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

SCHEDULE 14A

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

Filed by the Registrant ☒

Filed by a Party other than the Registrant o

Check the appropriate box:

o Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

Definitive Proxy Statement

o Definitive Additional Materials

o Soliciting Material under §240.14a-12

Karyopharm Therapeutics Inc.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

☒ No fee required.

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

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

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

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

Fee paid previously with preliminary materials.

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

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:
Dear Stockholder:

You are cordially invited to our Annual Meeting of Stockholders on Monday, June 9, 2014, beginning at 10:00 a.m., Eastern time, at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109, for the following purposes:

1. To elect two directors to serve as class I directors for a three-year term to expire at the 2017 annual meeting of stockholders;

2. To consider and vote upon the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014; and

3. To transact such other business as may be properly brought before the meeting or any adjournment or postponement thereof.

Instead of mailing a printed copy of our proxy materials to all of our stockholders, we provide access to these materials via the Internet. This reduces the amount of paper necessary to produce these materials as well as the costs associated with mailing these materials to all stockholders. Accordingly, on or about April 28, 2014, we will begin mailing a Notice of Internet Availability of Proxy Materials, or Notice, to all stockholders of record on our books at the close of business on April 16, 2014, the record date for the Annual Meeting, and will post our proxy materials on the website referenced in the Notice. As more fully described in the Notice, stockholders may choose to access our proxy materials on the website referred to in the Notice or may request to receive a printed set of our proxy materials. In addition, the Notice and website provide information regarding how you may request to receive proxy materials in printed form by mail, or electronically by email, on an ongoing basis.

If you are a stockholder of record, you may vote in one of the following ways:

- **Vote over the Internet**, by going to www.envisionreports.com/KPTI (have your Notice or proxy card in hand when you access the website);

- **Vote by Telephone**, by calling the toll-free number 1-800-652-VOTE (8683) (have your Notice or proxy card in hand when you call);

- **Vote by Mail**, if you received (or requested and received) a printed copy of the proxy materials, by returning the enclosed proxy card (signed and dated) in the envelope provided; or

- **Vote in person at the Annual Meeting**.

If your shares are held in "street name," meaning that they are held for your account by a broker or other nominee, you will receive instructions from the holder of record that you must follow for your shares to be voted.

Whether or not you plan to attend the Annual Meeting in person, we urge you to take the time to vote your shares.

By Order of the Board of Directors,

Michael G. Kauffman, M.D., Ph.D.
Chief Executive Officer

Natick, Massachusetts
April 28, 2014
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PROXY STATEMENT FOR THE 2014 ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD ON MONDAY, JUNE 9, 2014

The board of directors of Karyopharm Therapeutics Inc. is soliciting the enclosed proxy for use at the annual meeting of stockholders to be held at the offices of Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109, on June 9, 2014 at 10:00 a.m., local time.

Important Notice Regarding the Availability of Proxy Materials
for the Annual Meeting of Stockholders to be Held on June 9, 2014:

This proxy statement and our annual report are available electronically at www.edocumentview.com/KPTI.

On April 28, 2014, we mailed a Notice of Internet Availability of Proxy Materials to our stockholders (other than those who previously requested electronic or paper delivery of proxy materials), directing stockholders to a website where they can access our proxy materials, including this proxy statement and our annual report on Form 10-K, and view instructions on how to vote online or by telephone. If you would prefer to receive a paper copy of our proxy materials, please follow the instructions included in the Notice of Internet Availability of Proxy Materials. If you have previously elected to receive our proxy materials electronically, you will continue to receive access to those materials via e-mail unless you elect otherwise.

EXPLANATORY NOTE

We are an “emerging growth company” under applicable federal securities laws and therefore permitted to take advantage of certain reduced public company reporting requirements. As an emerging growth company, we provide in this proxy statement the scaled disclosure permitted under the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, including the compensation disclosures required of a “smaller reporting company,” as that term is defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934 as amended, or the Exchange Act. In addition, as an emerging growth company, we are not required to conduct votes seeking approval, on an advisory basis, of the compensation of our named executive officers or the frequency with which such votes must be conducted. We will remain an “emerging growth company” until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more; (ii) December 31, 2018; (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission.
GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why did you send me this proxy statement?

We are providing these proxy materials because our board of directors is soliciting your proxy to vote at the 2014 annual meeting of stockholders. This proxy statement summarizes information related to your vote at the annual meeting. All stockholders who find it convenient to do so are cordially invited to attend the annual meeting in person. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card.

The Notice of Annual Meeting, proxy statement, and voting instructions, together with our Annual Report on Form 10-K for the year ended December 31, 2013, will be made available to each stockholder entitled to vote starting on or about April 28, 2014. These materials are available for viewing, printing and downloading on the Internet at www.edocumentview.com/KPTI. Only stockholders who owned our common stock on April 16, 2014 are entitled to vote at the annual meeting. On this record date, there were 29,762,499 shares of our common stock outstanding. Common stock is our only class of stock outstanding.

What is the purpose of the annual meeting?

At the annual meeting, stockholders will consider and vote on the following matters:

1. To elect two directors to serve as Class I directors for a three-year term.

2. To consider and vote upon the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2014.

Stockholders will also act on any other business that may properly come before the meeting, or any adjournment thereof.

How many votes do I have?

Each share of our common stock that you own as of April 16, 2014 entitles you to one vote.

How do I vote?

If you are the "record holder" of your shares, meaning that you own your shares in your own name and not through a bank, brokerage firm or other nominee, you may vote:

1. **Over the Internet:** Go to the website of our tabulator at www.envisionreports.com/KPTI. Use the vote control number printed on the Notice (or your proxy card or voting instruction card) to access your account and vote your shares. You must specify how you want your shares voted or your Internet vote cannot be completed and you will receive an error message. Your shares will be voted according to your instructions. You must submit your Internet proxy before 11:59 p.m., Eastern Time, on June 8, 2014, the day before the annual meeting, for your proxy to be validly submitted over the Internet and your vote to count.

2. **By Telephone:** Call 1-800-652-VOTE (8683), toll free from the United States, Canada and Puerto Rico, and follow the recorded instructions. You will need to have the Notice (or your proxy card or voting instruction card) in hand when you call. You must specify how you want your shares voted and confirm your vote at the end of the call or your telephone vote cannot be completed. Your shares will be voted according to your instructions. You must submit your telephonic proxy before 11:59 p.m., Eastern Time, on June 8, 2014, the day before the annual meeting, for your telephonic proxy to be valid and your vote to count.

3. **By Mail:** If you received a printed copy of the proxy materials, complete and sign your enclosed proxy card and mail it in the enclosed postage prepaid envelope to Computershare,
If you hold the shares of our common stock in multiple accounts, you should vote your shares as described above for each account.

Can I revoke or change my vote?

If your shares are registered directly in your name, you may revoke your proxy and change your vote at any time before the annual meeting. To do so, you must do one of the following:

1. Vote over the Internet or by telephone as instructed above. Only your latest Internet or telephone vote is counted. You may not revoke or change your vote over the Internet or by telephone after 11:59 p.m., Eastern Time, on June 8, 2014.

2. Sign a new proxy and submit it by mail to Computershare, 250 Royall Street, Canton, MA 02021 who must receive the proxy card no later than June 8, 2014. Only your latest dated proxy will be counted.

3. Attend the annual meeting and vote in person as instructed above. Attending the annual meeting alone will not revoke your Internet vote, telephone vote or proxy submitted by mail, as the case may be.

4. Give our corporate secretary written notice before or at the meeting that you want to revoke your proxy.

If your shares are held in "street name," you may submit new voting instructions with a later date by contacting your bank, brokerage firm, or other nominee. You may also vote in person at the annual meeting, which will have the effect of revoking any previously submitted voting instructions, if you obtain a broker’s proxy as described in the answer to the question “How do I vote?” above.
Will my shares be voted if I do not return my proxy?

If your shares are registered directly in your name, your shares will not be voted if you do not vote over the Internet, by telephone, by returning your proxy by mail or by ballot at the annual meeting.

If your shares are held in "street name," your brokerage firm may under certain circumstances vote your shares if you do not timely return your voting instructions. Brokers can vote their customers' unvoted shares on discretionary matters but cannot vote such shares on non-discretionary matters. If you do not timely return voting instructions to your brokerage firm to vote your shares, your brokerage firm may, on discretion, vote or leave your shares unvoted.

Proposal 1, election of directors, is a non-discretionary matter. If you do not instruct your brokerage firm how to vote with respect to this proposal, your brokerage firm may not vote with respect to this proposal and those shares that would have otherwise been entitled to be voted will be counted as "broker non-votes." "Broker non-votes" are shares that are held in "street name" by a bank or brokerage firm that indicates on its proxy that it does not have or did not exercise discretionary authority to vote on a particular matter. Proposal 2, ratification of the selection of our independent registered public accounting firm, is considered a discretionary matter, and your brokerage firm will be able to vote on this proposal even if it does not timely receive instructions from you, so long as it holds your shares in its name. We encourage you to timely provide voting instructions to your brokerage firm or other nominee. This ensures that your shares will be voted at the annual meeting according to your instructions. You should receive directions from your brokerage firm or other nominee about how to submit your voting instructions to them.

How many shares must be represented to hold the annual meeting?

A majority of our shares of common stock outstanding at the record date must be present in person or represented by proxy to hold the annual meeting and conduct business. This is called a quorum. For purposes of determining whether a quorum exists, we count as present any shares that are voted over the Internet, by telephone, by completing and submitting a proxy by mail or that are represented in person at the meeting. Further, for purposes of establishing a quorum, we will count as present shares that a stockholder holds even if the stockholder votes to abstain or only votes on one of the proposals. In addition, we will count as present shares held in "street name" by banks, brokerage firms or nominees who indicate on their proxies that they do not have discretionary authority to vote those shares on Proposal 1, or broker non-votes. If a quorum is not present, we expect to adjourn the annual meeting until we obtain a quorum.

The presence at the annual meeting, in person or by proxy, of holders representing a majority of our outstanding common stock as of April 16, 2014, or 14,881,250 shares, constitutes a quorum at the meeting, permitting us to conduct the business of the meeting.

What vote is required to approve each matter and how are votes counted?

Proposal 1—Election of Directors

The two nominees for director to receive the highest number of votes FOR election will be elected as directors. This is called a plurality. Proposal 1 is a non-discretionary matter. Therefore, if your shares are held by your brokerage firm in "street name" and you do not timely provide voting instructions with respect to your shares, your brokerage firm cannot vote your shares on Proposal 1. Shares held in "street name" by banks, brokerage firms, or nominees who indicate on their proxies that they do not have authority to vote the shares on Proposal 1 will not be counted as votes FOR or
WITHHELD from any nominee. As a result, such "broker non-votes" will have no effect on the voting on Proposal 1. You may:

- vote FOR both nominees;
- vote FOR a particular nominee and WITHHOLD your vote from the other nominee; or
- WITHHOLD your vote from both nominees.

Votes that are withheld will not be included in the vote tally for the election of directors and will not affect the results of the vote.

**Proposal 2—Ratification of Selection of Independent Registered Public Accounting Firm**

To approve Proposal 2, stockholders holding a majority of the votes cast on the matter must vote FOR the proposal. **Proposal 2 is considered a discretionary matter.** If your shares are held by your brokerage firm in "street name" and you do not timely provide voting instructions with respect to your shares, your brokerage firm may vote your unvoted shares on Proposal 2. If you ABSTAIN from voting on Proposal 2, your shares will not be voted FOR or AGAINST the proposal and will also not be counted as votes cast or shares voting on the proposal. As a result, voting to ABSTAIN will have no effect on the outcome of Proposal 2.

Although stockholder approval of our audit committee's selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2014 is not required, we believe that it is advisable to give stockholders an opportunity to ratify this selection. If this proposal is not approved at the annual meeting, our audit committee will reconsider its selection of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2014.

**How does the board of directors recommend that I vote on the proposals?**

Our board of directors recommends that you vote:

- **FOR** the election of each of the two nominees to serve on our board of directors, each for a three-year term; and
- **FOR** the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014.

**Are there other matters to be voted on at the annual meeting?**

We do not know of any matters that may come before the annual meeting other than the election of two members of our board of directors and the ratification of the selection of our independent registered public accounting firm. If any other matters are properly presented at the annual meeting, the persons named in the accompanying proxy intend to vote, or otherwise act, in accordance with their judgment on the matter.

**Who is paying the costs of soliciting these proxies?**

We will pay all of the costs of soliciting proxies. Our directors, officers and other employees may solicit proxies in person or by mail, telephone, fax or email. We will pay our directors, officers and other employees no additional compensation for these services. We do not currently plan to hire a proxy solicitor to help us solicit proxies, although we reserve the right to do so. We will ask banks, brokerage firms and other nominees to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses. Our costs for forwarding proxy materials will not be significant.
How do I obtain an Annual Report on Form 10-K?

If you would like a copy of our Annual Report on Form 10-K for the year ended December 31, 2013 that we filed with the SEC, we will send you one without charge. Please write to:

Karyopharm Therapeutics Inc.
2 Mercer Road
Natick, Massachusetts 01760
Attn: Investor Relations

All of our SEC filings are also available free of charge under the heading "Financials & Filings—SEC Filings" in the "Investors" section of our website at www.karyopharm.com.

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

Preliminary voting results will be announced at the annual meeting. Final voting results will be tallied by the inspector of election and published in a current report on Form 8-K to be filed with the SEC within four business days after the annual meeting.
PROPOSAL 1:
ELECTION OF DIRECTORS

Our board of directors is divided into three classes, with one class of our directors standing for election each year, for a three-year term. Directors for each class are elected at the annual meeting of stockholders held in the year in which the term for their class expires and hold office until their resignation or removal or their successors are duly elected and qualified. In accordance with our certificate of incorporation and bylaws, our directors may fill existing vacancies on the board of directors by appointment.

The term of office of our Class I directors, Barry E. Greene and Mansoor Raza Mirza, M.D., will expire at the 2014 annual meeting. Accordingly, the nominees for Class I directors for election at the 2014 annual meeting are Mr. Greene and Dr. Mirza. If Mr. Greene or Dr. Mirza are elected at the 2014 annual meeting, such individual will be elected to serve for a three-year term that will expire at our 2017 annual meeting of stockholders and until such individual's successor is duly elected and qualified.

If no contrary indication is made, proxies in the accompanying form are to be voted for Mr. Greene and Dr. Mirza or in the event that either Mr. Greene or Dr. Mirza is not a candidate or is unable to serve as a director at the time of the election (which is not currently expected), for any nominee who is designated by our board of directors to fill the vacancy.

