position of President and Chief Executive Officer of Isolagen, Inc., President and General Manager of Dermik Laboratories and various positions of increasing responsibility in financial and commercial capacities within Aventis S.A. Mr. Bitterman holds an A.B. degree in Economics from The College of the Holy Cross and a Master of Business Administration degree from Boston University. He also holds a Doctor of Humane Letters (Honoris Causa) from the New York College of Podiatric Medicine. Our Nominating and Governance Committee believes that Mr. Bitterman is qualified to serve as a member of our Board of Directors due to his executive leadership and his experience in the pharmaceutical industry.

Geert Cauwenbergh, Dr. Med. Sc. has served as a member of our Board since April 2012. He served as our President and Chief Executive Officer from April 2012 to November 2018, and as our Chief Executive Officer from November 2018 until his retirement in March 2019. Dr. Cauwenbergh served as Chairman and Chief Executive Officer of RHEI Pharmaceuticals, Inc., a private company that develops and commercializes proprietary drug therapies, from 2008 to 2011. In 2001, Dr. Cauwenbergh founded Barrier Therapeutics, Inc., a biopharmaceutical company focused on dermatology drug development, until its acquisition by Stiefel Laboratories, Inc. in 2008. Prior to Barrier Therapeutics, Inc. Dr. Cauwenbergh was employed by Johnson & Johnson for 23 years where he held a number of ascending senior management positions. He currently serves as a director of Legacy Health Care (Switzerland). Dr. Cauwenbergh received his Doctorate in Medical Sciences from the Catholic University of Leuven, Faculty of Medicine (Belgium), where he also completed his masters and undergraduate work. Our Nominating and Governance Committee believes that Dr. Cauwenbergh is qualified to serve as a member of our Board of Directors due to his executive leadership and extensive knowledge and experience in the biotechnology industry.

Gerrit Dispersyn, Dr. Med. Sc. has served as a member of our Board since October 2020. He joined the Company in April 2017 as our Chief Development Officer and became our President and Chief Executive Officer in March 2019. From 2014 to April 2017, Dr. Dispersyn was the Vice President, Global Head of Clinical Affairs at Integra LifeSciences Corporation, a world leader in medical technology. Prior to assuming this role, Dr. Dispersyn held the position of Vice President, Program Management & Clinical Affairs from 2008 to 2014. In these positions, Dr. Dispersyn was responsible for the global strategy and execution of clinical and product development, clinical operations and medical affairs projects. He received his Doctorate in Medical Sciences from Maastricht University, Faculty of Medicine (Netherlands), a post-graduate degree in Biomedical Imaging and a Master of Science degree in Biochemistry, both from the University of Antwerp, Belgium. Our Nominating and Governance Committee believes that Dr. Dispersyn is qualified to serve as a member of our Board of Directors due to his leadership role as the President and Chief Executive Officer of our Company and his extensive knowledge and experience in the biotechnology industry.

H. Paul Dorman has served as a member of our Board since April 2013. Mr. Dorman currently serves as the Chairman and CEO of DFB Pharmaceuticals, a holdings company specializing in investing in and operating pharmaceutical businesses. From 1990 to 2012, Mr. Dorman also served as the Chairman and CEO of DPT Laboratories, a contract manufacturer and developer of pharmaceutical products. Prior to acquiring DPT, Mr. Dorman was employed by Johnson & Johnson for 12 years, where he served in various positions, including Vice President and as a member of the board of directors of several Johnson & Johnson companies. Prior to Johnson & Johnson, Mr. Dorman was employed by Baxter-Travenol, a large pharmaceuticals company. Mr. Dorman holds a B.S. degree in Mechanical Engineering from Tulane University and a Juris Doctor of Law from Loyola University. Our Nominating and Governance Committee believes that Mr. Dorman is qualified to serve as a member of our Board of Directors due to his executive leadership and business experience in the pharmaceutical industry.

Robert L. Ferrara has served as a member of our Board since October 2019. He most recently served as the Chief Financial Officer of Cutanea Life Sciences, Inc., a private company focused on developing innovative technologies to treat diseases and disorders of the skin and subcutaneous tissue, from January 2012 to June 2019. Prior to Cutanea, Mr. Ferrara served as the Chief Financial Officer of Storeroom Solutions Inc., a venture capital financed, technology enhanced, integrated supply chain solutions company, from 2004 to 2011, and NER Data Products, Inc., an IT service management company, from 2000 to 2003, as well as holding other senior level financial positions in national and international public companies in the greater Philadelphia area. Mr. Ferrara received a B.S. in Accounting from Lehigh University and is a Certified Public Accountant. Our Nominating and Governance Committee believes that Mr. Ferrara is qualified to serve as a member of our Board of Directors due to his financial expertise and his extensive experience in both publicly traded and venture capital backed companies in a variety of industries, including the life sciences.

