| Fibrocell Science, Inc. |
|---|
| Form PRE 14A |
| March 19, 2018 |
| 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 ý |
| Filed by a Party other than the Registrant o |
| Check the appropriate box: |
| ý Preliminary Proxy Statement |
| o Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) |
| o Definitive Proxy Statement |
| o Definitive Additional Materials |
| o Soliciting Material Pursuant to §240.14a-12 |
| Fibrocell Science, 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): |
| ý No fee required. |
| o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11. |
| Title of each class of securities to which transaction applies: |
| (1) |
| (2) Aggregate number of securities to which transaction applies: |
| Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set fort |
| (3) the amount on which the filing fee is calculated and state how it was determined): |
| |
| (4) Proposed maximum aggregate value of transaction: |
| (5) Total fee paid: |
| o 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 |
| o 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. |
| Amount Prayiously Paid: |
| (1) Amount reviously raid. |
| Form, Schedule or Registration Statement No.: |
| (2) |
| (3) Filing Party: |
| |
| (4) Date Filed: |
| |

| <u> </u> | | |
|--|--|--|
| | | |
| | | |
| NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS AND PROXY STATEMENT | | |
| Meeting Date May 23, 2018 | | |
| | | |
| | | |
| | | |
| | | |

Table of Contents

405 Eagleview Blvd. Exton, Pennsylvania 19341 (484) 713-6000

April 2, 2018

Dear Stockholders:

We are pleased to invite you to attend our 2018 Annual Meeting of Stockholders (the Annual Meeting) to be held on Wednesday, May 23, 2018 at 8:30 a.m., local time, at our corporate headquarters located at 405 Eagleview Blvd., Exton, Pennsylvania 19341.

Details regarding the business to be conducted at the Annual Meeting are described in the Notice of Internet Availability of Proxy Materials (Notice) you received in the mail and in this Notice of 2018 Annual Meeting of Stockholders and Proxy Statement (Proxy Statement). We have also made available a copy of our 2017 Annual Report on Form 10-K with this Proxy Statement.

We have elected to provide access to our proxy materials over the Internet under the U.S. Securities and Exchange Commission's "notice and access" rules. We believe that providing our proxy materials over the Internet increases the ability of our stockholders to connect with the information they need, while reducing the environmental impact of our Annual Meeting.

Your vote is important. Whether or not you plan to attend the Annual Meeting, we hope you will vote as soon as possible. You may vote over the Internet by following the instructions provided in the Notice, or, if you requested a printed or email copy of the proxy materials, you can also vote by telephone or mail by following the instructions contained on the proxy or voting instruction card that accompanied your proxy materials. Please review the instructions for each of your voting options described in this Proxy Statement, as well as in the Notice you received in the mail.

Thank you for your ongoing support of Fibrocell. We look forward to seeing you at the Annual Meeting.

Very truly yours,

John M. Maslowski President and Chief Executive Officer

and our 2017 Annual Report are available at http://www.proxyvote.com

TABLE OF CONTENTS

| | Page |
|--|----------------------------|
| NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS | 1 uge |
| QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS, VOTING AND THE ANNUAL | |
| MEETING | <u>2</u> |
| Proxy Materials | <u>2</u> |
| Voting Information | |
| Attending the Annual Meeting | 7 |
| PROPOSALS | 9 |
| Proposal 1: Election of Directors | 3 7 9 9 |
| Proposal 2: Approval of Amendment to Restated Certificate of Incorporation, as amended, to Effect Reverse | |
| Stock Split of the Company's Common Stock | <u>10</u> |
| Proposal 3: Ratification of Appointment of Independent Registered Public Accounting Firm | <u>17</u> |
| Proposal 4: Authorization to Adjourn the Annual Meeting | <u>18</u> |
| Other Proposed Action | <u>19</u> |
| DIRECTORS AND EXECUTIVE OFFICERS | <u>20</u> |
| Directors | <u>20</u> |
| Executive Officers | <u>23</u> |
| STOCK OWNERSHIP | <u>24</u> |
| Security Ownership of Certain Beneficial Owners and Management | <u>24</u> |
| Section 16(a) Beneficial Ownership Reporting Compliance | <u> 26</u> |
| CORPORATE GOVERNANCE AND BOARD MATTERS | <u>27</u> |
| <u>Director Independence</u> | <u>27</u> |
| Board Leadership Structure and Role in Risk Oversight | <u>27</u> |
| Board Meetings | <u>28</u> |
| Board Committees | <u>28</u> |
| Nomination of Director Candidates | <u>30</u> |
| Stockholder Communications with Directors | <u>30</u> |
| Compensation Committee Interlocks and Insider Participation | <u>31</u> |
| <u>Code of Ethics</u> | 31 31 32 32 32 |
| Audit Committee Report | <u>31</u> |
| RELATED PARTY TRANSACTIONS | <u>32</u> |
| Related Party Transaction Policy | <u>32</u> |
| Related Party Transactions | <u>32</u> |
| EXECUTIVE COMPENSATION | <u>34</u> |
| Executive Compensation Tables | <u>34</u> |
| Employment and Separation Agreements | <u>38</u> |
| OUR EQUITY COMPENSATION PLANS | 34 38 43 |
| Equity Compensation Plan Information | <u>43</u> |
| INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM | <u>44</u> |
| Fees Paid to Independent Registered Public Accounting Firm | <u>44</u> |
| Pre-Approval Policies and Procedures | 44 44 44 |
| DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS | <u>45</u> |
| AVAILABILITY OF ANNUAL REPORT ON FORM 10-K | <u>46</u> |
| STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS | <u>47</u> |
| Annex A: Form of Certificate of Amendment of the Restated Certificate of Incorporation of Fibrocell Science. | <u>49</u> |

5

In this Proxy Statement, the words "Fibrocell," "the Company," "we," "our," "us" and similar terms refer to Fibrocell Science, Inc. and its consolidated subsidiaries, unless the context indicates otherwise.

Fibrocell, Fibrocell Science and the Fibrocell logo are trademarks of Fibrocell. Other trademarks, trade names and service marks appearing in this Proxy Statement are the property of their respective owners. All images contained in this Proxy Statement are the property of Fibrocell.

Unless otherwise indicated, all share amounts and the exercise price of any of our securities reflect, as applicable, the occurrence of a 1-for-25 reverse split of our common stock that occurred on April 30, 2013 and the occurrence of a 1-for-3 reverse split of our common stock that occurred on March 10, 2017.

This Notice of 2018 Annual Meeting of Stockholders and Proxy Statement (Proxy Statement) and our accompanying 2017 Annual Report on Form 10-K (Annual Report) are being distributed and made available on or about April 2, 2018.

NOTICE OF 2018 ANNUAL MEETING OF STOCKHOLDERS

NOTICE IS HEREBY GIVEN that the 2018 Annual Meeting of Stockholders (the Annual Meeting) of Fibrocell Science, Inc. (the Company, we, our or us) will be held on Wednesday, May 23, 2018 at 8:30 a.m., local time, at our corporate headquarters located at 405 Eagleview Blvd., Exton, Pennsylvania 19341, for the following purposes:

- 1. To elect two director nominees to our Board of Directors, each to serve until our 2021 Annual Meeting of Stockholders or until such person's successor is qualified and elected.
- 2. To approve an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our common stock at a ratio in the range of 1:3 to 1:10, such ratio to be determined in the discretion of our Board of Directors.
- 3. To ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the year ending December 31, 2018.
- 4. To authorize an adjournment of the Annual Meeting, if necessary, to solicit additional proxies if there are not sufficient votes in favor of any of the proposals described in the proxy statement.
- 5. To transact any other business that is properly brought before the Annual Meeting or any adjournments or postponements thereof.

Our Board of Directors has fixed the close of business on March 26, 2018 as the record date for determining the stockholders entitled to receive notice of, and to vote at, the Annual Meeting or any adjournments or postponements thereof (the Record Date). The Annual Meeting may be adjourned or postponed from time to time without notice other than by announcement at the meeting.

Your vote is important. Even if you plan to attend the Annual Meeting, we urge you to submit your proxy or voting instructions as soon as possible. For specific instructions on how to vote your shares, please refer to the instructions on the Notice of Internet Availability of Proxy Materials you received in the mail, the "Questions and Answers About the Proxy Materials and Voting" section of this Notice of 2018 Annual Meeting of Stockholders and Proxy Statement and, if you requested a printed or email copy of these proxy materials, your enclosed proxy or voting instruction card.

By Order of the Board of Directors, John M. Maslowski President and Chief Executive Officer April 2, 2018

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting: This Notice of 2018 Annual Meeting of Stockholders and Proxy Statement and our 2017 Annual Report are available at http://www.proxyvote.com

Table of Contents

QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND VOTING Proxy Materials

Why am I receiving these proxy materials?

Our Board of Directors (Board) has made these proxy materials available to you on the Internet, or, upon your request, has delivered a printed or email copy of these proxy materials to you, in connection with its solicitation of proxies for use at our 2018 Annual Meeting of Stockholders (Annual Meeting), which will take place on Wednesday, May 23, 2018 at 8:30 a.m., local time, at our corporate headquarters located at 405 Eagleview Blvd., Exton, Pennsylvania 19341. You are invited to attend the Annual Meeting if you were a Fibrocell stockholder as of the close of business on March 26, 2018 (the Record Date), or hold a valid proxy for the Annual Meeting. These proxy materials include information that we are required to provide to you under the rules of the U.S. Securities and Exchange Commission (SEC) and are designed to assist you in voting your shares.

What is included in the proxy materials?

The proxy materials include:

this Notice of 2018 Annual Meeting of Stockholders and Proxy Statement (Proxy Statement);

our 2017 Annual Report to Stockholders, which consists of our Annual Report on Form 10-K for the year ended December 31, 2017 (Annual Report); and

if you requested a printed or email copy of these proxy materials, the proxy or voting instruction card that accompanied these materials.

What information is contained in this Proxy Statement and our Annual Report?

The information in this Proxy Statement relates to the proposals to be voted on at the Annual Meeting, the voting process, the compensation of our directors and certain of our executive officers, corporate governance matters, and certain other required information. Our Annual Report contains information about our business and our audited financial statements.

Why did I receive a notice in the mail regarding the Internet availability of proxy materials instead of a full set of proxy materials?

In accordance with SEC rules, we may furnish proxy materials, including this Proxy Statement and our Annual Report, to our stockholders by providing access to such documents on the Internet instead of mailing printed copies. Most stockholders will not receive printed copies of the proxy materials unless they request them. Instead, the Notice of Internet Availability of Proxy Materials (Notice), which was mailed to most of our stockholders, will instruct you as to how you may access and review all of the proxy materials on the Internet. The Notice also instructs you as to how you may submit your proxy or voting instructions on the Internet. If you would like to receive a paper or email copy of the proxy materials, you should follow the instructions in the Notice for requesting such materials.

How can I access the proxy materials over the Internet?

The Notice and, if you requested to receive a printed or email copy of these proxy materials, the proxy or voting instruction card that accompanied these materials, contains instructions on how to:

view the proxy materials for the Annual Meeting on the Internet and vote your shares; and

instruct us to send our future proxy materials to you electronically by email.

Our proxy materials are also available on at http://www.proxyvote.com.

Choosing to receive your future proxy materials by email will save us the cost of printing and mailing documents to you. If you choose to receive future proxy materials by email, you will receive an email 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 email will remain in effect until you revoke it.

Voting Information

What items of business will be voted on at the Annual Meeting?

The items of business scheduled to be voted on at the Annual Meeting are:

Proposal The election of two director nominees to our Board of Directors, each to serve until our 2021 Annual

No. 1: Meeting of Stockholders or until such person's successor is qualified and elected.

Proposal To approve an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our common stock at a ratio in the range of 1:3 to 1:10, such ratio to be determined in the

No. 2: discretion of our Board of Directors.

Proposal The ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public

No. 3: accounting firm for the fiscal year ending December 31, 2018.

Proposal The authorization to adjourn the Annual Meeting, if necessary, to solicit additional proxies if there are not

No. 4: sufficient votes in favor of any of the proposals described herein.

See the "Proposals" section of this Proxy Statement for information on these proposals. We will also consider any other business that is properly brought before the Annual Meeting or any adjournments or postponements thereof. See "What happens if additional matters are presented at the Annual Meeting?" below.

How does the Board of Directors recommend that I vote?

Our Board recommends that you vote your shares as follows:

Board Recommendation

Proposal The election of two director nominees to our Board of Directors, each to serve until our

2021 Annual Meeting of Stockholders or until such person's successor is qualified and FOR ALL

elected.

No. 1:

Proposal To approve an amendment to our Restated Certificate of Incorporation, as amended, to

No. 2: effect a reverse stock split of our common stock at a ratio in the range of 1:3 to 1:10, FOR

such ratio to be determined in the discretion of our Board of Directors.

Proposal The ratification of the appointment of PricewaterhouseCoopers LLP as our independent FOR

No. 3: registered public accounting firm for the fiscal year ending December 31, 2018.

Proposal The authorization to adjourn the Annual Meeting, if necessary, to solicit additional FOR

No. 4: proxies if there are not sufficient votes in favor of any of the proposals described

herein.

See the "Proposals" section of this Proxy Statement for information on these proposals and our Board's recommendations.

Table of Contents

What happens if additional matters are presented at the Annual Meeting?

Other than the four items of business described in this Proxy Statement, we are not aware of any other business to be acted upon at the Annual Meeting. If you grant a proxy, the person named as proxy holder, John M. Maslowski, will have the discretion to vote your shares on any additional matters properly presented for a vote at the Annual Meeting or any adjournments or postponements thereof. If, for any reason, any of the director nominees is not available as a candidate for director, the person named as proxy holder will vote your proxy for such other candidate or candidates as may be nominated by our Board.

How many votes do I have?

Each share of our common stock that you own as of the Record Date entitles you to one vote on each matter presented at the Annual Meeting. As of the Record Date, 28,356,351 shares of our common stock were issued and outstanding. A list of stockholders entitled to vote at the Annual Meeting will be available for examination by any stockholder for a purpose related to the Annual Meeting during normal business hours at our executive offices for a period of at least 10 days preceding the date of the Annual Meeting. Cumulative voting for directors is not permitted.