We have no formal policy regarding board diversity, but our Corporate Governance Guidelines provide that the background and qualifications of the directors considered as a group should provide a significant breadth of experience, knowledge and ability to assist the board in fulfilling its responsibilities. Our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and adherence to high ethical standards. Certain individual qualifications and skills of our directors that contribute to the board of directors' effectiveness as a whole are described in the following paragraphs.

Information Regarding Directors

The information set forth below as to the directors and nominees for director has been furnished to us by the directors and nominees for director:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Present Position with Karyopharm Therapeutics Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry E. Greene</td>
<td>50</td>
<td>Director</td>
</tr>
<tr>
<td>Mansoor Raza Mirza, M.D.</td>
<td>53</td>
<td>Director and Clinical Consultant</td>
</tr>
</tbody>
</table>

Barry E. Greene. Mr. Greene has served as a member of our board of directors since January 2013. Mr. Greene has served as President and Chief Operating Officer of Alnylam Pharmaceuticals, Inc., a public biopharmaceutical company, since 2007, as its Chief Operating Officer since 2003, and from 2004 through 2005, as its Treasurer. Mr. Greene joined Alnylam in 2003, bringing over 15 years of experience in the healthcare industry and in consulting. Prior to Alnylam, he was General Manager of Oncology at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, where he led the company’s global strategy and execution for its oncology business, including strategic business direction and execution, culminating in the successful FDA approval and launch of VELCADE (bortezomib) in
mid-2003. Prior to joining Millennium in 2001, Mr. Greene served as Executive Vice President and Chief Business Officer for Mediconsult.com, a healthcare consulting company. Prior to Mediconsult.com, Mr. Greene's experience included serving as Vice President of Marketing and Customer Services for AstraZeneca (formerly AstraMerck), a biopharmaceutical company; Vice President, Strategic Integration with responsibility for the AstraZeneca North American post-merger integration; and a partner of Andersen Consulting, a consulting company, where he was responsible for the pharmaceutical/biotechnology marketing and sales practice. Mr. Greene currently is a member of the board of directors of Acorda Therapeutics, Inc., a public biopharmaceutical company. Mr. Greene received his B.S. in Industrial Engineering from the University of Pittsburgh and serves as a Senior Scholar at Duke University, Fuqua School of Business. We believe Mr. Greene's qualifications to serve on our board of directors include his extensive experience in the healthcare and consulting industries as well his practical experience guiding new drugs through the commercialization process.

Mansoor Raza Mirza, M.D. Dr. Mirza has served as a member of our board of directors since October 2010. He has also served as a clinical consultant to us since 2010. Dr. Mirza is Chief Oncologist at the Department of Oncology, Rigshospitalet—the Copenhagen University Hospital, Denmark. Dr. Mirza is both a medical and radiation oncologist, with a primary focus in non-surgical treatment of gynecologic cancers. His key academic goals are to promote clinical research, international trial collaboration and education, and he has broad experience in clinical protocol development, trial conduct and clinical trial regulations. Dr. Mirza is the author of several phase 1, 2 and 3 studies and serves as the chair of the Independent Data Safety Monitoring Committee of the OUTBACK trial, which is a large international cervical cancer trial. He is the senior author of national Danish guidelines for the management of endometrial, cervical, vulvar and non-epithelial ovarian cancers as well as of the Nordic Society of Gynecologic Oncology (NSGO) radio therapy guidelines for cervical and vulvar cancers. His other current appointments include service as President-Elect of the NSGO, Medical Director of the NSGO-Clinical Trial Unit, Vice-Chairman of the Danish Gynecological Cancer Society, Founding Executive Member of the European Network of Gynecologic Oncology Trials Group, and membership on the faculty of the European Society of Medical Oncology. He also serves on the board of directors of the Gynecologic Cancer Intergroup, a private organization promoting high quality clinical trials, and Metamark Genetics Inc., a private biopharmaceutical company. He holds a M.D., Diploma in Surgery and Diploma in Clinical Oncology from the Pirogov Moscow State Medical Institute as well as post-graduate education and certification in radiation and medical oncology from the University of Southern Denmark. We believe Dr. Mirza's qualifications to serve on our board of directors include his position as an expert in the non-surgical treatment of cancer, and gynecologic cancers in particular, and his knowledge of our company and its business through service on our board since October 2010.

Recommendation of the Board of Directors

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE FOR THE ELECTION OF MR. BARRY E. GREENE AND DR. MANSOOR RAZA MIRZA.

Members of the Board of Directors Continuing in Office

Term Expiring at the 2015 Annual Meeting of Stockholders (Class II)

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Present Position with Karyopharm Therapeutics Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deepa R. Pakianathan, Ph.D.</td>
<td>49</td>
<td>Director</td>
</tr>
<tr>
<td>Kenneth E. Weg</td>
<td>75</td>
<td>Director</td>
</tr>
</tbody>
</table>
Deepa R. Pakianathan, Ph.D.  Dr. Pakianathan has served as a member of our board of directors since April 2013. Since 2001, Dr. Pakianathan has been a Managing Member at Delphi Ventures, a venture capital firm focused on medical device and biotechnology investments, and leads the firm’s biotechnology investment activities. From 1998 to 2001, Dr. Pakianathan was a senior biotechnology banker at JPMorgan, a global investment bank. Since 2004, Dr. Pakianathan has served on the board of directors of Alexza Pharmaceuticals, Inc., a public biopharmaceutical company, where she serves as a member of its compensation and nominating and governance committees. Since 2007, Dr. Pakianathan has served on the board of directors of Alder Biopharmaceuticals, Inc. and NeurAxon, Inc., each a private biopharmaceutical company. Since 2008, Dr. Pakianathan has served on the board of directors of OncoMed Pharmaceuticals, Inc., a public biopharmaceutical company, where she serves as chair of its audit committee. From 2009 to February 2013, Dr. Pakianathan served on the board of directors of PTC Therapeutics, Inc., a public biopharmaceutical company. Dr. Pakianathan received a B.Sc. from the University of Bombay, India, a M.Sc. from The Cancer Research Institute at the University of Bombay, India, and an M.S. and Ph.D. from Wake Forest University. We believe Dr. Pakianathan's qualifications to serve on our board of directors include her experience as a venture capital investor in, and director of, multiple biotechnology companies, as well as her experience as a biotechnology investment banker.

Kenneth E. Weg.  Mr. Weg has served as a member of our board of directors since February 2013. He has over 34 years of experience in the pharmaceutical industry with global biopharmaceutical companies Bristol-Myers Squibb Company and Merck & Co., Inc. From 1993 to 1998, he was President, Worldwide Medicines Group of Bristol-Myers Squibb, responsible for all ethical pharmaceuticals and over-the-counter medicines on a global basis. Mr. Weg also served as Vice-Chairman of the Board of Bristol-Myers Squibb from 1993 to 1998. He retired from Bristol-Myers Squibb in February 2001. From January 2002 to August 2013, Mr. Weg served as a director of AVEO Pharmaceuticals, Inc., a public biopharmaceutical company. Mr. Weg also served as non-Executive Chairman of Millennium Pharmaceuticals until that company was acquired by Takeda, Inc. in 2008. In addition, he has served as founder and Chairman of Metamark Genetics Inc., a private biotechnology company, since 2005. He holds a B.A. in English Literature from Dartmouth College and an M.B.A. from Columbia University. We believe Mr. Weg's qualifications to serve on our board of directors include his extensive leadership experience in the global pharmaceutical industry, including his extensive executive leadership at Bristol-Myers Squibb, and his experience as a member of the boards of directors of multiple biopharmaceutical companies.

Michael G. Kauffman, M.D., Ph.D.  Dr. Kauffman has served as Karyopharm’s Chief Executive Officer since January 2011 and has been one of our directors since 2008. Dr. Kauffman co-founded Karyopharm with Dr. Sharon Shacham in 2008 and served as President from January 2011 to December 2013 and as Chief Medical Officer from December 2012 to December 2013. Prior to joining Karyopharm, he was Chief Medical Officer of Onyx Pharmaceuticals Inc., a biopharmaceutical company, from November 2009 to December 2010, which acquired Proteolix Inc. in November 2009 where he was Chief Medical Officer since November 2008, where he led the development of Kyprolis® (carfilzomib), a novel proteasome inhibitor approved in refractory myeloma by the FDA in July 2012. Prior to joining Onyx Pharmaceuticals, Dr. Kauffman was an operating partner at Bessemer Venture Partners from 2006 to 2008 where he led investments in biotechnology companies. Prior to that, he was
President and Chief Executive Officer of Epix Pharmaceuticals, Inc., a biopharmaceutical company that underwent liquidation proceedings through an assignment for the benefit of creditors under Massachusetts law in 2009, from 2006 to 2008, and President and Chief Executive Officer of Predix Pharmaceuticals, Inc., a private biopharmaceutical company focused on G protein-coupled receptors (GPCR), from 2002 until its merger into Epix Pharmaceuticals in 2006, where he led the merger of Predix Pharmaceuticals and Epix Pharmaceuticals, oversaw the discovery and development of four new clinical candidates and led collaboration transactions with Amgen and GlaxoSmithKline. From March 2000 to September 2002, Dr. Kauffman was Vice President, Clinical at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, where he led the Velcade® development program. From September 1997 to March 2000, Dr. Kauffman held a number of senior positions at Millennium Predictive Medicine, Inc., a biopharmaceutical company and a subsidiary of Millennium Pharmaceuticals, where he led the discovery and development of novel molecular diagnostics for major cancers including melanoma, and led transactions with Becton-Dickenson and Bristol Myers Squibb. From August 1995 to September 1997, Dr. Kauffman held a number of senior positions at Biogen Idec, Inc., a biopharmaceutical company, where he led the clinical development of anti-CD40L antibodies in autoimmune and inflammatory diseases, and acted as the main medical advisor to the Biogen business development group. Dr. Kauffman currently serves on the board of directors and compensation committee of Verastem Inc., a public biopharmaceutical company, on the board of directors and the audit committee and compensation committee of Zalicus Inc. (formerly CombinatoRx Inc.), a public biopharmaceutical company, and on the board of directors and the compensation committee of Metamark Genetics Inc., a private molecular diagnostics company. Dr. Kauffman received his B.A. in Biochemistry from Amherst College, his M.D. and Ph.D. from Johns Hopkins Medical School, and trained in internal medicine and rheumatology at Beth Israel (now Beth Israel Deaconness Medical Center) and Massachusetts General Hospitals. He is board certified in internal medicine. We believe Dr. Kauffman's qualifications to serve on our board of directors include his extensive experience in the healthcare industry as well his extensive knowledge of our company and its business since inception through service in multiple executive leadership positions and as a member of our board.

Garen G. Bohlin. Garen G. Bohlin has served as a member of our board of directors since October 2013. Since April 2012, Mr. Bohlin has focused exclusively on service on boards of directors and consulting. From January 2010 until his retirement in April 2012, he served as Executive Vice President of Constellation Pharmaceuticals, Inc., a biopharmaceutical company, where his responsibilities included consummating option-to-acquire and pre-negotiated merger agreements with Genentech. Prior to Constellation Pharmaceuticals, Mr. Bohlin served as Chief Operating Officer of Sirtris Pharmaceuticals, a biotechnology company, from January 2006 to December 2009, where he played key roles in the overall management of Sirtris, its initial public offering and the sale of the company to GlaxoSmithKline. Mr. Bohlin was the founding Chief Executive Officer of Syntonix Pharmaceuticals, Inc., a biopharmaceutical company, from 1999 through December 2008, where he played a key role in the overall management of Syntonix, positioning it for an eventual sale to Biogen Idec. Prior to Syntonix, Mr. Bohlin was Executive Vice President of Genetics Institute Inc., a biotechnology company, where he played a key role in overall management, its initial public offering and its sale to American Home Products/Wyeth, and a partner at Arthur Andersen & Co., a public accounting and consulting organization. Mr. Bohlin serves on the board of directors and audit committees of Tetraphase Pharmaceuticals, Inc., a public biopharmaceutical company, and Acusphere, Inc., a public biotechnology company, and serves on the board of directors and audit committee of Precision Dermatology, Inc., a private biotechnology company. He holds a B.S. in Accounting from the University of Illinois. We believe Mr. Bohlin's qualifications to serve on our board of directors include his extensive experience and board experience, including his audit committee experience, with publicly traded and privately held biotechnology companies.
CORPORATE GOVERNANCE

General

We believe that good corporate governance is important to ensure that Karyopharm Therapeutics Inc. is managed for the long-term benefit of our stockholders. This section describes key corporate governance practices that we have adopted. We have adopted a code of business conduct and ethics, which applies to all of our officers, directors and employees, corporate governance guidelines and charters for our audit committee, our compensation committee and our nominating and corporate governance committee. We have posted copies of our code of business conduct and ethics and corporate governance guidelines, as well as each of our committee charters, on the Corporate Governance page of the Investors section of our website, www.karyopharm.com, which you can access free of charge. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement. We intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be disclosed by law or Nasdaq listing standards. We will also provide copies of these documents as well as our other corporate governance documents, free of charge, to any stockholder upon written request to Karyopharm Therapeutics Inc., 2 Mercer Road, Natick, MA 01760, ATTN: Investor Relations.

Director Independence

Rule 5605 of the Nasdaq Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Under Rule 5605(a)(2) of the Nasdaq Listing Rules, a director will only qualify as an “independent director” if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3 of the Exchange Act, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

In addition, in affirmatively determining the independence of any director who will serve on a company's compensation committee, Rule 10C-1 under the Exchange Act requires that a company's board of directors consider all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (i) the source of compensation of the director, including any consulting, advisory or other compensatory fee paid by such company to the director; and (ii) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

Our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that each of our directors, with the exception of Drs. Kauffman and Mirza, is an “independent director” as defined under Rule 5605(a)(2) of the Nasdaq Listing Rules. Our board of directors also determined that Messrs. Bohlin and Greene and Dr. Pakianathan, who comprise our audit committee, Messrs. Greene and Weg and Dr. Pakianathan, who comprise our compensation committee, and Messrs. Weg and Bohlin, who are members of our...
nominating and corporate governance committee, satisfy the independence standards for such committees established by the Securities and Exchange Commission and the Nasdaq Listing Rules, as applicable. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director.

There are no family relationships among any of our directors or executive officers, except that Michael Kauffman, M.D., Ph.D., our Chief Executive Officer and a director, is married to Sharon Shacham, Ph.D., M.B.A., our President and Chief Scientific Officer.