Jonathan E. Freeman, Ph.D. has served as a member of our Board since June 2017. Dr. Freeman currently serves as the Chief Operating Officer of Anthos Therapeutics Inc., a clinical-stage biopharmaceutical company developing therapies for cardiovascular patients. Anthos Therapeutics Inc. was launched by Novartis and Blackstone Life Sciences, a private investment firm, where Dr. Freeman has also served as a Senior Advisor since July 2018. From 2017 to June 2018, Dr. Freeman held the position of Chief Business Officer of Vedanta Biosciences, a clinical-stage company developing therapies for immune-mediated diseases. Prior to his role with Vedanta Biosciences, Dr. Freeman was the Senior Vice President of Strategy and Portfolio Management and Head of Business Development and Licensing at Merck KGaA, a leading science and technology company, from 2008 to 2016. Dr. Freeman received a Ph.D. in Molecular Pharmacology and Drug Metabolism from the Imperial Cancer Research Fund (now CRUK), an M.A. and First Class Honours in Biochemistry from Cambridge University and a MBA with a finance major from Webster, St. Louis. Our Nominating and Governance Committee believes that Dr. Freeman is qualified to serve as a member of our Board of Directors due to his executive leadership and his background in immunology.

Curtis A. Lockshin, Ph.D. has served as a member of our Board since April 2013. Dr. Lockshin currently serves as the Chief Scientific Officer of Xenetic Biosciences, Inc., a biopharmaceutical company focused on the development of novel oncology therapeutics. Prior to this appointment, Dr. Lockshin served as Xenetic Biosciences, Inc.'s Vice President of Research and Operations from March 2014 to January 2017. From July 2016 to December 2016, Dr. Lockshin served as Chief Technical Officer of VBI Vaccines, Inc., a company developing vaccines in infectious disease and immuno-oncology. VBI Vaccines, Inc. merged with SciVac Therapeutics, Inc. and its subsidiary SciVac, Ltd., a commercial-stage biologics and vaccine company, in July 2016 where Dr. Lockshin had served as its Chief Executive Officer and director since September 2014. Since May 2013, Dr. Lockshin has also served as President and Chief Executive Officer of Guardum Pharmaceuticals, LLC, a private pharmaceutical company. Dr. Lockshin holds a S.B. degree in Life Sciences and a Ph.D. in Biological Chemistry from the Massachusetts Institute of Technology. Our Nominating and Governance Committee believes that Dr. Lockshin is qualified to serve as a member of our Board of Directors due to his scientific background, his significant industry knowledge and management experience.

Vote Required

The seven nominees who receive the greatest number of affirmative votes of the shares cast will be elected as directors. Any shares that are not voted, whether by abstention, broker non-votes (if any) or otherwise, will not affect the election of directors. Holders of proxies solicited by this Proxy Statement will vote the proxies received by them as directed on the proxy card or, if no direction is made, then FOR the election of the nominees named in this Proxy Statement.

**THE BOARD RECOMMENDS A VOTE "FOR"
THE NOMINEES IDENTIFIED ABOVE.**

PROPOSAL NO. 2

RATIFICATION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our Audit Committee has selected BDO USA, LLP (“**BDO**”) as our independent registered public accounting firm for the fiscal year ending December 31, 2021, and has further directed that we submit the selection of BDO for ratification by our stockholders at the Annual Meeting.

The Company is not required to submit the selection of our independent registered public accounting firm for stockholder approval. However, if the stockholders do not ratify this selection, the Audit Committee will reconsider its selection of BDO. Even if the selection is ratified, our Audit Committee may direct the appointment of a different independent registered public accounting firm at any time during the year if the Audit Committee determines that the change would be in the best interests of the Company.

The Audit Committee reviews and pre-approves all audit and non-audit services performed by its independent registered public accounting firm, as well as the fees charged for such services. All fees incurred in fiscal years 2020 and 2019 for services rendered by BDO were approved in accordance with these policies. In its review of non-audit service fees, the Audit Committee considers, among other things, the possible impact of the performance of such services on the auditor’s independence. Additional information concerning the Audit Committee and its activities can be found in the “Board Committees” section of this Proxy Statement.

Representatives of BDO are expected to be present at the Annual Meeting, will have the opportunity to make a statement if they desire to do so and will be available to respond to appropriate stockholder questions.

Fees for Independent Registered Public Accounting Firm

The following is a summary of the fees billed to the Company by BDO for professional services rendered for the fiscal years ended December 31, 2020 and 2019.

| | 2020 | 2019 |
|------------------------|-------------------|-------------------|
| Audit Fees | \$ 246,494 | \$ 203,865 |
| Audit-Related Fees | – | – |
| Tax Fees | – | – |
| All Other Fees | – | – |
| Total All Fees: | \$ 246,494 | \$ 203,865 |

Audit Fees consist of fees for the audit of the Company’s financial statements included in our annual reports on Form 10-K, the review of the Company’s financial statements included in our quarterly reports on Form 10-Q and other statutory and regulatory filings, including auditor consents.

Audit-Related Fees consist of fees billed for assurance and related services that are also performed by our independent registered public accounting firm.

Tax Fees consist of services rendered for tax compliance, tax advice and tax planning.

Recommendation

The Board recommends a vote “FOR” the ratification of BDO as our independent registered public accounting firm for the fiscal year ending December 31, 2021. Proxies will be so voted unless stockholders specify otherwise in their proxies.

Vote Required

Ratification of the selection of the independent registered public accounting firm requires the affirmative vote of a majority of the votes cast on the matter affirmatively or negatively. Abstentions and broker non-votes (if any) will be entirely excluded from the vote and will have no effect on its outcome.

THE BOARD RECOMMENDS A VOTE “FOR” PROPOSAL NO. 2.