Table of Contents

What is the difference between holding shares as a "stockholder of record" and as a "beneficial owner"?

Most of our stockholders hold their shares as a beneficial owner through a broker or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

Stockholder of Record: If your shares are registered directly in your name with our transfer agent, Broadridge Financial Solutions, Inc., you are considered, with respect to those shares, the stockholder of record. As the stockholder of record, you have the right to appoint a proxy to vote your shares or you can vote in person at the Annual Meeting. If you do not wish to vote in person or you will not be attending the Annual Meeting, you may vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested a printed or email copy of these proxy materials, you can also vote by telephone or mail by following the instructions contained on the proxy card that accompanied these materials. See "How can I vote my shares without attending the Annual Meeting?" below.

Beneficial Owner: If your shares are held through a broker, bank, trust or other nominee, like the vast majority of our stockholders, you are considered the beneficial owner of shares held in street name, and the Notice was forwarded to you by that organization. As the beneficial owner, you have the right to direct your broker, bank, trustee, or nominee how to vote your shares. Since a beneficial owner is not the stockholder of record, you may not vote your shares in person at the Annual Meeting unless you obtain a "legal proxy" from the broker, bank, trustee, or nominee that holds your shares giving you the right to vote the shares at the Annual Meeting. If you do not wish to vote in person or you will not be attending the Annual Meeting, you may vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested a printed or email copy of these proxy materials, you can also vote by telephone or mail by following the instructions on the voting instruction card provided to you by your broker, bank, trustee, or nominee. See "How can I vote my shares without attending the Annual Meeting?" below.

How can I vote my shares in person at the Annual Meeting?

You may vote your shares held in your name as the stockholder of record in person at the Annual Meeting. You may vote your shares held beneficially in street name in person at the Annual Meeting only if you obtain a legal proxy from the broker, bank, trustee, or nominee that holds your shares giving you the right to vote the shares. Even if you plan to attend the Annual Meeting, we recommend that you also submit your proxy or voting instructions as described below so that your vote will be counted if you later decide not to attend the Annual Meeting.

How can I vote my shares without attending the Annual Meeting?

Whether you hold shares directly as the stockholder of record or beneficially in street name, you may direct how your shares are voted without attending the Annual Meeting.

Stockholder of Record: If you are a stockholder of record, you may vote by proxy. You can vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested a printed or email copy of these proxy materials, you can also vote by telephone or mail by following the instructions on the proxy card that accompanied there materials.

Beneficial Owner: If you hold shares beneficially in street name, you may also vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested to receive a printed or email copy of these proxy materials, you can also vote by telephone or mail by following the instructions on the voting instruction card provided to you by your broker, bank, trustee, or nominee.

Can I change my vote or revoke my proxy?

If you are the stockholder of record, you may change your vote at any time prior to the taking of the vote at the Annual Meeting by:

granting a new proxy bearing a later date by following the instructions provided in the Notice or, if you requested to receive a printed or email copy of these proxy materials, the proxy card that accompanied these materials;

Table of Contents

providing a written notice of revocation to our Corporate Secretary at 405 Eagleview Blvd., Exton, Pennsylvania, 19341, which notice must be received by our Corporate Secretary before the Annual Meeting; or

attending the Annual Meeting and voting in person.

If you hold shares beneficially in street name, you may change your vote at any time prior to the taking of the vote at the Annual Meeting by:

submitting new voting instructions to your broker, bank, trustee, or nominee by following the instructions they provided; or,

if you have obtained a valid legal proxy from your broker, bank, trustee, or nominee giving you the right to vote your shares, by attending the Annual Meeting and voting in person using the valid legal proxy.

Note that for both stockholders of record and beneficial owners, attendance at the Annual Meeting will not cause your previously granted proxy or voting instructions to be revoked unless you specifically so request or vote in person at the Annual Meeting.

Is my vote confidential?

Proxy instructions, ballots, and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within our Company or to third parties, except: (1) as necessary to meet applicable legal requirements, (2) to allow for the tabulation of votes and certification of the vote, and (3) to facilitate a successful proxy solicitation.

What is a "broker non-vote"?

If you are a beneficial owner of shares held by a broker, bank, trust or other nominee and you do not provide your broker, bank, trustee or other nominee with voting instructions, your shares may constitute "broker non-votes". Broker non-votes occur on a matter when the broker, bank, trustee or other nominee is not permitted under applicable stock exchange rules to vote on that matter without instructions from the beneficial owner and instructions are not given. These matters are referred to as "non-routine" matters.

Of the four matters scheduled to be voted on at the Annual Meeting, only Proposal No. 1 is considered a "non-routine" matter. Therefore, if you are a beneficial owner of shares held in street name and do not provide voting instructions, your shares will not be voted on Proposal No. 1 and a broker non-vote will occur on this matter. Proposal Nos. 2 through 4 are considered "routine" matters and a broker, bank, trustee or other nominee will be permitted to exercise its discretion on these proposals, which means there will be no broker non-votes on these matters.

In tabulating the voting result for Proposal No. 1, broker non-votes are not considered voting power present with respect to that proposal. However, the voting requirement for Proposal No. 1 (election of director nominees) is a plurality of the votes of the shares present in person or represented by proxy at the Annual Meeting. Therefore, broker non-votes will have no effect on the outcome of this proposal.

How many shares must be present or represented to conduct business at the Annual Meeting?

A "quorum" is necessary to conduct business at the Annual Meeting. A quorum is established if the holders of a majority of all shares entitled to vote at the Annual Meeting are present at the Annual Meeting, either in person or by

proxy. Abstentions and broker non-votes will be counted as present for purposes of determining a quorum at the Annual Meeting. If a quorum is not present, the Annual Meeting will be adjourned until a quorum is obtained.

Table of Contents

What are the voting requirements to approve the proposals discussed in this Proxy Statement?

Proposal No. 1: Election of directors. Votes may be cast: FOR ALL nominees, WITHHOLD ALL nominees or FOR ALL EXCEPT those nominees noted by you on the appropriate portion of your proxy or voting instructions. A plurality of the votes of the shares present in person or represented by proxy at the Annual Meeting is required to elect director nominees, and as such, the two nominees who receive the greatest number of votes of the shares present in person or presented by proxy at the Annual Meeting will be elected. Broker non-votes and abstentions will have no effect on the outcome of this proposal.

Proposal No. 2: To approve an amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our common stock. Votes may be cast FOR, AGAINST, or ABSTAIN. The approval of this Proposal No. 2 requires the affirmative vote of a majority of the Company's outstanding shares entitled to vote on this matter. Abstentions will have the effect of an AGAINST vote on this proposal.

Proposal No. 3: Ratification of the appointment of PricewaterhouseCoopers LLP as our independent public registered accounting firm for 2018. Votes may be cast: FOR, AGAINST or ABSTAIN. The approval of this Proposal No. 3 requires the affirmative vote of a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on the matter. Abstentions will have the effect of an AGAINST vote on this proposal.

Proposal No. 4: Authorize an adjournment of the Annual Meeting. Votes may be cast: FOR, AGAINST or ABSTAIN. The approval of this Proposal No. 4 requires the affirmative vote of a majority of the shares present in person or represented by proxy at the Annual Meeting and entitled to vote on the matter. Abstentions will have the effect of an AGAINST vote on this proposal.

Who will bear the cost of soliciting votes for the Annual Meeting?

We will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials and soliciting votes. Our directors, officers and employees may solicit proxies or votes in person, by telephone or by electronic communication. We will not pay our directors, officers or employees any additional compensation for these services. We will ask brokers, banks, trustees and other nominees to forward the proxy materials to their principals and to obtain authority to execute proxies and will reimburse them for certain costs in connection therewith.

Who will count the votes?

Votes will be counted by the inspector of election appointed for the Annual Meeting.

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

We will announce preliminary voting results at the Annual Meeting and disclose the final voting results in a Current Report on Form 8-K that we will file with the Securities and Exchange Commission (the SEC) within four business days of the Annual Meeting.

Attending the Annual Meeting

How can I attend the Annual Meeting?

You are entitled to attend the Annual Meeting only if you were a Fibrocell stockholder as of the Record Date (March 26, 2018), or you hold a valid legal proxy from a stockholder of record for attending or voting at the Annual Meeting. You must present valid photo identification, such as a driver's license or passport, for admittance. If you are not a stockholder of record but hold shares as a beneficial owner in street name, you must also provide proof of beneficial ownership as of the Record Date, such as your most recent account statement prior to March 26, 2018, a copy of the voting instruction card provided by your broker, bank, trustee or other nominee, or other similar evidence of ownership. If you do not provide photo identification or comply with the other procedures outlined above, you will not be admitted to the Annual Meeting.

Table of Contents

Please let us know if you plan to attend the Annual Meeting by indicating your plans when prompted if you vote by Internet or telephone or, if you vote by mail, by marking the appropriate box on your proxy or voting instruction card.

The Annual Meeting will begin promptly at 8:30 a.m., local time. Check-in will begin in the Executive Board Room at our corporate headquarters at 8:00 a.m., local time, and you should allow ample time for the check-in procedures. Our corporate headquarters is located at 405 Eagleview Blvd., Exton, Pennsylvania 19341.

Table of Contents

PROPOSALS

Proposal No. 1: Election of Directors

Our Restated Certificate of Incorporation, as amended, provides that our directors be divided into three classes, Class I directors, Class II directors and Class III directors, serving staggered three-year terms. The terms of our Class III directors will expire at the Annual Meeting. Our Board has nominated, upon the recommendation of our Nominating and Corporate Governance Committee, John Maslowski and Kelvin Moore for election as Class III directors at the Annual Meeting, each to serve a three-year term expiring at our 2021 Annual Meeting of Stockholders or until such person's successor is qualified and elected. Each of these nominees is currently serving as a Class III director. We expect each nominee will be able to serve if elected. If any nominee is unable to serve, proxies will be voted in favor of the remainder of those nominees and for such substitute nominee as may be selected by our Board.

Biographical information and the attributes, skills and experience of each nominee that led our Nominating and Corporate Governance Committee and Board of Directors to determine that such nominee should serve as a director are discussed in the "Directors and Executive Officers" section of this Proxy Statement.

Vote Required and Recommendation of Our Board of Directors

The two director nominees receiving the highest number of FOR votes shall be elected to our Board, each to serve until our 2021 Annual Meeting of Stockholders or until such person's successor is qualified and elected. Our Board recommends that stockholders vote FOR ALL on Proposal No. 1 to elect John Maslowski and Kelvin Moore.

Proposal No. 2: Approval of Amendment to Restated Certificate of Incorporation, as amended, to Effect Reverse Stock Split of the Company's Common Stock

General

Our Board has adopted and is recommending that our stockholders approve a proposed amendment to our Restated Certificate of Incorporation, as amended, in substantially the form attached hereto as Annex A, to effect a reverse stock split of our outstanding shares of common stock at a ratio within a range from 1:3 to 1:10, with the final ratio to be determined by our Board, in its sole discretion, following stockholder approval. If the stockholders approve and adopt the proposed amendment to effect the reverse stock split, and our Board decides to implement it, the reverse stock split will become effective on the date of the filing of the proposed amendment with the Secretary of State of the State of Delaware.

The reverse stock split will be realized simultaneously for all outstanding common stock and the ratio determined by our Board will be the same for all outstanding shares of common stock. The reverse stock split will affect all holders of shares of our common stock uniformly and each stockholder will hold the same percentage of our common stock outstanding immediately following the reverse stock split as that stockholder held immediately prior to the reverse stock split, except for adjustments that may result from the treatment of fractional shares as described below. The proposed amendment will not reduce the number of authorized shares of common stock (which will remain at 150,000,000) or preferred stock (which will remain at 5,000,000) or change the par values of our common stock (which will remain at \$0.001 per share) or preferred stock (which will remain at \$0.001 per share).

Background

Our common stock is currently quoted on The Nasdaq Capital Market ("Nasdaq"), and we are therefore subject to its continued listing requirements, including requirements with respect to the market value of publicly-held shares, market value of listed shares, minimum bid price per share, and minimum stockholder's equity, among others, and requirements relating to board and committee independence. If we fail to satisfy one or more of the requirements, we may be delisted from Nasdaq.

On January 23, 2018, we received notice (the "Notice") from Nasdaq that we are not currently in compliance with the \$1.00 minimum closing bid price requirement of Nasdaq Listing Rule 5550(a)(2). The Notice indicated that, consistent with Nasdaq Listing Rule 5810(c)(3)(A), we have until July 23, 2018 to regain compliance with the minimum bid price requirement by having the closing bid price of our common stock meet or exceed \$1.00 per share for at least ten consecutive business days. If we do not regain compliance by July 23, 2018, we may be subject to delisting.

Purpose of the Proposed Reverse Stock Split

Our Board's primary objective in proposing the reverse stock split is to raise the per share trading price of our common stock. In particular, this will help us to maintain the listing of our common stock on Nasdaq.

Delisting from Nasdaq may adversely affect our ability to raise additional financing through the public or private sale of equity securities, may significantly affect the ability of investors to trade our securities and may negatively affect the value and liquidity of our common stock. Delisting also could have other negative results, including the potential loss of employee confidence, the loss of institutional investors or interest in business development opportunities. Moreover, a delisting of our common stock could result in an event of default under the convertible promissory notes

that we issued in our September 2016 private placement offering and would result in a breach of covenant contained in the securities purchase agreement pursuant to which we offered and sold our Series A convertible preferred stock in 2017.

If we are delisted from Nasdaq and we are not able to list our common stock on another exchange, our common stock could be quoted on the OTC Bulletin Board or in the "pink sheets." As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock, is a "penny stock" which will require brokers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;

Table of Contents

- a limited amount of news and little or no analyst coverage for us;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

Our Board believes that the proposed reverse stock split is a potentially effective means for us to maintain compliance with the listing rules of Nasdaq and to avoid, or at least mitigate, the likely adverse consequences of our common stock being delisted from Nasdaq by producing the immediate effect of increasing the bid price of our common stock.

