UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

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 \Box

Check the appropriate box:

- Preliminary Proxy Statement
- □ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- ☑ Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material Pursuant to §240.14a-12

REGENXBIO 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.

- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - (1) Title of each class of securities to which transaction applies:
 - (2) Aggregate number of securities to which transaction applies:
 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
 - (4) Proposed maximum aggregate value of transaction:

(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:

| (3) | Filing | party: |
|-----|--------|--------|
| | | |

(4) Date Filed:

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REGENXBIO Inc. 9712 Medical Center Drive, Suite 100 Rockville, MD 20850

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS To Be Held On June 1, 2016

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders (the Annual Meeting) of REGENXBIO Inc., a Delaware corporation (the Company). The Annual Meeting will be held on June 1, 2016, at 9:00 a.m. local time at the Company's offices located at 9712 Medical Center Drive, Suite 100, Rockville, Maryland 20850 for the following purposes:

- *Proposal 1:* To elect Allan M. Fox and Camille Samuels to serve as Class I directors until the 2019 annual meeting of stockholders;
- *Proposal 2:* To ratify the selection by the Audit Committee of our Board of Directors of PricewaterhouseCoopers LLP as the independent registered public accounting firm of the Company for the year ending December 31, 2016; and
- To conduct any other business properly brought before the Annual Meeting or any adjournments or postponements thereof.

The record date for the Annual Meeting is April 7, 2016. Only stockholders of record at the close of business on that date may vote at the Annual Meeting or any adjournment thereof. A complete list of such stockholders will be available for examination at our offices in Rockville, Maryland during normal business hours for a period of ten days prior to the Annual Meeting.

YOUR VOTE IS IMPORTANT!

Your vote is important. Please vote by using the internet or by telephone or, if you received a paper copy of the proxy card by mail, by signing and returning the enclosed proxy card. Instructions for your voting options are described on the Notice of Internet Availability of Proxy Materials or proxy card.

Important Notice Regarding the Availability of Proxy Materials for the Stockholders Meeting to be held on June 1, 2016. The Proxy Statement and Annual Report on Form 10-K are available at <u>www.proxyvote.com</u>.

Your Board of Directors unanimously recommends you vote the proxy card "**FOR**" the Company's two director nominees, Allan M. Fox and Camille Samuels and "**FOR**" Proposal 2.

By Order of the Board of Directors,

Kenneth T. Mills President and Chief Executive Officer

Rockville, Maryland April 18, 2016

This notice of Annual Meeting and accompanying proxy statement are being distributed or made available to stockholders on or about April 18, 2016.

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REGENXBIO Inc. 9712 Medical Center Drive, Suite 100 Rockville, MD 20850

PROXY STATEMENT FOR THE 2016 ANNUAL MEETING OF STOCKHOLDERS June 1, 2016

This proxy statement and proxy card are furnished in connection with the solicitation of proxies to be voted at the 2016 Annual Meeting of Stockholders (the Annual Meeting) of REGENXBIO Inc. (sometimes referred to as we, the Company or REGENXBIO), which will be held on June 1, 2016, at 9:00 a.m. local time at the Company's offices located at 9712 Medical Center Drive, Suite 100, Rockville, Maryland 20850.

We are making this proxy statement and our Annual Report on Form 10-K available to stockholders at www.proxyvote.com. On or about April 18, 2016, we will begin mailing to certain of our stockholders a notice (the Notice) containing instructions on how to access and review this proxy statement and our Annual Report on Form 10-K at that website. The Notice also instructs you how you may submit your proxy over the internet or via telephone. If you would like to receive a printed copy of our proxy materials, you should follow the instructions for requesting those materials included in the Notice.

QUESTIONS AND ANSWERS ABOUT THIS PROXY MATERIAL AND VOTING

Why am I receiving this proxy statement and proxy card?

You have received these proxy materials because you owned shares of REGENXBIO common stock as of April 7, 2016, the record date for the Annual Meeting, and our Board of Directors is soliciting your proxy to vote at the Annual Meeting. This proxy statement describes issues on which we would like you to vote at the Annual Meeting. It also gives you information on these issues so that you can make an informed decision.

Why did I receive a Notice of Internet Availability of Proxy Materials in the mail instead of a printed set of proxy materials?

Pursuant to rules adopted by the Securities and Exchange Commission (SEC), we are permitted to furnish our proxy materials over the internet to our stockholders by delivering a Notice in the mail. As a result, only stockholders who specifically request a printed copy of the proxy statement will receive one. Instead, the Notice instructs stockholders on how to access and review the proxy statement and Annual Report on Form 10-K over the internet at www.proxyvote.com. The Notice also instructs stockholders on how they may submit their proxy over the internet or telephone. If a stockholder who received a Notice would like to receive a printed copy of our proxy materials, such stockholder should follow the instructions for requesting these materials contained in the Notice.

How may I vote at the Annual Meeting?

You are invited to attend the Annual Meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply follow the instructions below to submit your proxy via telephone or on the internet. If you received a printed set of materials, you may also vote by mail by signing, dating and returning the proxy card.

When you vote, regardless of the method used, you appoint Kenneth T. Mills and Sara Garon Berl as your representatives (or proxyholders) at the Annual Meeting. They will vote your shares at the Annual Meeting as you have instructed them or, if an issue that is not on the proxy card comes up for vote, in accordance with their best judgment. This way, your shares will be voted whether or not you attend the Annual Meeting.

Who is entitled to vote at the Annual Meeting?

Only stockholders of record at the close of business on April 7, 2016, the record date for the Annual Meeting, will be entitled to vote at the Annual Meeting. On the record date, there were 26,338,329 shares of the Company's common stock outstanding. All of these outstanding shares are entitled to vote at the Annual Meeting (one vote per share of common stock) in connection with the matters set forth in this proxy statement.

In accordance with Delaware law, a list of stockholders entitled to vote at the meeting will be available at the place of the Annual Meeting on June 1, 2016 and will be accessible for ten days prior to the meeting at our principal place of business, 9712 Medical Center Drive, Suite 100, Rockville, MD 20850, between the hours of 9:00 a.m. and 5:00 p.m. local time.

How do I vote?

If on April 7, 2016, your shares were registered directly in your name with our transfer agent, Computershare, then you are a stockholder of record. Stockholders of record may vote by using the internet, by telephone or (if you received a proxy card by mail) by mail as described below. Stockholders also may attend the meeting and vote in person. If you hold shares through a bank, broker or other nominee, please refer to your proxy card, Notice or other information forwarded by your bank, broker or other nominee to see which voting options are available to you.

- *You may vote by using the internet*. The address of the website for internet voting is www.proxyvote.com. Internet voting is available 24 hours a day and will be accessible until 11:59 p.m. Eastern Time on May 31, 2016. Easy-to-follow instructions allow you to vote your shares and confirm that your instructions have been properly recorded.
- You may vote by telephone. The toll-free telephone number is noted on the Notice and your proxy card. Telephone voting is available 24 hours a
 day and will be accessible until 11:59 p.m. Eastern Time on May 31, 2016. Easy-to-follow voice prompts allow you to vote your shares and
 confirm that your instructions have been properly recorded.
- You may vote by mail. If you received a proxy card by mail and choose to vote by mail, simply mark your proxy card, date and sign it, and return it in the postage-paid envelope.

The method you use to vote will not limit your right to vote at the Annual Meeting if you decide to attend in person. Written ballots will be passed out to anyone who wants to vote at the Annual Meeting. If you hold your shares in "street name," you must obtain a proxy, executed in your favor, from the holder of record to be able to vote in person at the Annual Meeting.

Can I change my vote after submitting my proxy?

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

- You may submit a subsequent proxy by using the internet, by telephone or by mail with a later date;
- You may deliver a written notice that you are revoking your proxy to the Corporate Secretary of the Company at 9712 Medical Center Drive, Suite 100, Rockville, MD 20850; or
- You may attend the Annual Meeting and vote your shares in person. Simply attending the Annual Meeting without affirmatively voting will not, by itself, revoke your proxy.

If you are a beneficial owner of your shares, you must contact the bank, broker or other nominee holding your shares and follow their instructions for changing your vote.

How many votes do you need to hold the Annual Meeting?

A quorum of stockholders is necessary to conduct business at the Annual Meeting. Pursuant to our amended and restated bylaws, a quorum will be present if a majority of the voting power of outstanding shares of the Company entitled to vote generally in the election of directors is represented in person or by proxy at the Annual Meeting. On the record date, there were 26,338,329 shares of common stock outstanding and entitled to vote. Thus, 13,169,165 shares must be represented by stockholders present at the Annual Meeting or represented by proxy to have a quorum.

Your shares will be counted towards the quorum only if you submit a valid proxy (or one is submitted on your behalf by your broker, bank or other nominee) or if you attend the Annual Meeting and vote in person. Abstentions and broker non-votes will be counted for the purpose of determining whether a quorum is present for the transaction of business. If a quorum is not present, the holders of a majority of the votes present at the Annual Meeting may adjourn the Annual Meeting to another date.

What proposals will be voted on at the Annual Meeting?

| | Board | | Broker Discretionary Voting |
|--|----------------|----------------|-----------------------------------|
| Proposal | Recommendation | Vote Required | Allowed |
| Proposal 1: Elect Allan M. Fox and Camille Samuels to serve as Class I directors until the 2019 annual meeting of stockholders. | FOR | Plurality | No |
| Proposal 2: Ratify the selection of PricewaterhouseCoopers LLP as our independent | FOR | Majority Votes | Yes |
| registered public accountants for the year ending December 31, 2016. | | Cast | |

Plurality means that the nominees for director receiving the greatest number of votes will be elected. Withheld votes and "broker non-votes" will have no effect on the election of a nominee.

Majority Votes Cast means that a proposal that receives an affirmative majority of the votes cast will be approved. Abstentions and broker non-votes will not be counted "**FOR**" or "**AGAINST**" this proposal and will have no effect on this proposal.

Broker Discretionary Voting occurs when a broker does not receive voting instructions from the beneficial owner and votes those shares in its discretion on any proposal on which it is permitted to vote.

How are votes counted?

Votes will be counted by the inspector of elections appointed for the meeting, who will separately count "For" and (with respect to proposals other than the election of directors) "Against" votes, abstentions and broker non-votes. Abstentions will be counted towards the vote total for each proposal, and will have the same effect as "Against" votes. Broker non-votes, as described in the next paragraph, have no effect and will not be counted towards the vote total for Proposals 1 and 2.

If your shares are held by your broker as your nominee (that is, in "street name"), you will need to obtain a proxy form from the institution that holds your shares and follow the instructions included on that form regarding how to instruct your broker to vote your shares. If you do not give instructions to your broker, your broker can vote your shares with respect to "discretionary" items, but not with respect to "non-discretionary" items. Discretionary items are proposals considered routine under the rules on which your broker may vote shares held in street name without your voting instructions. On non-discretionary items for which you do not give your broker instructions, the shares will be treated as broker non-votes. Under current broker voting rules, any election of a member of the Board of Directors, whether contested or uncontested, is considered "non-discretionary" and

therefore brokers are not permitted to vote your shares held in street name for the election of directors in the absence of instructions from you. Proposal 1 is "non-discretionary" and therefore if you hold your shares through a broker, bank or other agent, your shares will not be voted on Proposal 1 unless you provide voting instructions to the record holder.

Could other matters be decided at the Annual Meeting?

REGENXBIO does not know of any other matters that may be presented for action at the Annual Meeting. Should any other business come before the Annual Meeting, the persons named on the proxy card will have discretionary authority to vote the shares represented by proxies in accordance with their best judgment. If you hold shares through a broker, bank or other nominee as described above, they will not be able to vote your shares on any other business that comes before the Annual Meeting unless they receive instructions from you with respect to such other business.

What happens if a director nominee is unable to stand for election?

If a nominee is unable to stand for election, our Board of Directors may either:

- reduce the number of directors that serve on the board; or
- designate a substitute nominee.

If our Board of Directors designates a substitute nominee, shares represented by proxies voted for the nominee who is unable to stand for election will be voted for the substitute nominee.

What happens if I sign and return my proxy card but do not provide voting instructions?

If you return a signed and dated proxy card without marking any voting selections, your shares will be voted:

- **Proposal 1:** "FOR" the election of each of Allan M. Fox and Camille Samuels as Class I directors to serve a term of three years until our 2019 annual meeting of stockholders;
- *Proposal 2: "FOR"* the ratification of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the year ending December 31, 2016; and
- If any other matter is properly presented at the Annual Meeting, the proxyholders for shares voted on the proxy card (i.e. one of the individuals named as proxies on your proxy card) will vote your shares using their best judgment.

What do I need to show to attend the Annual Meeting in person?