BOARD OF DIRECTORS AND COMMITTEES

During fiscal year 2020, our Board met 11 times. Each director attended at least 71% of the aggregate of the meetings of the Board and meetings of the committees of which he was a member in our last fiscal year. The Board has three standing committees: an Audit Committee, a Compensation Committee, and a Nominating and Governance Committee. All members of the Audit, Compensation and Nominating and Governance Committees are non-employee directors who are deemed independent.

Although the Company has no formal policies regarding director attendance at annual meetings, it does expect that all members of the Board will attend the Annual Meeting. All directors attended the 2020 Annual Meeting of Stockholders.

Board Leadership Structure and Role in Risk Oversight

The positions of Chairman of the Board and Chief Executive Officer are separated, which allows our Chief Executive Officer to focus on our day-to-day business, while allowing the Chairman of the Board to lead the Board in its fundamental role of providing advice to and independent oversight of management. Our Board recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our Chairman. Our Board also believes that this structure ensures a greater role for the independent directors in the oversight of our Company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our Board. Our Board believes its administration of its risk oversight function has not affected its leadership structure.

While our Bylaws do not require that our Chairman and Chief Executive Officer positions be separate, our Board believes that having separate positions and having an independent outside director serve as Chairman is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance. Our separated Chairman and Chief Executive Officer positions are augmented by our independent Board committees that provide appropriate oversight in the areas described below. At executive sessions of independent directors, these directors speak candidly on any matter of interest, which may be with or without the Chief Executive Officer present. The independent directors meet separately in executive session on at least an annual basis to discuss matters relating to the Company and the Board, without members of the management team present. We believe this structure provides consistent and effective oversight of our management and the Company. The Board met in executive session one time in 2020.

The Board has overall responsibility for the oversight of the Company's risk management process, which is designed to support the achievement of organizational objectives, including strategic objectives, to improve long-term organizational performance and enhance stockholder value. Risk management includes not only understanding company-specific risks and the steps management implements to manage those risks, but also what level of risk is acceptable and appropriate for the Company. Management is responsible for establishing our business strategy, identifying and assessing the related risks and implementing appropriate risk management practices. The Board periodically reviews our business strategy and management's assessment of the related risk, and discusses with management the appropriate level of risk for the Company. The Board also delegates oversight to Board committees to oversee selected elements of risk as set forth below.

Board Committees

Audit Committee. As of the Record Date, the Audit Committee was comprised of Messrs. Ferrara (Chairman) and Dorman and Dr. Freeman. The Audit Committee selects the Company's independent registered public accounting firm, approves its compensation, oversees and evaluates the performance of the independent registered public accounting firm, oversees the accounting and financial reporting policies and internal control systems of the Company, reviews the Company's interim and annual financial statements, independent registered public accounting firm reports and management letters and performs other duties, as specified in the Audit Committee Charter. All members of the Audit Committee satisfy the current independence and experience requirements of Rule 10A-3 of the Exchange Act and the current Nasdaq independence standards, and the Board has determined that Mr. Ferrara is an "audit committee financial expert," as the SEC has defined that term in Item 407 of Regulation S-K. The Audit Committee met four times in fiscal year 2020.

Compensation Committee. As of the Record Date, the Compensation Committee was comprised of Messrs. Bitterman (Chairman) and Ferrara and Dr. Lockshin. The Compensation Committee determines compensation levels for the Company's executive officers and directors, oversees administration of the Company's equity compensation plans and performs other duties regarding compensation for employees and consultants as the Board may delegate from time to time. Our Chief Executive Officer makes recommendations to the Compensation Committee regarding the corporate and individual performance goals and objectives relevant to executive compensation and executives' performance in light of such goals and objectives and recommends other executives' compensation levels to the Compensation Committee based on such evaluations. The Compensation Committee considers these recommendations and then makes an independent decision regarding officer compensation levels and awards. All members of the Compensation Committee satisfy the current Nasdaq independence standards, and each member of the Committee qualifies as an "outside director" and "non-employee director" as defined by Section 162(m) of the Code and Rule 16b-3 of the Exchange Act, respectively. The Compensation Committee met one time in fiscal year 2020.

Nominating and Governance Committee. As of the Record Date, the Nominating and Governance Committee was comprised of Drs. Lockshin (Chairman) and Freeman and Messr. Dorman. The Nominating and Governance Committee reviews potential director nominees, recommends nominees to the Board, oversees the Company's corporate governance principles and develops and implements policies and processes regarding corporate governance matters. Drs. Lockshin and Freeman and Messr. Dorman satisfy the current Nasdaq independence standards. The Nominating and Governance Committee met two times in fiscal year 2020.

A copy of the Company's Audit, Compensation and Nominating and Governance Committee charters are available on the Company's website at www.phioharma.com.

CERTAIN RELATIONSHIPS AND RELATED-PARTY TRANSACTIONS

Our Board has a policy to review and approve all transactions with directors, officers and holders of more than 5% of our voting securities and their affiliates. The policy provides that, prior to Board consideration of a transaction with such a related party, the material facts as to the related party's relationship or interest in the transaction must be disclosed to the Board, and the transaction will not be considered approved by the Board unless a majority of the directors who are not interested in the transaction (if applicable) approve the transaction. Furthermore, when stockholders are entitled to vote on a transaction with a related party, the material facts of the related party's relationship or interest in the transaction must be disclosed to the stockholders, who must approve the transaction in good faith.