Increase the Market Price of our Common Stock to a Level More Appealing for Investors

We also believe that the reverse stock split could enhance the appeal of our common stock to the financial community, including institutional investors, and the general investing public. We believe that a number of institutional investors and investment funds are reluctant to invest in lower-priced securities and that brokerage firms may be reluctant to recommend lower-priced securities to their clients, which may be due in part to a perception that lower-priced securities are less promising as investments, are less liquid in the event that an investor wishes to sell its shares, or are less likely to be followed by institutional securities research firms and therefore more likely to have less third-party analysis of the Company available to

investors. We believe that the reduction in the number of issued and outstanding shares of our common stock caused by the reverse stock split, together with the anticipated increased stock price immediately following and resulting from the reverse stock split, may encourage interest and trading in our common stock and thus possibly promote greater liquidity for our stockholders, thereby resulting in a broader market for the common stock than that which currently exists.

We cannot assure you that all or any of the anticipated beneficial effects on the trading market for our common stock will occur. Our Board cannot predict with certainty what effect the reverse stock split will have on the market price of our common stock, particularly over the longer term. Some investors may view a reverse stock split negatively, which could result in a decrease in our market capitalization. Additionally, any improvement in liquidity due to increased institutional or brokerage interest or lower trading commissions may be offset by the lower number of outstanding shares. We cannot provide you with any assurance that our shares will qualify for, or be accepted for, listing on a national securities exchange. As a result, the trading liquidity of our common stock may not improve. In addition, investors might consider the increased proportion of unissued authorized shares to issued shares to have an anti-takeover effect under certain circumstances, since the proportion allows for dilutive issuances.

Determination of Ratio

The ratio of the reverse stock split, if approved and implemented, will be a ratio of not less than 1:3 and not more than 1:10, as determined by our Board in its sole discretion. In determining the reverse stock split ratio, our Board will consider numerous factors, including:

the historical and projected performance of our common stock;

prevailing market conditions;

general economic and other related conditions prevailing in our industry and in the marketplace;

the projected impact of the selected reverse stock split ratio on trading liquidity in our common stock;

our capitalization (including the number of shares of our common stock issued and outstanding);

the prevailing trading price for our common stock and the volume level thereof; and

potential devaluation of our market capitalization as a result of a reverse stock split.

The purpose of asking for authorization to amend the Restated Certificate of Incorporation, as amended, to implement the reverse stock split at a ratio to be determined by the Board, as opposed to a ratio fixed in advance, is to give our Board the flexibility to take into account then-current market conditions and changes in price of our common stock and to respond to other developments that may be deemed relevant when considering the appropriate ratio.

Principal Effects of the Reverse Stock Split

A reverse stock split refers to a reduction in the number of outstanding shares of a class of a corporation's capital stock, which may be accomplished, as in this case, by reclassifying and combining all of our outstanding shares of common stock into a proportionately smaller number of shares. For example, if our Board decides to implement a 1-for-5 reverse stock split of our common stock, then a stockholder holding 10,000 shares of our common stock before the reverse stock split would instead hold 2,000 shares of our common stock immediately after the reverse stock split. The reverse stock split will affect all of our common stockholders uniformly and will not affect any stockholder's percentage ownership interests in our company or proportionate voting power, except for minor adjustments due to the additional net share fraction that will need to be issued as a result of the treatment of fractional shares. No fractional shares will be issued in connection with the reverse stock split. Instead, we will issue one full share of the post-reverse stock split common stock to any stockholder who would have been entitled to receive a fractional share as a result of the process.

The principal effect of the reverse stock split will be that (i) the number of shares of common stock issued and outstanding will be reduced from 28,356,351 shares as of the Record Date to a number of shares between and including one-third to one-tenth that amount, as the case may be based on the ratio for the reverse stock split as determined by our Board, (ii) all outstanding options and warrants entitling the holders thereof to purchase shares of common stock will enable such holders to purchase, upon exercise of their options or warrants, as applicable, between and including one-third to one-tenth of the number of shares of common stock which such holders would have been able to purchase upon exercise of their options or warrants, as applicable, immediately preceding the reverse stock split at an exercise price equal to between and including three to ten times the exercise price specified before the reverse stock split, resulting in essentially the same aggregate price being required to be paid therefor upon exercise thereof immediately preceding the reverse stock split, as the case may be based on the ratio for the reverse stock split as determined by our Board, (iii) the conversion price of our outstanding convertible promissory notes will increase to an amount equal to between and including three to ten times the conversion price before the stock split entitling the holders thereof to receive between one-third and one-tenth of the number of shares of common stock upon conversion of such notes (and accrued interest at the option of the holder) which such holders would have received upon conversion of such notes immediately preceding the reverse stock split, (iv) the conversion price of our outstanding Series A convertible preferred stock will increase to an amount equal to between and including three to ten times the conversion price before the stock split entitling the holders thereof to receive between one-third and one-tenth of the number of shares of common stock upon conversion of such Series A convertible preferred stock which such holders would have received upon conversion of such shares of Series A convertible preferred stock immediately preceding the reverse stock split; and (v) the number of shares reserved for future issuance pursuant to our 2009 Equity Incentive Plan, as amended, will be reduced to between and including one-third to one-tenth of the number of shares currently included in such plan, as the case may be based on the ratio for the reverse stock split as determined by our Board.

The following table, which is for illustrative purposes only, illustrates the effects of the reverse stock split at certain exchange ratios within the 1:3 to 1:10 range, without giving effect to any adjustments for fractional shares of common stock, on our outstanding shares of common stock and preferred stock and authorized shares of capital stock as of the Record Date.

| | Before Reverse | After Reverse Stock Split | | |
|---|-------------------|---------------------------|-------------|-------------|
| | Stock Split | 1 for 3 | 1 for 7 | 1 for 10 |
| Common Stock Authorized | 150,000,000 | 150,000,000 | 150,000,000 | 150,000,000 |
| Preferred Stock Authorized | 5,000,000 | 5,000,000 | 5,000,000 | 5,000,000 |
| Common Stock Issued and Outstanding | 28,356,351 | 9,452,117 | 4,050,908 | 2,835,636 |
| Series A Preferred Stock Issued and Outstanding | 8,000 | 8,000 | 8,000 | 8,000 |
| Common Stock Underlying Series A Preferred Stock | 3,545,574 | 1,181,858 | 506,511 | 354,558 |
| Common Stock Underlying Options and Warrants | 26,180,753 | 8,726,918 | 3,740,108 | 2,618,076 |
| Common Stock Available for Grant under 2009 Equity Incentive Plan | 21,179,224 | 393,075 | 168,461 | 117,923 |
| Common Stock Underlying Convertible Debt and Accrued Interest | 5,572,955 | 1,857,652 | 796,137 | 557,296 |
| Total Common Stock Authorized but Unreserved | 85,165,143 | 128,388,380 | 140,737,875 | 143,516,511 |

The amendment will not change the terms of our common stock. The shares of new common stock will have the same voting rights and rights to dividends and distributions and will be identical in all other respects to the common stock now authorized. The common stock issued pursuant to the reverse stock split will remain fully paid and non-assessable. The reverse stock split is not intended as, and will not have the effect of, a "going private transaction" covered by Rule 13e-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). We will continue to be subject to the periodic reporting requirements of the Exchange Act.

Accounting Matters

The reverse stock split will not affect the par value of our common stock. As a result, on the effective date of the reverse stock split, the stated capital on our balance sheet attributable to the common stock will be reduced to between and including one-third to one-tenth of its present amount, as the case may be based on the ratio for the reverse stock split as determined by our Board, and the additional paid-in capital account shall be credited with the amount by which the stated capital is reduced. The per share net loss and net book value of our common stock will be retroactively increased for each period because there will be fewer shares of our common stock outstanding.

Effect of Authorized but Unissued Shares

The reverse stock split will have the effect of significantly increasing the number of authorized but unissued shares of common stock. The number of authorized shares of common stock will not be decreased and will remain at 150,000,000. Because the number of outstanding shares will be reduced as a result of the reverse stock split, the number of shares available for issuance

will be increased. See the table above under the caption "Principal Effects of the Reverse Stock Split" that shows the number of unreserved shares of common stock that would be available for issuance at various reverse stock split ratios.

Our Board believes that we will need to raise additional capital in the ordinary course of business. In addition, we may issue shares to acquire other companies or assets or engage in business combination transactions. As of the date of this Proxy Statement, we have no specific plans, arrangements or understandings, whether written or oral, with respect to the increase in shares available for issuance as a result of the reverse stock split.

Potential Anti-Takeover and Dilutive Effects

The purpose of the reverse stock split is not to establish any barriers to a change of control or acquisition of the Company. However, because the number of authorized shares of common stock will remain at 150,000,000, this proposal, if adopted and implemented, will result in a relative increase in the number of authorized but unissued shares of our common stock vis-à-vis the outstanding shares of our common stock and could, under certain circumstances, have an anti-takeover effect. Shares of common stock that are authorized but unissued provide our Board with flexibility to effect, among other transactions, public or private financings, mergers, acquisitions, stock dividends, stock splits and the granting of equity incentive awards. However, these authorized but unissued shares may also be used by our Board, consistent with and subject to its fiduciary duties, to deter future attempts to gain control of us or make such actions more expensive and less desirable. After implementation of the proposed amendment, our Board will continue to have authority under the provisions of our Restated Certificate of Incorporation, as amended, to issue additional shares from time to time without delay or further action by the stockholders except as may be required by applicable law or the Nasdaq listing standards, assuming the Company remains listed on Nasdaq. Our Board is not aware of any attempt to take control of our business and has not considered the reverse stock split to be a tool to be utilized as a type of anti-takeover device. We currently have no plans, proposals or arrangements to issue any shares of common stock that would become newly available for issuance as a result of the reverse stock split.

In addition, if we do issue additional shares of our common stock, the issuance could have a dilutive effect on earnings per share and the book or market value of the outstanding common stock, depending on the circumstances, and would likely dilute a stockholder's percentage voting power in the Company. Holders of common stock are not entitled to preemptive rights or other protections against dilution. Our Board intends to take these factors into account before authorizing any new issuance of shares.

Certain Risks Associated with the Reverse Stock Split

Before voting on this proposal, you should consider the following risks associated with the implementation of the reverse stock split:

Although we expect that the reverse stock split will result in an increase in the market price of our common stock, we cannot assure you that the reverse stock split, if implemented, will increase the market price of our common stock in proportion to the reduction in the number of shares of common stock outstanding or result in a permanent increase in the market price. The effect the reverse stock split may have upon the market price of our common stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in similar circumstances to ours is varied. The market price of our common stock is dependent on many factors, including our business and financial performance, general market conditions, prospects for future success and other factors detailed from time to time in the reports we file with the SEC. Accordingly, the total market capitalization of our common stock after the proposed reverse stock split may be lower than the total market capitalization before the proposed reverse stock split

and, in the future, the market price of our common stock following the reverse stock split may not exceed or remain higher than the market price prior to the proposed reverse stock split. In this regard, in 2012 our stockholders approved a reverse stock split of 1:25, which was implemented in 2013 in connection with our listing on the NYSE MKT. In addition, in March 2017 our stockholders approved a reverse stock split of 1:3, which was implemented in March 2017. While there have been numerous events and developments in our business since those reverse splits, over the long term we were not able to maintain compliance with the minimum bid price requirement.

The reverse stock split may result in some stockholders owning "odd lots" of less than 100 shares of our common stock on a post-split basis. These odd lots may be more difficult to sell, or require greater transaction costs per share to sell, than shares in "round lots" of even multiples of 100 shares.

While our Board believes that a higher stock price may help generate investor interest, there can be no assurance that the reverse stock split will result in a per share price that will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our common stock may not necessarily improve.

Procedure for Effecting Reverse Stock Split and Exchange of Stock Certificates

If the reverse stock split is approved by our stockholders, the reverse stock split would become effective at such time as it is deemed by our Board to be in the best interests of the Company and its stockholders and we file the amendment to our Restated Certificate of Incorporation, as amended, with the Secretary of State of the State of Delaware. Even if the reverse stock split is approved by our stockholders, our Board has discretion not to carry out or to delay in carrying out the reverse stock split. Upon the filing of the amendment, all the old common stock will be converted into new common stock as set forth in the amendment.

As soon as practicable after the effective time of the reverse stock split, stockholders will be notified that the reverse stock split has been effected. If you hold shares of common stock in a book-entry form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective time of the reverse stock split with instructions on how to exchange your shares. After you submit your completed transmittal letter, a transaction statement will be sent to your address of record as soon as practicable after the effective date of the reverse stock split indicating the number of post-reverse stock split shares of common stock you hold.

Some stockholders hold their shares of common stock in certificate form or a combination of certificate and book-entry form. Our transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates, if applicable. If you are a stockholder holding pre-split shares in certificate form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective time of the reverse stock split. The transmittal letter will be accompanied by instructions specifying how you can exchange your certificate representing the pre-split shares of our common stock for a statement of holding. When you submit your certificate representing the pre-split shares of our common stock, your post-split shares of our common stock will be held electronically in book-entry form in the Direct Registration System. This means that, instead of receiving a new stock certificate, you will receive a statement of holding that indicates the number of post-split shares you own in book-entry form. We will no longer issue physical stock certificates unless you make a specific request for a share certificate representing your post-split ownership interest.

STOCKHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATE(S) AND SHOULD NOT SUBMIT ANY CERTIFICATE(S) UNTIL REQUESTED TO DO SO.

Beginning on the effective time of the reverse stock split, each certificate representing pre-split shares will be deemed for all corporate purposes to evidence ownership of post-split shares.

Fractional Shares

No fractional shares will be issued in connection with the reverse stock split. Instead, we will issue one full share of the post-reverse stock split common stock to any stockholder who would have been entitled to receive a fractional share as a result of the process. Each common stockholder will hold the same percentage of the outstanding common stock immediately following the reverse stock split as that stockholder did immediately prior to the reverse stock split, except for minor adjustment due to the additional net share fraction that will need to be issued as a result of the treatment of fractional shares.