You will need proof of your share ownership (such as a recent brokerage statement or letter from your broker showing that you owned shares of our common stock as of April 7, 2016) and a form of photo identification. If you do not have proof of ownership and valid photo identification, you may not be admitted to the Annual Meeting. All bags, briefcases and packages will be held at registration and will not be allowed in the meeting. We will not permit the use of cameras (including cell phones and other devices with photographic capabilities) and other recording devices in the meeting room.

Who is paying for this proxy solicitation?

The accompanying proxy is being solicited by the Board of Directors of the Company. In addition to this solicitation, directors and employees of the Company may solicit proxies in person, by telephone, or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting

proxies. In addition, the Company may also retain one or more third parties to aid in the solicitation of brokers, banks and institutional and other stockholders. We will pay for the entire cost of soliciting proxies. We may reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What happens if the Annual Meeting is postponed or adjourned?

Unless the polls have closed or you have revoked your proxy, your proxy will still be in effect and may be voted once the Annual Meeting is reconvened. However, you will still be able to change or revoke your proxy with respect to any proposal until the polls have closed for voting on such proposal.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results are expected to be announced at the Annual Meeting. Final voting results will be reported on a Current Report on Form 8-K filed with the SEC no later than the fourth business day after the Annual Meeting, or June 7, 2016.

How can I find REGENXBIO's proxy materials and Annual Report on the Internet?

This proxy statement and the Annual Report on Form 10-K for the year ended December 31, 2015 are available at our corporate website at www.regenxbio.com. You also can obtain copies without charge at the SEC's website at www.sec.gov. Additionally, in accordance with SEC rules, you may access these materials at www.proxyvote.com, which does not have "cookies" that identify visitors to the site.

How do I obtain a separate set of REGENXBIO's proxy materials if I share an address with other stockholders?

In some cases, stockholders holding their shares in a brokerage or bank account who share the same surname and address receive only one copy of the Notice. This practice, called "housekeeping," is designed to reduce duplicate mailings and save printing and postage costs as well as natural resources. If you would like to have a separate copy of the Notice or our Annual Report on Form 10-K and/or proxy statement mailed to you or to receive separate copies of future mailings, please submit your request to the address or phone number that appears on your Notice or proxy card. We will deliver such additional copies promptly upon receipt of such request.

In other cases, stockholders receiving multiple copies at the same address may wish to receive only one. If you would like to receive only one copy if you now receive more than one, please submit your request to the address or phone number that appears on your Notice or proxy card.

Can I receive future proxy materials and annual reports electronically?

Yes. This proxy statement and the Annual Report on Form 10-K for the year ended December 31, 2015 are available on our investor relations website located at http://ir.regenxbio.com. Instead of receiving paper copies in the mail, stockholders can elect to receive an email that provides a link to our future annual reports and proxy materials on the internet. Opting to receive your proxy materials electronically will save us the cost of producing and mailing documents to your home or business, will reduce the environmental impact of our annual meetings and will give you an automatic link to the proxy voting site.

May I propose actions for consideration at next year's annual meeting or nominate individuals to serve as directors?

Yes. The following requirements apply to stockholder proposals, including director nominations, for the 2017 annual meeting of stockholders.

Requirements for Stockholder Proposals to be Considered for Inclusion in REGENXBIO's Proxy Materials:

Stockholders interested in submitting a proposal (other than the nomination of directors) for inclusion in the proxy materials to be distributed by us for the 2017 annual meeting of stockholders may do so by following the procedures prescribed in Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the Exchange Act). To be eligible for inclusion in REGENXBIO's proxy materials, stockholder proposals must be received at our principal executive offices no later than the close of business on December 19, 2016 which is the 120th day prior to the first anniversary of the date that we released this proxy statement to our stockholders for the Annual Meeting. To be included in our proxy materials, your proposal also must comply with the Company's amended and restated bylaws and Rule 14a-8 promulgated under the Exchange Act regarding the inclusion of stockholder proposals in company-sponsored proxy materials. If we change the date of the 2017 annual meeting of stockholders by more than 30 days from the anniversary of this year's Annual Meeting, stockholder proposals must be received a reasonable time before we begin to print and mail our proxy materials for the 2017 annual meeting of stockholders. Proposals should be sent to REGENXBIO Inc., 9712 Medical Center Drive, Suite 100, Rockville, MD 20850, Attn: Corporate Secretary.

Requirements for Stockholder Nomination of Director Candidates and Stockholder Proposals Not Intended for Inclusion in REGENXBIO's Proxy Materials:

Stockholders who wish to nominate persons for election to the Board of Directors at the 2017 annual meeting of stockholders or who wish to present a proposal at the 2017 annual meeting of stockholders, but who do not intend for such proposal to be included in REGENXBIO's proxy materials for such meeting, must deliver written notice of the nomination or proposal to our Corporate Secretary at 9712 Medical Center Drive, Suite 100, Rockville, MD 20850 no earlier than February 1, 2017 and no later than March 3, 2017. However, if the 2017 annual meeting of stockholders is held earlier than May 2, 2017 or later than July 1, 2017, nominations and proposals must be received no later than the close of business on the later of (a) the 90th day prior to the 2017 annual meeting of stockholders and (b) the 10th day following the day we first publicly announce the date of the 2017 annual meeting. The stockholder's written notice must include certain information concerning the stockholder and each nominee and proposal, as specified in our amended and restated bylaws.

Copy of Amended and Restated Bylaws:

You may request a copy of the Company's amended and restated bylaws at no charge by writing to REGENXBIO's Corporate Secretary at 9712 Medical Center Drive, Suite 100, Rockville, MD 20850.

Whom should I call if I have any questions?

If you have any questions, would like additional REGENXBIO proxy materials or proxy cards, or need assistance in voting your shares, please contact Investor Relations, REGENXBIO Inc., 9712 Medical Center Drive, Suite 100, Rockville, MD 20850 or by telephone at (240) 552-8181.

Important Notice Regarding the Availability of Proxy Materials for the Meeting to be Held on Wednesday, June 1, 2016

This proxy statement and our Annual Report on Form 10-K are available on-line at *www.proxyvote.com*.

PROPOSAL 1

ELECTION OF ALLAN M. FOX AND CAMILLE SAMUELS AS CLASS I DIRECTORS

Under our amended and restated bylaws, our Board of Directors is divided into three classes of roughly equal size. The members of each class are elected to serve a 3-year term with the term of office of each of the three classes ending in successive years. Pursuant to our amended and restated bylaws, the Board of Directors has fixed the current number of directors at eight, but the number of directors will be seven following the expiration of Edgar G. Engleman, M.D., S term at the Annual Meeting. Edgar G. Engleman, M.D., Allan M. Fox and Camille Samuels are the three Class I directors whose terms expire at this Annual Meeting. On March 1, 2016, Dr. Engleman informed the Board of Directors that he would not stand for re-election at the Annual Meeting. Mr. Fox and Ms. Samuels have been nominated for election by our Board of Directors to serve until the 2019 annual meeting of stockholders or until their successors are elected (or until their earlier death, resignation or removal). It is our policy to encourage nominees for director to attend the Annual Meeting.

Directors are elected by a plurality of the votes cast at the Annual Meeting. The two nominees receiving the highest number of "**FOR**" votes will be elected. Abstentions and broker non-votes will have no effect on the outcome of the election of directors at the Annual Meeting.

Shares represented by signed proxy cards will be voted on Proposal 1 "**FOR**" the election of Mr. Fox and Ms. Samuels to the Board of Directors at the Annual Meeting, unless otherwise marked on the card. If any REGENXBIO director nominee becomes unavailable for election as a result of an unexpected occurrence, shares represented by proxy will be voted for the election of a substitute nominee designated by our current Board of Directors, unless otherwise marked on the card. Mr. Fox and Ms. Samuels, REGENXBIO's two director nominees, have each agreed to serve as a director if elected. We have no reason to believe that either of the REGENXBIO nominees will be unable to serve if elected.

Nominees for Election as Class I Directors at the Annual Meeting

This year's nominees for election to the Board of Directors as our Class I directors to serve for a term of three years expiring at the 2019 annual meeting of stockholders, or until their successors have been duly elected and qualified or until their earlier death, resignation or removal, are provided below. The age of each director as of April 18, 2016 is set forth below.

| Name | Age | Positions and Offices Held with Company | Director Since |
|-----------------|-----|---|----------------|
| Allan M. Fox | 68 | Director | 2009 |
| Camille Samuels | 44 | Director | 2015 |

The following is additional information about each of the nominees as of the date of this proxy statement, including their business experience, public company director positions held currently or at any time during the last five years, involvement in certain legal or administrative proceedings, if applicable, and the experiences, qualifications, attributes or skills that caused the Nominating and Corporate Governance Committee and our Board of Directors to determine that the nominees should serve as one of our directors.

Allan M. Fox has been a Director since February 2009. Mr. Fox is the founding partner of FoxKiser, a nationally recognized firm committed to the strategic development of transformative innovations from biomedical research, which was formed in September 1986. Mr. Fox specializes in identifying business opportunities and improving competitive market positions. He has participated in the formation and development of numerous ventures in the public and private sectors. Before forming FoxKiser, Mr. Fox co-led the establishment of the Washington office of the law firm of Kaye Scholer. While in the public sector, Mr. Fox served as Chief of Staff and Chief Legislative Assistant to U.S. Senator Jacob K. Javits of New York. He also served as Chief Counsel to the United States Senate Health and Scientific Research Subcommittee, chaired by Senator Edward M. Kennedy. Mr. Fox was a Fellow in Law, Science and Medicine at Yale Law School where he received an LL.M. degree. Mr. Fox also holds a J.D. and B.A. from Temple University. Mr. Fox has specific

attributes that qualify him to serve as a member of our Board of Directors, including his experience in the biotechnology sector and FDA consulting, as well as his prior service on private company boards.

Camille Samuels has been a Director since January 2015. Ms. Samuels has been a Partner at Venrock, a venture capital firm, since May 2014. Prior to Venrock, Ms. Samuels spent over a decade as a Managing Director at Versant Ventures, a life sciences venture capital firm, which she joined in 2000 and for which she provided services through March 2014. Ms. Samuels currently serves on the board of Spirox Corporation and Unity Biosciences, Inc. She previously served as a board member or a board observer on other healthcare companies including Achaogen, Inc., Fluidigm Sciences Inc., Genomic Health, Inc., Novacardia, Inc. (acquired by Merck & Co., Inc.), ParAllele BioScience, Inc. (acquired by Affymetrix Inc.), and Syrrx Inc. (acquired by Takeda Pharmaceutical Co.). Prior to her venture career, Ms. Samuels held business development and strategic marketing roles at Tularik Inc. (acquired by Amgen Inc.) and Genzyme Corporation (acquired by Sanofi-Aventis SA). She also worked as a management consultant to consumer, healthcare and biotech companies at LEK Consulting. Ms. Samuels holds a B.A. in Biology from Duke University and an M.B.A. from Harvard Business School. Ms. Samuels has specific attributes that qualify her to serve as a member of our Board of Directors, including her experience in venture capital investing and in the biotechnology sector, as well as her prior service on public and private company boards and audit committees.

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE THE PROXY CARD "FOR" THE ELECTION OF ALLAN M. FOX AND CAMILLE SAMUELS AS CLASS I DIRECTORS

Continuing Directors Not Standing for Election

Certain information about those directors whose terms do not expire at the Annual Meeting is furnished below, including their business experience, public company director positions held currently or at any time during the last five years, involvement in certain legal or administrative proceedings, if applicable, and the experiences, qualifications, attributes or skills that caused the Nominating and Corporate Governance Committee and our Board of Directors to determine that the directors should serve as one of our directors. The age of each director as of April 18, 2016 is set forth below.

| Name | Age | Positions and Offices Held with Company | Director Since |
|-------------------------------|-----|---|----------------|
| Kenneth T. Mills | 41 | President, Chief Executive Officer and Director | 2009 |
| Donald J. Hayden, Jr. | 60 | Director, Chairman of the Board | 2013 |
| Luke M. Beshar | 57 | Director | 2015 |
| A.N. "Jerry" Karabelas, Ph.D. | 63 | Director | 2015 |
| David C. Stump, M.D. | 66 | Director | 2015 |

Class II Directors (Terms Expire in 2017)

Donald J. Hayden, Jr. has been a Director and Chairman of our Board of Directors since February 2013. From 1991 to 2006, Mr. Hayden held several executive positions with Bristol-Myers Squibb Company, most recently serving as Executive Vice President and President, Americas. Mr. Hayden is currently a member and chairman of the Board of Directors of Insmed Incorporated and Vitae Pharmaceuticals Inc. He is also lead independent director at Amicus Therapeutics, Inc., a member of the Board of Directors at Otsuka America Pharmaceutical, Inc., and serves as a senior advisor to Prospect Venture Partners, a leading life sciences venture capital firm. Mr. Hayden served as a director of Dimension Therapeutics, Inc. from October 2013 to July 2015. Mr. Hayden holds a B.A. from Harvard University and an M.B.A. from Indiana University. Mr. Hayden has specific attributes that qualify him to serve as a member of our Board of Directors, including his experience in the biotechnology and pharmaceutical industries, as well as his prior service on public and private company boards and his executive-level service at a number of public and private companies.