In March 2019, the Company entered into a consulting agreement with Dr. Cauwenbergh, one of our directors, which was renewed for another one-year term in March 2020. The Company paid Dr. Cauwenbergh \$90,393 in consulting fees in 2019. No consulting fees were paid to Dr. Cauwenbergh in 2020. Outside of the Company's consulting agreement with Dr. Cauwenbergh, since the past two years, there has not been, nor is there currently proposed, any transaction or series of related transactions to which we were or will be a party in which the amount involved exceeded or will exceed \$120,000 and in which the other parties included or will include any of our directors, executive officers, holders of 5% or more of our voting securities, or any member of the immediate family of any of the foregoing persons, other than compensation arrangements with directors and executive officers, which are described where required in "Executive Compensation" and "Director Compensation."

Indemnification Agreements

We have entered into indemnification agreements with each of our executive officers and directors. These agreements provide that, subject to limited exceptions and among other things, we will indemnify each of our executive officers and directors to the fullest extent permitted by law and advance expenses to each indemnitee in connection with any proceeding in which a right to indemnification is available.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our "officers" (as defined in Rule 16a-1(f) under the Exchange Act) and directors, and persons who own more than 10% of a registered class of our equity securities to file reports of beneficial ownership and changes in beneficial ownership with the SEC. Officers, directors and greater-than-10% stockholders (the "**Reporting Persons**") are required by SEC regulations to furnish us with copies of all reports filed under Section 16(a). Based solely on our review of copies of these reports and representations of such Reporting Persons, we believe that during fiscal year 2020, all Reporting Persons satisfied such applicable SEC filing requirements.

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth certain information, as of December 31, 2020, about the securities authorized for issuance under our equity compensation plans, which consisted of our 2020 Long Term Incentive Plan (“**2020 Plan**”) and our 2013 Employee Stock Purchase Plan. Upon adoption of the 2020 Plan, shares that remained available for grant under our prior 2012 Long Term Incentive Plan (“**2012 Plan**”) and shares that were subject to outstanding awards under the 2012 Plan were included in the authorized shares available for grant under the 2020 Plan. Further, upon adoption of the 2020 Plan, the Company no longer grants new equity awards under the 2012 Plan.

| Plan Category | Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in First Column) |
|---|--|--|--|
| Equity compensation plans approved by security holders ⁽¹⁾ | 12,269 | \$ 3,334.06 | 1,262,836 |
| Equity compensation plans not approved by security holders | – | – | – |
| Total | 12,269 | \$ 3,334.06 | 1,262,836 |

(1) Includes options outstanding representing 2,570 shares of common stock under the 2020 Plan. Also includes 9,699 restricted stock units subject to the 2020 Plan.

**SECURITY OWNERSHIP OF
CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

Based on information available to us and filings with the SEC, the following table sets forth certain information regarding the beneficial ownership (as defined by Rule 13d-3 under the Exchange Act) of our outstanding common stock for (i) each of our directors, (ii) each of our “named executive officers,” as defined in the Executive Officers section below, (iii) all of our directors and executive officers as a group and (iv) persons known to us to beneficially own more than 5% of our outstanding common stock. The following information is presented as of March 15, 2021 or such other date as may be reflected below.

Beneficial ownership and percentage ownership are determined in accordance with the rules of the SEC and include voting or investment power with respect to shares of stock. This information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, shares of common stock not outstanding but deemed beneficially owned by virtue of the right of a person to acquire them as of March 15, 2021, or within 60 days of March 15, 2021, are deemed outstanding for the purpose of computing the percentage ownership of each person, but are not deemed outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated and subject to applicable community property laws, to our knowledge, each stockholder named in the following table possesses sole voting and investment power over their shares of common stock, except for those jointly owned with that person’s spouse. Unless otherwise indicated below, the address of each person listed on the table is c/o Phio Pharmaceuticals Corp., 257 Simarano Drive, Suite 101, Marlborough, MA 01752.

| Name and Address of Beneficial Owner | Shares Beneficially Owned | |
|---|----------------------------------|---------------------------------------|
| | Number ⁽¹⁾ | Percent of Class⁽²⁾ |
| Greater than 5% Holders | | |
| Empery Asset Management, LP ⁽³⁾ | 899,684 | 6.65% |
| Directors and Named Executive Officers: | | |
| Gerrit Dispersyn, Dr. Med. Sc. ⁽⁴⁾ | 16,796 | * |
| Robert J. Bitterman ⁽⁵⁾ | 5,848 | * |
| Geert Cauwenbergh, Dr. Med. Sc. ⁽⁶⁾ | 13,219 | * |
| H. Paul Dorman ⁽⁷⁾ | 389 | * |
| Robert Ferrara | 3,000 | * |
| Jonathan E. Freeman, Ph.D. ⁽⁸⁾ | 370 | * |
| Curtis A. Lockshin, Ph.D. ⁽⁹⁾ | 385 | * |
| All current directors and executive officers as a group (seven persons) | 40,007 | * |

* Indicates less than 1%.