Board Leadership Structure

Our bylaws and corporate governance guidelines provide our Board with flexibility to combine or separate the positions of Chairman of the Board and Chief Executive Officer and/or the implementation of a lead director in accordance with its determination that utilizing one or the other structure would be in the best interests of our company. At the current time, we do not have a Chairman of the Board or a lead director. Our board believes that oversight of our company is the responsibility of our Board as a whole, and this responsibility can be properly discharged without a Chairman or lead director. Our Chief Executive Officer, Dr. Kauffman, facilitates communications between members of our Board and works with management in the preparation of the agenda for each board meeting.

All of our directors are encouraged to make suggestions for Board agenda items or pre-meeting materials. Our board has concluded that our current leadership structure is appropriate at this time. However, our Board will continue to periodically review our leadership structure and may make such changes in the future, as it deems appropriate.

The Board's Role in Risk Oversight

Our board of directors has responsibility for the oversight of the company's risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, the potential impact of these risks on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from board committees and members of senior management to enable our board to understand the company's risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

The audit committee reviews information regarding liquidity and operations, and oversees our management of financial risks. Periodically, the audit committee reviews our policies with respect to risk assessment, risk management, loss prevention and regulatory compliance. Oversight by the audit committee includes direct communication with our external auditors, and discussions with management regarding significant risk exposures and the actions management has taken to limit, monitor or control such exposures. The compensation committee is responsible for assessing whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. The nominating and corporate governance committee manages risks associated with the independence of the board, corporate disclosure practices, and potential conflicts of interest. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by our board as a whole.
Board of Directors Meetings

Our board of directors met four times during our fiscal year 2013, including telephonic meetings. During that year, each of our directors attended 75% or more of the total number of meetings of the board of directors and the committees on which he served.

Committees of the Board of Directors

We have three standing committees: the audit committee, the compensation committee and the nominating and corporate governance committee. Each of these committees has a written charter approved by our board of directors. A copy of each charter can be found under the heading "Corporate Governance" in the "Investors" section of our website at www.karyopharm.com.

Audit Committee

The members of our audit committee are Mr. Bohlin, Mr. Greene and Dr. Pakianathan. Mr. Bohlin is the chair of the audit committee. Our board of directors has determined that Mr. Bohlin qualifies as an audit committee financial expert within the meaning of SEC regulations and the Nasdaq Listing Rules. In making this determination, our board has considered the formal education and nature and scope of Mr. Bohlin's previous experience, coupled with past and present service on various audit committees. Our audit committee assists our board of directors in its oversight of our accounting and financial reporting process and the audits of our financial statements. The audit committee met three times during fiscal year 2013, including telephonic meetings. The audit committee's responsibilities include:

• appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
• overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
• reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
• recommending to our board whether the audited financial statements should be included in our annual report;
• monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
• discussing our risk management policies;
• establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt, retention and treatment of accounting related complaints and concerns;
• meeting independently with our registered public accounting firm and management;
• reviewing and approving or ratifying any related person transactions; and
• preparing the audit committee report required by SEC rules.

Compensation Committee

The members of our compensation committee are Mr. Greene, Dr. Pakianathan and Mr. Weg. Mr. Greene is the chair of the compensation committee. Our compensation committee assists our board of directors in the discharge of its responsibilities relating to the compensation of our executive
The compensation committee met four times during fiscal year 2013. The compensation committee's responsibilities include:

- reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer;
- reviewing and approving, or making recommendations to our board with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board with respect to director compensation; and
- reviewing and discussing with management our compensation disclosure required by SEC rules.

The compensation committee generally meets at least four times annually and with greater frequency if necessary. The agenda for each meeting is usually developed by the chair of the compensation committee, in consultation with the chief executive officer, the senior vice president, finance and administration and/or the vice president and general counsel. The compensation committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the compensation committee to make presentations, to provide financial or other background information or advice or to otherwise participate in compensation committee meetings. No officer may participate in, or be present during, any deliberations or determinations of the compensation committee regarding the compensation for such officer or any immediate family member of such officer. The charter of the compensation committee grants the compensation committee full access to all of our books, records, facilities and personnel, as well as authority to obtain, at our expense, advice and assistance from internal and external legal, accounting or other advisors and consultants and other external resources that the compensation committee considers necessary or appropriate in the performance of its duties. In particular, the compensation committee has the sole authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms.

The compensation committee engaged Arnosti Consulting, Inc. (ACI), an independent compensation consultant, during the fiscal year ended December 31, 2013 to provide comparative data on executive compensation practices in our industry and to advise on our executive compensation program generally. The company pays the cost for ACI's services. However, the compensation committee retains the sole authority to direct, terminate or engage ACI's services. Other than the services provided to the compensation committee, ACI provided advice to the company with respect to compensation for employees at the vice president level. Compensation for all services provided by ACI did not exceed $120,000 during the fiscal year ended December 31, 2013.

Historically, the compensation committee has made most of the significant adjustments to annual compensation, determined bonus and equity awards and established new performance objectives at one or more meetings held during the last quarter of the year. However, the compensation committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of our compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. The compensation committee is responsible for making determinations, or making recommendations to the board, regarding compensation of executive officers, making changes to pre-approved salary ranges, salary increases, equity awards, incentive payments and pre-approved equity ranges for new hires and high performers and making material changes to benefits offered to our employees. In addition, the compensation committee makes recommendations to our
board of directors regarding the compensation of directors and the initiation of offerings under our 2013 employee stock purchase plan. The compensation committee also administers our equity-based plans and determines whether to approve smaller increases in the number of shares reserved under our 2013 stock incentive plan and 2013 employee stock purchase plan that automatically occur each year pursuant to the "evergreen" provisions of such plans.

Under its charter, the compensation committee may form, and delegate authority to, subcommittees, consisting of independent directors, as it deems appropriate. During fiscal year 2013, the compensation committee did not form or delegate authority to such subcommittees.

*Nominating and Corporate Governance Committee*

The members of our nominating and corporate governance committee are Mr. Weg, Mr. Bohlin and Dr. Kauffman. Mr. Weg is the chair of the nominating and corporate governance committee. The charter delegating authority to the nominating and corporate governance committee became effective in November 2013 and the committee did not meet during fiscal year 2013. The nominating and corporate governance committee's responsibilities include:

- identifying individuals qualified to become board members;
- recommending to our board the persons to be nominated for election as directors and to each of the board's committees;
- reviewing and making recommendations to the board with respect to management succession planning;
- developing and recommending to the board corporate governance principles; and
- overseeing periodic evaluations of the board.

We believe that the composition of our nominating and corporate governance committee meets the requirements for independence under current Nasdaq listing standards and SEC rules and regulations. Our board of directors has determined that Messrs. Bohlin and Weg are independent as independence is currently defined in applicable Nasdaq listing standards. Although the board of directors determined that Dr. Kauffman does not satisfy the independence standards, under Nasdaq Marketplace Rule 5615(b)(1), we are permitted to phase in our compliance with the independent nominating and corporate governance committee requirements set forth in Nasdaq Marketplace Rule 5605(e) as follows: (1) one independent member at the time of listing, (2) a majority of independent members within 90 days of listing and (3) all independent members within one year of listing. Prior to November 6, 2014, which is the date that is one year of our listing on The Nasdaq Global Select Market, we expect that our nominating and corporate governance committee will be comprised solely of the independent directors pursuant to the Nasdaq Marketplace Rules.

*Compensation Committee Interlocks and Insider Participation*

During 2013, the members of our compensation committee were Mr. Greene (chair), Dr. Pakianathan and Mr. Weg. None of our executive officers served as a director or a member of a compensation committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as a director or member of our compensation committee during the fiscal year ended December 31, 2013. During 2013, no member of our compensation committee was a current or former officer or employee of Karyopharm or had any related person transaction involving Karyopharm.
Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted on our website, www.karyopharm.com, a current copy of the code and all disclosures that are required by law or Nasdaq stock market listing standards concerning any amendments to, or waivers from, any provision of the code. Information contained on the website is not incorporated by reference in, or considered part of, this proxy statement.

Director Nomination Process

Director Qualifications

In evaluating director nominees the nominating and corporate governance committee will consider, among other things, the following factors:

* reputation for personal and professional integrity, honesty and adherence to high ethical standards;
* demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of our company;
* strong finance experience;
* commitment to understand our company and its industry;
* interest and ability to understand the sometimes conflicting interests of the various constituencies of our company, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders;
* diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;
* diversity of background and perspective, including with respect to age, gender, race, place of residence and specialized experience; and
* practical and mature business judgment, including the ability to make independent analytical inquiries.

The nominating and corporate governance committee's goal is to assemble a board of directors that brings to the company a variety of perspectives and skills derived from high quality business and professional experience. Moreover, the nominating and corporate governance committee believes that the background and qualifications of the board of directors, considered as a group, should provide a significant breadth of experience, knowledge and abilities that to assist the board of directors to fulfill its responsibilities. Nominees are not discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law.

The nominating and corporate governance committee has not adopted a formal policy with respect to a fixed set of specific minimum qualifications for its candidates for membership on the board of directors. The committee may consider such factors, including, without limitation, diversity, as it may deem are in the best interests of our company and its stockholders. The committee further believes it is appropriate for at least one member of our board of directors to meet the criteria for an "audit committee financial expert" as that phrase is defined under the regulations promulgated by the SEC, and that a majority of the members of our board of directors be independent as required under the Nasdaq qualification standards. The committee believes it is appropriate for our chief executive officer
to serve as a member of our board of directors. Our directors' performance and qualification criteria are reviewed periodically by the nominating and corporate governance committee.

Identification and Evaluation of Nominees for Directors

The nominating and corporate governance committee identifies nominees for director by first evaluating the current members of our board of directors willing to continue in service. Current members with qualifications and skills that are consistent with the nominating and corporate governance committee's criteria for board of directors service and who are willing to continue in service are considered for re-nomination, balancing the value of continuity of service by existing members of our board of directors with that of obtaining a new perspective or expertise.

If any member of our board of directors does not wish to continue in service or if our board of directors decides not to re-nominate a member for re-election, the nominating and corporate governance committee identifies a new nominee that meets the criteria above. The committee generally inquires of our board of directors and members of management for their recommendations. The committee may also review the composition and qualification of the boards of directors of our competitors, and may seek input from industry experts or analysts. The nominating and corporate governance committee reviews the qualifications, experience and background of suggested candidates. Final candidates, if other than our current directors, would be interviewed by the members of the nominating and corporate governance committee and by certain of our other independent directors and executive management. In making its determinations, the nominating and corporate governance committee evaluates each individual in the context of our board of directors as a whole, with the objective of assembling a group that can best contribute to the success of our company and represent stockholder interests through the exercise of sound judgment. After review and deliberation of all feedback and data, the nominating and corporate governance committee makes its recommendation to our board of directors. To date, the nominating and corporate governance committee has not utilized third-party search firms to identify board of directors candidates. The nominating and corporate governance committee may in the future choose to do so in those situations where particular qualifications are required or where existing contacts are not sufficient to identify an appropriate candidate.

We have not received director candidate recommendations from our stockholders and do not have a formal policy regarding consideration of such recommendations. However, any recommendations received from stockholders will be evaluated in the same manner that potential nominees suggested by board members, management or other parties are evaluated. We do not intend to treat stockholder recommendations in any manner different from other recommendations.

Under our bylaws, stockholders wishing to suggest a candidate for director must write to our corporate secretary. In order to give the nominating and corporate governance committee sufficient time to evaluate a recommended candidate and/or include the candidate in our proxy statement for the 2015 annual meeting, the recommendation must be received by our corporate secretary at our principal executive offices in accordance with our procedures detailed in the section below entitled “Stockholder Proposals.” Such submissions must state the nominee's name, together with appropriate biographical information and background materials, and information with respect to the stockholder or group of stockholders making the recommendation, including the number of shares of common stock owned by such stockholder or group of stockholders, as well as other information required by our bylaws. We may require any proposed nominee to furnish such other information as we may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such proposed nominee.
Director Attendance at Annual Meetings

Although we do not have a formal policy regarding attendance by members of our board of directors at our annual meeting, we encourage all of our directors to attend.

Communications with Our Board of Directors

Stockholders seeking to communicate with our board of directors must submit their written comments to our corporate secretary, Karyopharm Therapeutics Inc., 2 Mercer Road, Natick, MA 01760. The corporate secretary will forward such communications to each member of our board of directors; provided that, if in the opinion of our corporate secretary it would be inappropriate to send a particular stockholder communication to a specific director, such communication will only be sent to the remaining directors (subject to the remaining directors concurring with such opinion).

Director Compensation

We compensate non-employee members of the board of directors for their service. Directors who are also employees do not receive cash or equity compensation for service on the board of directors in addition to compensation payable for their service as our employees. The non-employee members of our board of directors are also reimbursed for travel, lodging and other reasonable expenses incurred in attending board of directors or committee meetings.

In October 2013, our board of directors, upon the recommendation of our compensation committee, established the following compensation guidelines for non-employee board members:

• Each non-employee director will receive, on an annual basis, a cash retainer of $30,000;

• Any non-employee director serving as independent chairman or lead independent director of the board will receive an additional cash retainer of $20,000 per year;

• Each non-employee director who serves as a chairperson of either of the audit committee or the compensation committee will receive a cash retainer of $15,000 per year;

• Each non-employee director who serves as a chairperson of the nominating and corporate governance committee will receive a cash retainer of $10,000 per year;

• Each non-employee director who serves on the audit committee, the compensation committee or the nominating and corporate governance committee will receive a cash retainer of $5,000 per year for service on each such committee;

• Each non-employee director elected to the board will receive a one-time award of an option to purchase 20,000 shares of our common stock upon such non-employee director's initial election to the board, which option shall vest with respect to one-third of the shares on the first anniversary of the grant date and with respect to an additional 1/36th of the shares at the end of each successive month following the first anniversary of the grant date until the third anniversary of the grant date; and

• After each annual meeting of our stockholders, each non-employee director will receive an additional option to purchase 10,000 shares of our common stock, which option shall vest in full on the first anniversary of the grant date.

The stock options granted to our non-employee directors for service on our board or its committees have an exercise price equal to the fair market value of our common stock on the date of grant, expire ten years after the date of grant, and are subject to the director's continued service on our board. To the extent that a non-employee director has other responsibilities to our company in addition to service on our board, such director may receive additional compensation to the extent as deemed appropriate by our board.
Dr. Mirza serves as a clinical consultant to us pursuant to a consulting agreement with an entity wholly-owned by Dr. Mirza, for which he is paid (through such entity) a consulting fee of $22,500 per month as of January 1, 2014. See “Certain Relationships and Related Person Transactions—Consulting Arrangements.”