A.N. "Jerry" Karabelas, Ph.D. has been a Director since May 2015. Since December 2001, Mr. Karabelas has been a managing member at Care Capital II, LLC and Care Capital III, LLC (Care Capital), a provider of capital for entrepreneurial private and public companies developing pharmaceuticals. Prior to his work at Care Capital, from July 2000 to September 2001, Mr. Karabelas was Chairman at Novartis BioVentures, which is owned by Novartis AG (Novartis), a provider of capital for life sciences companies across the biotech, medical devices and diagnostics industries, prior to which Mr. Karabelas was the Chief Executive Officer of Novartis Pharma AG, which is owned by Novartis. In connection with his work at Care Capital, Mr. Karabelas has served on numerous boards of directors of pharmaceutical and therapeutics companies, including Renovo, plc, Vanda Pharmaceuticals, Inc. and NitroMed, Inc. Since June 2013, Mr. Karabelas has served as Chairman of Polyphor AG. Mr. Karabelas also served as a member of the boards of directors of SkyePharma, plc from May 2001 to May 2009 and Human Genome Sciences. Mr. Karabelas received a B.S. from the University of New Hampshire and a Ph.D. from the Massachusetts College of Pharmacy. Mr. Karabelas has specific attributes that qualify him to serve as a member of our Board of Directors, including his extensive experience in working with publicly held pharmaceuticals companies, advising developing life sciences, therapeutics and pharmaceuticals companies and his executive leadership, managerial and business experience.

Class III Directors (Terms Expire in 2018)

Luke M. Beshar has been a Director since April 2015. Mr. Beshar was the Executive/Senior Vice President and Chief Financial Officer of NPS Pharmaceuticals, Inc., a global biopharmaceutical company from November 2007 to February 2015. He is a former Chief Financial Officer of various public and private companies and has more than 30 years of general and financial management experience. Mr. Beshar served as Executive Vice President and Chief Financial Officer of Cambrex Corporation from December 2002 to November 2007, a global life sciences company, and previously as Senior Vice President and Chief Financial Officer at Dendrite International, a leading provider of services to the life sciences industry. Mr. Beshar began his career with Arthur Andersen & Co. in 1980 and is a Certified Public Accountant. Mr. Beshar is a Director of Trillium Therapeutics, Inc. and Chair of its Audit Committee, a Director and member of the Audit Committee of Sancilio Pharmaceuticals Company, Inc., and a Director of EnteraBio Ltd. Mr. Beshar holds a B.S. degree in Accounting and Finance from Michigan State University and is a graduate of The Executive Program at the Darden Graduate School of Business at the University of Virginia. Mr. Beshar has specific attributes that qualify him to serve as a member of our Board of Directors, including his experience in the biotechnology and medical industries, his financial and accounting expertise, as well as his prior service on public and private company boards.

Kenneth T. Mills has been our President, Chief Executive Officer and Director since March 2009. Mr. Mills was with FoxKiser, most recently as a partner, from January 2007 to January 2015. Mr. Mills was previously the Chief Financial Officer and Vice President of Business Development at Meso Scale Diagnostics, a privately-held life sciences company from January 2004 to December 2006 and was part of the original management team that established the company's operations and financing strategy. From March 1997 to December 2003, Mr. Mills was employed at IGEN International, a medical diagnostics company, where he served as Director of Business Development up through the company's acquisition by Roche. Mr. Mills received an S.B. in Chemistry from the Massachusetts Institute of Technology. We believe that Mr. Mills' qualifications to serve as a director of our company include his extensive experience as an executive in the gene therapy and biotechnology industries and his prior service as a senior-level executive in both early stage and mature biotechnology companies.

David C. Stump, M.D. has been a Director since October 2015. From November 1999 to December 2012, Dr. Stump was with Human Genome Sciences, Inc., as Executive Vice President, Research and Development from May 2007 to December 2012, Executive Vice President, Drug Development from December 2003 to May 2007 and Senior Vice President, Drug Development from November 1999 to December 2003. Prior to joining Human Genome Sciences, Dr. Stump held roles of increasing responsibility at Genentech, Inc., a biopharmaceutical company, from 1989 to 1999, including Vice President, Clinical Research and Genentech Fellow. Prior to joining Genentech, Dr. Stump was an Associate Professor of Medicine and Biochemistry at the University of Vermont. Dr. Stump is a member of the board of directors of Sunesis Pharmaceuticals, Inc.,

MacroGenics, Inc. and Portola Pharmaceuticals, Inc. and a member of the board of trustees of Earlham College. Dr. Stump previously served on the board of directors of Dendreon Corporation. Dr. Stump holds an A.B. from Earlham College and an M.D. from Indiana University and did his residency and fellowship training in internal medicine, hematology, oncology and biochemistry at the University of Iowa. Dr. Stump has specific attributes that qualify him to serve as a member of our Board of Directors, including his scientific and clinical expertise and industry background, as well as his prior service on company boards.

CORPORATE GOVERNANCE

Independence of the Board of Directors

As required under NASDAQ listing standards, a majority of the members of a listed company's board of directors must qualify as "independent," as affirmatively determined by the board of directors. Consistent with these regulations, after review of all relevant transactions or relationships between each director, or any of his family members, and the Company, its senior management and its independent registered public accounting firm, the Board of Directors has determined that all of our directors are independent directors within the meaning of applicable NASDAQ listing standards, except for Mr. Mills, our Chief Executive Officer, Allan M. Fox and Donald J. Hayden, Jr. Our Board of Directors currently expects that Donald Hayden, Jr. will qualify as an independent director in accordance with the rules of NASDAQ commencing during the fourth quarter of 2016.

Information Regarding the Board of Directors and its Committees

As required under NASDAQ listing standards, our independent directors meet in regularly scheduled executive sessions at which only independent directors are present, noting that we have relied on Nasdaq Marketplace Rule 5615(b)(1), a "phase-in" rule for companies following their initial public offerings, in allowing Donald J. Hayden, Jr., Chairman of the Board of Directors, to be present and preside over these executive sessions.

Our Board of Directors has an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The following table provides membership and meeting information for each of the Board committees during 2015:

| Committee | Chairman | Members | Number of Committee Meetings in 2015 |
|-------------------------------------|-------------------------------|-----------------------------------|---|
| Audit Committee ⁽¹⁾ | Luke M. Beshar | David C. Stump, M.D. and Camille | 4 |
| | | Samuels | |
| Compensation Committee | Donald J. Hayden, Jr. | Luke M. Beshar and Camille | 3 |
| | | Samuels | |
| Nominating and Corporate | A.N. "Jerry" Karabelas, Ph.D. | Edgar G. Engleman, M.D. and David | 2 |
| Governance Committee ⁽²⁾ | | C. Stump, M.D. | |

(1) Effective October 14, 2015, Dr. Stump became a member of the Audit Committee and Mr. Hayden resigned as member of the Audit Committee.

(2) Effective October 14, 2015, Dr. Stump became a member of the Nominating and Corporate Governance Committee.

Below is a description of each committee of the Board of Directors. The Board of Directors has determined that each member of the Audit, Compensation and Nominating and Corporate Governance Committees meets applicable rules and regulations regarding "independence" and that each such member is free of any relationship that would interfere with his individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of the Board of Directors oversees the quality and integrity of the Company's financial statements and other financial information provided to the Company's stockholders, the retention and performance of the Company's independent accountants, the effectiveness of the Company's internal controls and disclosure controls, and the Company's compliance with ethics policies and SEC and related regulatory requirements. Pursuant to the Audit Committee charter, the functions of the Audit Committee include, among other things: (1) appointing, approving the compensation of, and assessing the independence of our registered public accounting firm; (2) overseeing the work of our registered public accounting firm, including through the

receipt and consideration of reports from such firm; (3) reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures; (4) monitoring our internal control over financial reporting and our disclosure controls and procedures; (5) meeting independently with our registered public accounting firm and management; (6) furnishing the audit committee report required by SEC rules; (7) reviewing and approving or ratifying any related person transactions; and (8) overseeing our risk assessment and risk management policies. Our Audit Committee charter can be found in the corporate governance section of our corporate website at www.regenxbio.com.

Three directors comprised the Audit Committee as of December 31, 2015: Mr. Beshar (the Chairman of the Audit Committee), Dr. Stump and Ms. Samuels. The Audit Committee met four times during 2015. Effective October 14, 2015, Dr. Stump became a member of the Audit Committee and Mr. Hayden resigned as a member of the Audit Committee.

All members of our Audit Committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and NASDAQ. Our Board of Directors has determined that Mr. Beshar is an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable NASDAQ rules and regulations.

The Board of Directors annually reviews the NASDAQ listing standards definition of independence for Audit Committee members and has determined that all members of our Audit Committee are independent (as independence is currently defined in applicable NASDAQ listing standards and Rule 10A-3 promulgated under the Exchange Act).

Compensation Committee

The Compensation Committee of the Board of Directors reviews and approves the design of, assesses the effectiveness of, and administers executive compensation programs for officers and employees, including our equity incentive plans. Pursuant to the Compensation Committee charter, the functions of the Compensation Committee include: (1) evaluating the performance of our chief executive officer and determining the chief executive officer's salary and contingent compensation based on his or her performance and other relevant criteria; (2) identifying the corporate and individual objectives governing the chief executive officer's compensation; (3) approving the compensation of our other executive officers; (4) making recommendations to our board with respect to director compensation; (5) reviewing and approving the terms of material agreements between us and our executive officers; (6) overseeing and administering our equity incentive plans and employee benefit plans; (7) reviewing and approving policies and procedures relating to the perquisites and expense accounts of our executive officers; (8) preparing the annual Compensation Committee report required by SEC rules; and (9) conducting a review of executive officer succession planning, as necessary, reporting its findings and recommendations to our Board of Directors, and working with the Board in evaluating potential successors to executive officer positions. In accordance with NASDAQ listing standards and our amended and restated Compensation Committee charter, our Board of Directors has granted our Compensation Committee the authority and responsibility to retain or obtain the advice of compensation consultants, legal counsel and other compensation advisers, the authority to fund such advisers, and the responsibility to consider the independence factors specified under applicable law and any additional factors the Compensation Committee deems relevant. Our Compensation Committee charter can be found in the corporate governance section of our website at www.r

Three directors comprised the Compensation Committee of the Board of Directors as of December 31, 2015: Mr. Hayden (the Chairman of the Compensation Committee), Mr. Beshar and Ms. Samuels. The Compensation Committee met three times during 2015.

The Board of Directors has determined that all members of the Compensation Committee are independent (as independence is currently defined in the NASDAQ listing standards) other than Mr. Hayden. However, we

are permitted to phase-in our compliance with the independent compensation committee requirements set forth in the rules of NASDAQ and the Exchange Act, which would require the compensation committee to be compromised of all independent members within one year of listing. We expect that, within one year of our listing on NASDAQ, Mr. Hayden will have resigned from our compensation committee. At such time, we may appoint an independent director (as determined under the listing standards of NASDAQ and Exchange Act rules) to our compensation committee or have two directors serve on the committee. Our Board of Directors currently expects that Mr. Hayden will qualify as an independent director in accordance with the rules of NASDAQ commencing during the fourth quarter of 2016. In addition, each of our directors serving on our Compensation Committee satisfies the heightened independence standards for members of a compensation committee under NASDAQ listing standards, each member of this committee is a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended (the Code).

Our Chief Executive Officer often participates in the Compensation Committee's meetings. He does not participate in the determination of his own compensation or the compensation of directors. However, Mr. Mills does make recommendations to the Compensation Committee regarding the amount and form of the compensation of the other executive officers and key employees, and he often participates in the Compensation Committee's deliberations about their compensation. No other executive officers participate in the determination of the amount or form of the compensation of executive officers or directors.

The Compensation Committee has retained Radford, a compensation consulting firm, since May 2015. In February 2016, Radford presented a new executive compensation report to the Compensation Committee. Radford provided the Compensation Committee with data about the compensation paid by our peer group of companies and other employers who compete with the Company for executives, updated the Compensation Committee on new developments in areas that fall within the Compensation Committee's jurisdiction and was available to advise the Compensation Committee regarding all of its responsibilities. The consultant serves at the pleasure of the Compensation Committee rather than the Company, and the consultant's fees are approved by the Compensation Committee. In February 2016, our Compensation Committee assessed the independence of Radford pursuant to applicable SEC rules and NASDAQ listing standards and concluded that the work of Radford has not raised any conflict of interest.