- (1) Represents shares of common stock held as of March 15, 2021 plus shares of common stock that may be acquired upon the exercise of options or warrants within 60 days of March 15, 2021.
- (2) Based on 13,531,941 shares of common stock that were issued and outstanding as of March 15, 2021. Shares not outstanding but deemed beneficially owned by virtue of the right of a person to acquire them as of March 15, 2021, or within 60 days of March 15, 2021, are treated as outstanding only when determining the ownership and voting power for each person (or all directors and executive officers as a group).
- (3) Based solely on information set forth in a Schedule 13G filed with the SEC on February 12, 2021 by Empery Asset Management, LP (“Empery”). Each of Ryan M. Lane (“Mr. Lane”) and Martin D. Hoe (“Mr. Hoe”) is a managing member of Empery AM GP, LLC, the general partner of Empery. Each of Empery, Mr. Lane and Mr. Hoe may be deemed to have beneficial ownership of 899,684 shares of Common Stock. The foregoing excludes 789,063 shares of Common Stock issuable upon warrants held by entities managed by Empery because such warrants contain a blocker provision under which the holder thereof does not have the right to exercise such warrant to the extent that such exercise would result in beneficial ownership by the holder thereof, together with the holder’s affiliates, and any other persons acting as a group together with the holder or any of the holder’s affiliates, of more than 4.99% of the Common Stock. The principal business office of Empery, Mr. Lane and Mr. Hoe is 1 Rockefeller Plaza, Suite 1205, New York, New York 10020.
- (4) Includes 318 stock options exercisable within 60 days of March 15, 2021.
- (5) Includes 22 stock options exercisable within 60 days of March 15, 2021.
- (6) Includes 518 stock options and 61 warrants exercisable within 60 days of March 15, 2021.
- (7) Includes 19 stock options exercisable within 60 days of March 15, 2021.
- (8) Includes 6 stock options exercisable within 60 days of March 15, 2021.
- (9) Includes 19 stock options exercisable within 60 days of March 15, 2021.

EXECUTIVE OFFICERS

As of the date of this proxy statement, we have only one executive officer, Gerrit Dispersyn, who serves as our President and Chief Executive Officer. Certain biographical information regarding Dr. Dispersyn is set forth below.

| Name | Age | Position |
|--------------------------------|-----|---------------------------------------|
| Gerrit Dispersyn, Dr. Med. Sc. | 46 | President and Chief Executive Officer |

Gerrit Dispersyn, Dr. Med. Sc. joined the Company in April 2017 as our Chief Development Officer and became our President and Chief Executive Officer in March 2019. From 2014 to April 2017, Dr. Dispersyn was the Vice President, Global Head of Clinical Affairs at Integra LifeSciences Corporation, a world leader in medical technology. Prior to assuming this role, Dr. Dispersyn held the position of Vice President, Program Management & Clinical Affairs from 2008 to 2014. In these positions, Dr. Dispersyn was responsible for the global strategy and execution of clinical and product development, clinical operations and medical affairs projects. Dr. Dispersyn has also served as a member of our Board since October 2020. He received his Doctorate in Medical Sciences from Maastricht University, Faculty of Medicine (Netherlands), a post-graduate degree in Biomedical Imaging and a Master of Science degree in Biochemistry, both from the University of Antwerp, Belgium.

EXECUTIVE COMPENSATION

The following describes the compensation earned by each of the executive officers identified below in the Summary Compensation Table, who are referred to collectively as our “named executive officers.” Our named executive officer with respect to the fiscal year that ended on December 31, 2020 is Gerrit Dispersyn, Dr. Med. Sc.

| Name and principal position | Year | Salary (\$) | Option awards (\$) ⁽¹⁾ | Stock awards (\$) ⁽¹⁾ | Non-equity incentive plan compensation (\$) ⁽²⁾ | All other compensation (\$) ⁽³⁾ | Total (\$) |
|---|------|----------------|---|--|---|--|---------------|
| Gerrit Dispersyn, Dr. Med. Sc. ⁽⁴⁾ President and Chief Executive Officer | 2020 | 386,614 | – | – | 196,000 | 528 | 583,142 |
| | 2019 | 372,251 | – | 117,662 | 168,935 | 534 | 659,382 |

- (1) The amounts shown reflect the grant date fair value of stock options and restricted stock units computed in accordance with ASC 718 for the indicated year.
- (2) The amounts shown reflect the annual cash bonus earned for performance for each respective year under the Company’s Incentive Bonus Program. The annual cash bonus for fiscal year 2020 was paid in March 2021 and the annual cash bonus for fiscal year 2019 was paid in March 2020. In 2019, Dr. Dispersyn also received a retention bonus.
- (3) Represents amounts for the dollar value of life insurance premiums paid.
- (4) Dr. Dispersyn became our Chief Development Officer effective April 24, 2017 and served in this role until November 2018 when he was appointed President and Chief Operating Officer. On March 1, 2019, Dr. Dispersyn was appointed to President and Chief Executive Officer of the Company.