The following table sets forth information concerning the compensation for our non-employee directors during the fiscal year ended December 31, 2013:

<table>
<thead>
<tr>
<th>Name(1)</th>
<th>Fees Paid In Cash ($)</th>
<th>Option Awards ($)</th>
<th>All Other Compensation ($)</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garen G. Bohlin(4)</td>
<td>10,357</td>
<td>109,075</td>
<td>—</td>
<td>119,432</td>
</tr>
<tr>
<td>Barry E. Greene(5)</td>
<td>7,143</td>
<td>52,377</td>
<td>—</td>
<td>59,520</td>
</tr>
<tr>
<td>Deepa R. Pakianathan, Ph.D.(6)</td>
<td>5,714</td>
<td>245,878</td>
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<td>251,592</td>
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<tr>
<td>Mansoor Raza Mirza, M.D.(7)</td>
<td>4,286</td>
<td>312,914</td>
<td>293,110(8)</td>
<td>610,310</td>
</tr>
<tr>
<td>Kenneth E. Weg(9)</td>
<td>6,429</td>
<td>52,359</td>
<td>—</td>
<td>58,788</td>
</tr>
</tbody>
</table>

(1) Dr. Kauffman, one of our directors who also serves as our chief executive officer, does not receive any compensation for his service as a director.

(2) Amounts represent cash compensation for services rendered by each member of our board of directors.

(3) Amounts listed represent the aggregate fair value amount computed as of the grant date of the option awards granted during 2013 in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 9, Stock-based Compensation, of the notes to our consolidated financial statements.

(4) As of December 31, 2013, Mr. Bohlin held options to purchase 10,606 shares of our common stock.

(5) As of December 31, 2013, Mr. Greene held options to purchase 13,636 shares of our common stock.

(6) As of December 31, 2013, Dr. Pakianathan held options to purchase 20,000 shares of our common stock.

(7) As of December 31, 2013, Dr. Mirza held 9,944 unvested shares of our common stock and options to purchase 62,615 shares of our common stock.

(8) Amount listed represents $293,110 paid to Mirza Consulting, an entity wholly-owned by Dr. Mirza, for consulting and advisory services provided to us by Dr. Mirza other than for his service on the board of directors.

(9) As of December 31, 2013, Mr. Weg held options to purchase 10,606 shares of our common stock.

Limitation of Liability and Indemnification

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for any breach of fiduciary duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
• for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
• for voting or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
• for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, our certificate of incorporation provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain an insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with our directors. These indemnification agreements require us, among other things, to indemnify each such director for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him in any action or proceeding arising out of his service as one of our directors.

Certain of our non-employee directors may, through their relationships with their employers, be insured and/or indemnified against certain liabilities incurred in their capacity as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Report of the Audit Committee of the Board of Directors

The audit committee oversees the Company's financial reporting process on behalf of the board of directors. We have reviewed the Company's audited consolidated financial statements for the fiscal year ended December 31, 2013 and discussed them with Company management and McGladrey LLP, the Company's independent registered public accounting firm for the fiscal year ended December 31, 2013.

We have received from, and discussed with, McGladrey LLP, which is responsible for expressing an opinion on the conformity of the Company's audited consolidated financial statements with accounting principles generally accepted in the United States, its judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the audit committee under generally accepted auditing standards, including all communications required under the standards of the Public Company Accounting Oversight Board (the "PCAOB"). In addition, we have discussed with McGladrey LLP its independence from management and the Company, have received from McGladrey LLP the written disclosures and the letter required by applicable requirements of the PCAOB regarding its communications with us concerning independence, and have considered the compatibility of non-audit services with the auditors' independence.

Based on the review and discussions referred to above, we recommended to the board of directors that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2013.
This report of the audit committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

The foregoing report has been furnished by the audit committee.

Respectfully submitted,

The Audit Committee of the Board of Directors

Garen G. Bohlin (chair)
Barry E. Greene
Deepa R. Pakianathan
EXECUTIVE OFFICERS

The following table sets forth information regarding our executive officers as of April 16, 2014:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Position(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>50</td>
<td>Chief Executive Officer and Director</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.</td>
<td>43</td>
<td>President and Chief Scientific Officer</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>41</td>
<td>Senior Vice President, Finance and Administration, and Treasurer</td>
</tr>
<tr>
<td>Christopher B. Primiano, J.D., M.B.A.</td>
<td>33</td>
<td>Vice President, General Counsel and Secretary</td>
</tr>
</tbody>
</table>

The biography of Michael G. Kauffman, M.D., Ph.D. can be found under "Proposal 1: Election of Directors."

**Sharon Shacham, Ph.D., M.B.A.**  Dr. Shacham founded Karyopharm in 2008 and has served as our President since December 2013 and as our Chief Scientific Officer since October 2010. Dr. Shacham served as our President of Research and Development from December 2012 to December 2013, as our Head of Research and Development from October 2010 to December 2012 and as our President and Chief Executive Officer from October 2010 to January 2011. Dr. Shacham established the company to focus on the discovery and development of small molecule inhibitors of nuclear export and has led our scientific progress since inception. Her computational drug discovery algorithms formed a critical part of the technological basis for our drug discovery and optimization platform, which was used for the discovery of Selinexor, our lead drug candidate. Dr. Shacham co-chairs our Scientific Advisory Board. Prior to founding Karyopharm, from July 2000 to April 2009, she was Senior Vice President of Drug Development at Epix Pharmaceuticals, Inc., which underwent liquidation proceedings through an assignment for the benefit of creditors under Massachusetts law in 2009, and Director, Algorithm and Software Development at Predix Pharmaceuticals Inc. which merged into Epix Pharmaceuticals in 2006, where she led the company's efforts in GPCR modeling, computational chemistry, lead optimization and development of clinical trials. Dr. Shacham received her B.Sc. in Chemistry, Ph.D. and M.B.A. from Tel Aviv University.

**Paul Brannelly.**  Mr. Brannelly joined Karyopharm in June 2013 as Senior Vice President, Finance and Administration and has served as our Treasurer since July 2013 and our Secretary from July 2013 until March 2014. Prior to joining Karyopharm, Mr. Brannelly served most recently as Vice President of Finance at Varastem, Inc., a biopharmaceutical company, from September 2011 to June 2013, Chief Financial Officer from November 2010 to September 2011, and as Treasurer and Secretary from November 2010 to June 2013, where he led the company through the initial public offering process and managed several successful financings. From January 2010 to September 2011, Mr. Brannelly held the position of Chief Financial Officer at the Longwood Fund, a venture capital firm aimed at investing in, managing and building healthcare companies, where he set up the financial and operational infrastructure following the closing of its first fund. From November 2005 to September 2009, he served as Vice President, Finance at Sirtris Pharmaceuticals, Inc., a biopharmaceutical company which GlaxoSmithKline plc purchased for $720 million in 2008, where he managed the S-1 preparation and due diligence process for Sirtris’ initial public offering and managed the company’s transition to being a public company. Mr. Brannelly started his biopharmaceutical career at Dyax Corporation from September 1999 to May 2002, and subsequently moved on to positions of increasing responsibility at Zalicus Inc. (formerly CombinatoRx Inc.) from May 2002 to November 2005, most recently as VP Finance and Treasurer, where he led Zalicus through the initial public offering process. Mr. Brannelly holds a Bachelors of Business Administration in Accounting from the University of Massachusetts at Amherst.
Christopher B. Primiano, J.D., M.B.A. Mr. Primiano joined Karyopharm in March 2014 as Vice President, General Counsel and Secretary. Prior to joining Karyopharm, Mr. Primiano was a Counsel at Wilmer Cutler Pickering Hale and Dorr LLP where he practiced law since October 2012. From August 2010 to August 2012, he served as Vice President, Corporate Development, General Counsel and Secretary of GlassHouse Technologies, Inc., an information technology consulting company, where he led global legal operations and managed asset and subsidiary acquisition and sale activity. Mr. Primiano began his career at Gunderson Dettmer Stough Villeneuve Franklin & Hachigian LLP where he practiced law from August 2006 to July 2010. Mr. Primiano received a Bachelor of Arts in Political Economy and English from Georgetown University, a Master of Business Administration from the Boston College Carroll School of Management and a Juris Doctor from Boston College Law School.
EXECUTIVE COMPENSATION

This section discusses the material elements of our executive compensation policies and important factors relevant to an analysis of these policies. It provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers named in the "Summary Compensation Table" below and is intended to place in perspective the information presented in the following tables and the corresponding narrative.

Summary Compensation Table

The following table sets forth information regarding compensation earned by each of our named executive officers during each of the fiscal years ended December 31, 2012 and 2013. Our named executive officers for 2013 were Dr. Kauffman, our chief executive officer, Dr. Shacham, our president and chief scientific officer, and Mr. Brannelly, our senior vice president, finance and administration.

<table>
<thead>
<tr>
<th>Name and Principal Position</th>
<th>Year</th>
<th>Salary ($)</th>
<th>Option Awards ($)(1)</th>
<th>Non-Equity Incentive Plan Compensation ($)</th>
<th>All Other Compensation ($)</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>2013</td>
<td>380,507</td>
<td>6,771,948</td>
<td>170,000</td>
<td>12,739</td>
<td>7,335,194</td>
</tr>
<tr>
<td>Chief Executive Officer(4)</td>
<td>2012</td>
<td>352,240</td>
<td>—</td>
<td>97,900</td>
<td>13,138</td>
<td>463,278</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.</td>
<td>2013</td>
<td>380,507</td>
<td>6,771,948</td>
<td>129,342</td>
<td>14,288</td>
<td>7,296,065</td>
</tr>
<tr>
<td>President and Chief Scientific Officer</td>
<td>2012</td>
<td>300,000</td>
<td>5,460</td>
<td>138,800</td>
<td>12,060</td>
<td>456,320</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>2013</td>
<td>160,505</td>
<td>1,702,879</td>
<td>117,960</td>
<td>4,614</td>
<td>1,985,958</td>
</tr>
<tr>
<td>Senior Vice President, Finance and Administration(5)</td>
<td>2012</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

(1) Amounts represent the aggregate fair value amount computed as of the grant date of the option awards granted during 2012 and 2013 in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 9, Stock-based Compensation, of the notes to our consolidated financial statements.

(2) Amounts represent awards to our named executive officers under our annual performance-based cash incentive program. See "Narrative Disclosure to Summary Compensation Table—Annual Performance-based Cash Incentives" for a description of that program. Annual bonus compensation for 2012 was earned in 2012 and paid in 2012. Annual bonus compensation for 2013 was earned in 2013 and paid in 2013.

(3) Amounts represent (i) the dollar value of life insurance premiums paid by us on behalf of our named executive officers and (ii) the amount we contributed to our 401(k) plan in respect of our named executive officers. In 2012, we paid $810 and $60 in life insurance premiums on behalf of Dr. Kauffman and Dr. Shacham, respectively, and we contributed $12,328 and $12,000 to our 401(k) plan in respect of Dr. Kauffman and Dr. Shacham, respectively. In 2013, we paid $58, $25 and $25 in life insurance premiums on behalf of Dr. Kauffman, Dr. Shacham and Mr. Brannelly, respectively. Also in 2013, we contributed $12,681, $14,263 and $4,589 to our 401(k) plan in respect of Dr. Kauffman, Dr. Shacham and Mr. Brannelly, respectively.

(4) Dr. Kauffman also serves as a member of our board of directors but does not receive any compensation for his service as a director.

(5) Mr. Brannelly joined us in June 2013 as our Senior Vice President, Finance and Administration.
Narrative Disclosure to Summary Compensation Table

Our compensation committee makes compensation decisions regarding our named executive officers or makes recommendations concerning executive compensation to our board of directors. In May 2013, our compensation committee engaged ACI, an independent compensation consultant, to provide comparative data on executive compensation practices in our industry and to advise on our executive compensation program generally. Although our board of directors and compensation committee consider the advice and recommendation of any independent compensation consultants as to our executive compensation program, the board of directors and compensation committee ultimately make their own decisions about these matters.

Base Salary

Base salaries are used to recognize the experience, skills, knowledge and responsibilities required of our named executive officers. Historically, base salaries for our named executive officers typically have been established through arm's length negotiation at the time the executive officer is appointed, taking into account the position for which the named executive officer is being considered and the named executive officer's qualifications, prior experience and prior salary. None of our named executive officers is currently party to an employment agreement or other service agreement that provides for automatic or scheduled increases in base salary. However, on an annual basis, our compensation committee reviews and evaluates the need for adjustment of the base salaries of each of our named executive officers, including our chief executive officer. Our chief executive officer provides input to our compensation committee with respect to the base salaries of our named executive officers other than our chief executive officer and our president and chief scientific officer. In making decisions regarding salary increases, we may also draw upon the experience of members of our board of directors with other companies.

In 2012, we paid base salaries to Dr. Kauffman and Dr. Shacham of $352,240 and $300,000, respectively. In 2013, we paid base salaries to Dr. Kauffman, Dr. Shacham and Mr. Brannelly of $380,507, $380,507 and $160,505, respectively. The base salaries for 2014 for each of Dr. Kauffman, Dr. Shacham and Mr. Brannelly are $440,000, $385,000 and $285,000, respectively.

Annual Performance-based Cash Incentives

We have designed our annual performance-based cash incentive program to emphasize pay-for-performance, on corporate and individual levels, and to reward our named executive officers for the preceding year's performance. Subsequent to our initial public offering, each named executive officer has been eligible, at our compensation committee's discretion, to receive an annual performance-based cash incentive, which we refer to as an annual cash incentive, in an amount corresponding to a percentage of his or her base salary. The target amount of the annual cash incentive is determined, prior to the applicable fiscal year, by our compensation committee, based upon the accomplishment of certain objective corporate milestones for the applicable fiscal year, and the amount of the annual cash incentive paid to our named executive officers is determined by our compensation committee, upon a consideration of the level of achievement of these milestones and a subjective evaluation of individual performance. The final evaluation made by our compensation committee does not involve a predetermined mathematical formula. Our compensation committee has authority to adjust the incentive percentage each year in connection with its review of our company's performance and the named executive officer's individual performance. Prior to our initial public offering, the foregoing decisions related to annual cash incentives for named executive officers were made by our board of directors, based upon the recommendation of the compensation committee.