Compensation Committee Interlocks and Insider Participation

None of the members of the Compensation Committee is or has ever been an officer or employee of the Company. No executive officer of the Company serves as a member of the Board of Directors or compensation committee of any other entity that has one or more executive officers serving as a member of our Board of Directors or our Compensation Committee.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee identifies, evaluates and recommends nominees to our Board of Directors and committees of our Board of Directors, conducts searches for appropriate directors, and evaluates the performance of our Board of Directors and of individual directors. Pursuant to the Nominating and Corporate Governance Committee charter, the functions of the Nominating and Corporate Governance Committee include, among other things: (1) identifying, evaluating, and making recommendations to our Board of Directors and our stockholders concerning nominees for election to our board, to each of the board's committees and as committee chairs; (2) annually reviewing the performance and effectiveness of our board and developing and overseeing a performance evaluation process; (3) annually evaluating the performance of management, the board and each board committee against their duties and responsibilities relating to corporate governance; (4) annually evaluating adequacy of our corporate governance structure, policies, and procedures; and (5) providing reports to our board regarding the committee's nominations for election to the Board of Directors and its committees. Our Nominating and Corporate Governance Committee charter can be found in the corporate governance section of our website at www.regenxbio.com.

Three directors comprised the Nominating and Corporate Governance Committee as of December 31, 2015: Dr. Karabelas (the Chairman of the Nominating and Corporate Governance Committee), Dr. Engleman and Dr. Stump. Dr. Engleman has informed the Board of Directors that he will not stand for re-election and his term will expire on June 1, 2016 at the Annual Meeting. Following such time, the Nominating and Corporate Governance Committee will be comprised of two directors. The Nominating and Corporate Governance Committee met two times during 2015.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including being able to read and understand basic financial statements and having a general understanding of the Company's industry. The Nominating and Corporate Governance Committee also considers other factors it deems appropriate, including, but not limited to:

- the candidate's relevant expertise and experience upon which to offer advice and guidance to management;
- the candidate having sufficient time to devote to the affairs of the Company;
- the candidate having a proven track record in his or her field;
- the candidate's ability to exercise sound business judgment;
- the candidate's commitment to vigorously represent the long-term interests of our stockholders;
- whether or not a conflict of interest exists between the candidate and our business;
- whether the candidate would be considered independent under applicable NASDAQ and SEC standards;
- the current composition of the Board of Directors; and
- the operating requirements of the Company.

In conducting this assessment, the committee considers diversity, age, skills, and such other factors as it deems appropriate given the then-current needs of the Board of Directors and the Company, to maintain a balance of knowledge, experience and capability. While diversity and variety of experiences and viewpoints represented on the Board of Directors should always be considered, the Nominating and Corporate Governance Committee believes that a director nominee should not be chosen nor excluded solely or largely because of race, color, gender, national origin or sexual orientation or identity.

In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews such directors' overall service to the Company during their term, including the number of meetings attended, level of participation, quality of performance, and any other relationships and transactions that might impair such directors' independence.

When there is a vacancy on the Board of Directors, the Nominating and Corporate Governance Committee uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems it appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board of Directors. The Nominating and Corporate Governance Committee meets to discuss and consider such candidates' qualifications and then selects a nominee for recommendation to the Board of Directors by majority vote.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders and evaluate them using the same criteria as candidates identified by the Board of Directors or the Nominating and Corporate Governance Committee for consideration. If a stockholder of the Company wishes to recommend a director candidate for consideration by the Nominating and Corporate Governance Committee, the

stockholder recommendation should be delivered to the Corporate Secretary of the Company at the principal executive offices of the Company pursuant to the terms and conditions of our amended and restated bylaws. The stockholder recommendation must, among other things, set forth:

- for each person whom the stockholder proposes to nominate for election or reelection as a director all information relating to such person as would be required to be disclosed in solicitations of proxies for the election of such nominees as directors pursuant to Regulation 14A under the Exchange Act, and such person's written consent to serve as a director if elected;
- as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (1) the name and address of such stockholder, as they appear on the Company's books, and of such beneficial owner; (2) the class and number of shares of the Company that are owned beneficially and of record by such stockholder and such beneficial owner and a representation that the stockholder will notify the Company in writing of the class and number of such shares owned beneficially and of record as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed; (3) whether either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of, in the case of a proposal, at least the percentage of the Company's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the Company's voting shares to elect such nominee or nominees; and (4) whether and the extent to which any derivative instrument, swap, option, warrant, short interest, hedge or profit interest or other transaction has been entered into by or on behalf of such stockholder with respect to stock of the Company and whether any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares of stock) has been made by or on behalf of such stockholder, the effect or intent of any of the foregoing being to mitigate loss to, or to manage risk of stock price changes for, such stockholder or to increase or decrease the voting power or pecuniary or economic interest of such stockholder with respect to stock of the Company;
- any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement
 payment or mechanism at a price related to any class or series of shares of the Company or with a value derived in whole or in part from the
 value of any class or series of shares of the Company, whether or not such instrument or right shall be subject to settlement in the underlying class
 or series of capital stock of the Company or otherwise (a Derivative Instrument) directly or indirectly owned beneficially by such stockholder and
 any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of the
 Company and a representation that the stockholder will notify the Company in writing of any such Derivative Instrument in effect as of the record
 date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed;
- a description of any agreement, arrangement or understanding with respect to the proposal of business between or among such stockholder and the beneficial owner, if any, on whose behalf the proposal is made, any of their respective affiliates or associates, and any others acting in concert with any of the foregoing and a representation that the stockholder will notify the Company in writing of any such agreements, arrangements or understandings in effect as of the record date for the meeting promptly following the later of the record date or the date notice of the record date is first publicly disclosed;
- a representation that the stockholder is a holder of record of stock of the Company entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to propose such business; and
- any other information that is required to be provided by the stockholder pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder in such stockholder's capacity as a proponent of a stockholder proposal.

In addition, our amended and restated bylaws require that the stockholder recommendation shall set forth as to each person whom the stockholder proposes to nominate for election or reelection as a director (1) the name, age, business address and residence address of the person; (2) the principal occupation or employment of the

person; (3) the class, series and number of shares of capital stock of the Company that are owned beneficially and of record by the person; (4) a statement as to the person's citizenship; (5) the completed and signed representation and agreement described above; (6) any other information relating to the person that is required to be disclosed in solicitations for proxies for election of directors pursuant to Section 14 of the Exchange Act; (7) such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected; and (8) whether and the extent to which any derivative instrument, swap, option, warrant, short interest, hedge or profit interest or other transaction has been entered into by or on behalf of such person with respect to stock of the Company and whether any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares of stock) has been made by or on behalf of such person, the effect or intent of any of the foregoing being to mitigate loss to, or to manage risk of stock price changes for, such person or to increase or decrease the voting power or pecuniary or economic interest of such person with respect to stock of the Company.

We believe that each of our directors and nominees brings a strong background and set of skills to our Board of Directors, giving the Board of Directors, as a whole, an appropriate balance of the knowledge, experience, attributes, skills and expertise. In addition, four of our seven continuing directors are independent under NASDAQ standards (Mr. Mills, our Chief Executive Officer, Allan M. Fox and Donald J. Hayden, Jr. being the exceptions) and our Nominating and Corporate Governance Committee believes that all seven continuing directors are independent of the influence of any particular stockholder or group of stockholders whose interests may diverge from the interests of our stockholders as a whole. We believe that our directors have a broad range of personal characteristics including leadership, management, pharmaceutical, gene therapy business, marketing and financial experience and abilities to act with integrity, with sound judgment and collegially, to consider strategic proposals, to assist with the development of our strategic plan and oversee its implementation, to oversee our risk management efforts and executive compensation and to provide leadership, to commit the requisite time for preparation and attendance at board and committee meetings and to provide required expertise on our board committees. As described above, the Nominating and Corporate Governance Committee recommends new members of our Board of Directors for their directorships. In evaluating such directors, our Nominating and Corporate Governance Committee has reviewed the experience, qualifications, attributes and skills of our directors and nominees, including those identified in the biographical information set forth above in the section entitled "Election of Directors." The Nominating and Corporate Governance Committee believes that the members of our Board of Directors offer insightful and creative views and solutions with respect to issues facing the Company. In addition, the Nominating and Corporate Governance Committee also believes that the members of our Board of Directors function well together as a group. The Nominating and Corporate Governance Committee believes that the above-mentioned attributes and gualifications, along with the leadership skills and other experiences of the members of the Board of Directors described in further detail above under the section entitled "Election of Directors," provide the Company with the perspectives and judgment necessary to guide the Company's strategies and monitor their execution.

Disclosure Committee and Committee Charter

We have a Disclosure Committee and Disclosure Committee charter. Our Disclosure Committee is comprised of our Chief Executive Officer; Chief Financial Officer; Chief Medical Officer; General Counsel; and certain other senior-level executive officers. Our General Counsel serves as the chair of the Disclosure Committee. The purpose of the Disclosure Committee is to provide assistance to the Chief Executive Officer and the Chief Financial Officer in fulfilling their responsibilities regarding the identification and disclosure of material information about us, and the accuracy, completeness and timeliness of our financial reports. Our Disclosure Committee meets at least once per quarter.

Separation of CEO and Chairman of the Board Roles

Our Board of Directors separates the positions of Chairman of the Board and Chief Executive Officer. Separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while

allowing the Chairman of the Board to lead the Board of Directors in its fundamental role of providing advice to and independent oversight of management. The Board of Directors recognizes the time, effort, and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our Chairman of the Board, particularly as the Board of Directors' oversight responsibilities continue to grow. We believe that having separate positions and having an outside director serve as Chairman of the Board is the appropriate leadership structure for the Company at this time.

Meetings of the Board of Directors

Our Board of Directors met 13 times during 2015. Each director attended 75% or more of the aggregate of the meetings of the Board of Directors and of the committees on which he or she served, held during the period for which he was a director or committee member.

Director Attendance at Annual Meetings of Stockholders

Directors are encouraged, but not required, to attend our annual stockholder meetings.

Stockholder Communications with the Board of Directors

Stockholders may communicate with the Board of Directors, including the independent members of the Board of Directors, by sending a letter to the Corporate Secretary, REGENXBIO Inc., 9712 Medical Center Drive, Suite 100, Rockville, MD 20850. Each such communication should set forth (1) the name and address of such stockholder, as they appear on the Company's books and, if the shares of the Company's stock are held by a nominee, the name and address of the beneficial owner of such shares, and (2) the number of shares of the Company's stock that are owned of record by such record holder and beneficially by such beneficial owner. The Corporate Secretary will review all communications from stockholders, but may, in her sole discretion, disregard any communication that she believes is not related to the duties and responsibilities of the Board of Directors, or a particular director, as appropriate.

Code of Business Conduct

We have adopted a code of business conduct that applies to each of our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller and persons performing similar functions. The code addresses various topics, including: (1) compliance with applicable laws, rules and regulations; (2) conflicts of interest; (3) public disclosure of information; (4) insider trading; (5) corporate opportunities; (6) competition and fair dealing; (7) gifts; (8) discrimination, harassment and retaliation; (9) health and safety; (10) record-keeping; (11) confidentiality; (12) protection and proper use of company assets; (13) payments to government personnel; and (14) the reporting of illegal and unethical behavior.

The code of business conduct is posted in the corporate governance section of our website at www.regenxbio.com. Any waiver of the code of business conduct for an executive officer or director may be granted only by our Board of Directors or a committee thereof and must be timely disclosed as required by applicable law. We intend to disclose future amendments to certain provisions of our code of business conduct, or waivers of those provisions, applicable to any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions on our website at www.regenxbio.com.

We have implemented whistleblower procedures that establish formal protocols for receiving and handling complaints from employees. Any concerns regarding accounting or audit matters reported under these procedures will be communicated promptly to the Audit Committee. The whistleblower policy is posted in the corporate governance section of our website at www.regenxbio.com.

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, their potential impact on our business and the steps we take to manage them. The risk oversight process includes our Board of Directors receiving regular reports from board committees and members of senior management to enable our Board of Directors 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 oversight of risk within the Company is an evolving process requiring the Company to continually look for opportunities to further embed systematic enterprise risk management into ongoing business processes within the Company.

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 of Directors, 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 of Directors is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by our Board of Directors as a whole.