Outstanding Equity Awards at Fiscal Year-End

The following table shows information regarding outstanding equity awards as of December 31, 2020 for our named executive officers:

| Name | Grant Date | Option Awards | | | | Stock Awards | | | | |
|-----------------------------|------------|---|---|----------------------------|------------------------|---|--|--|--|--|
| | | Number of Securities Underlying Unexercised Options (# Exercisable) | Number of Securities Underlying Unexercised Options (# Unexercisable) | Option Exercise Price (\$) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$) | Equity Incentive Plan Awards: Number of Unearned Shares or Units of Stock That Have Not Vested (#) | Equity Incentive Plan Awards: Market Value of Unearned Shares or Units of Stock That Have Not Vested (\$) ⁽¹⁾ | |
| Gerrit Dispersyn, | 4/24/2017 | 158 | 15 | 357.50 | 4/24/2027 | — | — | — | — | |
| Dr. Med. Sc. ⁽²⁾ | 8/1/2018 | 145 | 146 | 98.45 | 8/1/2028 | — | — | 146 | 393 | |
| | 2/13/2019 | — | — | — | — | — | — | 750 | 2,018 | |
| | 10/24/2019 | — | — | — | — | — | — | 5,559 | 14,954 | |

(1) Value is based on the closing price of \$2.69 of the Company's common stock on December 31, 2020.

(2) The equity award granted to Dr. Dispersyn in 2017 vests in equal monthly installments over four years. The equity awards granted to Dr. Dispersyn subsequent to 2017, vest in equal annual installments over four years.

Nonqualified Deferred Compensation Earnings

We do not have any nonqualified deferred compensation plans.

Employment and Change of Control Agreements

The following provides descriptions of the employment agreements currently in effect for our named executive officers:

Gerrit Dispersyn, Dr. Med. Sc.

We entered into an employment agreement with Dr. Dispersyn effective April 24, 2017 as our Chief Development Officer. As Chief Development Officer, Dr. Dispersyn was entitled to receive an initial base salary of \$285,000 per annum, as well as a performance bonus of up to 30% of his base salary, subject to the achievement of performance goals to be established annually. In connection with Dr. Dispersyn's appointment to Chief Development Officer, he received a stock option entitling him to purchase 173 shares of the Company's Common Stock, which is subject to vesting in equal monthly installments over four years following the date of grant.

On March 1, 2019, Dr. Dispersyn was appointed as the Company's President and Chief Executive Officer. As President and Chief Executive Officer, Dr. Dispersyn is entitled to an initial base salary of \$380,000 per annum, as well as a performance bonus of up to 50% of his base salary, subject to the achievement of performance goals to be established annually. As a one-time award in connection with his appointment on March 1, 2019, Dr. Dispersyn received a restricted stock unit award giving him the conditional right to receive 7,413 shares of Company common stock, which is subject to vesting in equal annual installments over four years. The award was subject to the Company's stockholders' approving an increase in the number of shares available for issuance under the Company's 2012 Incentive Plan, which occurred on October 24, 2019. Outside of the above-mentioned changes, Dr. Dispersyn's employment agreement dated April 24, 2017 continues to remain in full force and effect.

Dr. Dispersyn's employment agreement provides that, upon termination of Dr. Dispersyn's employment without "cause" (as defined therein) by us or by Dr. Dispersyn for "good reason" (as defined therein), he will be entitled to payment of: (1) any accrued but unpaid salary and unused vacation as of the date of his termination; (2) six months of salary from the date of termination; and (3) continued participation, at our expense, during the applicable six-month severance period in our sponsored group medical and dental plans. In the event his employment is terminated within twelve months following a "change of control" of the Company, he will be entitled to: (x) twelve months of salary from the date of termination; (y) accelerated vesting of any unvested stock options held by him as to 50% of the unvested option shares or the portion of the unvested option shares that would have vested over the following twenty-four months, whichever is greater; and (z) continued participation, at our expense, during the twelve-month severance period in our sponsored group medical and dental plans.

DIRECTOR COMPENSATION

We compensate our non-employee directors for their service as a member of our Board. Each non-employee director is entitled to receive an annual cash retainer of \$27,500. The chairs of our Board and Audit Committee are entitled to receive an additional annual cash retainer of \$15,000, the chair of the Compensation Committee is entitled to receive an additional cash retainer of \$5,000 and the chair of the Nominating and Corporate Governance Committee is entitled to receive an additional annual cash retainer of \$7,500.

The Compensation Committee and the Board reassess the appropriate level of equity compensation for non-employee directors on an annual basis. Future equity compensation payments will be determined on a year-by-year basis for the foreseeable future due to the volatility of the Company's stock price.

Non-employee directors are also reimbursed for their travel and reasonable out-of-pocket expenses incurred in connection with attending Board and committee meetings and in attending continuing education seminars, to the extent that attendance is required by the Board or the committee(s) on which that director serves.

The following table shows the compensation paid in fiscal year 2020 to the Company's non-employee directors.

| Name | Fees Earned or Paid in Cash (\$) | Stock Awards (\$) | Total (\$) |
|---------------------------------|---|------------------------------|-----------------------|
| Robert J. Bitterman | 45,417 | – | 45,417 |
| Geert Cauwenbergh, Dr. Med. Sc. | 27,083 | – | 27,083 |
| H. Paul Dorman | 27,083 | – | 27,083 |
| Robert L. Ferrara | 41,250 | – | 41,250 |
| Jonathan E. Freeman, Ph.D. | 27,083 | – | 27,083 |
| Curtis A. Lockshin, Ph.D. | 34,167 | – | 34,167 |

As of December 31, 2020, the aggregate number of shares underlying stock options and restricted stock units by our non-employee directors is as follows: Robert J. Bitterman — 22 option awards, Geert Cauwenbergh, Dr. Med. Sc.— 709 option awards and 191 restricted stock units, H. Paul Dorman — 19 option awards, Jonathan E. Freeman, Ph.D. — 6 option awards, and Curtis A. Lockshin, Ph.D. — 19 option awards.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee evaluates auditor performance, manages relations with the Company's independent registered public accounting firm, and evaluates policies and procedures relating to internal control systems. The Audit Committee operates under a written Audit Committee Charter that has been adopted by the Board, a copy of which is available on the Company's website at www.phiopharma.com. All members of the Audit Committee currently meet the independence and qualification standards for Audit Committee membership set forth in the listing standards provided by Nasdaq and the SEC.