No Dissenter's Rights

Under the Delaware General Corporation Law, our stockholders are not entitled to dissenter's rights with respect to the reverse stock split or the corresponding amendment to our Restated Certificate of Incorporation, as amended, to effect the reverse stock split and we will not independently provide our stockholders with any such right.

Federal Income Tax Consequences of the Reverse Stock Split

The following is a summary of important tax considerations of the reverse stock split. It addresses only stockholders who hold our common stock as capital assets. It does not purport to be complete and does not address stockholders subject to special rules, such as financial institutions, tax-exempt organizations, insurance companies, dealers in securities, foreign stockholders, stockholders who hold their pre-reverse stock split shares as part of a straddle, hedge or conversion transaction, and

Table of Contents

stockholders who acquired their pre-reverse stock split shares pursuant to the exercise of employee stock options or otherwise as compensation. This summary is based upon current law, which may change, possibly even retroactively. It does not address tax considerations under state, local, foreign and other laws. The tax treatment of a stockholder may vary depending upon the particular facts and circumstances of such stockholder. Each stockholder is urged to consult with such stockholder's own tax advisor with respect to the tax consequences of the reverse stock split.

Generally, a reverse stock split will not result in the recognition of gain or loss for federal income tax purposes. The adjusted basis of the new shares of common stock will be the same as the adjusted basis of the common stock exchanged for such new shares. The holding period of the new, post-reverse stock split shares of the common stock resulting from implementation of the reverse stock split will include the stockholder's respective holding periods for the pre-reverse stock split shares. Stockholders who acquired their shares of our common stock on different dates or at different prices should consult their tax advisors regarding the allocation of the tax basis of such shares. Additional information about the effects of the reverse stock split on the basis of holders of our common stock will be included in Internal Revenue Service Form 8937, Report of Organizational Actions Affecting Basis of Securities, which we will post to our website on or before the 45th day following the effective date of the reverse stock split, if effected.

The foregoing views are not binding on the Internal Revenue Service or the courts. Accordingly, each stockholder should consult with his or her own tax advisor with respect to all of the potential tax consequences to him or her of the reverse stock split.

Vote Required and Recommendation of the Board

The approval of Proposal No. 2 requires the affirmative vote of a majority of our outstanding shares of common stock. The Board recommends that stockholders vote FOR on Proposal No. 2 to approve the amendment to our Restated Certificate of Incorporation, as amended, to effect a reverse stock split of our common stock at a ratio in the range of 1:3 to 1:10, such ratio to be determined in the discretion of our Board.

Proposal No. 3: Ratification of Appointment of Independent Registered Public Accounting Firm

Our Audit Committee has appointed PricewaterhouseCoopers LLP (PwC) as our independent registered public accounting firm to audit our consolidated financial statements for the year ending December 31, 2018. Although stockholder ratification of the appointment of PwC is not required by our bylaws or otherwise, our Board believes that it is desirable to give our stockholders the opportunity to ratify this appointment as a matter of good corporate governance. If this proposal is not approved at the Annual Meeting, our Audit Committee will reconsider, but may or may not change, its appointment of PwC as our independent registered public accounting firm for 2018. Even if the selection is ratified, our Audit Committee may, at its discretion, direct the selection of a different independent registered public accounting firm during the year if the Audit Committee determines such a change is advisable.

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

Information regarding fees paid to our independent registered public accounting firm in 2017 and 2016 and our pre-approval policies relating to such fees is discussed in the "Independent Registered Public Accounting Firm" section of this Proxy Statement.

Vote Required and Recommendation of Our Board of Directors

The approval of Proposal No. 3 requires the affirmative vote of a majority of the shares present in person or represented by proxy and entitled to vote on the matter. Our Board recommends that stockholders vote FOR on Proposal No. 3 to ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for 2018.

Proposal No. 4: Authorization to Adjourn the Annual Meeting

General

If the Annual Meeting is convened and a quorum is present, but there are not sufficient votes to approve any of the proposals described herein, the person presiding at the Annual Meeting may move to adjourn the Annual Meeting at that time in order to enable our Board to solicit additional proxies.

In this proposal, we are asking our stockholders to authorize the person presiding at the Annual Meeting to adjourn the Annual Meeting to another time and place, if necessary, to solicit additional proxies in the event that there are not sufficient votes to approve any of the proposals described herein. If our stockholders approve this proposal, the person presiding at the Annual Meeting can adjourn the Annual Meeting and any adjourned session of the Annual Meeting to allow for additional time to solicit additional proxies, including the solicitation of proxies from our stockholders that have previously voted. Among other things, approval of this proposal could mean that, even if we had received proxies representing a sufficient number of votes to defeat any of the proposals described herein, we could adjourn the Annual Meeting without a vote on such proposals and seek to convince our stockholders to change their votes in favor of any such proposals.

If it is necessary to adjourn the Annual Meeting, no notice of the adjourned meeting is required to be given to our stockholders, other than an announcement at the Annual Meeting of the time and place to which the Annual Meeting is adjourned, so long as the meeting is adjourned for 30 days or less and no new record date is fixed for the adjourned meeting. At the adjourned meeting, we may transact any business which might have been transacted at the original meeting.

Vote Required and Recommendation of the Board

The approval of Proposal No. 4 requires the affirmative vote of a majority of the shares present or represented by proxy at the Annual Meeting and entitled to vote on the matter. The Board recommends that stockholders vote FOR on Proposal No. 4.

Other Proposed Action

Our Board does not intend to bring any other matters before the Annual Meeting, nor does it know of any matters which other persons intend to bring before the Annual Meeting. If, however, other matters not mentioned in this Proxy Statement properly come before the Annual Meeting, the persons named in the accompanying form of proxy will vote thereon in accordance with the recommendation of the Board.

DIRECTORS AND EXECUTIVE OFFICERS

The following table sets forth the names and ages of all of our directors and executive officers as of April 2, 2018.

| Name | Title | Age |
|--------------------|--|-----|
| John M. Maslowski | President and Chief Executive Officer and Director | 43 |
| Douglas J. Swirsky | Chairman of the Board | 48 |
| Julian Kirk | Director | 44 |
| Marc Mazur | Director | 59 |
| Kelvin Moore | Director | 68 |
| Marcus E. Smith | Director | 63 |
| Christine St.Clare | Director | 67 |

Directors

Biographical information as of April 2, 2018 and the attributes, skills and experience of each director that led our Nominating and Corporate Governance Committee and our Board to determine that such individual should serve as a director are discussed below.

Douglas J. Swirsky Director since 2013 Mr. Swirsky serves as Fibrocell's Chairman of the Board. He has served as a member of our Board since March 2013. Mr. Swirsky currently serves as President and Chief Financial Officer of Rexahn Pharmaceuticals, Inc., a publicly-traded clinical-stage oncology company. Prior to joining Rexahn, Mr. Swirsky served as President, Chief Executive Officer, and a director of GenVec, Inc., a publicly traded biotechnology company; a position he held from 2013 through the sale of the company in June 2017. Mr. Swirsky joined GenVec in 2006 as Senior Vice President, Chief Financial Officer, Treasurer and Corporate Secretary. Prior to joining GenVec, Mr. Swirsky worked at Stifel Nicolaus where he served as a Managing Director and the Head of Life Sciences Investment Banking. Mr. Swirsky previously held investment banking positions at UBS, PaineWebber, Morgan Stanley, and Legg Mason. His experience also includes positions in public accounting and consulting. Mr. Swirsky is the Chairman of the Board of Directors of Cellectar Biosciences, Inc. and a member of the board of directors of Pernix Therapeutics Holdings, Inc. He received his B.S. in Business Administration from Boston University and his M.B.A. from the Kellogg School of Management at Northwestern University.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Swirsky should serve as a member of our Board because of his distinguished career in financial services and corporate management, including his investment banking experience and his experience serving as a senior executive in the life sciences industry and his service on the boards of directors of other life sciences companies.

Julian Kirk Director since 2012 Mr. Kirk has served as a member of our Board since October 2012. Mr. Kirk is a Managing Director of Third Security, LLC, where he has worked since the firm's inception with several portfolio companies of its managed investment funds. He is also involved with the oversight of Third Security, LLC's internal operations. Mr. Kirk was a member of the board of directors of AmpliPhi Biosciences Corporation (NYSE: APHB) from June 2013 to April 2015. Since August 2010, he has served on the board of the New River Valley Economic Development Alliance. From October 2006 until December 2011, he served as a member of the board of directors of IntelliMat, Inc. and as Co-Chairman of its board of directors between September 2008 and December 2011. From September 2005 until December 2011, Mr. Kirk served as President of Harvest Pharmaceuticals Inc. Mr. Kirk also served as Chairman of the board of managers of ECDS, LLC from June 2008 until March 2010. Mr. Kirk graduated as an Echols Scholar from the University of

Virginia.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Kirk should serve as a member of our Board because of his extensive operating and board experience, his experience as the President of Harvest Pharmaceuticals, as well as his responsibilities at Third Security encompassing corporate oversight of internal operations.

John M. Maslowski

President and Chief Executive Officer and Director since 2016 Mr. Maslowski has served as a member of our Board since December 2016. Mr. Maslowski is Fibrocell's Chief Executive Officer. Prior to that, he was Senior Vice President of Scientific Affairs, with oversight of research and development, clinical and regulatory affairs. Previously, he was Vice President of Operations with responsibility for manufacturing and quality operations. Prior to joining Fibrocell, Mr. Maslowski held various positions at Wyeth Pharmaceuticals, Inc. (now Pfizer, Inc.), eventually serving as Quality Assurance Manager. Prior to joining Wyeth, Mr. Maslowski held various positions with Merck & Co. and Teva. Mr. Maslowski earned a B.S. in Biology from the Ursinus College and an M.S. in Biology from Villanova University.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Maslowski should serve as a member of our Board because of his extensive experience in the life sciences and health care fields and a deep understanding of our business and operations through his tenure as Chief Executive Officer and Senior Vice President of Scientific Affairs.

Marc Mazur Director since 2010 Mr. Mazur has served as a member of our Board since April 2010. Mr. Mazur currently serves as an advisor to Brightwood Capital Advisors, an investment fund. From October 2006 until December 2009, Mr. Mazur served as the Chief Executive Officer of Brevan Howard U.S. Asset Management, the U.S. arm of London-based Brevan Howard. Mr. Mazur founded Ambassador Capital Group, a privately held investment and advisory entity providing capital, business development and strategic planning advice to companies in the healthcare, financial services and real estate fields. Between 1984 and 1999, Mr. Mazur held management positions at Goldman Sachs and Swiss Bank Corporation. He has served on a number of private company boards in the wellness, population health and medical device fields. Mr. Mazur received his B.A. in political science from Columbia University and a J.D. from Villanova University School of Law.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Mazur should serve as a member of our Board because of his senior executive level experience in finance, healthcare consulting and business strategy, as well as his board experience.

Kelvin Moore Director since 2009 Mr. Moore has served as a member of our Board since September 2009. He has over 30 years of experience in a wide range of roles within the banking industry. From March 2009 to late 2010, Mr. Moore served as the consultant sales director for the UK-based Seaborne Group, developing its business in building constructions from converting shipping sea containers. From July 2008 to September 2010, Mr. Moore was a director of Acorn Cultural Developments Limited which developed a social networking site. Between June 2004 and May 2008, Mr. Moore was a senior advisor with Exit Strategy Planning, dealing with the sale of businesses. Currently, he runs his own consulting business providing expertise and mentoring to owners of small and medium-sized enterprises. Mr. Moore holds a London University Degree in Geography and Pure Mathematics.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Moore should serve as a member of our Board because of his extensive experience as both a consultant and operating executive, his experience in the banking industry, as well as his familiarity with corporate governance, strategic business development and delivery and human resources.

Marcus E. Smith

Director since 2012

Mr. Smith has served as a member of our Board since October 2012. Mr. Smith joined Third Security, LLC upon its inception and has since been principally responsible for legal matters and transaction execution. From August 1996 to April 2004, Mr. Smith served as Senior Vice President, General Counsel, Secretary and member of the board of directors of New River Pharmaceuticals Inc. Mr. Smith received his B.B.A. and his J.D. from the University of Georgia.

Key Attributes, Experience and Skills: Our Board concluded that Mr. Smith should serve as a member of our Board because of his extensive experience in the life sciences and health care fields and his active role as the Senior Vice President and General Counsel at Third Security.

Christine St.Clare Director since 2013 Ms. St.Clare has served as a member of our Board since February 2013. Ms. St.Clare completed a 35-year career with KPMG LLP, where she served a four-year term on the firm's board of directors and chaired the board's audit and finance committee. As an Audit Partner, she served as the engagement partner for some of KPMG's largest publicly-traded clients. She then assumed the position of Advisory Partner for the firm's Advisory Practice focusing on the internal audit, risk and compliance practice. Since retiring from KPMG, she has served on the board of directors of Polymer Group, Inc. and as the chair of its audit committee for approximately three years, until Polymer Group was sold in October 2015. Polymer Group was a wholly-owned company of the Blackstone Group with publicly-traded debt. She currently serves on the board of directors of AquaBounty Technologies, Inc. (NASDAQ-listed), and as the chair of its audit committee. She recently served on advisory boards of Houlihan Lokey, a midsize global, advisory-focused investment bank, Women Corporate Directors, and Emory University's Goizueta Business School. Ms. St.Clare earned a B.S. in Accounting from California State University at Long Beach.

Key Attributes, Experience and Skills: Our Board concluded that Ms. St.Clare should serve as a member of our Board because of her deep and broad level of expertise in financial accounting and reporting matters as a former Audit Partner at KPMG, and her board experience.

No director is related to any of our other directors or executive officers and there are no arrangements or understandings between a director and any other person pursuant to which such person was elected as director, except for Mr. Kirk and Mr. Smith who were originally appointed to our Board as a condition to the closing of a financing transaction we completed in October 2012. Mr. Kirk and Mr. Smith were subsequently re-elected by our stockholders at our 2014 Annual Meeting of Stockholders and our 2017 Annual Meeting of Stockholders.