DIRECTOR COMPENSATION

During our fiscal year ended December 31, 2015, we paid cash fees and granted options to purchase shares of our common stock to our non-employee directors who served on our Board of Directors. A non-employee director is a director who is not employed by us and who does not receive compensation from us (other than for services as a director) or have a business relationship with us that would require disclosure under certain SEC rules. Kenneth T. Mills, our president and chief executive officer and a member of our Board of Directors, did not receive any compensation from us during our fiscal year ended December 31, 2015 for his service as a director and is not included in the table below.

| Name | Fees Earne | d or Paid In Cash | Optic | on Awards(1) | Total |
|--|------------|-------------------|-------|--------------|-----------|
| Benjamin Auspitz ⁽²⁾ | | | | | |
| Luke M. Beshar ⁽³⁾ | \$ | 16,010 | \$ | 300,540 | \$316,550 |
| Edgar G. Engleman, M.D. ⁽⁴⁾ | \$ | 11,353 | \$ | 364,774 | \$376,127 |
| Allan M. Fox | \$ | 10,188 | \$ | 364,774 | \$374,962 |
| Michael Gelman ⁽⁵⁾ | | _ | | _ | |
| Donald J. Hayden, Jr.(6). | \$ | 62,405 | \$ | 368,861 | \$431,266 |
| Jerry Karabelas, Ph.D.(7) | \$ | 12,517 | \$ | 215,138 | \$227,655 |
| John Daniel Kiser ⁽⁸⁾ | | — | | | — |
| Camille Samuels ⁽⁹⁾ | \$ | 13,827 | \$ | 364,774 | \$378,601 |
| David C. Stump, M.D.(10) | \$ | 9,982 | \$ | 295,093 | \$305,075 |

(1) Reflects the aggregate grant date fair value of options granted during the fiscal year calculated in accordance with FASB ASC Topic 718. See Note 10 to our financial statements for the year ended December 31, 2015 included in our Annual Report on Form 10-K for the year ended December 31, 2015 for a discussion of the assumptions made by us in determining the grant date fair value of our equity awards.

- (2) Mr. Auspitz resigned from our Board of Directors in May 2015.
- (3) Mr. Beshar joined our Board of Directors in April 2015.
- (4) Dr. Engleman joined our Board of Directors in May 2015.
- (5) Mr. Gelman joined our Board of Directors in January 2015 and resigned from our Board of Directors in April 2015.
- (6) Includes \$40,000 paid pursuant to the letter agreement we entered into with Mr. Hayden on February 6, 2013 when he agreed to serve as a member of our Board of Directors. The terms of this letter agreement are described below in further detail.
- (7) Dr. Karabelas joined our Board of Directors in May 2015.
- (8) Mr. Kiser resigned from our Board of Directors in April 2015.
- (9) Ms. Samuels joined our Board of Directors in January 2015.
- (10) Dr. Stump joined our Board of Directors in October 2015.

As of December 31, 2015, the following non-employee directors held outstanding options to purchase shares of our common stock: Mr. Hayden (475,475 shares); Mr. Beshar (89,375 shares); Dr. Karabelas (49,375 shares); Dr. Engleman (25,000 shares); Mr. Fox (25,000 shares); Ms. Samuels (25,000 shares) and Dr. Stump (25,000 shares).

Non-Employee Director Compensation

Our Board of Directors, upon the recommendation of our Compensation Committee, adopted a compensation program for non-employee directors in August 2015. Pursuant to the program, each member of our Board of Directors who is not our employee will receive the following cash compensation for board services, as applicable:

- \$35,000 per year for service as a member of the Board of Directors;
- \$30,000 per year for service as Chairman of the Board of Directors;

- \$15,000 per year for service as Chairman of the Audit Committee;
- \$7,500 per year for service as a member of the Audit Committee;
- \$10,000 per year for service as Chairman of the Compensation Committee;
- \$5,000 per year for service as a member of the Compensation Committee;
- \$8,000 per year for service as Chairman of the Nominating and Corporate Governance Committee; and
- \$4,000 per year for service as a member of the Nominating and Corporate Governance Committee.

Each of the above is paid in quarterly installments in arrears.

Non-employee members of our Board of Directors receive automatic grants of non-statutory stock options under our 2015 Equity Incentive Plan. Each non-employee director upon joining our Board of Directors will automatically be granted a non-statutory stock option to purchase 25,000 shares of our common stock with an exercise price equal to the fair market value of our common stock on the grant date. Each of these options will vest in equal monthly installments over the 36 months following the date of the grant, and each provides for full acceleration in the event of a change of control.

In addition, on the date of each annual meeting of our stockholders, each non-employee director will automatically be granted a non-statutory stock option to purchase 12,500 shares of our common stock with an exercise price equal to the fair market value of our common stock on the grant date. A non-employee director who receives an initial award will not receive the additional annual award in the same calendar year. The annual grants vest in equal monthly installments over the 12 months following the date of the grant, and each provides for full acceleration in the event of a change of control.

We will also continue to reimburse our non-employee directors for their reasonable out-of-pocket expenses incurred in attending board and committee meetings.

Pursuant to the letter agreement he entered into with us on February 6, 2013, Mr. Hayden, the Chairman of our Board of Directors, agreed to serve as a member of our Board of Directors. In consideration of such services, we agreed to pay Mr. Hayden an annual fee of \$40,000. Pursuant to his letter agreement, we issued Mr. Hayden an option to purchase 6,420,000 Class B Preferred Units of our predecessor limited liability company. In connection with our conversion to a C-corporation in September 2014, Mr. Hayden's Class B Preferred Units were cancelled and Mr. Hayden received an option to purchase 354,100 shares of our common stock. We terminated the letter agreement with Mr. Hayden upon completion of our initial public offering in September 2015 (the IPO), and Mr. Hayden is compensated in accordance with the provisions of our compensation program for non-employee directors.

PROPOSAL 2

RATIFICATION OF SELECTION OF PRICEWATERHOUSECOOPERS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2016

The Audit Committee of our Board of Directors has selected PricewaterhouseCoopers LLP, an independent registered public accounting firm, as our independent auditors for the year ending December 31, 2016, and has further directed that management submit the selection of independent auditors for ratification by our stockholders at the Annual Meeting. PricewaterhouseCoopers LLP has audited our financial statements for the years ended December 31, 2015, 2014 and 2013. Representatives of PricewaterhouseCoopers LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

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

In order for Proposal 2 to pass, holders of a majority of all those outstanding shares present in person, or represented by proxy, and cast either affirmatively or negatively at the Annual Meeting must vote "**FOR**" Proposal 2. Abstentions and broker non-votes will be counted towards a quorum; however, they will not be counted either "**FOR**" or "**AGAINST**" the proposal and will have no effect on the proposal. Because the ratification of the appointment of the independent registered public accounting firm is a matter on which a bank, broker or other nominee is generally empowered to vote, no broker non-votes are expected to exist in connection with this matter.

Independent Registered Public Accounting Firm's Fees

The following table represents aggregate fees billed to REGENXBIO for the years ended December 31, 2015 and December 31, 2014, by PricewaterhouseCoopers LLP, our principal accountant.

| | Year ended December 31, | |
|--------------------|-------------------------|------------|
| | 2015 | 2014 |
| Audit fees(1) | \$1,047,067 | \$619,083 |
| Audit-related fees | | — |
| Tax fees | — | — |
| All other fees | — | _ |
| Total fees | \$1,047,067 | \$ 619,083 |

(1) The fees billed or incurred by PricewaterhouseCoopers LLP for professional services rendered in connection with the annual audit of our financial statements for the years ended December 31, 2015, 2014 and 2013, the consents issued for our registration statements, and the statements included in our filings with the SEC regarding our initial public offering of common stock.

All fees described above were pre-approved by the Audit Committee in accordance with applicable SEC requirements.

Pre-Approval Policies and Procedures

The Audit Committee's policy is to pre-approve all audit and permissible non-audit services rendered by PricewaterhouseCoopers LLP, our independent registered public accounting firm. The Audit Committee can pre-approve specified services in defined categories of audit services, audit-related services and tax services up to specified amounts, as part of the Audit Committee's approval of the scope of the engagement of PricewaterhouseCoopers LLP or on an individual case-by-case basis before PricewaterhouseCoopers LLP is engaged to provide a service. The Audit Committee has determined that the rendering of tax-related services by PricewaterhouseCoopers LLP is compatible with maintaining the principal accountant's independence for audit purposes. PricewaterhouseCoopers LLP has not been engaged to perform any non-audit services.

YOUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS YOU "FOR" VOTE FOR THE RATIFICATION OF PRICEWATERHOUSECOOPERS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2016



REPORT OF THE AUDIT COMMITTEE1

The Audit Committee of the Board of Directors consisted on December 31, 2015 of the three non-employee directors named below. The Board of Directors annually reviews the NASDAQ listing standards' definition of independence for Audit Committee members (including the requirements of Rule 10A-3 promulgated under the Securities Exchange Act of 1934, as amended) and has determined that each member of the Audit Committee meets that standard. Mr. Beshar serves as an audit committee financial expert in accordance with applicable SEC regulations.

The principal purpose of the Audit Committee is to assist the Board of Directors in its general oversight of our accounting and financial reporting processes and audits of our financial statements. The Audit Committee is responsible for selecting and engaging our independent auditor and approving the audit and non-audit services to be provided by the independent auditor. The Audit Committee's function is more fully described in its charter, which the Board of Directors has adopted and which the Audit Committee reviews and approves on an annual basis.

Our management is responsible for preparing our financial statements and our financial reporting process. PricewaterhouseCoopers LLP, our independent registered public accounting firm, is responsible for performing an independent integrated audit of our financial statements and expressing an opinion on the conformity of those financial statements with accounting principles generally accepted in the United States and attesting to the effectiveness of our internal control over financial reporting.

The Audit Committee has also reviewed and discussed with PricewaterhouseCoopers LLP the audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2015 (the 10-K). In addition, the Audit Committee discussed with PricewaterhouseCoopers LLP those matters required to be discussed by Statement of Accounting Standards 114, as modified, as adopted by the Public Company Accounting Oversight Board, or "PCAOB," in Rule 3200T and by PCAOB Auditing Standard No. 16, Communications with Audit Committees, as may be further modified or supplemented. Additionally, PricewaterhouseCoopers LLP provided to the Audit Committee the written disclosures and the letter required by PCAOB Rule 3526 "Communication with Audit Committees concerning independence" as adopted by the Public Company Accounting Oversight Board. The Audit Committee also discussed with PricewaterhouseCoopers LLP its independence from the Company.

Based upon the review and discussions described above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the 10-K for filing with the United States Securities and Exchange Commission. We have selected PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for the year ended December 31, 2016, and have approved submitting the selection of the independent registered public accounting firm for ratification by the stockholders.

Submitted by the following members of the Audit Committee:

Luke M. Beshar, Chairman David C. Stump, M.D. Camille Samuels

¹ The material in this report is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of REGENXBIO 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.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information known to us regarding beneficial ownership of our common stock as of April 7, 2016 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than five percent of our outstanding common stock;
- each of our named executive officers;
- each of our directors; and
- all of our current directors and executive officers as a group.

Applicable percentage ownership is based on 26,338,329 shares of common stock outstanding at April 7, 2016.