Other than Mr. Ferrara, the Audit Committee members are not professional accountants or auditors. The members' functions are not intended to duplicate or to certify the activities of management and the independent registered public accounting firm. The Audit Committee serves a Board-level oversight role in which it provides advice, counsel and direction to management and the auditors on the basis of the information it receives, discussions with management and the auditors, and the experience of the Audit Committee's members in business, financial and accounting matters.

The Audit Committee oversees the Company's financial reporting process on behalf of the Board. The Company's management has the primary responsibility for the financial statements and reporting process, including the Company's system of internal controls. In fulfilling its oversight responsibilities, the Audit Committee reviewed with management the audited financial statements included in the Annual Report on Form 10-K for the fiscal year ended December 31, 2020. This review included a discussion of the quality and the acceptability of the Company's financial reporting, including the nature and extent of disclosures in the financial statements and the accompanying notes. The Audit Committee also reviewed the progress and results of the testing of the design and effectiveness of its internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002.

The Audit Committee also reviewed with the Company's independent registered public accounting firm, which is responsible for expressing an opinion on the conformity of the audited financial statements with accounting principles generally accepted in the United States of America, their judgments as to the quality and the acceptability of the Company's financial reporting and such other matters as are required to be discussed with the Committee under generally accepted auditing standards, including the Public Company Accounting Oversight Board Auditing Standard No. 1301, *Communications with Audit Committees*. The Audit Committee has received the written disclosures and the letter from the independent registered public accounting firm required by the Public Company Accounting Oversight Board. The Audit Committee discussed with the independent registered public accounting firm their independence from management and the Company, including the matters required by the applicable rules of the Public Company Accounting Oversight Board.

In addition to the matters specified above, the Audit Committee discussed with the Company's independent registered public accounting firm the overall scope, plans and estimated costs of their audit. The Committee met with the independent registered public accounting firm periodically, with and without management present, to discuss the results of the independent registered public accounting firm's examinations, the overall quality of the Company's financial reporting and the independent registered public accounting firm's reviews of the quarterly financial statements, and drafts of the quarterly and annual reports.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board that the Company's audited financial statements should be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

Robert L. Ferrara
H. Paul Dorman
Jonathan E. Freeman, Ph.D.

OTHER BUSINESS

We know of no other matters to be submitted to a vote of stockholders at the Annual Meeting. If any other matter is properly brought before the Annual Meeting or any adjournment thereof, it is the intention of the persons named in the enclosed proxy to vote the shares they represent in accordance with their judgment. In order for any stockholder to nominate a candidate or to submit a proposal for other business to be acted upon at a given annual meeting, he or she must provide timely written notice to our corporate Secretary in the form prescribed by our Bylaws, as described below.

STOCKHOLDER PROPOSALS

Stockholder proposals intended to be included in the 2022 annual meeting proxy materials must be received by the Secretary of the Company no later than January 6, 2022, or otherwise as permitted by applicable law (the “**Proxy Deadline**”). The form and substance of these proposals must satisfy the requirements established by the Company’s Bylaws and the SEC, and the timing for the submission of any such proposals may be subject to change as a result of changes in SEC rules and regulations.

Additionally, stockholders who intend to present a stockholder proposal at the 2022 annual meeting must provide the Secretary of the Company with written notice of the proposal not fewer than 90 nor more than 120 days prior to the anniversary date of the Annual Meeting, *provided, however*, that if the 2022 annual meeting date is more than 30 days before or after the anniversary date of the Annual Meeting, then stockholders must provide notice on or before 10 days after the day on which the date of the 2022 annual meeting is first disclosed in a public announcement. Notice must be tendered in the proper form prescribed by our Bylaws. Proposals not meeting the requirements set forth in our Bylaws will not be entertained at the meeting.

Additionally, any stockholder seeking to recommend a director candidate or any director candidate who wishes to be considered by the Nominating and Governance Committee, the committee that recommends a slate of nominees to the Board for election at each annual meeting, must provide the Secretary of the Company with a completed and signed biographical questionnaire on or before the Proxy Deadline. Stockholders can obtain a copy of this questionnaire from the Secretary of the Company upon written request. The Nominating and Governance Committee is not required to consider director candidates received after this date or without the required questionnaire. The Nominating and Governance Committee will consider all director candidates who comply with these requirements and will evaluate these candidates using the criteria described above under the caption, “Nomination of Directors.” Director candidates who are then approved by the Board will be included in the Company’s proxy statement for that annual meeting.