For 2012, the objective factors contributing to corporate performance were based on (i) the achievement of clinical and regulatory milestones, including effectiveness in the U.S. of an IND and
authorization of a clinical trial application in Europe and Canada for the oral administration of Selinexor, recruitment of patients for human clinical trials, initiation of a Phase 2b clinical trial to support regulatory approval of Verdinexor and demonstration of activity of our SINE compounds in certain indications, and (ii) the achievement of a financial milestone consisting of the receipt of non-dilutive funding during 2012. Based upon the company’s achievement, on or before the company’s projected timeframe, of effectiveness of an IND in the U.S. and authorization of a clinical trial application in Europe and Canada for the oral administration of Selinexor and the successful recruitment of patients for human clinical trials, the board of directors determined that the company overachieved its expectations regarding corporate performance during 2012. The board of directors approved annual cash incentives for Drs. Kauffman and Shacham upon consideration of these corporate achievements along with subjective factors related to each named executive officer’s individual performance, responsibilities and then existing compensation levels.

For 2013, the objective factors contributing to corporate performance were based on (i) the achievement of multiple fundraising milestones, including the completion of the sale of our series B and series B-1 preferred stock and our initial public offering and (ii) the achievement of clinical milestones, including expansion of Phase 1 clinical trials of Selinexor, enrollment of patients in clinical trials, initiation of investigator sponsored trials of Selinexor, preparation for registration-directed trials in hematological malignancy indications and completion of a Phase 2b clinical trial of Verdinexor in pet dogs with newly-diagnosed or after first relapse lymphomas. Based upon these clinical achievements and the completion of the company’s fundraising milestones, along with subjective factors related to each named executive officer’s individual performance, the compensation committee of the board of directors approved annual cash incentives for Drs. Kauffman and Shacham and Mr. Brannelly of 85% of each named executive officer’s respective target for 2013.

In 2012, we awarded cash incentives to Dr. Kauffman and Dr. Shacham in the amounts of $97,900 and $138,800, respectively. In 2013, we awarded cash incentives to Dr. Kauffman, Dr. Shacham and Mr. Brannelly in the amounts of $170,000, $129,342 and $117,960, respectively.

**Equity Incentive Awards**

Our equity award program is the primary vehicle for offering long-term incentives to our named executive officers. While we do not currently have any equity ownership guidelines for our named executive officers, we believe that equity grants provide our named executive officers with a strong link to our long-term performance, create an ownership culture and help to align the interests of our named executive officers and our stockholders. We believe stock options provide meaningful incentives to our named executive officers to achieve increases in the value of our stock over time. In addition, the vesting feature of our equity grants contributes to executive retention by providing an incentive to our named executive officers to remain employed by us during the vesting period.

Prior to our initial public offering, our named executive officers were eligible to participate in the 2010 Stock Incentive Plan, as amended, or the 2010 Plan. Prior to our initial public offering, all stock options granted to our named executive officers were granted pursuant to the 2010 Plan. Following the closing of our initial public offering, our named executive officers and employees became eligible to receive stock options and other stock-based awards pursuant to the 2013 Stock Incentive Plan, or the 2013 Plan. Subsequent to our initial public offering, all stock options granted to our named executive officers have been granted pursuant to the 2013 Plan.

We have used stock options to compensate our named executive officers in the form of initial grants in connection with the named executive officer’s appointment to his or her position, generally on an annual basis thereafter, and also at various times, including, prior to our initial public offering, concurrent with our preferred stock financings in order to address dilution to existing options attributable to such financings. Prior to our initial public offering, the award of stock options to our
named executive officers has been made upon the recommendation of the compensation committee and the approval of our board of directors. Subsequent to our initial public offering, such awards have been made upon the approval of our compensation committee. None of our named executive officers is currently party to an employment or other service agreement with us that provides for automatic award of stock options. We have granted stock options to our named executive officers with time-based vesting, and, prior to our initial public offering, with performance-based vesting and an ability to early exercise. The options that we grant to our named executive officers with time-based vesting typically become exercisable as to 25% of the shares underlying the option on the first anniversary of the grant date, and as to an additional 1/48th of the shares underlying the option on a monthly basis thereafter. The options that we have granted to our named executive officers with performance-based vesting become exercisable upon the attainment of certain operational milestone events recommended by the compensation committee and approved by our board of directors. The options that we have granted to our named executive officers with an ability to early exercise are immediately exercisable in full, provided that any shares issued upon exercise will remain subject to the original vesting terms. In addition, such shares that are vested or unvested are subject to repurchase by us in the event such named executive officer ceases service to us or our successor in the capacity of an employee, officer, director or consultant for cause. Unvested shares are subject to repurchase by us in the event such named executive officer ceases service to us or our successor, other than for cause. For all options, vesting rights cease upon, and exercise rights cease shortly after, termination of employment or other service except in the case of death or disability. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including no voting rights and no right to receive dividends or dividend equivalents.

In November 2010, we issued awards of restricted stock pursuant to the 2010 Plan, which we refer to as founders shares, to compensate Dr. Kauffman and Dr. Shacham in connection with their service to us from inception to such date and their expected continued service following such date. The founders shares vested as to 25% of the shares underlying the awards upon the first sale of shares of our series A preferred stock in October 2010, and vest as to an additional 1/48th of the shares underlying the awards on a monthly basis thereafter. These founders shares became fully vested in October 2013.

In 2013, prior to our initial public offering, our board of directors granted stock options to our named executive officers, pursuant to our 2010 Plan, as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Grant</th>
<th>Option Award (#)</th>
<th>Grant Date Fair Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>9/3/2013</td>
<td>480,303</td>
<td>4,228,083</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.</td>
<td>9/3/2013</td>
<td>480,303</td>
<td>4,228,083</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>9/3/2013</td>
<td>56,061</td>
<td>493,502</td>
</tr>
<tr>
<td></td>
<td>7/25/2013</td>
<td>63,636</td>
<td>373,536</td>
</tr>
</tbody>
</table>

(1) Amounts listed represent the aggregate fair value amount computed as of the grant date of the option awards granted in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 9, Stock-based Compensation, of the notes to our consolidated financial statements.
In 2013, subsequent to our initial public offering, our compensation committee granted stock options to our named executive officers, pursuant to our 2013 Plan, as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Grant</th>
<th>Option Award ($)</th>
<th>Grant Date Fair Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>12/18/2013</td>
<td>140,000</td>
<td>2,543,865</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.</td>
<td>12/18/2013</td>
<td>140,000</td>
<td>2,543,865</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>12/18/2013</td>
<td>46,000</td>
<td>835,841</td>
</tr>
</tbody>
</table>

(1) Amounts listed represent the aggregate fair value amount computed as of the grant date of the option awards granted in accordance with FASB ASC Topic 718.

### 2013 Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning outstanding equity awards for each of our named executive officers at December 31, 2013:

<table>
<thead>
<tr>
<th>Name</th>
<th>Option Awards</th>
<th>Stock Awards</th>
<th>Number of Shares or Units of Stock That Have Not Vested ($)</th>
<th>Market Value of Shares or Units of Stock That Have Not Vested(1) ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Securities</td>
<td>Option Exercise Price ($)</td>
<td>Option Expiration Date</td>
<td>Number of Securities</td>
</tr>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>21,212(2) $</td>
<td>0.26</td>
<td>12/14/2021</td>
<td>12,500</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.</td>
<td>39,748</td>
<td>$</td>
<td>0.03</td>
<td>10/21/2020</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>63,636</td>
<td>1,458,537</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Represents the market value of the shares based on the closing price on December 31, 2013 of $22.92 per share.

(2) The unvested awards are scheduled to vest in equal monthly installments through December 1, 2015.

(3) The unvested awards are scheduled to vest in equal monthly installments through June 1, 2016.

(4) The option vests as to 25% of the shares on September 3, 2014 and thereafter in 36 equal monthly installments.

(5) The option vests as to 25% of the shares on December 18, 2014 and thereafter in 36 equal monthly installments.

(6) The option is subject to an early exercise provision and is immediately exercisable in full, provided that any shares issued upon exercise of such option will remain subject to the original vesting terms of such option and subject to repurchase by us in certain circumstances. As of December 31, 2013, 71,449 shares were vested.
Employment Agreements, Severance and Change in Control Arrangements

We expect to enter into new employment agreements with each of our named executive officers to ensure that overall compensation for each named executive officer provides appropriate retention and performance incentives based in part on the recommendations of our compensation consultant and all subject to the review and approval of our compensation committee.

Historically, we have entered into employment agreements with each of our named executive officers pursuant to which such named executive officers are employed “at will,” meaning the executive or we may terminate the employment arrangement at any time. Such employment agreements establish the named executive officer's title, initial compensation arrangements, eligibility for benefits made available to employees generally and also provide for certain benefits upon termination of employment under specified conditions. The following summarizes such termination benefits under our named executive officers' existing employment agreements.

Benefits Provided Upon Termination Without Cause or for Good Reason Upon a Change in Control

Under the terms of the existing employment agreements we have entered into with each of Dr. Kauffman and Dr. Shacham, subject to the execution and effectiveness of a separation agreement that includes a release of claims against us, if such executive’s employment is terminated by us without cause or by such executive for good reason, as defined in such employment agreements, after a change of control, as defined in such employment agreements, we will be obligated to pay (i) in the case of Dr. Kauffman, an amount equal to his then-current base salary for a period of eight months, or, in the case of Dr. Shacham, an amount equal to her then-current base salary for a period of six months, (ii) any earned but unpaid annual cash incentive and (iii) all other payments and benefits to which the executive was entitled on such date of termination under the terms of any applicable arrangement, plan or program in effect at the time of such termination.

Non-Disclosure Agreements

We have entered into non-disclosure and inventions assignment agreements with Dr. Kauffman, Dr. Shacham and Mr. Brannelly. Under the non-disclosure and inventions assignment agreements, Dr. Kauffman, Dr. Shacham and Mr. Brannelly have agreed (i) not to compete with us during his or her employment and for a period of twelve months after the termination of his or her employment; (ii) not to solicit our employees or customers during his or her employment and for a period of twelve months after the termination of his or her employment; (iii) to protect our confidential and proprietary information, and (iv) to assign to us related intellectual property that is developed during the course of his or her employment.

Equity Compensation Plans and Other Benefits

2013 Stock Incentive Plan

Our board of directors adopted, and our stockholders approved, the 2013 stock incentive plan, which we refer to as the 2013 Plan, which became effective immediately prior to the closing of our
initial public offering. The 2013 Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock-based awards. As of February 28, 2014, 2,358,217 shares of our common stock are reserved for issuance under the 2013 Plan. Additional shares of our common stock may also become available for issuance under the 2013 Plan. The number of such additional shares is equal to the sum of (1) the number of shares of our common stock subject to outstanding awards under our 2010 Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right and (2) an annual increase to be added on the first day of each fiscal year, until, and including, the fiscal year ending December 31, 2023, equal to the least of (A) 1,939,393 shares of our common stock, (B) 4% of the number of shares of our common stock outstanding on the first day of the fiscal year, and (C) an amount determined by our board of directors.

Our employees, officers, directors, consultants, and advisors, and employees, officers, directors, consultants, and advisors of any of our present or future parent or subsidiary corporations and any other business venture (including, without limitation, joint venture or limited liability company) in which we have a controlling interest, as determined by our board of directors, are eligible to be granted awards under the 2013 Plan. However, incentive stock options may only be granted to employees who are eligible to receive incentive stock options under the Internal Revenue Code.

The 2013 Plan is administered by our board of directors or a committee or officer appointed by our board of directors. Pursuant to the terms of the 2013 Plan, our board of directors or such committee or officer (subject to the below) selects the recipients of awards and determines:

- the number of shares of our common stock covered by options and the conditions and limitations applicable to the exercise of options;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and
- the number of shares of our common stock subject to any stock appreciation rights, restricted stock awards, restricted stock unit awards, or other stock-based awards and the terms and conditions of such awards, including conditions for vesting and repurchase (or forfeiture), issue price and repurchase price (provided that the measurement price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of stock appreciation rights may not be in excess of ten years).

Our board of directors has delegated its powers under the 2013 Plan to our compensation committee. If our board of directors delegates authority to an officer to grant awards under the 2013 Plan, the officer will have the power to grant awards to all of our employees, except executive officers. Our board of directors will fix the terms of awards to be granted by such officer, including the exercise price of such awards (which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to awards that the officer may grant.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, our board of directors is required by the 2013 Plan to make equitable adjustments, in a manner determined by our board, to:

- the number and class of securities available under, and the share counting rules set forth in, the 2013 Plan;
• the number and class of securities and exercise price per share of each outstanding option;
• the share and per-share provisions and measurement price of each outstanding stock appreciation right;
• the number of shares and the repurchase price per share subject to each outstanding restricted stock award or restricted stock unit award; and
• the share and per-share-related provisions and purchase price, if any, of any other outstanding stock-based award.

In connection with a merger or other reorganization event (as defined in the 2013 Plan), our board of directors may take any one or more of the following actions as to all or any portion of any outstanding awards other than restricted stock, on such terms as it determines:

• provide that all outstanding awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);

• upon written notice to a participant, provide that all of the participant's unvested and/or unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant (to the extent then exercisable) within a specified period following the date of such notice;

• in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for termination of such award; and/or

• provide that in connection with our liquidation or dissolution, awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings).

Our board of directors is not obligated under the 2013 Plan to treat all awards, all awards held by a participant, or all awards of the same type, identically in connection with a reorganization event.

In the case of certain restricted stock unit awards, no assumption or substitution will be permitted and the restricted stock unit awards will instead be settled in accordance with the terms of the applicable restricted stock unit agreement, and in certain circumstances, any unvested restricted stock unit awards will be terminated immediately prior to the consummation of the reorganization event without any payment in exchange therefor.

Upon the occurrence of a reorganization event other than our liquidation or dissolution, the repurchase and other rights with respect to outstanding awards of restricted stock will continue for the benefit of the successor company and will, unless our board of directors otherwise determines, apply to the cash, securities or other property into which our common stock was converted into or exchanged for pursuant to the reorganization event in the same manner and to the same extent as they applied to such restricted stock. Upon the occurrence of a reorganization event involving our liquidation or dissolution, all restrictions and conditions on all restricted stock then outstanding will automatically be deemed terminated or satisfied, unless otherwise provided in the instrument evidencing the award of restricted stock or any other agreement between a participant and us.
At any time, our board of directors may provide that any award under the 2013 Plan shall become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

In addition, the 2013 Plan provides that, notwithstanding the provisions of the plan that may apply upon a reorganization event and except as otherwise provided for in the instrument evidencing an option or award of restricted stock or any other agreement between us and the participant, upon the occurrence of a change in control event (as defined in the 2013 Plan) each option shall become immediately exercisable and each award of restricted stock shall become immediately free from all conditions and restrictions, if, in either case, the employment of the participant holding such award is terminated by us (or our acquiring or succeeding corporation) without cause (as defined in the 2013 Plan) or by the participant for good reason (as defined in the 2013 Plan), on or prior to the first anniversary of the date of the change in control event. Our board of directors may specify in an award at the time of grant the effect of a change in control event on any stock appreciation right, restricted stock unit or other stock-based award.