The table below is based upon information supplied by executive officers, directors and principal stockholders and Schedule 13Gs and 13Ds filed with the SEC through April 7, 2016.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding all shares of common stock subject to options held by that person or entity that are currently exercisable or releasable or that will become exercisable or releasable within 60 days of April 7, 2016. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the principal address of each of the stockholders below is c/o REGENXBIO Inc., 9712 Medical Center Drive, Suite 100, Rockville, MD 20850.

| Name and Address of Beneficial Owner | Number of Shares Beneficially Owned | Percentage of Shares Beneficially Owned |
|--|--|--|
| 5% Stockholders | <u></u> | |
| FMR LLC(1) 245 Summer Street Boston, MA 02210 | 3,312,462 | 12.6% |
| Entities Affiliated with Allan M. Fox ⁽²⁾ 1701 Pennsylvania Ave., NW, Suite 900 Washington, DC 20006 | 3,221,048 | 12.2% |
| Entities Affiliated with John Daniel Kiser ⁽³⁾ 1701 Pennsylvania Ave., NW, Suite 900 Washington, DC 20006 | 2,280,110 | 8.7% |
| Entities Affiliated with Venrock Partners(4) 3340 Hillview Avenue Palo Alto, CA 94304 | 1,991,907 | 7.6% |
| Brookside Capital Partners Fund, L.P.(5) John Hancock Tower 200 Clarendon Street Boston, MA 02116 | 1,759,961 | 6.7% |
| Directors and Named Executive Officers | | |
| Kenneth T. Mills ⁽⁶⁾ | 483,585 | 1.8% |
| Vittal Vasista(7) | 322,099 | 1.2% |
| Stephen Yoo, M.D. ⁽⁸⁾ | 137,380 | * |
| Donald J. Hayden, Jr. ⁽⁹⁾ | 316,626 | 1.2% |
| Luke Beshar ⁽¹⁰⁾ | 58,333 | * |
| Edgar G. Engleman, M.D.(11) | 946,004 | 3.6% |
| Allan M. Fox(12) | 3,226,603 | 12.2% |
| A.N. "Jerry" Karabelas, Ph.D. ⁽¹³⁾ | 33,333 | * |
| Camille Samuels ⁽¹⁴⁾ | 5,555 | * |
| David C. Stump, M.D. ⁽¹⁵⁾ | 4,861 | * |
| All current executive officers and directors as a group (12 persons) ⁽¹⁶⁾ | 5,534,379 | 21.0% |

- * Less than one percent of the outstanding shares of common stock.
- (1) Based on Schedule 13G/A filed with the SEC on February 12, 2016 by FMR LLC on behalf of itself and Abigail P. Johnson, a Director, the Vice Chairman, the Chief Executive Officer and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, 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. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act ("Fidelity Funds") advised by Fidelity Management & Research Company ("FMR Co"), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees.
- (2) Consists of 443,700 shares of common stock held by FoxKiser Holdings, LLC (Holdings), 722,485 shares of common stock held by The Allan M. Fox Trust (U/A/D April 21, 2015) (the Fox Trust) and 2,054,863 shares of common stock held by The Allan M. Fox Revocable Trust. Mr. Fox holds shared dispositive power over the shares held by Holdings described in the foregoing sentence with John Daniel Kiser, with Mr. Fox having a 60% voting interest in Holdings. Mr. Kiser is the trustee of the Fox Trust and holds sole dispositive voting power over such trust. Mr. Fox otherwise holds sole dispositive power over the shares held by the other entities described.
- (3) Consists of 443,700 shares of common stock held by Holdings, 948,157 shares of common stock held by The Kiser 2012 Gift Trust (the Kiser Gift Trust) and 888,253 shares of common stock held by the John Daniel Kiser Revocable Trust U/A/D July 27, 2011. Mr. Kiser holds shared dispositive power over the shares held by Holdings described in the foregoing sentence with Mr. Fox, with Mr. Kiser having a 40% voting interest in Holdings. Mr. Fox is the trustee of the Kiser Gift Trust and holds sole dispositive voting power over such trust. Mr. Kiser holds sole dispositive power over the shares held by the other entities described.
- (4) Based on Schedule 13G filed on February 16, 2016, consists of 838,956 shares of common stock held by Venrock Associates VII, L.P. (VA7), 783,474 shares of common stock held by Venrock Healthcare Capital Partners II, L.P. (VHCP II), 247,480 shares of common stock held by VHCP Co-Investment Holdings II, LLC (VHCP Co-Invest II), 69,497 shares of common stock held by Venrock Partners VII, L.P. (VP7), 44,381 shares of common stock held by Venrock Healthcare Capital Partners, L.P. (VHCP) and 8,119 shares of common stock held by VHCP Co-Investment Holdings, LLC (VHCP Co-Invest I). Venrock Management VII, LLC (VM7, and collectively with VA7 and VP7, the Venrock 7 Entities) is the sole general partner of VA7 and VP7. VHCP Management I, LLC (VHCPM I) is the sole general partner of VHCP I and the manager of VHCP Co-Invest I. VHCP Management II, LLC (VHCPM II, and collectively with VHCPM I, VHCP Co-Invest I, VHCP Co-Invest II and VHCPM II, the VHCP Entities) is the sole general partner of VHCP II and the manager of VHCP Co-Invest II. The VHCP Entities expressly disclaim beneficial ownership over all shares held by the VHCP Entities, except to the extent of their indirect pecuniary interest therein.
- (5) Consists of 1,759,961 shares of common stock. Brookside Capital Management, LLC, the sole general partner of Brookside Capital Investors, L.P., which is the sole general partner of Brookside Capital Partners Fund, L.P., has voting and dispositive power with respect to the shares.
- (6) Consists of 15,440 shares of common stock and includes options to purchase 468,145 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (7) Consists of 115,440 shares of common stock and includes options to purchase 206,659 shares of common stock that may be exercised within 60 days of April 7, 2016 after the offering.

- (8) Consists of options to purchase 137,380 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (9) Consists of 38,599 shares of common stock and includes options to purchase 278,027 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (10) Consists of options to purchase 58,333 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (11) Dr. Engleman is affiliated with Vivo Capital Fund VIII, L.P. (Vivo Fund VIII) and Vivo Capital Surplus Fund VIII, L.P. (Vivo Surplus VIII). Vivo Fund VIII's ownership consists of 826,341 shares of common stock and Vivo Surplus VIII's ownership consists of 114,108 shares of common stock. Vivo Capital VIII, LLC, the sole general partner of both Vivo Fund VIII and Vivo Surplus VIII, has shared voting power and shared investment power over such securities, may be deemed to beneficially own such shares, and disclaims beneficial ownership of the shares except to the extent of its pecuniary interests therein. Dr. Engleman disclaims beneficial ownership of the shares held by Vivo Fund VIII and Vivo Surplus Fund, except to the extent of his pecuniary interest therein. Dr. Engleman has informed the Board of Directors that he will not stand for re-election and his term will expire on June 1, 2016 at the Annual Meeting. Includes options to purchase 5,555 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (12) See footnote 2 above for stock ownership relating to Mr. Fox. Includes options to purchase 5,555 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (13) Consists of options to purchase 33,333 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (14) Consists of options to purchase 5,555 shares of common stock that may be exercised within 60 days of April 7, 2016. Ms. Samuels is affiliated with Venrock Partners. Ms. Samuels does not have voting or dispositive control over the shares held by the entities affiliated with Venrock Partners referenced in footnote 4 above.
- (15) Consists of options to purchase 4,861 shares of common stock that may be exercised within 60 days of April 7, 2016.
- (16) Consists of 4,330,976 shares of common stock and includes options to purchase 1,203,403 shares of common stock that may be exercised within 60 days of April 7, 2016. Mr. Fox holds shared dispositive power over certain shares as described in footnote 2 above and these shares are only counted once for the purpose of this calculation.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors, executive officers, and certain holders of more than 10% of our common stock to file reports regarding their ownership and changes in ownership of our securities with the SEC, and to furnish us with copies of all Section 16(a) reports that they file.

Based solely upon a review of Forms 3 and 4 and amendments thereto furnished to us and written representations provided to us by all of our directors and executive officers and certain of our greater than 10% stockholders, we believe that during the year ended December 31, 2015, our directors, executive officers, and greater than 10% stockholders complied with all applicable Section 16(a) filing requirements.

EXECUTIVE OFFICERS

The names of the current executive officers of REGENXBIO and certain information about each of them as of April 18, 2016, are set forth below:

Executive Officers

Kenneth T. Mills – For biographical information, see "Proposal 1: Election of Directors – Continuing Directors Not Standing for Election – Class III Directors (Terms Expire in 2018)."

Vittal "Vit" Vasista, age 48, has been our Chief Financial Officer and Senior Vice President of Corporate Development since August 2009. Prior to joining us, Mr. Vasista served as Principal at PRTM Management Consultants from October 2006 to July 2009, where he developed operational strategies for both private and public organizations, including the development of market entry strategies, innovative business models, and operational improvements. Earlier in his career, Mr. Vasista served as Director, Business Development at Meso Scale Diagnostics, a privately held life sciences company, from June 2002 to May 2006. Mr. Vasista received an M.B.A. from The Wharton School at the University of Pennsylvania, an M.S. in Mechanical Engineering from Stanford University, and an S.B. in Mechanical Engineering from the Massachusetts Institute of Technology.

Stephen Yoo, M.D., age 38, has been our Chief Medical Officer since October 2014. Prior to joining us, Dr. Yoo was Medical Science Director and Group Director of Clinical Development at AstraZeneca from January 2014 to October 2014. In these roles, he led the late-phase clinical project teams while providing strategic and operational leadership to physicians and scientists. In previous roles at MedImmune, LLC, AstraZeneca's global biologics research and development arm, from April 2010 to May 2014, Dr. Yoo provided strategic clinical leadership for early-phase programs. Earlier in his career, Dr. Yoo served as Associate Director of Clinical Development at Abbott Laboratories from June 2008 to April 2010. Dr. Yoo holds an M.D. from the University of California, Los Angeles School of Medicine and a B.A. in Molecular and Cell Biology from the University of California, Berkeley.

Faraz Ali, age 43, has been our Chief Business Officer since February 2016. Prior to joining us, Mr. Ali was Vice President, Global Commercial Development and External Affairs at bluebird bio from May 2011 until February 2016, where he led all commercial planning efforts, including engagement with payers in the U.S. and Europe. From August 2001 to November 2010, Mr. Ali held roles of increasing global commercial responsibility at Genzyme, including Head of U.S. Marketing and Strategic Planning for the rare disease business unit. Prior to Genzyme, Mr. Ali served in leadership roles at GE Corporate and GE Healthcare. Mr. Ali holds an M.B.A. with distinction from Harvard Business School and a B.S. in Electrical Engineering from Stanford University.

Curran Simpson, age 54, has been our Senior Vice President, Technical Operations since August 2015. Prior to joining us, Mr. Simpson was the Head, North American Supply Chain and also served as Interim Chief Operating Officer and Integration Lead with GlaxoSmithKline and Human Genome Sciences division of GlaxoSmithKline (HGS), respectively, from December 2012 until August 2015. From July 2006 to December 2012, Mr. Simpson was the Senior Vice President, Operations at HGS, as well as the Vice President, Manufacturing Operations at HGS from January 2003 to June 2006. Prior to HGS, Mr. Simpson held various positions with Biogen, Inc., Covance Biotechnology Services Inc., Novo-Nordisk Biochem Inc., Genentech, Inc. and Genencor, Inc. Mr. Simpson received an M.S. in Surface and Colloid Science (Physical Chemistry) from Clarkson University and a B.S. in Chemistry/Chemical Engineering from Clarkson College of Technology.

EXECUTIVE COMPENSATION

2015 Summary Compensation Table

The following table provides information concerning the compensation paid to our President and Chief Executive Officer and our next two most highly compensated executive officers during the year ended December 31, 2015. We refer to these individuals as our named executive officers.

| Name and Principal Position Kenneth T. Mills President and Chief Executive Officer | <u>Year</u> 2015 2014 | Salary (\$) 500,000(2) 500,000 | Bonus (\$) 275,000 250,000 | Option Awards (\$)(1) 615,882 361,182 | All Other Compensation (\$) — | Total (\$) \$1,390,882 \$1,146,998 |
|--|-----------------------------|---|-------------------------------------|---|--|---|
| Stephen Yoo, M.D. | 2015 | 340,000(3) | 130,900 | 156,770 | | \$ 627,670 |
| Chief Medical Officer | 2014 | 65,625(4) | 20,000 | 121,471 | | \$ 211,392 |
| Vittal K. Vasista | 2015 | 315,000(5) | 121,300 | 67,187 | _ | \$ 503,487 |
| Chief Financial Officer | 2014 | 300,000 | 120,000 | 216,669 | | \$ 665,881 |

(1) Reflects the aggregate grant date fair value of options granted during the fiscal year calculated in accordance with FASB ASC Topic 718. See Note 10 to our audited financial statements for the years ended December 31, 2015 and 2014, each included elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2015 for a discussion of the assumptions made by us in determining the grant date fair value of our equity awards.

- (2) Mr. Mill's annual base salary was increased to \$515,000 on January 28, 2016.
- (3) Dr. Yoo's annual base salary was increased to \$340,000 effective on the effective date of the IPO in September 2015 and was increased to \$375,000 on January 28, 2016.
- (4) Dr. Yoo's employment with us commenced on October 13, 2014. The amount reported represents the pro rata portion of the officer's annual salary from commencement of employment through December 31, 2014.
- (5) On February 1, 2015, the annual base salary of Mr. Vasista was increased to \$315,000 and was increased to \$350,000 on January 28, 2016.

Narrative Explanation of Certain Aspects of the Summary Compensation Table

Base Salaries and Performance-Based Bonuses

Pursuant to employment agreements entered into with us, as amended from time to time, each of our named executive officers is eligible to receive a base salary and an annual discretionary bonus payable in cash, stock or a combination and based on the achievement of individual and corporate objectives.

The base salary and target annual performance bonus for each of our named executive officers for our fiscal year ended December 31, 2015, is listed in the table below:

| Name | 2015 Base Salary (\$) | 2015 Target Performance Bonus (%)(1) |
|-------------------|-----------------------------|---|
| Kenneth T. Mills | \$ 500,000(2) | 50% |
| Stephen Yoo, M.D. | \$ 340,000(3) | 35% |
| Vittal K. Vasista | \$ 315,000(4) | 35% |

Mr. Mills' target bonus was increased from 40% to 50% of his base salary and Dr. Yoo's and Mr. Vasista's target bonuses were increased from 30% to 35% of their respective base salaries for the portion of our fiscal year following the IPO.