DELIVERY OF PROXY MATERIALS

Our Annual Report to stockholders for the fiscal year ended December 31, 2020, including audited financial statements and the notes thereto, accompanies this Proxy Statement. **Copies of our Annual Report on Form 10-K for fiscal 2020 and the exhibits thereto are available from the Company without charge upon written request of a stockholder.** Copies of these materials are also available online through the SEC at www.sec.gov. The Company may satisfy SEC rules regarding delivery of proxy materials, including the Proxy Statement, Annual Report and Notice, by delivering a single Notice and, if applicable, a single set of proxy materials to an address shared by two or more Company stockholders. This delivery method can result in meaningful cost savings for the Company. In order to take advantage of this opportunity, the Company may deliver only one Notice and, if applicable, a single set of proxy materials to multiple stockholders who share an address, unless contrary instructions are received prior to the mailing date. Similarly, if you share an address with another stockholder and have received multiple copies of our Notice and/or other proxy materials, you may write or call us at the address and phone number below to request delivery of a single copy of the Notice and, if applicable, other proxy materials in the future. We undertake to deliver promptly upon written or oral request a separate copy of the Notice and, if applicable, other proxy materials, as requested, to a stockholder at a shared address to which a single copy of the Notice and/or other proxy materials was delivered. If you hold stock as a record stockholder and prefer to receive separate copies of a Notice and, if applicable, other proxy materials either now or in the future, please contact the Company at 257 Simarano Drive, Suite 101, Marlborough, MA 01752 or by telephone at (508) 767-3861. If your stock is held through a brokerage firm or bank and you prefer to receive separate copies of a Notice and, if applicable, other proxy materials either now or in the future, please contact your brokerage firm or bank.

EACH STOCKHOLDER IS URGED TO COMPLETE, DATE, SIGN AND PROMPTLY RETURN THE ENCLOSED PROXY.



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MR A SAMPLE
DESIGNATION (IF ANY)
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Your vote matters - here's how to vote!

You may vote online or by phone instead of mailing this card.



Online

Go to www.envisionreports.com/PHIO
or scan the QR code - login details are
located in the shaded bar below.



Phone

Call toll free 1-800-652-VOTE (8683) within
the USA, US territories and Canada



Save paper, time and money!

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www.envisionreports.com/PHIO

Using a **black ink** pen, mark your votes with an **X** as shown in this example.
Please do not write outside the designated areas.



Annual Meeting Proxy Card

1234 5678 9012 345

▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

A Proposals - The Board of Directors recommend a vote FOR all the nominees listed and FOR Proposal 2.

1. Election of Directors:

| | For | Withhold | | For | Withhold | | For | Withhold |
|--------------------------------|--------------------------|--------------------------|--------------------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| 01 - Robert J. Bitterman | <input type="checkbox"/> | <input type="checkbox"/> | 02 - Geert Cauwenbergh, Dr. Med. Sc. | <input type="checkbox"/> | <input type="checkbox"/> | 03 - Gerrit Dispersyn, Dr. Med. Sc. | <input type="checkbox"/> | <input type="checkbox"/> |
| 04 - H. Paul Dorman | <input type="checkbox"/> | <input type="checkbox"/> | 05 - Robert L. Ferrara | <input type="checkbox"/> | <input type="checkbox"/> | 06 - Jonathan E. Freeman, Ph.D. | <input type="checkbox"/> | <input type="checkbox"/> |
| 07 - Curtis A. Lockshin, Ph.D. | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | |

2. Ratification of BDO USA, LLP as our independent registered public
accounting firm for the fiscal year ending December 31, 2021.

For Against Abstain

B Authorized Signatures - This section must be completed for your vote to count. Please date and sign below.

Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

Date (mm/dd/yyyy) - Please print date below.

Signature 1 - Please keep signature within the box.

Signature 2 - Please keep signature within the box.



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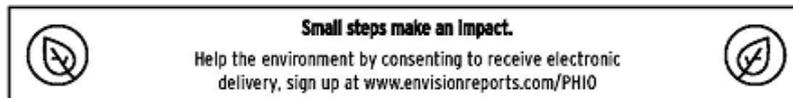
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The 2021 Annual Meeting of Stockholders of Phio Pharmaceuticals Corp. will be held on June 15, 2021 at 11:00 a.m. Eastern Time, virtually via the Internet at www.meetingcenter.io/269777998.

To access the virtual meeting, you must have the 15-digit code that is printed in the shaded bar located on the reverse side of this form.

The password for the meeting is - PHIO2021



▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

Proxy / Voting Instruction Card +

Phio Pharmaceuticals Corp.
Annual Meeting of Stockholders
June 15, 2021
11:00 a.m. Eastern Time

This proxy is solicited by the Board of Directors

The undersigned hereby constitutes and appoints Gerrit Dispersyn, Dr. Med. Sc. and Caitlin Kontulis as proxies, with the full power of substitution in each of them. Each of them is hereby authorized to represent and vote the shares of the undersigned, with all the powers which the undersigned would possess if personally present, at the virtual Annual Meeting of Stockholders of Phio Pharmaceuticals Corp. to be held on June 15, 2021, or at any postponement or adjournment thereof, on all matters set forth on the reverse side and in the discretion of the proxies upon such other matters as may properly come before the meeting.

Shares represented by this proxy will be voted by the stockholder. If no such directions are indicated, the Proxies will have authority to vote FOR the election of the Board of Directors and FOR item 2.

(Items to be voted appear on reverse side)

C Non-Voting Items

Change of Address – Please print new address below.

Comments – Please print your comments below.