Table of Contents

Executive Officers

Biographical information regarding our executive officers as of April 2, 2018 is set forth below. Our executive officers are appointed by, and serve at the pleasure of, our Board of Directors.

John M. Maslowski

President and Chief Executive Officer

Please refer to "Directors" section above for Mr. Maslowski's biographical information.

STOCK OWNERSHIP

Stock Ownership of Directors, Officers and Principal Stockholders

The following table sets forth information known to us concerning the beneficial ownership of our common stock as of March 26, 2017 (unless otherwise indicated by footnote below) for:

each of our directors and director nominees, including our Chief Executive Officer;

each of our other named executive officers identified in the "Executive Compensation" section of this Proxy Statement;

all of our current directors and executive officers as a group; and,

each stockholder known by us to own beneficially more than 5% of our common stock.

Beneficial ownership is determined in accordance with the rules of the SEC as indicated in the footnotes to the table below.

| | Common | | | | |
|---|--------------|-----------|------------|--|--|
| Name of Beneficial Owner | Stock | | Percent of | | |
| Name of Beneficial Owner | Beneficially | Class (2) | | | |
| | Owned (1) | | | | |
| Named Executive Officers and Directors (11): | | | | | |
| John M. Maslowski | 92,230 | (3) | * | | |
| Michael F. Marino | _ | (4) | * | | |
| Lisa A. Embon | _ | (5) | * | | |
| Julian Kirk | 40,667 | (6) | * | | |
| Marc Mazur | 50,335 | (7) | * | | |
| Kelvin Moore | 47,520 | (8) | * | | |
| Marcus E. Smith | 40,667 | (6) | * | | |
| Christine St.Clare | 44,001 | (9) | * | | |
| Douglas J. Swirsky | 40,667 | (6) | * | | |
| All Current Executive Officers and Directors as a Group (7 persons) | 356,087 | (10) | 1.2% | | |
| Greater Than 5% Stockholders: | | | | | |
| Randal J. Kirk (11) | 10,994,686 | | 35.4% | | |

^{*} Represents less than 1% of the outstanding shares of our common stock.

Beneficial ownership is determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934 (the Exchange Act). A person or group is deemed to be the beneficial owner of any shares of our common stock over which such person or group has sole or shared voting or investment power, plus any shares which such person or

⁽¹⁾ group has the right to acquire beneficial ownership of within 60 days of March 26, 2018, whether through the exercise of options, warrants or otherwise. Unless otherwise indicated in the footnotes, each person or entity identified in the table has sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

⁽²⁾ The beneficial ownership percentage is calculated for each person or group separately because shares of our common stock subject to options, warrants or other rights to acquire our common stock that are currently exercisable or exercisable within 60 days of March 26, 2018 are considered outstanding and beneficially owned by the person or group holding such options, warrants or other rights but not for the purpose of calculating the

percentage ownership of any other person or group. As a result, the beneficial ownership percentage for each person or group is calculated by dividing (x) the number of shares reported in the table as beneficially owned by such person or group, by (y)

28,356,351 shares (which represents the number of shares of our common stock that were outstanding as of March 26, 2018) plus the number of shares that such person or group has the right to acquire beneficial ownership of within 60 days of March 26, 2018 as indicated in the footnotes below.

- (3) Consists of (i) 819 shares of our common stock and (ii) options to purchase an aggregate of 91,411 shares of our common stock exercisable within 60 days of March 26, 2018.
- (4) Mr. Marino resigned in January 2017. At the time of his resignation, he held no shares of our common stock and all vested stock awards owned by him expired 3 months after his resignation.
 - Ms. Embon resigned in August 2017. Ms. Embon was an employee of the firm AC Lordi, an accounting and
- (5) consulting firm, and her services were assigned to the Company per an executed engagement letter. At the time Ms. Embon resigned, Ms. Embon held no shares of our common stock nor did Ms. Embon have the right to acquire beneficial ownership of any shares of our common stock within 60 days of March 26, 2018.
- (6) The share amounts set forth in the table consist solely of shares underlying one or more outstanding options to purchase our common stock exercisable within 60 days of March 26, 2018.
- Consists of (i) 3,000 shares of our common stock and (ii) options and warrants to purchase an aggregate of 47,355 shares of our common stock exercisable within 60 days of March 26, 2018.
- (8) Consists of (i) 1,519 shares of our common stock and (ii) options to purchase 46,001 shares of our common stock exercisable within 60 days of March 26, 2018.
- (9) Consists of (i) 3,334 shares of our common stock and (ii) options to purchase 40,667 shares of our common stock exercisable within 60 days of March 26, 2018.
- Consists of (i) 8,672 shares of our common stock and (ii) options and warrants to purchase an aggregate of 347,415 shares of our common stock exercisable within 60 days of March 26, 2018.

 Based on the Schedule 13D/A filed on December 11, 2017 (the "Schedule 13D/A") by Randal J. Kirk, Third Security, LLC ("Third Security"), NRM VII Holdings I, LLC ("NRM VII Holdings"), Kapital Joe, LLC ("Kapital Joe",
- (11) Mascara Kaboom, LLC ("Mascara Kaboom") and Intrexon Corporation ("Intrexon"). According to the Schedule 13D/A, Randal J. Kirk has sole voting and investment power with respect to 8,861,091 shares and shared voting and investment power with respect to 2,133,595 shares of common stock held, in each case, by NRM VII Holdings, Kapital Joe, Mascara Kaboom and Intrexon.

According to Schedule 13D/ As jointly filed by Mr. Kirk and his affiliated entities, the convertible promissory notes, the shares of Series A Convertible Preferred Stock, the 2016 private placement warrants and the March 2017 warrants contain certain conversion and exercise restrictions. If NRM VII Holdings, Intrexon, Kapital Joe and Mascara Kaboom exercised our common stock purchase warrants and converted (x) the principal and accrued interest of our convertible promissory notes and (y) the Series A Convertible Preferred Stock held by each such entity, NRM VII Holdings, Intrexon, Kapital Joe and Mascara Kaboom would receive, in the aggregate, (i) 6,277,316 shares of our common stock pursuant to exercise of the warrants, (ii) 1,983,863 of common stock underlying \$6,762,500 outstanding principal amount of convertible promissory notes, (iii) 109,927 shares of common stock underlying an estimated \$374,718 of accrued interest on the convertible promissory notes and (iv) 1,336,820 shares of common stock underlying our Series A Convertible Preferred Stock (inclusive of dividends through December 31, 2017 payable by way of inclusion in the stated value of the Series A Convertible Preferred Stock, resulting in the beneficial ownership of approximately 47% of our common stock, NRM VII Holdings is managed by an affiliate that is managed by Third Security which is owned by Mr. Kirk. Kapital Joe and Mascara Kaboom are managed by Third Security. Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of common stock directly beneficially owned by NRM VII Holdings, Intrexon, Kapital Joe and Mascara Kaboom. The address for Randal J. Kirk is c/o Third Security, 1881 Grove Avenue, Radford, Virginia 24141.

The address for each of our directors and named executive officers is c/o Fibrocell, 405 Eagleview Blvd, Exton, Pennsylvania 19341.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than ten percent of our common stock, to file reports of ownership and changes in ownership of our common stock with the SEC. Our executive officers, directors and greater-than-ten-percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based on a review of such Section 16(a) forms and written representations of our executive officers and directors, we believe that all such forms required to be filed were timely filed by our executive officers, directors, and security holders required to file the forms during 2017 except that Ms. Embon failed to timely file her initial report of ownership on Form 3 upon her appointment as our principal financial officer and principal accounting officer.

CORPORATE GOVERNANCE AND BOARD MATTERS

Director Independence

Our Board has determined that each of our current directors, with the exception of Messrs. Maslowski, Kirk and Smith, is an "independent" director within the meaning of applicable rules and regulations of Nasdaq and the SEC. In making its independence determinations, our Board considers the relationship that each of our directors has with our Company and all other facts and circumstances that the Board deems relevant including, with respect to Ms. St.Clare, her service on the board of directors of AquaBounty Technologies, a majority-owned subsidiary of our collaboration partner, Intrexon Corporation, with respect to Mr. Swirsky, his prior employment as president and chief executive officer and service on the board of directors of GenVec, a company that was acquired by Intrexon Corporation in 2017 (see the "Related Party Transactions" section of this Proxy Statement for additional information relating to our collaborations with Intrexon and Mr. Randal J. Kirk's ownership interest in us and Intrexon), and concluded that Messrs. Mazur, Moore, Swirsky and Ms. St.Clare do not have any relationships that would interfere with his/her exercise of independent judgment in carrying out the responsibilities of a director. Our Board has also determined that each member of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee meets the independence requirements applicable to those committees as prescribed by applicable rules and regulations of Nasdaq and the SEC.

Board Leadership Structure and Role in Risk Oversight

Our Board's Leadership Structure

The Board does not have a formal policy on whether the roles of Chairman of the Board and Chief Executive Officer should be separate. It is the Board's view that rather than having a rigid policy, the Board, upon consideration of all relevant factors and circumstances, will determine, as and when appropriate, whether the two offices should be separate. Douglas Swirsky, an independent director, currently serves as Chairman of the Board. Our Chief Executive Officer, among other duties, is responsible for setting our strategic direction and the day-to-day leadership and performance of the Company, while the Chairman of the Board, among other responsibilities, presides at all stockholder meetings and all meetings of the full Board and provides advice to, and independent oversight of, management.

Our Board believes that a bifurcated leadership structure offers the following benefits:

increasing the independent oversight of our company and enhancing the Board's objective evaluation of our Chief Executive Officer;

freeing the Chief Executive Officer to focus on company operations instead of Board administration;

providing the Chief Executive Officer with an experienced sounding board;

providing greater opportunities for communication between stockholders and the Board;

enhancing the independent and objective assessment of risk by the Board; and

providing independent spokespersons for our Company.

Our Board's Role in Risk Oversight

Our management is responsible for managing risks in our business, including developing processes to manage and monitor risks. Our Board views its role as one of oversight. Our Board focuses on understanding management's risk management systems, the effectiveness of those systems, and the way in which management proactively manages risks. In addition, our Board utilizes the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, to oversee risks that arise under each committee's area of focus.

Board Meetings

Members of our Board discussed various business matters informally on numerous occasions throughout 2017 and held eighteen meetings. Each director attended at least 75% of the total number of meetings of the Board and committee meetings of which such director was a member during 2017.

We do not have a formal policy regarding Board attendance at stockholder meetings. Each of our directors attended our 2017 Annual Meeting of Stockholders.

Board Committees

Our Board has three standing committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. Each of these committees operates under a written charter that has been approved by our Board. These charters are available on the "Investors — Corporate Governance" section of our website at www.fibrocell.com. Each committee annually reviews and assesses its charter. From time to time, our Board may also appoint ad hoc committees for specific matters.

Below is a summary of our committee structure and membership information.

| | | Current Committee Membership | | | | | | |
|---|-------------------------|------------------------------|--------------|-----------------------------------|--|--|--|--|
| Board Member | Independent Director | Audit | Compensation | Nominating & Corporate Governance | | | | |
| Douglas J. Swirsky Chairman of the Board | « | « | « | « Chair | | | | |
| Julian P. Kirk | | | | | | | | |
| John Maslowski* | | | | | | | | |
| Marc B. Mazur | « | « | « | « | | | | |
| Kelvin D. Moore* | « | | « Chair | | | | | |
| Marcus E. Smith | | | | | | | | |
| Christine St.Clare | « | « Chair | | « | | | | |

^{*} Director nominee for re-election to the Board at the Annual Meeting.

Audit Committee

The members of our Audit Committee are Christine St.Clare (Chairperson), Marc Mazur and Douglas J. Swirsky. Each member of our Audit Committee is independent as defined by applicable rules and regulations of Nasdaq and the SEC. In addition, each member of our Audit Committee satisfies the additional requirements of Nasdaq and the SEC for audit committee membership, including additional independence and financial literacy requirements. Our Board has determined that at least two members of our Audit Committee, Ms. St.Clare and Mr. Swirsky, are "audit committee financial experts" as defined under applicable rules and regulations of the SEC. Our Audit Committee met seven times during 2017. The primary purpose of our Audit Committee is to oversee the quality and integrity of our accounting and financial reporting processes and the audit of

our financial statements. Our Audit Committee is responsible for selecting, compensating, overseeing and terminating our independent registered public accounting firm.

Compensation Committee

The members of our Compensation Committee are Kelvin Moore (Chairperson), Marc Mazur and Douglas J. Swirsky. Each member of our Compensation Committee is independent as defined by applicable rules and regulations of Nasdaq and the SEC. Our Compensation Committee met six times during 2017. Our Compensation Committee is responsible for, among other things, reviewing and making recommendations to our Board with respect to the annual compensation for our Chief Executive Officer. The Compensation Committee also reviews and approves the annual compensation and benefits for our other executive officers, reviews and makes recommendations on all new executive compensation programs that are proposed for adoption, reviews compensation of our Board and administers our equity incentive plans.

Executive and Director Compensation Processes

Our executive compensation program is administered by our Compensation Committee, subject to the oversight and approval of our Board. We compensate our executives through a combination of base salary, annual performance bonuses and long-term incentives in the form of equity grants that are designed to be competitive with comparable companies within the biotechnology industry. Our executive compensation program is structured to align management's incentives with the long-term interests of our stockholders, and to maximize stockholder value.

In order to determine compensation for our named executive officers, our Compensation Committee reviews competitive information on executive compensation practices from our peer companies as well as an assessment of overall corporate performance and individual performance. In addition, our Chief Executive Officer provides a performance review and compensation recommendation for each named executive officer, other than himself. Our Chief Executive Officer does not submit an assessment of his own performance, does not present a recommendation on his own compensation, and does not participate in the portion of the meeting where his compensation is determined. Our Compensation Committee recommends the Chief Executive Officer's compensation to the Board for approval. With respect to our other named executive officers, our Compensation Committee determines and approves the compensation for such executive officers.