(2) Mr. Mills' annual base salary was increased to \$515,000 on January 28, 2016.

- (3) Dr. Yoo's annual base salary was increased to \$340,000 effective following completion of the IPO and was increased to \$375,000 on January 28, 2016.
- (4) On February 1, 2015, the annual base salary of Mr. Vasista was increased to \$315,000 and was increased to \$350,000 on January 28, 2016.

Objectives for the named executive officers' target bonuses for our fiscal year ended December 31, 2015 included both subjective and objective goals determined in the discretion of our Board of Directors. In January 2016, our Compensation Committee determined that the Company achieved 110% of its corporate goals for the year ended December 31, 2015. As a result, our Compensation Committee awarded our named executive officers cash bonuses equal to 110% of their respective non-prorated, post-IPO target performance bonus, as reflected above in the bonus column of the 2015 Summary Compensation Table.

Each of our named executive officers is eligible to receive certain benefits if his employment is terminated under certain circumstances, as described under "Employment Agreements" below.

Equity Compensation

Since our conversion to a C-corporation, we have offered stock options to our employees, including our named executive officers, as the long-term incentive component of our compensation program. We typically grant equity awards to new hires upon their commencing employment with us. Stock options allow employees to purchase shares of our common stock at a price per share equal to the fair market value of our common stock on the date of grant and may or may not be intended to qualify as "incentive stock options" for U.S. federal income tax purposes. Awards to newly hired employees generally vest with respect to 25% of the total number of option shares on the first anniversary of the vesting commencement date and in equal monthly installments over the following 36 months.

As described under "Outstanding Equity Awards as of December 31, 2015" below, certain equity awards granted to our named executive officers are subject to accelerated vesting in the event such officer is subject to an involuntary termination or if we experience a change in control.

Outstanding Equity Awards as of December 31, 2015

The following table sets forth information regarding each outstanding and unexercised option held by each of our named executive officers as of December 31, 2015. The number of shares subject to each award and, where applicable, the exercise price per share, reflects all changes as a result of our capitalization adjustments.

The vesting schedule applicable to each outstanding award is described in the footnotes to the table below.

| | | Option Awards | | | |
|-------------------|---------------------------------|--|--|-------------------------------------|------------------------------|
| Name | Vesting Commencement Date | Number of Securities Underlying Unexercised Options Exercisable | Number of Securities Underlying Unexercised Options Unexercisable | Option Exercise Price (\$) | Option Expiration Date |
| Kenneth T. Mills | 9/17/2014 | 344,251(1) | 363,949(1) | 0.85 | 9/23/2024 |
| | 5/19/2015 | — | 275,000(2) | 3.76 | 5/18/2025 |
| Stephen Yoo, M.D. | 10/13/2014 | 97,807(3) | 150,093(3) | 0.85 | 11/3/2024 |
| | 5/19/2015 | — | 70,000(2) | 3.76 | 5/18/2025 |
| Vittal K. Vasista | 9/17/2014 | 166,075(4) | 158,825(4) | 0.85 | 9/23/2024 |
| | 5/19/2015 | | 30,000(2) | 3.76 | 5/18/2025 |

(1) The option vested with respect to 120,394 shares on the vesting commencement date. The option vested with respect to 88,524 shares on the one year anniversary of the vesting commencement date and vests with



respect to an additional 7,377 shares following each month of service following such date. The continued vesting of the option with respect to 233,710 shares subject to the option (the Mills Contingent Shares) was conditioned on our completion of a financing in which we raised gross proceeds of not less than \$5,000,000 on or before January 1, 2016 (a Qualified Financing), which was satisfied upon the consummation of our Series C Preferred Stock financing in January 2015. As such, effective as of the closing of our Series C Preferred Stock financing, the option vested with respect to 25% of the Mills Contingent Shares as of the vesting commencement date. The option vested with respect to 25% of the remaining Mills Contingent Shares on the one year anniversary of the vesting commencement date and, subject to the optionee providing continuous service to us, the remaining Mills Contingent Shares vest in 36 equal monthly installments thereafter.

- (2) Subject to the optionee providing continuous service to our company, the option vests 25% on completion of one year of service following the vesting commencement date and in 36 equal monthly installments thereafter.
- (3) The option vested with respect to 23,600 shares on the vesting commencement date. The option vested with respect to 35,400 shares on the one year anniversary of the vesting commencement date and vests with respect to an additional 2,950 shares following each month of service following such date. The continued vesting of the option with respect to 82,700 shares subject to the option (the Yoo Contingent Shares) was conditioned on our completion of a Qualified Financing, which was satisfied upon the consummation of our Series C Preferred Stock financing in January 2015. As such, effective as of the closing of our Series C Preferred Stock financing, the option vested with respect to 15% of the Yoo Contingent Shares as of the vesting commencement date. The option vested with respect to 25% of the remaining Yoo Contingent Shares on the one year anniversary of the vesting commencement date and, subject to the optionee providing continuous service to us, the remaining Yoo Contingent Shares vest in 36 equal monthly installments thereafter.
- (4) The option vested with respect to 72,235 shares on the vesting commencement date. The option vested with respect to 53,112 shares on the one year anniversary of the vesting commencement date and vests with respect to an additional 4,426 shares following each month of service following such date. The continued vesting of the option with respect to 140,217 shares subject to the option (the Vasista Contingent Shares) was conditioned on our completion of a Qualified Financing, which was satisfied upon the consummation of our Series C Preferred Stock financing in January 2015. As such, effective as of the closing of our Series C Preferred Stock financing, the option vested with respect to 25% of the Vasista Contingent Shares as of the vesting commencement date. The option vested with respect to 25% of the remaining Vasista Contingent Shares on the one year anniversary of the vesting commencement date and, subject to the optionee providing continuous service to us, the remaining Vasista Contingent Shares vest in 36 equal monthly installments thereafter. The option vested with respect to 59,533 shares on December 31, 2015 which would have otherwise vested between January 2018 and September 2018 upon achievement of two business goals and a determination by our Compensation Committee that two additional business goals were deemed to be achieved as of December 31, 2015.

Effective January 28, 2016, the compensation committee of our Board of Directors granted options to purchase 225,000 shares of our common stock to Mr. Mills, 75,000 shares of our common stock to Mr. Vasista and 70,000 shares of our common stock to Dr. Yoo. The exercise price for each of the options was \$13.09 per share, which was the closing price of our common stock on January 28, 2016 as reported by NASDAQ. The options vest with respect to 25% of the shares of stock which are subject to the option on January 28, 2017 and in 36 equal monthly installments thereafter provided the named executive officer provides continuous service to the company through such vesting dates.

2015 Option Exercises

The following table shows the number of shares acquired upon option exercise for each named executive officer during the year ended December 31, 2015.

| | Option Awards | |
|---------------------------------|--|---------------------------------------|
| Name | Number of Shares Acquired on Exercise of Options (#) | Value Realized on Exercise (\$)(1) |
| <u>Name</u> Kenneth T. Mills | — | — |
| Stephen Yoo, M.D | — | — |
| Vittal K. Vasista | 100,000 | 291,000 |

(1) The value realized is based on the fair market value of our Common Stock on the date of exercise minus the exercise price. The amounts set forth do not necessarily reflect proceeds actually received by the named executive officer. The named executive officer will not realize the estimated value of these awards until the underlying shares are sold.

Employment Agreements

In connection with the IPO, our Compensation Committee retained an independent compensation consultant, Radford, to provide the committee with comparative information on executive compensation at peer group companies as well as advice on terms of employment for our named executive officers. Based on consultations with Radford, we entered into new employment agreements with our named executive officers prior to the IPO. Pursuant to the employment agreements, if we terminate the employment of our Chief Executive Officer and our other named executive officers without cause or if such officer voluntarily resigns for good reason, then each will be eligible to receive, contingent on his timely executing and not revoking a general release of all claims he may have against us and on his returning all of our property in his possession, continued payment of base salary for (i) 12 months for Mr. Mills and (ii) nine months for Dr. Yoo and Mr. Vasista. If a terminated named executive officer obtains employment during the salary continuation period, then we will cease to be obligated to pay the terminated named executive officer any further payments. In addition, we will pay the terminated named executive officer a lump sum equal to the COBRA premiums for the same period of time.

Further, if we terminate the employment of our Chief Executive Officer and our other named executive officers without cause or if such officer voluntarily resigns for good reason immediately prior to or during the 18 months following a change in control, as such term is defined in our 2015 Plan, then each will be eligible to receive, contingent on his timely executing and not revoking a general release of all claims he may have against us and on his returning all of our property in his possession, continued payment of base salary and their target annual bonus in equal monthly installments for (i) 18 months for Mr. Mills and (ii) 12 months for Dr. Yoo and Mr. Vasista. In addition, we will pay the named executive officer a lump sum equal to the COBRA premiums for the same period of time. All outstanding unvested options that were outstanding as of the date of a change in control will vest if we or our successor terminates the employment of our Chief Executive Officer or other named executive officers without cause or if such officer voluntarily resigns for good reason during the remaining vesting period.

"Cause" means, with respect to Messrs. Mills and Vasista and Dr. Yoo:

- the conviction of, or the entering a plea of guilty or no contest (or pleading or accepting deferred adjudication or receiving unadjudicated probation) to or for, any felony or any crime involving moral turpitude;
- the commission of a material breach of any of the covenants, terms and provisions of the employment agreement or the proprietary information and inventions agreement;
- the commission of an act of fraud, embezzlement, misappropriation, willful misconduct or breach of fiduciary duty against us or other similar conduct materially harmful or potentially materially harmful to our best interest, as determined by our Board, in its reasonable sole discretion; or

 the failure to perform assigned duties or responsibilities, provided we provide the executive written notice and he fails to cure the failure within 10 days of receiving such notice.

"Good Reason" means an officer's resignation within 12 months after one of the following conditions comes into existence without such officer's consent, provided the officer gives us written notice of the condition within 90 days after it first comes into existence and we fail to remedy such condition within 30 days after receipt of such written notice:

- a significant reduction in the officer's duties or responsibilities or removal from officer's position, unless he is assigned comparable duties or responsibilities or employed in a different position, respectively;
- a significant reduction (30% or more) in base salary;
- a significant reduction in the type or level of employee benefits to which officer is entitled that results in a significant reduction in officer's
 overall benefits package (other than a reduction applicable to all employees) as determined in Board's sole discretion; or
- a relocation of the officer's principal workplace by more than 35 miles.

In connection with their employment, our named executive officers entered into our standard form of proprietary information and inventions agreement. The proprietary information agreement provides that our officers are, generally, prohibited for one year after termination of employment from, directly or indirectly, soliciting our employees or customers, or competing against us.

Retirement Benefits

We have established a 401(k) tax-deferred savings plan, which permits participants, including our named executive officers, to make contributions by salary deduction pursuant to Section 401(k) of the Internal Revenue Code. We are responsible for administrative costs of the 401(k) plan. We may, at our discretion, make matching contributions to the 401(k) plan.

Employee Benefits and Perquisites

Our named executive officers are eligible to participate in our health and welfare plans to the same extent as all full-time employees would be eligible generally, including reimbursement of certain medical expenses incurred by such named executive officer and, if applicable, his or her eligible dependents. We pay 100% of the premium cost for our group health plan for all of our employees, including the named executive officers.

We do not generally provide our named executive officers with perquisites or other personal benefits (other than occasional payment of relocation expenses and severance benefits, as described above).

Tax and Accounting Considerations

Our Compensation Committee considers tax and accounting implications in determining all elements of our compensation plans, programs and arrangements. Section 162(m) of the Code generally denies a deduction to any publicly-held corporation for compensation paid in a taxable year to its named executive officers (other than the Chief Financial Officer) exceeding \$1.0 million, unless such compensation qualifies as performance-based compensation. Base salaries, time-vested restricted stock, time-vested retention and transition payments, and discretionary or subjectively determined bonus awards generally do not qualify as performance-based compensation. In September 2015, our stockholders approved our 2015 Equity Incentive Plan that permits us to satisfy the performance-based requirements under Section 162(m) with respect to the grant of stock options.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

In addition to the compensation arrangements with directors and executive officers described elsewhere in this proxy statement, the following is a description of transactions since January 1, 2015 to which we have been a party, in which the amount involved exceeded or will exceed \$120,000, and in which any of our directors, executive officers or beneficial owners of more than five percent of our common stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest.