Except with respect to certain actions requiring stockholder approval under the Internal Revenue Code or the rules of the Nasdaq Stock Market, our board of directors may amend, modify or terminate any outstanding award under the 2013 Plan, including but not limited to, substituting therefor another award of the same or a different type, changing the date of exercise or realization, and converting an incentive stock option into a non-qualified stock option, subject to certain participant consent requirements. Unless our stockholders approve such action, the 2013 Plan provides that we may not (except as otherwise permitted in connection with a change in capitalization or reorganization event):

• amend any outstanding stock option or stock appreciation right granted under the 2013 Plan to provide an exercise or measurement price per share that is lower than the then-current exercise or measurement price per share of such outstanding award;

• cancel any outstanding option or stock appreciation right (whether or not granted under the 2013 Plan) and grant in substitution therefor new awards under the 2013 Plan (other than substitute awards permitted in connection with a merger or consolidation of an entity with us or our acquisition of property or stock of another entity) covering the same or a different number of shares of our common stock and having an exercise or measurement price per share lower than the then-current exercise or measurement price per share of the cancelled award;

• cancel in exchange for a cash payment any outstanding option or stock appreciation right with an exercise or measurement price per share above the then-current fair market value of our common stock; or

• take any other action that constitutes a “repricing” within the meaning of the rules of the Nasdaq Stock Market.

No award may be granted under the 2013 Plan after October 21, 2023, but awards previously granted may extend beyond that date. Our board of directors may amend, suspend or terminate the 2013 Plan or any portion thereof at any time, subject to certain stockholder approval requirements and limitations under the Internal Revenue Code.

2013 Employee Stock Purchase Plan

Our board of directors adopted, and our stockholders approved, the 2013 Employee Stock Purchase Plan, or the 2013 ESPP. The 2013 ESPP is administered by our board of directors or by a committee appointed by our board of directors. The 2013 ESPP provides participating employees with the opportunity to purchase an aggregate of 242,424 shares of our common stock. The number of shares of our common stock reserved for issuance under the 2013 ESPP will automatically increase on the first day of each fiscal year, commencing on January 1, 2015 and ending on December 31, 2023, in
an amount equal to the least of (1) 484,848 shares of our common stock, (2) 1% of the total number of shares of our common stock outstanding on the first day of the applicable year, and (3) an amount determined by our board of directors.

All of our employees and employees of any of our designated subsidiaries, as defined in the 2013 ESPP, are eligible to participate in the 2013 ESPP, provided that:

- such person is customarily employed by us or a designated subsidiary for more than 20 hours a week and for more than five months in a calendar year;
- such person has been employed by us or by a designated subsidiary for at least 30 days prior to enrolling in the 2013 ESPP; and
- such person was our employee or an employee of a designated subsidiary on the first day of the applicable offering period under the 2013 ESPP.

No employee may purchase shares of our common stock under the 2013 ESPP and any of our other employee stock purchase plans in excess of $25,000 of the fair market value of our common stock (as of the date of the option grant) in any calendar year. In addition, no employee may purchase shares of our common stock under the 2013 ESPP that would result in the employee owning 5% or more of the total combined voting power or value of our stock.

We expect to make one or more offerings to our eligible employees to purchase stock under the 2013 ESPP beginning at such time as our board of directors may determine. Each offering will consist of a six-month offering period during which payroll deductions will be made and held for the purchase of our common stock at the end of the offering period. Our board of directors may, at its discretion, choose a different period of not more than 12 months for offerings. Our board of directors has determined that the first six-month offering period under the 2013 ESPP will begin on May 1, 2014.

On the commencement date of each offering period, each eligible employee may authorize up to a maximum of 15% of his or her compensation to be deducted by us during the offering period. Each employee who continues to be a participant in the 2013 ESPP on the last business day of the offering period will be deemed to have exercised an option to purchase from us the number of whole shares of our common stock that his or her accumulated payroll deductions on such date will pay for, not in excess of the maximum numbers set forth above. Under the terms of the 2013 ESPP, the purchase price shall be determined by our board of directors for each offering period and will be at least 85% of the applicable closing price of our common stock. If our board of directors does not make a determination of the purchase price, the purchase price will be 85% of the lesser of the closing price of our common stock on the first business day of the offering period or on the last business day of the offering period.

An employee may for any reason withdraw from participation in an offering prior to the end of an offering period and permanently draw out the balance accumulated in the employee's account. If an employee elects to discontinue his or her payroll deductions during an offering period but does not elect to withdraw his or her funds, funds previously deducted will be applied to the purchase of common stock at the end of the offering period. If a participating employee's employment ends before the last business day of an offering period, no additional payroll deductions will be made and the balance in the employee's account will be paid to the employee.

We will be required to make equitable adjustments to the number and class of securities available under the 2013 ESPP, the share limitations under the 2013 ESPP, and the purchase price for an offering period under the 2013 ESPP to reflect stock splits, reverse stock splits, stock dividends, recapitalizations, combinations of shares, reclassifications of shares, spin-offs and other similar changes in capitalization or events or any dividends or distributions to holders of our common stock other than ordinary cash dividends.
In connection with a merger or other reorganization event (as defined in the 2013 ESPP), our board of directors or a committee of our board of directors may take any one or more of the following actions as to outstanding options to purchase shares of our common stock under the 2013 ESPP on such terms as our board or committee determines:

- provide that options shall be assumed, or substantially equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);
- upon written notice to employees, provide that all outstanding options will be terminated immediately prior to the consummation of such reorganization event and that all such outstanding options will become exercisable to the extent of accumulated payroll deductions as of a date specified by our board or committee in such notice, which date shall not be less than ten days preceding the effective date of the reorganization event;
- upon written notice to employees, provide that all outstanding options will be cancelled as of a date prior to the effective date of the reorganization event and that all accumulated payroll deductions will be returned to participating employees on such date;
- in the event of a reorganization event under the terms of which holders of our common stock will receive upon consummation thereof a cash payment for each share surrendered in the reorganization event, change the last day of the offering period to be the date of the consummation of the reorganization event and make or provide for a cash payment to each employee equal to (1) the cash payment for each share surrendered in the reorganization event times the number of shares of our common stock that the employee's accumulated payroll deductions as of immediately prior to the reorganization event could purchase at the applicable purchase price, where the acquisition price is treated as the fair market value of our common stock on the last day of the applicable offering period for purposes of determining the purchase price and where the number of shares that could be purchased is subject to the applicable limitations under the 2013 ESPP minus (2) the result of multiplying such number of shares by the purchase price; and/or
- provide that, in connection with our liquidation or dissolution, options shall convert into the right to receive liquidation proceeds (net of the purchase price thereof).

Our board of directors may at any time, and from time to time, amend or suspend the 2013 ESPP or any portion thereof. We will obtain stockholder approval for any amendment if such approval is required by Section 423 of the Internal Revenue Code. Further, our board of directors may not make any amendment that would cause the 2013 ESPP to fail to comply with Section 423 of the Internal Revenue Code. The 2013 ESPP may be terminated at any time by our board of directors. Upon termination, we will refund all amounts in the accounts of participating employees.

2010 Stock Incentive Plan

In July 2013, our board of directors adopted and our stockholders approved the amended and restated 2010 stock incentive plan, which we refer to as the 2010 Plan. The 2010 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock awards, restricted stock unit awards, and other stock-based awards. We no longer grant awards under the 2010 Plan, but awards remain outstanding under the 2010 Plan in accordance with their terms.

The 2010 Plan is administered by our board of directors. Pursuant to the terms of the 2010 Plan, our board of directors selected the recipients of awards and determined:

- the number of shares of our common stock covered by options;
the terms, conditions and limitations applicable to the grant or exercise of options and to the common stock to be issued upon exercise of each option, including vesting provisions, repurchase provisions and restrictions upon sale or transfer thereof;

• the type of options to be granted;

• the vesting and duration of options;

• the exercise price of options; and

• the number of shares of our common stock subject to and the terms and conditions of any restricted stock awards, restricted stock unit awards, or other stock-based awards, including conditions for repurchase (or forfeiture) and repurchase price.

To the extent permitted by applicable law, our board of directors may delegate its powers under the 2010 Plan to one or more committees or subcommittees of our board or to one or more of our executive officers.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination or reclassification of shares, spin-off or other similar change in capitalization or event, we are required by the 2010 Plan to make appropriate adjustments, in a manner determined by our board, to:

• the number and class of securities available and the per-participant share limits under the 2010 Plan;

• the number and class of securities, vesting schedule, and exercise price per share of each outstanding award;

• the repurchase price per security subject to repurchase; and

• the terms of each other outstanding stock-based award.

Upon the consummation of a merger or other event constituting an acquisition (as defined in the 2010 Plan), our board of directors or the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2010 Plan (on the same basis or on different bases), either:

• make appropriate provision for the continuation or assumption of such awards or substitute on an equitable basis for the shares then subject to such awards either (1) the consideration payable with respect to the outstanding shares of our common stock in connection with the acquisition, (2) shares of stock of the surviving or acquiring corporation, or (3) such other securities or other consideration as the applicable board deems appropriate, the fair market value of which shall not materially differ from the fair market value of the shares of our common stock subject to such awards immediately preceding the acquisition;

• upon written notice, provide that one or more awards then outstanding must be exercised (to the extent then vested), in whole or in part, within a specified number of days of the date of such notice, at the end of which period such awards shall terminate; or

• provide that one or more awards then outstanding, in whole or in part, shall be terminated in exchange for a cash payment equal to the excess of the fair market value (as determined by the applicable board in its sole discretion) for the vested shares subject to such awards over the exercise price, if any, thereof.

Unless otherwise determined by the applicable board, any repurchase rights or other rights that relate to an award shall continue to apply to consideration, including cash, that has been substituted, assumed or amended for an award in connection with an acquisition. We may require that all or any portion of such consideration payable in respect of an award in connection with an acquisition shall be
held in escrow (including in an escrow pursuant to the agreement effecting such acquisition) in order to effectuate any continuing restrictions.

At any time, our board of directors may provide that any award under the 2010 Plan shall become immediately exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

Our board of directors may amend, modify or terminate any outstanding award under the 2010 Plan, including, but not limited to, substituting therefor another award of the same or a different type, changing the date of exercise or realization, and converting an incentive stock option to a nonstatutory stock option, subject to certain participant consent requirements. In addition, our board of directors may, without stockholder approval, amend any outstanding option to reduce the exercise price of such option or cancel any outstanding option and grant in substitution therefor new options covering the same or a different number of shares of our common stock and having a lower exercise price than the cancelled options. Our board of directors may amend, suspend or terminate the 2010 Plan or any portion thereof at any time.

401(k) Retirement 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. In general, all of our U.S.-based employees are eligible to participate in the 401(k) plan, beginning on the first day of the month following commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to $17,500 in 2013, and have the amount of the reduction contributed to the 401(k) plan.

Health and Welfare Benefits

Our named executive officers are eligible to participate in all of our employee benefit plans, including our medical, dental, vision, group life and disability insurance plans, in each case on the same basis as other employees. We believe that these health and welfare benefits help ensure that we have a productive and focused workforce through reliable and competitive health and other benefits.
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Since January 1, 2013, we have engaged in the following transactions with our directors and executive officers and holders of more than 5% of our voting securities and affiliates of our directors, executive officers and such 5% stockholders. We believe that all of the transactions described below were made on terms no less favorable to us than could have been obtained from unaffiliated third parties.

Participation in Initial Public Offering

In our initial public offering, certain of our 5% stockholders and their affiliates purchased an aggregate of 625,000 shares of our common stock. Each of those purchases was made through the underwriters at the initial public offering price. The following table sets forth the aggregate number of shares of our common stock that these 5% stockholders and their affiliates purchased in our initial public offering:

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Common Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delphi Ventures and affiliates(1)</td>
<td>312,500</td>
</tr>
<tr>
<td>Foresite Capital Fund I, L.P.</td>
<td>312,500</td>
</tr>
</tbody>
</table>

(1) Consists of 309,478 shares of common stock purchased by Delphi Ventures VIII, L.P. and 3,022 shares of common stock purchased by Delphi BioInvestments VIII, L.P. Deepa R. Pakianathan, Ph.D., a member of our board of directors, is a Managing Member of Delphi Management Partners VIII, L.L.C, the general partner of Delphi Ventures VIII, L.P. and Delphi BioInvestments VIII, L.P.

Preferred Stock Financings

All series of preferred stock discussed in this section converted into shares of our common stock upon the closing of our initial public offering.

Series B-1 Preferred Stock Financing

In July 2013, we issued and sold an aggregate of 8,636,362 shares of our series B-1 preferred stock, at a purchase price per share of $2.20, for an aggregate purchase price of $18,999,996, and immediately following such sale, Foresite Capital, which purchased 6,818,182 shares of our series B-1 preferred stock in this financing, became a beneficial owner of more than 5% of our voting securities.

The following table sets forth the number of shares of series B-1 preferred stock that were issued to holders of more than 5% of our voting securities at the time of such issuance and affiliates of such holders, in connection with the series B-1 preferred stock financing and the aggregate cash purchase price paid by such entities.

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Series B-1 Preferred Stock</th>
<th>Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delphi Ventures and affiliates(1)</td>
<td>909,091</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

(1) Consists of 900,300 shares purchased by Delphi Ventures VIII, L.P. and 8,791 shares purchased by Delphi BioInvestments VIII, L.P.
### Series B Preferred Stock Financing

Between April and September 2013, we issued and sold an aggregate of 24,100,000 shares of our series B preferred stock, at a purchase price per share of $2.00, for an aggregate purchase price of $48,200,000, and immediately following the first sale of shares of our series B preferred stock in April 2013, each of Plio Limited and Delphi Ventures, which purchased 3,000,000 and 2,500,000 shares, respectively, of our series B preferred stock, became a beneficial owner of more than 5% of our voting securities.