In 2017, our Compensation Committee retained Radford, an Aon Hewitt company (Radford), as its compensation consultant. Radford reported directly to the Compensation Committee and provided various executive compensation services to the Compensation Committee, including advising the Compensation Committee on the principal aspects of our executive compensation program and evolving industry practices and providing market information and analysis regarding the competitiveness of our executive compensation program design and our award values in relation to performance. Although the Compensation Committee considers Radford's advice and recommendations about our executive compensation program, the Compensation Committee ultimately makes its own decisions about these matters.

Radford provides no services to us other than its advice to the Compensation Committee on executive and director compensation matters. The Compensation Committee determined that the work of Radford does not present any conflicts of interest and the Compensation Committee is satisfied with the independence of Radford.

Our director compensation program is administered by our Compensation Committee, subject to the oversight and approval of our full Board. Our Compensation Committee conducts periodic reviews of director compensation and makes recommendations to the Board with respect thereto. As part of its review of director compensation, the

Compensation Committee retained Radford to evaluate director compensation across a peer group and subsequently provided recommendations to the Compensation Committee for both cash and equity compensation for the Company's non-employee directors. Radford benchmarked director compensation annually over the past two years. The peer groups are comprised of companies generally comparable to Fibrocell in terms of stage of development, headcount and market cap. The peer group used for the 2016 review consisted of the following companies: ArQule, Athersys, CASI Pharmaceuticals, Catabasis Pharmaceuticals, Celsion Corporation, Cerulean Pharmaceuticals, Inc., Dicerna Pharmaceuticals, Endocyte, Fate Therapeutics, GlycoMimetics, GTx, Heat Biologics, Mirna Therapeutics, Neuralstem, Opexa Therapeutics, Oragenics, Rexhan Pharmaceuticals and Verastem. For the 2017 review, Celsion Corporation, Cerulean Pharmaceuticals, and Opexa Therapeutics were removed from the peer group.

Nominating and Corporate Governance Committee

The members of our Nominating and Corporate Governance Committee are Douglas J. Swirsky (Chairperson), Christine St.Clare and Marc Mazur. Each member of our Nominating and Corporate Governance Committee is independent as defined by applicable rules and regulations of Nasdaq and the SEC. Our Nominating and Corporate Governance Committee met three times during 2017. The primary functions and responsibilities of our Nominating and Corporate Governance Committee are to: determine the qualifications, qualities, skills, and other expertise required to be a director; identify and screen individuals qualified to become members of our Board; make recommendations to our Board regarding the selection and approval of the nominees for director; and review and assess the adequacy of our corporate governance policies and procedures.

Nomination of Director Candidates

We receive suggestions for potential director nominees from many sources, including members of our Board, advisors and stockholders. Any suggested director candidate, together with appropriate biographical information, should be submitted to the Chairperson of our Nominating and Corporate Governance Committee in the manner discussed below. Any candidates submitted by a stockholder or stockholder group are reviewed and considered in the same manner as all other candidates.

Qualifications for consideration as a director nominee may vary according to the particular areas of expertise being sought as a complement to the existing composition of our Board. However, minimum qualifications include high level leadership experience in business activities, breadth of knowledge about issues affecting the Company, experience on other boards of directors, preferably public company boards, and time available for meetings and consultation on Company matters. Our Nominating and Corporate Governance Committee does not have a formal policy with regard to the consideration of diversity in identifying director candidates, but seeks a diverse group of candidates who possess the background, skills and expertise to make a significant contribution to our Board, to the Company and our stockholders. Candidates whose evaluations are favorable are recommended by our Nominating and Corporate Governance Committee to the full Board for consideration. The full Board selects and recommends candidates for nomination as directors for stockholders to consider and vote upon at our annual meeting of stockholders.

A stockholder wishing to nominate a person for election to our Board at any annual meeting at which the Board has determined that one or more directors will be elected must submit a written notice of his or her nomination of a candidate to the Chairperson of our Nominating and Corporate Governance Committee (c/o the Corporate Secretary at Fibrocell Science, Inc., 405 Eagleview Blvd., Exton, Pennsylvania 19341), providing the nominee's name, biographical data and other relevant information required by our bylaws, together with a consent from the nominee. Pursuant to our bylaws, the submission must be received at our principal executive offices at least 120 days prior to the anniversary date of the mailing date of our previous year's proxy statement so as to permit the Board time to evaluate the qualifications of the nominee.

Stockholder Communications with Directors

Persons wishing to write to our Board, or to a specified director or committee of our Board, should send correspondence to our Corporate Secretary at Fibrocell Science, Inc., 405 Eagleview Blvd., Exton, Pennsylvania 19341. Electronic submissions of stockholder correspondence will not be accepted.

Our Corporate Secretary will forward to our Board all communications that, in his judgment, are appropriate for consideration by our Board. Examples of communications that would not be appropriate for consideration by our Board include commercial solicitations and matters not relevant to the stockholders, to the functioning of our Board or to our affairs. Any correspondence received that is addressed generically to our Board will be forwarded to the Chairman of the Board.

Compensation Committee Interlocks and Insider Participation

During 2017 and as of the date of this Proxy Statement, none of the members of our Compensation Committee was or is an officer or employee of ours, and none of our executive officers served or serves on the compensation committee (or other board committee performing a similar function) or board of directors of any company that employed or employs any member of our Compensation Committee or Board.

Code of Ethics

We have adopted a written code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller and any persons performing similar functions. The code of ethics is on the "Investors —Corporate Governance" section of our website at www.fibrocell.com. We intend to disclose any future amendments to, or waivers from, the code of ethics within four business days of the waiver or amendment through a website posting or by filing a Current Report on Form 8-K with the SEC.

Audit Committee Report

The Audit Committee of the Board of Directors of Fibrocell is comprised entirely of independent directors who meet the independence and experience requirements of the rules and regulations of Nasdaq and the SEC. The Audit Committee operates pursuant to a written charter that is available on the "Investors —Corporate Governance" section of Fibrocell's website at www.fibrocell.com.

The Audit Committee assists the Board in overseeing and monitoring the integrity of Fibrocell's accounting and financial reporting process, compliance with legal and regulatory requirements and the quality of internal and external audit processes. The Audit Committee reviews and reassesses its charter annually and recommends any changes to the Board of Directors for approval. The Audit Committee is responsible for overseeing Fibrocell's accounting and financial reporting process on behalf of the Board of Directors, and for the appointment, compensation, retention, termination and oversight of the work of Fibrocell's independent registered public accounting firm. In fulfilling its responsibilities with respect to Fibrocell's audited consolidated financial statements for the year ended December 31, 2017, the Audit Committee took the following actions:

reviewed and discussed such audited consolidated financial statements with management and PricewaterhouseCoopers LLP;

discussed with PricewaterhouseCoopers LLP the matters required to be discussed by Auditing Standards No. 1301, Communications with Audit Committees, issued by the Public Company Accounting Oversight Board (PCAOB) concerning the conduct of the audit;

received written disclosures and a letter from PricewaterhouseCoopers LLP regarding its

communications with the Audit Committee concerning independence as required by applicable requirements of the PCAOB, and discussed with PricewaterhouseCoopers LLP their independence; and considered taxation matters and other areas of oversight relating to the financial reporting and audit process that the Audit Committee determined appropriate.

Based on the reviews and discussions referred to above, the Audit Committee unanimously recommended to the Board of Directors that the audited consolidated financial statements be included in Fibrocell's Annual Report on Form 10-K for the year ended December 31, 2017.

Members of the Audit Committee Christine St.Clare (Chairperson) Marc Mazur Douglas J. Swirsky

RELATED PARTY TRANSACTIONS Related Party Transactions Policy

We have a written related party transactions policy for the review, approval and ratification of "related person transactions" which we define under our policy as any transaction, arrangement or relationship, or series of transactions, arrangements or relationships, in which (i) we are a participant, (ii) the amount involved exceeds \$120,000, and (iii) one of our executive officers, directors, director nominees or beneficial owners of more than 5% of our common stock, or their immediate family members (each of whom we refer to as a "related person") has a direct or indirect material interest.

Under our policy, related party transactions must be approved or ratified by our Audit Committee, or the Chair of the Audit Committee pursuant to delegated authority. To identify related party transactions, we rely on information supplied by our executive officers, directors and certain significant stockholders. Such individuals must present information regarding any proposed related party transaction to our Chief Executive Officer. The presentation must include a description of, among other things, the material terms of the proposed transaction, the direct and indirect interests of the related parties, the benefits of the transaction to us and whether any alternative transactions are available. Unless our Chief Executive Officer determines that the transaction is not a related party transaction under our policy, he submits the transaction to the Chair of our Audit Committee for consideration by the Audit Committee at its next meeting or, if advance consideration is necessary, the Chair may take action on the transaction, and submit the transaction to the Audit Committee at its next meeting for ratification. In determining whether to approve a proposed transaction, our Audit Committee, or Audit Committee Chair pursuant to delegated authority, will consider all relevant facts and circumstances including:

•he materiality and character of the related party's direct or indirect interest;

the commercial reasonableness of the terms;

the benefit or perceived benefit, or lack thereof, to us;

the opportunity cost of alternate transactions; and

the actual or apparent conflict of interest of the related party.

The Audit Committee, or the Audit Committee Chair pursuant to delegated authority, will approve a related party transaction only if it determines in good faith that the transaction is in, or is not inconsistent with, our best interests, and is not in violation of any of our other policies or procedures.

Periodically, but no less than annually, our management provides our Audit Committee with information concerning all ongoing related party transactions previously approved or ratified that remain ongoing. The Audit Committee reviews the status of each ongoing related party transaction based on all relevant facts and circumstances under the criteria specified above for approving a related party transaction. The Audit Committee will then determine whether to continue the respective transaction or whether to direct that such transaction be terminated or continued with modification (taking into consideration our contractual obligations).

Related Party Transactions

We are a party to two separate exclusive channel collaboration agreements with Intrexon Corporation (NYSE: XON), pursuant to which we are Intrexon's exclusive channel collaborator in the development and commercialization of products within certain specified fields. We engage Intrexon for support services for the research and development of product candidates covered under these agreements and reimburse Intrexon for its cost for time and materials for such

work.

Our first exclusive channel collaboration agreement with Intrexon (2012 ECC) was entered into in October 2012, and was subsequently amended in June 2013 and January 2014. FCX-007 and FCX-013, our gene-therapy product candidates for the treatment of recessive dystrophic epidermolysis bullosa and linear scleroderma, respectively, are being developed under the 2012 ECC. We incurred research and development expenses of approximately \$3.7 million and \$5.7 million during 2016 and 2017, respectively under the 2012 ECC.

In December 2015, we entered into our second exclusive channel collaboration agreement with Intrexon (2015 ECC). We are currently in the research phase for a gene-therapy product for arthritis and related conditions under the 2015 ECC. In 2016 we paid Intrexon \$10.0 million related to an up-front technology fee due under the 2015 ECC. We did not incur any research and development expenses under the 2015 ECC during 2016 or 2017.

Randal J. Kirk is the chairman of the board of directors and chief executive officer of Intrexon. Together with his affiliates, Mr. Kirk owns more than 50% of Intrexon's common stock and approximately 29% of our common stock. Two of our directors, Julian Kirk (who is the son of Randal J. Kirk) and Marcus E. Smith, are officers of Third Security, which is owned by Randal J. Kirk.

Participation in 2016 Private Placement

On September 7, 2016, we issued an aggregate of approximately \$18.1 million in principal of convertible promissory notes (each a Note and collectively, the Notes) and accompanying warrants to purchase an aggregate of 6,029,174 shares of common stock (Private Placement Warrants) in a private placement (2016 Private Placement) to institutional and accredited investors. The Notes bear interest at 4% per annum and have a stated maturity date of the earlier of (i) September 7, 2026 and (ii) one-hundred and eighty (180) days after the date on which our product candidate, FCX-007, is approved by the U.S. Food and Drug Administration for the treatment of recessive dystrophic epidermolysis bullosa. The Notes bear interest at four percent (4%) per annum which we may elect to pay in cash or accrue. Commencing September 8, 2016, we have elected to accrue interest. Each individual Note holder has the right to require us to repay all or any portion of the unpaid principal from time to time on or after September 7, 2021. With respect to accrued and unpaid interest on the Note, each Note holder may elect, at any time and from time to time, to have any accrued and unpaid interest converted into shares of our common stock. In addition, each Note holder may elect to accelerate the repayment of all unpaid principal and accrued interest under such holder's Note upon consummation of a specified change of control transaction or occurrence of certain events of default as specified in the Notes.

In addition, upon an event of default, the base interest rate (excluding any additional interest) for the Notes automatically increases to twelve percent (12%) per annum. Subject to any applicable cure period set forth in the Notes, all amounts outstanding with respect to the Notes (principal and accrued interest) would become due and payable immediately upon an event of default. The conversion price of the Notes, the exercise price of the accompanying warrants and the number of shares of our common stock issuable upon conversion of the Notes and exercise of the accompanying warrants are each subject to adjustment upon certain corporate events, including stock dividends, stock splits and distributions of cash or other assets to our stockholders.

Affiliates of Randal J. Kirk (including Intrexon) participated in the 2016 Private Placement, and were issued an aggregate of \$6,762,500 in principal of Notes (all of which remains outstanding as of March 26, 2018) and 2016 Private Placement Warrants to purchase an aggregate of 2,254,168 shares of common stock.

Participation in Series A Preferred Stock Offering

On March 7, 2017, we entered into a Securities Purchase Agreement with certain of our existing investors pursuant to which we issued and sold a total of 8,000 units (each a Unit, collectively the Units) for a purchase price of \$1,000 per Unit, with each Unit consisting of (i) one share of our Series A Convertible Preferred Stock (Series A Preferred Stock) convertible into 429 shares of our common stock and (ii) an accompanying warrant to purchase up to a number of shares of common stock equal to 100% of the conversion shares issuable on March 7, 2017 pursuant to the shares of Series A Preferred Stock purchased by each investor (collectively, the Series A Preferred Stock Offering). Affiliates

of Randal J. Kirk (including Intrexon) participated in the Series A Preferred Stock Offering, and were issued an aggregate of 3,016 shares of Series A Convertible Preferred Stock and accompanying warrants to purchase 1,295,875 shares of common stock for aggregate gross proceeds of \$3,016,000.