All of the transactions set forth below were approved by our Audit Committee or a majority of our Board of Directors, including a majority of the independent and disinterested members of our Board of Directors. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties. It is our intention to ensure that all future transactions between us and our officers, directors and principal stockholders and their affiliates are approved by the Audit Committee or a majority of the members of our Board of Directors, including a majority of the independent and disinterested members of our Board of Directors, and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

FoxKiser LLP Strategic Services Agreement

In February 2016, we entered into a Strategic Services Agreement (the Strategic Services Agreement) with FoxKiser LLP (FoxKiser). FoxKiser is (i) an affiliate of Allan M. Fox, one of our directors, (ii) an affiliate of certain entities controlled by Mr. Fox which hold an aggregate of more than 5% of our common stock and (iii) an affiliate of certain entities controlled by Daniel Kiser which hold an aggregate of more than 5% of our common stock. Pursuant to the Strategic Services Agreement, we incur a monthly fixed fee of \$80,000 in consideration for certain strategic planning, development and regulatory services to be provided by FoxKiser. The Strategic Services Agreement has an initial term of one year and is terminable by either party, at any time, upon sixty days' prior written notice to the other party.

Series D Financing

In May 2015, we entered into a stock purchase agreement (the Series D Purchase Agreement) with new and existing investors, including certain of our existing stockholders at the time who were represented by members of our Board of Directors, including entities affiliated with Venrock Partners (Venrock Partners) and Beacon Bioventures Fund III Limited Partnership (Beacon Bioventures), to raise approximately \$70.5 million from the sale of 7,366,849 shares of our Series D convertible preferred stock, \$0.0001 par value per share (the Series D Preferred Stock), at a purchase price of \$9.5699 per share (the Series D Financing).

Series C Financing

In January 2015, we entered into a stock purchase agreement (the Series C Purchase Agreement) with new and existing investors, including FoxKiser (which were subsequently transferred to trusts affiliated with Allan M. Fox and John Daniel Kiser) and Beacon Bioventures, which were stockholders at the time who were represented by members of our Board of Directors, to raise approximately \$30.0 million, including the conversion of approximately \$3.8 million in outstanding convertible notes held by FoxKiser, from the sale of 4,631,774 shares of our Series C convertible preferred stock, \$0.0001 par value per share (the Series C Preferred Stock), at a purchase price of \$6.477 per share (the Series C Financing).

The following table summarizes the issuances and purchases of our preferred stock in the Series D Financing and the Series C Financing by our directors, officers or the beneficial holders of more than five percent of our capital stock or entities affiliated with them at the time of such transactions:

| Name of Stockholder | REGENXBIO Director | Series C Preferred Stock | Series D Preferred Stock | Aggregate Purchase Price |
|---|----------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Donald J. Hayden, Jr. | | 38,599 | | \$ 250,005.73 |
| Kenneth T. Mills | — | 15,440 | | \$ 100,004.88 |
| Vittal Vasista | — | 15,440 | | \$ 100,004.88 |
| Entities Affiliated with Allan M. Fox | Allan M. Fox | 478,463(1) | — | \$ 10,684,132.48 |
| Beacon Bioventures Fund III Limited Partnership | Benjamin Auspitz(2) | 236,982 | 365,731 | \$ 7,034,939.64 |
| Brookside Capital Partners Fund, L.P. | | 1,080,748 | 679,213 | \$ 13,500,005.29 |
| Deerfield Private Design Fund III, L.P. | — | 771,963 | 397,079 | \$ 8,800,001.68 |
| GFO II, LLC | Michael Gelman ⁽³⁾ | 771,963 | — | \$ 5,000,004.36 |
| Entities Affiliated with John Daniel Kiser | John Daniel Kiser ⁽⁴⁾ | 318,976(1) | | \$ 7,872,754.98(2) |
| Entities Affiliated with Venrock Partners | Camille Samuels ⁽⁵⁾ | 771,963 | 1,044,944 | \$ 15,000,013.95 |
| Entities Affiliated with Vivo Ventures | Edgar G. Engleman, M.D.(6) | — | 940,449 | \$ 9,000,002.89 |

 Includes shares issued upon the conversion of certain convertible promissory notes then outstanding, for which the converted principal and accrued interest are included in the aggregate purchase price.

(2) Mr. Auspitz is affiliated with Beacon Bioventures Fund III Limited Partnership, but resigned from our Board of Directors in May 2015.

- (3) Mr. Gelman is affiliated with GFO II, LLC (which subsequently transferred its shares to RegenX GRAT U/A/D May 15, 2015) and resigned from our Board of Directors in April 2015.
- (4) Mr. Kiser resigned from our Board of Directors in April 2015.
- (5) Ms. Samuels is affiliated with Venrock Partners and was the director appointed by Venrock Partners in connection with the Series C Financing.
- (6) Dr. Engleman is affiliated with Vivo Capital and was the director appointed by entities affiliate with Vivo Capital in connection with the Series D Financing. Dr. Engleman has informed the Board of Directors that he will not stand for re-election and his term will expire on June 1, 2016 at the Annual Meeting.

Amended and Restated Investors' Rights Agreement

In connection with the closing of the Series D Financing described above, we entered into an amended and restated investors' rights agreement (the Investors' Rights Agreement) with our significant stockholders, including entities affiliated with FoxKiser (which were subsequently transferred to trusts affiliated with Allan M. Fox and John Daniel Kiser), FoxKiser Holdings, LLC (Holdings), Brookside Capital Partners, Venrock Partners, Beacon Bioventures, Deerfield Management and Vivo Capital. Pursuant to this agreement, we granted such stockholders certain registration rights with respect to shares of our common stock and a right of first offer with respect to future issuances of our securities. The sections other than with regard to registration rights of the Investors' Rights Agreement terminated pursuant to its terms upon the consummation of the IPO in September 2015.

Amended and Restated Voting Agreement

In connection with the closing of the Series D Financing, we entered into an amended and restated voting agreement (the Voting Agreement), along with certain holders of our common stock and convertible preferred stock, including FoxKiser (which were subsequently transferred to trusts affiliated with Allan M. Fox and John Daniel Kiser), Holdings, Brookside Capital Partners, Venrock Partners, Beacon Bioventures, Deerfield Management and Vivo Capital. Under the terms of the Voting Agreement, the parties had agreed, subject to certain conditions, to vote their shares so as to elect as directors the nominees designated by certain of our investors, including Holdings, which designated Luke M. Beshar, Allan M. Fox, Donald J. Hayden, Jr. and A.N. "Jerry" Karabelas, Ph.D., Venrock Partners, which designated Camille Samuels, and Vivo Capital, which

designated Edgar G. Engleman, M.D. In addition, the parties to the Voting Agreement had agreed to vote their shares so as to elect our Chief Executive Officer to our Board of Directors, who is currently Kenneth T. Mills, and additional directors nominated by the Board of Directors and elected by the holders of our common stock and preferred stock. The Voting Agreement terminated immediately prior to the completion of the IPO.

Amended and Restated Right of First Refusal and Co-Sale Agreement

In connection with the closing of the Series D Financing, we entered into a right of first refusal and co-sale agreement (the First Refusal Agreement) with certain holders of our common stock and our convertible preferred stock, including FoxKiser (which were subsequently transferred to trusts affiliated with Allan M. Fox and John Daniel Kiser), Holdings, Brookside Capital Partners, Venrock Partners, Beacon Bioventures, Deerfield Management and Vivo Capital. Allan M. Fox, one of our directors, is a partner of FoxKiser and affiliated with Holdings, Camille Samuels, one of our directors, is a general partner at Venrock Partners and Edgar G. Engleman, M.D., one of our directors, is a partner at Vivo Capital. Pursuant to the First Refusal Agreement, the holders of convertible preferred stock had a right of first refusal and co-sale in respect of certain sales of securities by our founders and management team. The First Refusal Agreement terminated upon the closing of the IPO.

Indemnification Agreements

We have entered, or will enter, into indemnification agreements with our directors, executive officers and certain key employees. Under these agreements, we agree to indemnify our directors, executive officers and certain key employees against any and all expenses incurred by them in connection with proceedings because of their status as one of our directors, executive officers or key employees to the fullest extent permitted by Delaware law, subject to certain limitations. In addition, these indemnification agreements provide that, to the fullest extent permitted by Delaware law, we will pay for all expenses incurred by our directors, executive officers in connection with a legal proceeding arising out of their service to us.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws provide that we are authorized to enter into indemnification agreements with our directors and executive officers and we are authorized to purchase directors' and officers' liability insurance, which we currently maintain to cover our directors and executive officers.

Policies and Procedures for Related Party Transactions

In June 2015, we adopted a related party transaction policy under which our directors and executive officers, including their immediate family members and affiliates, are not permitted to enter into a related party transaction with us without the prior consent of our Audit Committee, or other independent committee of our Board of Directors in the case it is inappropriate for our Audit Committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director or any of such persons' immediate family members or affiliates, in which the amount involved exceeds \$120,000, must first be presented to our Audit Committee for review, consideration and approval. All of our directors and executive officers are required to report to our Audit Committee any such related party transaction. In approving or rejecting the proposed agreement, our Audit Committee shall consider the relevant facts and circumstances available and deemed relevant to the Audit Committee, including, but not limited to the risks, costs, and benefits to us, the terms of the transaction, the availability of other sources for comparable services or products, and, if applicable, the impact on a director's independence. Our Audit Committee shall approve only those agreements that, in light of known circumstances, are not inconsistent with our best interests, as our Audit Committee determines in the good faith exercise of its discretion.

Stock Options

For information regarding stock options granted to our named executive officers and directors, see "Corporate Governance – 2015 Director Compensation" and "Executive Compensation."

NO INCORPORATION BY REFERENCE

In REGENXBIO's filings with the SEC, information is sometimes "incorporated by reference." This means that we are referring you to information that has previously been filed with the SEC and the information should be considered as part of the particular filing. As provided under SEC regulations, the "Report of the Audit Committee" and the "Report of the Compensation Committee" contained in this proxy statement specifically are not incorporated by reference into any other filings with the SEC and shall not be deemed to be "soliciting material." In addition, this proxy statement includes several website addresses are intended to provide inactive, textual references only. The information on these websites is not part of this proxy statement.

OTHER MATTERS

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

It is important that your proxies be returned promptly and that your shares are represented at the Annual Meeting. Whether or not you plan to attend the Annual Meeting, please complete, date, sign and promptly return the enclosed proxy card in the enclosed postage pre-paid envelope or vote your shares before the Annual Meeting by telephone or over the internet so your shares will be represented at the Annual Meeting.

The form of proxy and this proxy statement have been approved by the Board of Directors and are being mailed and delivered to stockholders by its authority.

CONTACT FOR QUESTIONS AND ASSISTANCE WITH VOTING

If you have any questions or require any assistance with voting your shares, please contact:

Investor Relations REGENXBIO Inc. 9712 Medical Center Drive, Suite 100 Rockville, MD 20850 or Call (240) 552-8181

If you need additional copies of this proxy statement or voting materials, you should contact Investor Relations as described above.

The Board of Directors of REGENXBIO Inc. Rockville, Maryland

April 18, 2016



VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

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

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Time the day before the cut-off date or meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

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

| | KEEP THIS PORTION FOR YOUR RECORDS |
|--|------------------------------------|
| | |

| | THIS PROXY | Y CAR | D IS VALII | ONLY WI | DETACH ANI HEN SIGNED AND DATED. | D RETUR | N THIS PO | RTION ONL |
|------------|---|------------|-----------------|-------------------|---|---------|-----------|-----------|
| Th | XBIO INC. e Board of Directors recommends you vote FOR the lowing: | For All | Withhold All | For All Except | To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below. | | | |
| 1. | Election of Two Class I Directors | | | | | - | | |
| | Nominees: | | | | | | | |
| | 01) Allan M. Fox 02) Camille Samuels | | | | | | | |
| Th | The Board of Directors recommends you vote FOR the following proposal: | | | | | | Against | Abstain |
| 2. | To ratify the selection by the Audit Committee of our Boar accounting firm of the Company for the year ending Decer | | | icewaterhou | seCoopers LLP as the independent registered public | | | |
| | TE: Such other business as may properly come before the me reof. | eeting c | or any adjour | nment | | | | |
| adn per | ase sign exactly as your name(s) appear(s) hereon. When sign ninistrator, or other fiduciary, please give full title as such. Joi sonally. All holders must sign. If a corporation or partnership, partnership name by authorized officer. | nt own | ers should ea | hch sign | | | | |

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

E07600-P77939

REGENXBIO INC. Annual Meeting of Stockholders June 1, 2016 9:00 AM This proxy is solicited by the Board of Directors

The stockholder hereby appoints Kenneth T. Mills and Sara Garon Berl, or either of them, as proxies, each with the power to appoint his or her substitute, and hereby authorizes them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of REGENXBIO Inc. that the stockholder is entitled to vote at the Annual Meeting of Stockholders to be held at June 1, 2016, 9:00 a.m., Eastern Time, at 9712 Medical Center Drive, Suite 100, Rockville, Maryland 20850, 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.

Continued and to be signed on reverse side