The following table sets forth the number of shares of series B preferred stock that were issued to holders of more than 5% of our voting securities at the time of such issuance, and affiliates of such holders, in connection with the series B preferred stock financing and the aggregate cash purchase price paid by such entities.

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Series B Preferred Stock</th>
<th>Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chione Ltd.</td>
<td>6,000,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Plio Limited</td>
<td>9,000,000</td>
<td>$18,000,000</td>
</tr>
<tr>
<td>Delphi Ventures and affiliates(1)</td>
<td>5,000,000</td>
<td>$10,000,000</td>
</tr>
</tbody>
</table>

(1) Consists of 4,951,650 shares purchased by Delphi Ventures VIII, L.P. and 48,350 shares purchased by Delphi BioInvestments VIII, L.P.

### Series A-4 Preferred Stock Financing

In February 2012, we entered into a stock purchase agreement for the purpose of issuing and selling up to an aggregate of 1,538,461 shares of our series A-4 preferred stock, at a purchase price per share of $1.30, for an aggregate purchase price of $1,999,999. We issued these shares in August 2013.

The following table sets forth the number of shares of series A-4 preferred stock that were issued to a holder of more than 5% of our voting securities at the time of such issuance in connection with the series A-4 preferred stock financing and the aggregate cash purchase price paid by such entity.

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Series A-4 Preferred Stock</th>
<th>Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plio Limited</td>
<td>1,538,461</td>
<td>$1,999,999</td>
</tr>
</tbody>
</table>

### Series A-2 and A-3 Preferred Stock Financing

In October 2011, we entered into a stock purchase agreement for the purpose of issuing and selling up to an aggregate of (i) 7,000,000 shares of our series A-2 preferred stock and (ii) 3,000,000 shares of our series A-3 preferred stock. Between October 2011 and February 2013, we became obligated to issue 6,100,000 shares of our series A-2 preferred stock at a purchase price per share of $1.15, for an aggregate purchase price of $7,015,000, and 1,764,706 shares of our series A-3 preferred stock at a purchase price per share of $1.70, for an aggregate purchase price of $3,000,000. We issued these shares in August 2013.

The following table sets forth the number of shares of series A-2 preferred stock and series A-3 preferred stock that were issued to a holder of more than 5% of our voting securities at the time of such issuance in connection with the series A-2 and series A-3 preferred stock financing and the aggregate cash purchase price paid by such entity.

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Series A-2 Preferred Stock</th>
<th>Shares of Series A-3 Preferred Stock</th>
<th>Aggregate Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chione Ltd.</td>
<td>6,086,957</td>
<td>1,764,706</td>
<td>$10,000,001</td>
</tr>
</tbody>
</table>

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Between October 2010 and January 2013, we issued and sold an aggregate of 20,937,500 shares of our series A preferred stock, at a purchase price per share of $1.00, for an aggregate purchase price of $20,937,500. Immediately following the first sale of shares of our series A preferred stock in October 2010, Chione Ltd., which purchased 5,000,000 shares of our series A preferred stock in such sale, became a beneficial owner of more than 5% of our voting securities.

The following table sets forth the number of shares of series A preferred stock that were issued to our directors, executive officers and holders of more than 5% of our voting securities at the time of such issuance in connection with the series A preferred stock financing and the aggregate cash purchase price paid by such persons and entities.

<table>
<thead>
<tr>
<th>Purchaser</th>
<th>Shares of Series A Preferred Stock</th>
<th>Purchase Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.</td>
<td>437,500</td>
<td>$437,500</td>
</tr>
<tr>
<td>Chione Ltd.</td>
<td>15,000,000(1)</td>
<td>$15,000,000</td>
</tr>
</tbody>
</table>

(1) Does not include 5,000,000 shares of our series A preferred stock issued to Chione Ltd. in October 2010 at the initial closing of the series A preferred stock financing. Chione Ltd. became a beneficial owner of more than 5% of our voting securities immediately following such initial closing and we issued the 15,000,000 shares of our series A preferred stock listed in this table to Chione Ltd. after Chione Ltd. had become a holder of more than 5% of our voting securities.

Registration Rights

We are a party to a third amended and restated investors' rights agreement, last amended in July 2013, with the former holders of our preferred stock, including certain of our directors, executive officers and 5% stockholders and their affiliates. The investor rights agreement provides these holders the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing.

Severance and Change in Control Agreements

See the "Executive Compensation—Employment Agreements, Severance and Change in Control Arrangements’ section of this proxy statement for a further discussion of these arrangements.

Indemnification of Directors

Our certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for any breach of fiduciary duty as a director. In addition, we have entered into indemnification agreements with each of our directors that require us, among other things, to indemnify each director for certain expenses, including attorneys’ fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors. See the "Corporate Governance—Limitation of Liability and Indemnification” section of this proxy statement for a further discussion of these arrangements.

Consulting Arrangements

We are party to a consulting agreement with Mirza Consulting, an entity that is wholly owned by Mansoor Raza Mirza, a member of our board of directors. Pursuant to this agreement, we paid
Dr. Mirza (through such entity) a consulting fee of $28,500 per month during the fiscal year ended December 31, 2013. We have agreed to pay Dr. Mirza a consulting fee of $22,500 per month beginning January 1, 2014.

We are also a party to a consulting agreement with Dr. Tami Rashal, the sister of Dr. Sharon Shacham, our President and Chief Scientific Officer, and the sister-in-law of Michael Kauffman, our Chief Executive Officer and member of our board of directors. Pursuant to this agreement, we pay Dr. Rashal a consulting fee of $12,083.33 per month, effective January 1, 2014. We also paid Dr. Rashal a bonus of $19,500 for her services in 2013. Prior to January 1, 2014, we paid Dr. Rashal a consulting fee of $11,666.66 per month, effective May 1, 2013. Prior to May 1, 2013, we paid Dr. Rashal a consulting fee of $60 per hour, which fee was limited to $10,000 per year. In September 2013 and December 2013, we granted to Dr. Rashal options to purchase 15,151 and 8,000 shares of our common stock at exercise prices of $4.75 and $23.66 per share, respectively.

Policies and Procedures for Related Person Transactions

On October 8, 2013, our board adopted written policies and procedures for the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds $120,000, and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our principal financial officer. The policy calls for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the board's audit committee. Whenever practicable, the reporting, review and approval will occur prior to effectiveness or consummation of the related person transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy also permits the chairman of the committee to review and, if deemed appropriate, approve proposed related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

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

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

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

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

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

- a transaction that is specifically contemplated by provisions of our charter or bylaws.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the compensation committee in the manner specified in its charter.
PROPOSAL 2: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee has selected Ernst & Young LLP as the company's independent registered public accounting firm for the fiscal year ending December 31, 2014 and the board has directed that management submit the selection of the company's independent registered public accounting firm for ratification by the stockholders at the annual meeting. Representatives of Ernst & Young LLP are expected to be present at the annual meeting, will have an opportunity to make a statement if they so desire, and be available to respond to appropriate questions. Ernst & Young LLP was appointed to serve as our independent registered public accounting firm for the fiscal year ending December 31, 2014 on April 11, 2014. McGladrey LLP served as our independent registered public accounting firm for the fiscal years ended December 31, 2013 and December 31, 2012. See "—Change in Independent Registered Public Accounting Firm" below. The Company does not expect that a representative from McGladrey LLP will be present at the annual meeting.

Stockholder ratification of the selection of Ernst & Young LLP as the company's independent registered public accounting firm is not required by Delaware law or our certificate of incorporation or our bylaws. However, the board is submitting the audit committee's selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the audit committee will reconsider whether to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the selection of a different independent registered public accounting firm at any time during the year if the audit committee determines that such a change would be in the best interests of the company and its stockholders.

Independent Registered Public Accountants' Fees

The following table sets forth aggregate fees billed to us for services related to the fiscal years ended December 31, 2013 and 2012, by McGladrey LLP, our independent registered public accounting firm for periods.

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2012</td>
</tr>
<tr>
<td>Audit Fees(1)</td>
<td>$636,600</td>
<td>$26,000</td>
</tr>
<tr>
<td>Audit Related Fees(2)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Tax Fees(3)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>All Other Fees(4)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$636,600</td>
<td>$26,000</td>
</tr>
</tbody>
</table>

(1) Audit Fees consist of fees billed for professional services performed by McGladrey LLP for the audit of our annual consolidated financial statements, the review of interim consolidated financial statements, and related services that are normally provided in connection with registration statements, including the registration statement for our initial public offering. Included in the 2013 Audit Fees is $501,600 of fees billed in connection with our initial public offering.

(2) Audit Related Fees may consist of fees billed by an independent registered public accounting firm for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements. There were no such fees incurred by the company in 2013 or 2012.
The audit committee has considered the services listed above to be compatible with maintaining McGladrey LLP's independence.

Change in Independent Registered Public Accounting Firm

On April 11, 2014, the audit committee selected Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2014, and dismissed McGladrey LLP from service as our independent registered public accounting firm. We formally engaged Ernst & Young LLP on April 17, 2014.

McGladrey LLP's reports on our financial statements as of and for the fiscal years ended December 31, 2013 and 2012 did not contain any adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope, or accounting principles.

During the fiscal years ended December 31, 2013 and 2012 and the subsequent interim period through April 11, 2014, there were (i) no "disagreements" (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) between us and McGladrey LLP on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of McGladrey LLP, would have caused McGladrey LLP to make reference to the subject matter of the disagreement in its reports on our consolidated financial statements and (ii) no "reportable events" (as that term is defined in Item 304(a)(1)(v) of Regulation S-K).

During the fiscal years ended December 31, 2013 and 2012 and the subsequent interim period through April 16, 2014, neither we, nor anyone on our behalf, consulted Ernst & Young LLP regarding (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements, and no written report or oral advice was provided to us by Ernst & Young LLP that Ernst & Young LLP concluded was an important factor considered by us in reaching a decision as to any accounting, auditing or financial reporting issue or (ii) any matter that was the subject of a "disagreement" (as that term is defined in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) or a "reportable event" (as that term is defined in Item 304(a)(1)(v) of Regulation S-K).

Pre-Approval Policies and Procedures

Our audit committee has established a policy that all audit and permissible non-audit services provided by our independent registered public accounting firm will be pre-approved by the audit committee, and all such services were pre-approved in accordance with this policy during the fiscal year ended December 31, 2013. These services may include audit services, audit-related services, tax services and other services. The audit committee considers whether the provision of each non-audit service is compatible with maintaining the independence of our auditors. Pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. Our independent registered public accounting firm and management are required to periodically report to the audit committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date.

Recommendation of the Board of Directors

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information relating to the beneficial ownership of our common stock as of February 28, 2014, by:

- each person known by us to beneficially own more than 5% of our outstanding shares of common stock;
- each of our directors;
- each of our named executive officers; and
- all directors and executive officers as a group.

The percentage of shares beneficially owned is computed on the basis of 29,753,726 shares of our common stock outstanding as of February 28, 2014. The number of shares beneficially owned by each stockholder is determined under rules issued by the Securities and Exchange Commission and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options or other rights held by such person that are currently exercisable or will become exercisable within 60 days of February 28, 2014 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, the address of all listed stockholders is c/o Karyopharm Therapeutics Inc., 2 Mercer Road, Natick, MA 01760. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

<table>
<thead>
<tr>
<th>Name of Beneficial Owner</th>
<th>Shares Beneficially Owned</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5% Stockholders</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chione Ltd.(1)</td>
<td>10,258,079</td>
<td>34.48%</td>
</tr>
<tr>
<td>Plio Limited(2)</td>
<td>3,193,473</td>
<td>10.73%</td>
</tr>
<tr>
<td>Entities Affiliated with Foresite Capital(3)</td>
<td>2,378,615</td>
<td>7.99%</td>
</tr>
<tr>
<td>Entities Affiliated with FMR LLC(4)</td>
<td>2,346,000</td>
<td>7.88%</td>
</tr>
<tr>
<td>Entities Affiliated with Delphi Ventures(5)</td>
<td>2,103,133</td>
<td>7.07%</td>
</tr>
<tr>
<td><strong>Named Executive Officers and Directors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael G. Kauffman, M.D., Ph.D.(6)</td>
<td>1,960,306</td>
<td>6.59%</td>
</tr>
<tr>
<td>Sharon Shacham, Ph.D., M.B.A.(7)</td>
<td>1,960,306</td>
<td>6.59%</td>
</tr>
<tr>
<td>Paul Brannelly</td>
<td>63,636</td>
<td>*</td>
</tr>
<tr>
<td>Deepa R. Pakianathan, Ph.D.(8)</td>
<td>2,103,133</td>
<td>7.07%</td>
</tr>
<tr>
<td>Mansoor Raza Mirza, M.D.(9)</td>
<td>48,100</td>
<td>*</td>
</tr>
<tr>
<td>Barry E. Greene(10)</td>
<td>4,640</td>
<td>*</td>
</tr>
<tr>
<td>Kenneth E. Weg(11)</td>
<td>2,209</td>
<td>*</td>
</tr>
<tr>
<td>Garen Bohlin</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>All executive officers and directors as a group (8 persons)(12)</td>
<td>4,182,024</td>
<td>14.06%</td>
</tr>
</tbody>
</table>

* Less than 1%.

(1) The address for Chione Ltd. is Simou Menardou 8, Ria Court 8, Office 101, 6015 Larnaca, Cyprus. The board of directors of Chione, comprised of Marcin Czernik, Andreas Hadjimichael and Amalia Hadjimichael, and its sole stockholder, Wiaczeslaw Smolokowski, may be deemed to share voting and investment power with respect to the shares held by such entity and each of them disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The shares held by Chione Ltd. do not include the shares held by Plio Limited.
(2) The address for Plio Limited is Simou Menardou 8, Ria Court 8, Office 101, 6015 Larnaca, Cyprus. The board of directors of Plio, comprised of Marcin Czernik, Andreas Hadjiimichael and Amalia Hadjiimichael, and its sole stockholder, Gregory Jankilevitsch, may be deemed to share voting and investment power with respect to the shares held by such entity and each of them disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The shares held by Plio Limited do not include the shares held by Chione Ltd.