EXECUTIVE COMPENSATION

Our named executive officers for 2017 are John Maslowski, our President and Chief Executive Officer, Michael F. Marino, our former Senior Vice President, General Counsel and Corporate Secretary and Lisa A. Embon, our former Vice President of Corporate Accounting and Controller.

Summary Compensation Table

The following table presents information regarding the compensation of our named executive officers for 2017 and 2016.

| | | | | | Non-Equity | | | |
|--|------|--------------------|-----------|------------------------------|------------|--------------|-----|--------------------|
| Name and Principal Position | Year | Salary (\$) | Bonu (\$) | Option Awards (\$) (3) | Incontivo | Compensation | n | Total (\$) |
| John Maslowski President and Chief Executive Officer | | 350,000 276,346 | | | 157,501 | , | | 521,501 639,036 |
| Michael F. Marino ⁽¹⁾ Former Senior Vice President, General Counsel and Corporate Secretary | | 31,731 329,923 | | | _ _ | • | | 143,852 601,043 |
| Lisa A. Embon ⁽²⁾ Former Vice President of Corporate Accounting and Controller | 2017 | _ | _ | _ | _ | 169,322 | (7) | 169,322 |

- (1)Mr. Marino commenced employment with us on June 1, 2015 and resigned on January 25, 2017.
- Ms. Embon was an employee of the firm AC Lordi, an accounting and consulting firm and her services were (2) assigned to the Company per an executed engagement letter on May 8, 2017. Ms. Embon resigned and ceased to
- provide service to us on August 15, 2017.

 Represents the full grant date fair value of the option grants, calculated in accordance with Financial Accounting
 - Standards Board Accounting Standards Codification Topic 718 (FASB ASC Topic 718). These amounts do not necessarily correspond to the actual value that may be realized by the named executive officers. The assumptions
- (3) made in valuing the option awards reported in this column are discussed in our audited financial statements (Note 3, Summary of Significant Accounting Policies Stock-Based Compensation, and Note 11, Stock-Based Compensation) included in our 2017 Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC.
- (4) Amounts in this column represent annual performance bonuses earned for the year shown based on pre-established performance objectives.
- (5) Amounts represent employer matching contributions made on behalf of the named executive officer to our 401(k) plan.
- Amounts represent Mr. Marino's separation payment of \$110,852, which was paid to Mr. Marino pursuant to his (6) separation agreement and general release, dated January 25, 2017, and employer contributions of \$1,269 to our 401(k) plan.
- (7) Amounts paid to the firm AC Lordi for Ms. Embon's services to us in 2017, included \$169,290 for hours worked and \$32 in reimbursable expenses.

Narrative Disclosure to Summary Compensation Table

2017 Equity Incentive Compensation

For the year ended December 31, 2017, no grants of options to purchase shares of our common stock under our 2009 Equity Incentive Plan, as amended were issued to our named executive officers.

Employment Agreements with Named Executive Officers

John Maslowski

On September 14, 2015, we entered into an employment agreement with John Maslowski in connection with his promotion from Vice President, Scientific Affairs to Senior Vice President, Scientific Affairs. In a letter dated December 18, 2016, Mr. Maslowski's employment agreement was amended effective December 16, 2016 in connection with his appointment to serve as our President and Chief Executive Officer. The amendment provided that Mr. Maslowski will receive an annual base salary of \$350,000 and an annual target performance bonus equal to 50% of his base salary starting in fiscal year 2016. The amendment also provided that Mr. Maslowski will be eligible to participate in and be covered on the same basis as other members of our senior management under all employee benefits plans and programs maintained by us and he will be eligible to receive four weeks of vacation annually.

Michael F. Marino

Prior to his resignation on January 25, 2017, the terms of Mr. Marino's employment as our Senior Vice President, General Counsel and Corporate Secretary were set forth in an employment agreement that we entered into with him in 2015. The agreement provided for an annual base salary of \$325,000 and an annual target performance bonus equal to 35% of Mr. Marino's base salary. The employment agreement also provided that Mr. Marino was eligible to participate in and be covered on the same basis as other members of our senior management, under all employee benefit plans and programs maintained by us, including without limitation vacation, retirement, health insurance and life insurance, and that he was eligible to receive four weeks of vacation annually. Mr. Marino was also entitled to receive an allowance of \$15,000 upon relocation closer to our offices.

Pursuant to the terms of his employment agreement, Mr. Marino received an option granted under the 2009 Plan to purchase 73,333 shares of our common stock, which was scheduled to vest as to 25% of the option on the first anniversary of the date of grant and as to 75% of the option in 12 equal quarterly installments thereafter, provided he was employed by us on each vesting date. The vesting of such option would have accelerated upon a "change in control" (as defined in the employment agreement), provided Mr. Marino was employed by us immediately prior to such change in control.

Lisa A. Embon

Prior to her resignation on August 15, 2017, the terms of Ms. Embon's engagement as our Vice President of Corporate Accounting and Controller were set forth in an engagement agreement with AC Lordi, dated as of May 8, 2017, and an accompanying addendum, which we refer to collectively as the Engagement Letter. Pursuant to the Engagement Letter, Ms. Embon, among other things, assumed the role of our Vice President of Corporate Accounting and Controller, served as our principal financial officer and principal accounting officer until June 22, 2017, and assumed the responsibilities for our accounting operations, as directed by the Chief Executive Officer and/or the Board. The

compensation paid for Ms. Embon's services consisted of monthly cash payments for hours worked and we paid AC Lordi \$169,290 for Ms. Embon's services in 2017. In addition, we reimbursed AC Lordi for certain out-of-pocket expenses incurred by Ms. Embon in the course of her service as our Vice President of Corporate Accounting and Controller which reimbursable expenses amounted to \$32.00 in 2017. Examples of such out-of-pocket expenses included transportation, meals, lodging, telephone, specifically assignable secretarial and office assistance, and report production. Upon our early termination of Ms. Embon's engagement without cause prior to the completion of her engagement as set forth in the Engagement Letter, AC Lordi was entitled to receive payment for all work performed by Ms. Embon for us and we were required to reimburse AC Lordi for any incremental wind-down costs incurred on account of such early termination. Apart from amounts paid by us to AC Lordi for the services actually provided by Ms. Embon prior to the date of her resignation, no additional amounts were paid by us to AC Lordi in connection with her resignation.

Table of Contents

For a description of the severance entitlements of Mr. Maslowski pursuant to his employment agreement and the severance benefits paid to Mr. Marino in connection with his resignation from us on January 25, 2017, see the section below entitled "Executive Compensation - Additional Narrative Disclosure - Potential Payments Upon Termination or Change in Control."

2017 Outstanding Equity Awards At Fiscal Year-End

The following table presents information regarding the outstanding stock options held by our named executive officers at December 31, 2017.

| | Number of | Number of | | | |
|-------------------|-------------|---------------|-----|--------------------|------------|
| | Securities | Securities | | Ontion | |
| | Underlying | Underlying | | Option Exercise | Option |
| Name | Unexercised | Unexercised | | Price | Expiration |
| | Options | Options | | (\$) | Date |
| | (#) | (#) | | (Φ) | |
| | Exercisable | Unexercisable | 2 | | |
| John Maslowski | 20,834 | 62,500 | (1) | 1.99 | 12/16/2026 |
| | 14,584 | 18,750 | (2) | 6.81 | 3/1/2026 |
| | 16,667 | 16,667 | (3) | 10.59 | 1/20/2025 |
| | 5,000 | 1,667 | (4) | 8.82 | 5/13/2024 |
| | 5,000 | 1,667 | (5) | 14.85 | 1/17/2024 |
| | 5,834 | | | 16.47 | 7/19/2023 |
| | 4,534 | _ | | 46.50 | 1/14/2021 |
| Michael F. Marino | _ | _ | (6) | _ | |
| Lisa A. Embon | _ | _ | (7) | _ | |

- Represents unvested portion of stock option award that vested 25% on the first anniversary date following the
- (1) December 16, 2016 grant date, with the remainder vesting in 12 equal quarterly installments thereafter (beginning on March 16, 2017), provided Mr. Maslowski is still employed with us on each vesting date.
 - Represents unvested portion of stock option award that vested 25% on March 1, 2017 (first anniversary date
- (2) following the March 1, 2016 grant date), with the remainder vesting in twelve equal quarterly installments thereafter, provided Mr. Maslowski is still employed with us on each vesting date.
 - Represents unvested portion of stock option award that vested 25% on each of January 20, 2016 and January 20,
- (3)2017 (anniversary dates following the January 20, 2015 grant date), with the remainder vesting in two equal annual installments thereafter, provided Mr. Maslowski is still employed with us on each vesting date.
 - Represents unvested portion of stock option award that vested 25% on each of May 13, 2015, May 13, 2016 and
- (4) May 13, 2017 (anniversary dates following the May 13, 2014 grant date), with the remainder vesting on May 13, 2018, provided Mr. Maslowski is still employed with us on each vesting date.
 - Represents unvested portion of stock option award that vested 25% on each of January 17, 2015, January 17, 2016
- (5) and January 17, 2017 (anniversary dates following the January 17, 2014 grant date). The final unvested portion of such award vested on January 17, 2018.
- (6) Pursuant to Mr. Marino's resignation on January 25, 2017, all unvested stock option awards were forfeited at the time of his resignation, and all vested stock option awards expired on April 25, 2017, unexercised.
- (7) Ms. Embon was not awarded any grants of options to purchase common stock prior to her resignation on August 15, 2017.

Additional Narrative Disclosures

Potential Payments Upon Termination or Change in Control

John Maslowski

Pursuant to his employment agreement, which is described above in the section entitled "Executive Compensation - Narrative Disclosure to Summary Compensation Table - Employment Agreements with Named Executive Officers," if Mr. Maslowski's employment is terminated by us without cause or by Mr. Maslowski due to good reason, he will receive a lump sum severance payment equal to nine months of his then current base salary and nine months of monthly COBRA premiums; provided that if such termination of employment occurs within 60 days before or 18 months after a "change of control" (as defined in the employment agreement), then the severance payment will be a lump sum equal to (i) the last annual bonus paid to Mr. Maslowski, plus (ii) 18 months of his then current base salary, plus (iii) 18 months of monthly COBRA premiums. All severance payments will be made 60 days following such termination, provided that Mr. Maslowski has executed and delivered to us a general release that becomes effective within 60 days following his termination of employment. If Mr. Maslowski's employment with us terminates for any reason, he will receive any base salary earned but unpaid through the termination date in accordance with our normal payroll practices and any benefits accrued and due under applicable benefit plans and programs of ours and our affiliates. Mr. Maslowski's employment agreement contains typical restrictive covenant provisions, including non-competition and non-solicitation restrictions, which apply during the term of his employment and for a period of one year thereafter.

For purposes of Mr. Maslowski's employment agreement, "cause" for termination means that Mr. Maslowski: (A) is convicted of or pleads nolo contendere to a felony or misdemeanor involving moral turpitude; (B) engages in the commission of fraud, misappropriation or embezzlement against any person; (C) engages in theft or misappropriation of any property or money of ours or any of our affiliates; (D) materially breaches the terms of the employment agreement; or (E) engages in willful or gross neglect of his duties, willful or gross misconduct in the performance of his duties or the willful violation of any of our material policies. For purposes of the employment agreement, "good reason" means: (i) a material breach of the employment agreement by us, (ii) any change of Mr. Maslowski's principal office location to a location that requires a one-way commute of more than 50 miles from 405 Eagleview Boulevard, Exton, PA, or (iii) the assignment to Mr. Maslowski of any duties materially inconsistent with the duties or responsibilities of the Chief Executive Officer or any other action by us that results in a material diminution in such position, authority, duties, or responsibilities, excluding an isolated, insubstantial, and inadvertent action not taken in bad faith.

Michael F. Marino

Pursuant to his employment agreement, which is described above in the section entitled "Executive Compensation - Narrative Disclosure to Summary Compensation Table - Employment Agreements with Named Executive Officers," if Mr. Marino's employment was terminated by us without "cause" or by Mr. Marino due to "good reason," he would receive a lump sum severance payment equal to nine months of his then current base salary and nine months of monthly COBRA premiums; provided that if such termination of employment occurred within 60 days before or 18 months after a "change in control" (as such term is defined in his employment agreement), then the severance payment would be a lump sum equal to (i) his last annual bonus, plus (ii) 18 months of his then current base salary, plus (iii) 18 months of monthly COBRA premiums. All severance payments would be made 60 days following such termination, provided that Mr. Marino had executed and delivered to us an effective general release. If Mr. Marino's employment with us terminated for any reason, he would receive any base salary earned but unpaid through the termination date in

accordance with our normal payroll practices and any benefits accrued and due under any applicable benefit plans and programs of ours and our affiliates. Mr. Marino's employment agreement contained typical restrictive covenant provisions, including non-competition and non-solicitation restrictions, which applied during the term of his employment and for a period of one year thereafter.

On January 25, 2017, Mr. Marino resigned as our Senior Vice President, General Counsel and Corporate Secretary, effective immediately.

In connection with his resignation, we and Mr. Marino entered into a separation agreement and general release, dated January 25, 2017, which sets forth the terms of Mr. Marino's separation. Pursuant to the separation agreement and general release, in exchange for Mr. Marino agreeing to a release of claims and complying with certain other continuing obligations contained therein (including compliance with the restrictive covenants in his employment agreement), we paid Mr. Marino the total

Table of Contents

amount \$110,852, less applicable withholdings and deductions. In addition, we (a) paid all of Mr. Marino's compensation due and owing to him as of January 25, 2017, including any accrued and unused vacation for fiscal year 2017, in accordance with our usual compensation and payroll practices, and (b) reimbursed Mr. Marino for all reasonable unreimbursed business expenses incurred by him as of January 25, 2017 in accordance with our expense reimbursement policy.

401(k) Plan

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Internal Revenue Code (IRC). All of our employees are eligible to participate in our 401(k) plan and our named executive officers are eligible to participate on the same basis as our other employees, subject to applicable laws. Pursuant to our 401(k) plan, participants are eligible to make pretax elective deferrals and/or Roth (post-tax) elective deferrals by up to the statutorily prescribed limit, and have such deferrals contributed to the 401(k) plan. Effective January 1, 2016, we elected to make safe harbor matching contributions in an amount equal to 100% on the first 3% of eligible compensation deferred and 50% on the next 2% of eligible compensation deferred, subject to maximum IRC compensation limits, which immediately vests in full. For purposes of applying the safe harbor contribution, compensation is based on a bi-weekly payroll period.

DIRECTOR COMPENSATION

Non-Employee Director Compensation

We compensate our non-employee directors with a combination of cash, which is designed to compensate directors for their service, and equity, which is designed to align their interests with the long-term interests of our stockholders. Directors who are also our employees receive no additional compensation (beyond their regular employee compensation) for their service as a director. Under our director compensation policy, each non-employee director receives an annual retainer fee of \$45,000 for service on the Board, our Chairman of the Board receives an additional retainer of \$60,000, and each non-employee director receives the following additional annual retainer fees for Board committee service:

| | Chair | Other |
|---|----------|----------|
| | Chair | Member |
| Audit Committee | \$14,000 | \$ 7,000 |
| Compensation Committee | \$10,000 | \$ 5,000 |
| Nominating and Corporate Governance Committee | \$7,000 | \$ 3,000 |

Additionally, in connection with each annual meeting of stockholders, each non-employee director remaining on the Board after the Annual Meeting receives an annual equity grant, which has historically been in the form of options to purchase shares of our common stock. The number of options is determined by our Board generally in the second quarter before the Annual Meeting with the advice and input of our Compensation Committee and its independent compensation consultant.

In connection with our 2017 annual meeting of stockholders, each non-employee director received options to purchase 30,000 shares of our common stock which vest 100% on the earlier of (x) June 22, 2018 or (y) the date of the Annual Meeting, subject to the grantee's continued service through the vesting date. The options have an exercise price per share of \$3.31, which was the closing price per share of our common stock as reported on Nasdaq on June 22, 2017, the date of grant.

As set forth in its written charter, our Compensation Committee reviews our director compensation practices at least annually and recommends any changes for adoption by the full Board. As such, the director compensation policy described above is subject to change at the discretion of the Board.

2017 Director Compensation

The following table sets forth the total compensation earned by our non-employee directors in 2017:

| Name | Fees Earned or Paid in Cash | Option Awards (\$) (1) | Total (\$) | |
|---------------------|-----------------------------|------------------------------|------------|--|
| | (\$) | 72.005 | | |
| Kelvin Moore (2) | 106,000 | * | 178,095 | |
| Marc Mazur (2) | 96,000 | 72,095 | 168,095 | |
| Marcus E. Smith | 45,000 | 72,095 | 117,095 | |
| Julian Kirk | 45,000 | 72,095 | 117,095 | |
| Christine St.Clare | 62,000 | 72,095 | 134,095 | |
| Douglas Swirsky (3) | 159,081 | 72,095 | 231,176 | |

Amounts in this column represent the full grant date fair value of the 30,000 option awards our Board approved and granted to each non-employee director on June 22, 2017, computed in accordance with FASB ASC Topic 718. These amounts do not necessarily correspond to the actual value that may be realized by the directors. The

- (2) Includes an additional \$36,000 paid to such director for service on an ad hoc committee of the Board of Directors.
- (3) Includes an additional \$35,081 paid to such director for service on an ad hoc committee of the Board of Directors.

⁽¹⁾ assumptions made in valuing the option awards reported in this column are discussed in our audited financial statements (Note 3, Summary of Significant Accounting Policies under subsection "Stock-Based Compensation," and in Note 11, Stock-Based Compensation) included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, as filed with the SEC.

As of December 31, 2017, we had granted the following option awards to our non-executive directors who served as directors during 2017:

| Name | Option | Exercise |
|--------------------|--------|----------|
| Name | Awards | Price |
| Julian Kirk | 30,000 | \$ 3.31 |
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| | 2,667 | \$ 15.00 |
| Total | 70,667 | |
| Marc Mazur | 30,000 | \$3.31 |
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| | 2,667 | \$ 10.50 |
| | 2,667 | \$ 46.50 |
| | 2,667 | \$ 78.00 |
| Total | 76,001 | |
| Kelvin Moore | 30,000 | \$3.31 |
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| | 2,667 | \$ 10.50 |
| | 2,667 | \$ 46.50 |
| | 2,667 | \$ 56.25 |
| Total | 76,001 | |
| Name | Option | Exercise |
| | Awards | |
| Marcus E. Smith | 30,000 | \$ 3.31 |
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| Tr. 4 1 | 2,667 | \$ 15.00 |
| Total | 70,667 | |
| Christine St.Clare | 30,000 | \$ 3.31 |
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| | 2,667 | \$ 10.50 |
| Total | 70,667 | |

Edgar Filing: Fibrocell Science, Inc. - Form PRE 14A

| Douglas Swirsky | 30,000 | \$ 3.31 |
|-----------------|--------|----------|
| | 12,000 | \$ 2.85 |
| | 12,000 | \$ 16.32 |
| | 6,000 | \$ 12.42 |
| | 8,000 | \$ 16.47 |
| | 2,667 | \$ 11.25 |
| Total | 70,667 | |

Fibrocell - 2018 Proxy Statement | 42

OUR EQUITY COMPENSATION PLANS

Equity Compensation Plan Information

The following table sets forth information regarding our equity compensation plans as of December 31, 2017:

| Plan category | Number of securities to be issued upon exercise of outstanding options, warrants and rights (a) | (| exe out opt | eighted-average ercise price of standing ions, warrants I rights | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c) |
|--|---|-----|-------------------|--|---|
| Equity compensation plans approved by security holders | 1,081,179 | (1) | \$ | 12.06 | 1,430,736 |
| Equity compensation plans not approved by security holders | 8,334 | (2) | \$ | 12.00 | |
| Total | 1,089,513 | | \$ | 12.06 | 1,430,736 |

Represents shares of common stock issuable upon exercise of outstanding stock options under our 2009 Plan. Our 2009 Plan has been approved by our stockholders.

⁽²⁾ Consists of stock options issued to consultants outside of our 2009 Plan. These options were issued in 2013 prior to our stock being listed on a national securities exchange.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Fees Paid to Independent Registered Public Accounting Firm

The following table sets forth all fees paid or accrued by us for professional services rendered by PwC during the years ended December 31, 2017 and 2016:

Audit Fees represent the aggregate fees billed for professional services rendered by our independent registered public accounting firm for the audit of our annual financial statements and internal controls over financial reporting, review of financial statements included in our quarterly reports or services that are normally provided in connection with statutory and regulatory filings or engagements for those fiscal years, such as the issuance of consents in connection with registration statement filings with the SEC and comfort letters in connection with securities offerings.

Audit-Related Fees represent the aggregate fees billed for assurance and related professional services rendered by our independent registered public accounting firm that are reasonably related to the performance of the audit or

- (2) review of our financial statements and are not reported under "Audit Fees" including the issuance of consents in connection with registration statement filings with the SEC and comfort letters in connection with securities offerings.
- (3) Tax Fees represent the aggregate fees billed for professional services rendered by our independent registered public accounting firm for tax compliance, tax advice and tax planning services.
- (4) All Other Fees represent the aggregate fees billed for all other products and services rendered by our independent registered public accounting firm other than the services reported in the other categories.

Pre-Approval Policies and Procedures

Our Audit Committee has established a policy that requires it, or the Chair of our Audit Committee pursuant to delegated authority, to pre-approve all services provided by our independent registered public accounting firm and the fees for such services. Our Audit Committee considers, among other things, the possible effect of the performance of such services on the firm's independence. The prior approval of our Audit Committee, or the Chair of our Audit Committee pursuant to delegated authority, was obtained for all services provided by PwC in 2017 and 2016 and the fees for such services.

DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS

We have adopted a procedure, approved by the SEC, called "householding." Under this procedure, stockholders of record who have the same address and last name and did not receive a Notice of Internet Availability or otherwise receive their proxy materials electronically will receive only one copy of this Proxy Statement and our 2017 Annual Report, unless we are notified that one or more of these stockholders wishes to continue receiving individual copies. This procedure will reduce our printing costs and postage fees.

If you are eligible for householding, but you and other stockholders of record with whom you share an address currently receive multiple copies of this Proxy Statement and our 2017 Annual Report, or if you hold our stock in more than one account, and in either case you wish to receive only a single copy of each of these documents for your household, please contact our Corporate Secretary by mail, c/o Fibrocell Science, Inc., 405 Eagleview Blvd., Exton, Pennsylvania 19341 or by phone at (484) 713-6000. If you participate in householding and wish to receive a separate copy of this Proxy Statement and our 2017 Annual Report, or if you do not wish to continue to participate in householding and prefer to receive separate copies of these documents in the future, please contact our Corporate Secretary as indicated above.

If your shares are held in street name through a broker, bank or other intermediary, please contact your broker, bank or intermediary directly if you have questions, require additional copies of this Proxy Statement or our 2017 Annual Report or wish to receive a single copy of such materials in the future for all beneficial owners of shares of our common stock sharing an address.

AVAILABILITY OF ANNUAL REPORT ON FORM 10-K

A copy of our 2017 Annual Report, consisting of our Annual Report on Form 10-K for the year ended December 31, 2017, has been made available or mailed concurrently with this Proxy Statement, without charge, to stockholders entitled to notice of and to vote at the Annual Meeting, provided that we have not included the exhibits to the Form 10-K. We will provide copies of the exhibits to the Form 10-K upon request by eligible stockholders, provided that we may impose a reasonable fee for providing such exhibits, which is limited to our reasonable expenses. Requests for copies of such exhibits should be mailed to Fibrocell Science, Inc., 405 Eagleview Blvd., Exton, Pennsylvania 19341, Attention: Corporate Secretary.

STOCKHOLDER PROPOSALS AND DIRECTOR NOMINATIONS

If you wish to submit a proposal to be considered for inclusion in next year's proxy materials or nominate a director, your proposal must be in proper form according to SEC Regulation 14A, Rule 14a-8 and received by our Corporate Secretary no later than December 3, 2018. Proposals received after that date will not be included in the proxy materials we send out in connection with our 2019 Annual Meeting of Stockholders. If a proposal is received before that date, the proxies that management solicits for the meeting may still exercise discretionary voting authority on the proposal under circumstances consistent with the proxy rules of the SEC. To be timely, stockholder notice of any such proposal must be received by us not later than December 3, 2018; provided, however, that in the event that the date of the 2019 Annual Meeting of Stockholders is changed by more than thirty (30) days from the anniversary date of the 2018 Annual Meeting of Stockholders, notice by the stockholder to be timely must be delivered not earlier than the close of business on the thirtieth day prior to the 2019 Annual Meeting of Stockholders; provided, that in the event that less than 40 days' notice of the date of the meeting is given to stockholders, to be timely, a stockholders' notice of business to be brought before the meeting shall be so received no later than the close of business of the tenth day following the day on which such notice of the date of the 2019 Annual Meeting of Stockholders was mailed. All stockholder proposals should be sent to the attention of our Corporate Secretary, c/o Fibrocell Science, Inc., 405 Eagleview Blvd., Exton, Pennsylvania 19341. The notice of the proposal also must comply with the content requirements for such notices set forth in our Fourth Amended and Restated Bylaws.

* * *

Edgar Filing: Fibrocell Science, Inc. - Form PRE 14A

Table of Contents

Your vote is important. Even if you plan to attend the Annual Meeting, we urge you to submit your proxy or voting instructions as soon as possible.

By Order of the Board of Directors of FIBROCELL SCIENCE, INC.

John M. Maslowski President and Chief Executive Officer

April 2, 2018 Exton, Pennsylvania

| Tab. | le c | of C | ontents |
|------|------|------|---------|
| | | | |

ANNEX A

STATE OF DELAWARE CERTIFICATE OF AMENDMENT OF THE RESTATED CERTIFICATE OF INCORPORATION OF FIBROCELL SCIENCE, INC.

Fibrocell Science, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation") for the purpose of amending its Restated Certificate of Incorporation, as amended, in accordance with the General Corporation Law of the State of Delaware, does hereby make and execute this Certificate of Amendment to the Restated Certificate of Incorporation, as amended, and does hereby certify that:

- 1. The Board of Directors of the Corporation (the "Board"), acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware, adopted resolutions amending its Restated Certificate of Incorporation, as amended (the "Certificate of Incorporation"), so that effective upon the effective time of this Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware, every [three] [four] [five] [six] [seven] [eight] [nine] [ten] shares of the Corporation's common stock, par value \$0.001 per share (hereinafter the "Common Stock"), issued and outstanding shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into one share of Common Stock without increasing or decreasing the par value of each share of Common Stock (the "Reverse Stock split") and without increasing or decreasing the authorized number of shares of Common Stock or the Corporation's preferred stock, par value \$0.001 per share (hereinafter the "Preferred Stock"); provided, however, no fractional shares of Common Stock shall be issued in connection with the Reverse Stock Split, and instead, the Corporation shall issue one full share of post-Reverse Stock Split Common Stock to any stockholder who would have been entitled to receive a fractional share of Common Stock as a result of the Reverse Stock Split. The Reverse Stock Split shall occur whether or not the certificates representing such shares of Common Stock are surrendered to the Corporation or its transfer agent.
- 2. The foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the General Corporation law of the State of Delaware by the vote of a majority of each class of outstanding stock of the Corporation entitled to vote thereon at the annual meeting of stockholders of the Corporation held on May 23, 2018.
- 3. This amendment shall be effective as of 5:00 p.m., Eastern Time, on the date of filing of this Certificate of Amendment with the Secretary of State of the State of Delaware.

 IN WITNESS WHEREOF, I have signed this Certificate this _____ day of ______, 2018.

John M. Maslowski
President and Chief Executive Officer