(3) The address for Foresite Capital and affiliates is One Montgomery Street, Suite 2500, San Francisco, California 94104. Consists of (i) 1,585,743 shares of common stock held by Foresite Capital Fund I, L.P. (ii) 688,705 shares of common stock held by Foresite Capital IV-B, LLC and (iii) 104,167 shares of common stock held by Foresite Capital IV-C, LLC. James B. Tananbaum is the managing member of Foresite Capital Management I, LLC, the general partner of Foresite Capital Fund I, L.P., is the managing member of Foresite Capital IV-B Management, LLC, the managing member of Foresite Capital IV-B, LLC, and is the managing member of Foresite Capital IV-C Management, LLC, the managing member of Foresite Capital IV-C, LLC, and as such, James B. Tananbaum may be deemed to have sole voting and investment power over the securities held by Foresite Capital Fund I, L.P., Foresite Capital IV-B, LLC and Foresite Capital IV-C, LLC. James B. Tananbaum disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein. For information regarding Foresite Capital and its affiliates, we have relied on the Schedule 13G filed by Foresite Capital Fund I, L.P. filed with the SEC on November 15, 2013.

(4) The address for Fidelity SelectCo, LLC (“SelectCo”) is 1225 17th Street, Suite 1100, Denver, Colorado 80202 and the address for Fidelity Select Biotechnology Portfolio (“Portfolio”) is 245 Summer Street, Boston, Massachusetts 02210. SelectCo, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, may be deemed to be the beneficial owner of 2,346,000 shares of common stock as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940, including Portfolio, which holds 2,055,682 shares of common stock. Additional shares of common stock are owned by other investment companies. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. For information regarding FMR LLC and its affiliates, we have relied on the Schedule 13G filed by FMR LLC with the SEC on February 14, 2014.

(5) The address for Delphi Ventures and affiliates is 3000 Sand Hill Road, #1-135, Menlo Park, California 94025. Delphi Ventures VIII, L.P. (“Delphi VIII”) directly holds 2,082,796 shares of common stock. Delphi BioInvestments VIII, L.P. (“DBI VIII”) directly holds 20,337 shares of common stock. Delphi Management Partners VIII, L.L.C. (“DMP VIII”) is the general partner of Delphi VIII and DBI VIII (together, the “Delphi VIII Funds”) and may be deemed to have sole voting and dispositive power over the shares held by the Delphi VIII Funds. DMP VIII and each of James J. Bochnowski, David L. Douglass, Douglas A. Roeder and Deepa R. Pakianathan, Ph.D., the Managing Members of DMP VIII who may be deemed to share voting and dispositive power over the reported securities, disclaim beneficial ownership of the reported securities held by Delphi VIII Funds except to the extent of any pecuniary interest therein.

(6) Consists of (a) 40,024 shares of common stock underlying options held by Michael Kauffman that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date, (b) 830,171 shares of common stock held by Michael Kauffman, (c) 171,148 shares of common stock underlying options held by Sharon Shacham, who is the spouse of Michael Kauffman, that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date and (d) 918,963 shares of common stock held by Sharon Shacham.

(7) Consists of (a) 171,148 shares of common stock underlying options held by Sharon Shacham that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date, (b) 918,963 shares of common stock held by Sharon Shacham, (c) 40,024 shares of common stock.
underlying options held by Michael Kauffman, who is Sharon Shacham's spouse, that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date and (d) 830,171 shares of common stock held by Michael Kauffman.

(8) Delphi Ventures VIII, L.P. ("Delphi VIII") directly holds 2,082,796 shares of common stock. Delphi BioInvestments VIII, L.P. ("DBI VIII") directly holds 20,337 shares of common stock. Delphi Management Partners VIII, L.L.C. ("DMP VIII") is the general partner of Delphi VIII and DBI VIII (together, the "Delphi VIII Funds") and may be deemed to have sole voting and dispositive power over the shares held by the Delphi VIII Funds. DMP VIII and each of James J. Bochnowski, David L. Douglass, Douglas A. Roeder and Deepa R. Pakianathan, Ph.D., the Managing Members of DMP VIII who may be deemed to share voting and dispositive power over the reported securities, disclaim beneficial ownership of the reported securities held by Delphi VIII Funds except to the extent of any pecuniary interest therein.

(9) Consists of (a) 25,373 shares of common stock underlying options that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date and (b) 22,727 shares of common stock.

(10) Consists of 4,640 shares of common stock underlying options that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date.

(11) Consists of 2,209 shares of common stock that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date.

(12) Includes 253,684 shares of common stock underlying options that are exercisable as of February 28, 2014 or will become exercisable within 60 days after such date.
SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Under Section 16(a) of the Exchange Act, directors, executive officers and beneficial owners of 10% or more of our common stock, or reporting persons, are required to report to the SEC on a timely basis the initiation of their status as a reporting person and any changes with respect to their beneficial ownership of our common stock. Based solely on our review of copies of forms that we have received, or written representations from reporting persons, we believe that during the fiscal year ended December 31, 2013, all executive officers, directors and greater than 10% stockholders complied with all applicable filing requirements, except as follows: Chione Ltd. filed a Form 3 setting forth its shareholdings (due upon the effectiveness of our initial public offering, or IPO) that was filed three days late, Plio Ltd. filed a Form 3 setting forth its shareholdings (due upon the effectiveness of our IPO) that was filed three days late, Chione Ltd. filed a Form 4 setting forth its shareholdings and reflecting the conversion of preferred stock to common stock upon closing of our IPO (due within two business days following the closing of our IPO) that was filed one day late and Plio Ltd. filed a Form 4 setting forth its shareholdings and reflecting the conversion of preferred stock to common stock upon closing of our IPO (due within two business days following the closing of our IPO) that was filed one day late.

SEcurities AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table contains information about our equity compensation plans as of December 31, 2013. As of December 31, 2013, we had two equity compensation plans, each of which was approved by our stockholders: our 2010 stock incentive plan and our 2013 stock incentive plan.

<table>
<thead>
<tr>
<th>Plan category</th>
<th>Number of securities to be issued upon exercise of outstanding options, warrants and rights</th>
<th>Weighted-average exercise price of outstanding options, warrants and rights</th>
<th>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity compensation plans approved by security holders</td>
<td>2,410,522</td>
<td>$7.85</td>
<td>635,962</td>
</tr>
<tr>
<td>Equity compensation plans not approved by security holders</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>2,410,522</td>
<td>$7.85</td>
<td>635,962</td>
</tr>
</tbody>
</table>

The number of shares reserved for issuance under our 2013 stock incentive plan is subject to an annual increase, to be added on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2014 and continuing until, and including, the fiscal year ending December 31, 2023, equal to the least of (A) 1,939,393 shares of our common stock, (B) 4% of the number of shares of our common stock outstanding on the first day of such fiscal year and (C) an amount determined by our board of directors or a committee of the board delegated with the authority to make such determination. On January 1, 2014, the number of shares reserved for issuance under our 2013 stock incentive plan was increased by 1,190,149. No further grants will be made under our 2010 stock incentive plan.
STOCKHOLDER PROPOSALS

Proposals of stockholders intended to be presented at our annual meeting of stockholders to be held in 2015 must be received by us no later than December 30, 2014, which is 120 calendar days prior to date on which our proxy statement was released to stockholders in connection with this year's annual meeting of stockholders, in order to be included in our proxy statement and form of proxy relating to the 2015 annual meeting of stockholders, unless the date of the 2015 annual meeting of stockholders is changed by more than 30 days from the anniversary of our 2014 annual meeting, in which case the deadline for such proposals will be a reasonable time before we begin to print and send our proxy materials. These proposals must comply with the requirements as to form and substance established by the SEC for such proposals in order to be included in the proxy statement.

In addition, our bylaws establish an advance notice procedure for nominations for election to our board of directors and other matters that shareholders wish to present for action at an annual meeting other than those to be included in our proxy statement. In general, notice must be received at our principal executive offices not less than 90 calendar days before nor more than 120 calendar days before the one year anniversary of the previous year's annual meeting of stockholders. Therefore, to be presented at our 2015 annual meeting of stockholders, such a proposal must be received by us no earlier than February 10, 2015 and no later than March 12, 2015. However, if the date of the annual meeting is more than 20 days earlier or more than 60 days later than such anniversary date, notice must be received no earlier than the close of business 120 calendar days prior to such annual meeting and no later than the close of business on the later of 90 days prior to such annual meeting and 10 days following the day on which notice of the date of such annual meeting was mailed or public announcement of the date of such annual meeting was first made. Any proposals we do not receive in accordance with the above standards will not be voted on at the 2015 annual meeting of stockholders. Stockholders are advised to review our bylaws which also specify requirements as to the form and content of a stockholder's notice.

Any proposals, notices or information about proposed director candidates should be sent to:

Karyopharm Therapeutics Inc.
2 Mercer Road
Natick, MA 01760
Attention: Corporate Secretary

STOCKHOLDERS SHARING THE SAME ADDRESS

The rules promulgated by the SEC permit companies, banks, brokerage firms or other intermediaries to deliver a single copy of a proxy statement and annual report to households at which two or more stockholders reside. This practice, known as "householding," is designed to reduce duplicate mailings and save significant printing and postage costs as well as natural resources. Stockholders sharing an address who have been previously notified by their bank, brokerage firm or other intermediary and have consented to householding will receive only one copy of our proxy statement and annual report. If you would like to opt out of this practice for future mailings and receive separate proxy statements and annual reports for each stockholder sharing the same address, please contact your bank, brokerage firm or other intermediary from whom you received such mailing. We will promptly deliver a separate copy of the proxy statement and/or annual report to you if you contact us at the following address, telephone number Karyopharm Therapeutics Inc., 2 Mercer Road, Natick, MA 01760, Attention: Corporate Secretary, 508-975-4801. We will promptly send additional copies of the proxy statement or annual report upon receipt of such request. Stockholders sharing an address that are receiving multiple copies of the proxy statement or annual report can request delivery of a single copy of the proxy statement or annual report by contacting their bank, brokerage firm or other intermediary or by contacting us at the address or telephone number above.
OTHER MATTERS

We do not know of any business that will be presented for consideration or action by the stockholders at the annual meeting other than that described in this proxy statement. If, however, any other business is properly brought before the meeting, shares represented by proxies will be voted in accordance with the best judgment of the persons named in the proxies or their substitutes. All stockholders are urged to complete, sign and return the accompanying proxy card in the enclosed envelope.

DIRECTIONS TO ANNUAL MEETING

Directions to the 2014 Annual Meeting of Stockholders, to be held at Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, MA 02109 are set forth below.

From the West of Boston: From the Mass Pike (I-90), take Exit 24B into Liberty Tunnel, stay in right lane. Take Exit 23, Government Center, stay in left lane. At the end of the exit ramp, turn left onto Surface Road. Turn right onto State Street from Surface Road. Proceed up State Street to Merchants Row. Take right onto Merchants Row and proceed to end of street. Take a left into garage, take ticket, proceed to public parking area.

From the South of Boston: From Route 93N (Fitzgerald/Southeast Expressway), proceed through Liberty Tunnel, stay in right lane. Take Exit 23, Government Center, stay in left lane. At the end of the exit ramp, turn left onto Surface Road. Turn right onto State Street from Surface Road. Proceed up State Street to Merchants Row. Take right onto Merchants Row and proceed to end of street. Take a left into garage, take ticket, proceed to public parking area.

From the North of Boston: From Route 93S proceed over Zakim Bridge into tunnel. Take exit 24A, Government Center. Follow signs for Aquarium/Financial District. At end of exit bear left and proceed onto Surface Road. Take right from Surface Road onto State Street. Proceed up State Street to Merchants Row. Take right onto Merchants Row and proceed to end of street. Take a left into garage, take ticket, proceed to public parking area.

From Logan Airport: Exit airport following signs for Ted Williams Tunnel. Take Exit 24 to I-93 North. Take Exit 23, Government Center, stay in left lane. At the end of the exit ramp, turn left onto Surface Road. Turn right onto State Street from Surface Road. Proceed up State Street to Merchants Row. Take right onto Merchants Row and proceed to end of street. Take a left into garage, take ticket, proceed to public parking area.
Using a black ink pen, mark your votes with an X as shown in this example. Please do not write outside the designated areas. X

Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below

Signature 1 — Please keep signature within the box.
Signature 2 — Please keep signature within the box.

Electronic Voting Instructions
Available 24 hours a day, 7 days a week!
Instead of mailing your proxy, you may choose one of the voting methods outlined below to vote your proxy.

PUBLIC VOTE DETAILS ARE LOCATED BELOW IN THE TITLE BAR
Proxies submitted by the internet or telephone must be received by 11:59 p.m., Eastern Time, on June 8, 2014.

Vote by Internet
• Go to www.envisionreports.com/KPTI
• Or scan the QR code with your smartphone
• Follow the steps outlined on the secure website

Vote by telephone
• Call toll free 1-800-652-VOTE (8683) within the USA, US territories & Canada on a touch tone telephone
• Follow the instructions provided by the recorded message

Annual Meeting Proxy Card

If you have not voted via the internet or telephone, fold along the perforation, detach and return the bottom portion in the enclosed envelope.

A Proposals — The Board of Directors recommends a vote FOR all the nominees listed and FOR Proposal 2.
1. Election of Directors: For Withhold For Withhold

   1. Barry E. Greene
   2. Mansoor Raza Mirza

2. Ratification of the selection of Ernst & Young LLP as independent registered public accounting firm. For Against Abstain

NOTE: In their discretion, the proxies are authorized to vote upon such other business as may properly come before the meeting or any adjournment thereof.

B Non-Voting Items
Change of Address — Please print your new address below.
Comments — Please print your comments below.
Meeting Attendance
Mark the box to the right if you plan to attend the Annual Meeting.

C Authorized Signatures — This section must be completed for your vote to be counted. — Date and Sign Below
Please sign exactly as name(s) appears hereon. Joint owners should each sign personally. All holders must sign. When signing as attorney, executor, administrator, corporate officer, insuror, guardian, or custodian, please give full title.

Date (mm/dd/yy) — Please print date below.

Signature 1 — Please keep signature within the box.
Signature 2 — Please keep signature within the box.

X 21 D V
Notice of 2014 Annual Meeting of Stockholders

Monday, June 9, 2014, 10:00 a.m.

Proxy Solicited by Board of Directors

The stockholder(s) hereby appoint(s) Paul Brannelly and Christopher Primiano, or any of them, as proxies, each with the power to appoint his substitute, and hereby authorized them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of KARYOPHARM THERAPEUTICS INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of stockholder(s) to be held at 10:00 AM, EST on 6/9/2014, at Wilmer Cutler Pickering Hale and Dorr LLP’s offices, 60 State Street, Boston, MA 02109 and any adjournment or postponement thereof.

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

In their discretion, the Proxies are authorized to vote upon such other business as may properly come before the meeting.

(Items to be voted appear on reverse side.)