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

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of
the Securities Exchange Act of 1934
(Amendment No. 1)**

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

Check the appropriate box:

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

Merrimack Pharmaceuticals, Inc.

(Name of Registrant as Specified in its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.
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- (1) Title of each class of securities to which transaction applies:

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- Fee paid previously with preliminary materials.
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- (3) Filing Party:

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PRELIMINARY PROXY MATERIALS – SUBJECT TO COMPLETION

MERRIMACK PHARMACEUTICALS, INC.
One Kendall Square, Suite B7201
Cambridge, Massachusetts 02139

[], 2018

Dear Merrimack Pharmaceuticals, Inc. Stockholder:

You are cordially invited to our Annual Meeting of Stockholders on Tuesday, June 12, 2018, beginning at 4:00 p.m., Eastern time, at our headquarters at One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139. The enclosed notice of annual meeting of stockholders sets forth the proposals that will be presented at the meeting, which are described in more detail in the enclosed proxy statement. Our board of directors recommends that you vote “FOR” each of the director nominees in Proposal 1, “FOR” Proposal 2 (“say-on-pay”), “FOR” Proposal 3 (ratification of our independent auditors) and “FOR” Proposal 4 (approval of an increase in the number of authorized shares of common stock).

We look forward to seeing you there.

Very truly yours,

Richard Peters, M.D., Ph.D.
President and Chief Executive Officer

PRELIMINARY PROXY MATERIALS – SUBJECT TO COMPLETION

MERRIMACK PHARMACEUTICALS, INC.
One Kendall Square, Suite B7201
Cambridge, Massachusetts 02139

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
to be held on Tuesday, June 12, 2018

The 2018 Annual Meeting of Stockholders (the “Annual Meeting”) of Merrimack Pharmaceuticals, Inc., a Delaware corporation (“Merrimack”), will be held on Tuesday, June 12, 2018, at 4:00 p.m., Eastern time, at our headquarters at One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, to consider and act upon the following matters:

1. To elect seven directors for a one year term, to hold office until the 2019 Annual Meeting of Stockholders;
2. To hold a non-binding, advisory vote on executive compensation;
3. To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018;
4. To approve an amendment to our certificate of incorporation to increase the number of authorized shares of common stock from 20,000,000 to 30,000,000; and
5. To transact such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

Stockholders of record at the close of business on April 17, 2018 will be entitled to notice of and to vote at the Annual Meeting or any adjournment or postponement thereof. This Notice, the accompanying Proxy Statement and a form of proxy card are being mailed beginning on or about [], 2018 to all stockholders entitled to vote at the Annual Meeting.

By Order of the Board of Directors,

Richard Peters, M.D., Ph.D.
President and Chief Executive Officer

Cambridge, Massachusetts
[], 2018

YOU MAY OBTAIN ADMISSION TO THE ANNUAL MEETING BY IDENTIFYING YOURSELF AT THE ANNUAL MEETING AS A STOCKHOLDER AS OF THE RECORD DATE. IF YOU ARE A RECORD OWNER, POSSESSION OF A COPY OF A PROXY CARD WILL BE ADEQUATE IDENTIFICATION. IF YOU ARE A BENEFICIAL (BUT NOT RECORD) OWNER, A COPY OF AN ACCOUNT STATEMENT FROM YOUR BANK, BROKER OR OTHER NOMINEE SHOWING SHARES HELD FOR YOUR BENEFIT ON APRIL 17, 2018 WILL BE ADEQUATE IDENTIFICATION.

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE COMPLETE, DATE AND SIGN THE ENCLOSED PROXY CARD AND MAIL IT PROMPTLY IN THE ENCLOSED ENVELOPE IN ORDER TO HELP ENSURE REPRESENTATION OF YOUR SHARES AT THE ANNUAL MEETING. NO POSTAGE NEED BE AFFIXED IF THE PROXY CARD IS MAILED IN THE UNITED STATES. ALTERNATIVELY, YOU MAY SUBMIT YOUR VOTE VIA THE INTERNET OR BY TELEPHONE BY FOLLOWING THE INSTRUCTIONS SET FORTH ON THE ENCLOSED PROXY CARD.

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MERRIMACK PHARMACEUTICALS, INC.
One Kendall Square, Suite B7201
Cambridge, Massachusetts 02139

PROXY STATEMENT FOR THE ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON TUESDAY, JUNE 12, 2018

Information About the Annual Meeting and Voting

This proxy statement is furnished in connection with the solicitation of proxies by the board of directors (the “board of directors” or the “board”) of Merrimack Pharmaceuticals, Inc. (“Merrimack,” “we” or “us”) for use at the 2018 Annual Meeting of Stockholders (the “Annual Meeting”) to be held on Tuesday, June 12, 2018, at 4:00 p.m., Eastern time, at our headquarters at One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, and at any adjournment or postponement thereof. On April 17, 2018, the record date for the determination of stockholders entitled to vote at the Annual Meeting, there were outstanding and entitled to vote an aggregate of [] shares of our common stock, \$0.01 par value per share (“common stock”). Each share of common stock entitles the record holder thereof to one vote on each of the matters to be voted on at the Annual Meeting.

This proxy statement, the enclosed proxy card and our 2017 annual report to stockholders were first made available to stockholders on or about [], 2018.

Your vote is important no matter how many shares you own. Please take the time to vote. Take a moment to read the instructions below. Choose the way to vote that is easiest and most convenient for you, and cast your vote as soon as possible.

If you are the “record holder” of your shares, meaning that you own your shares in your own name and not through a bank, broker or other nominee, you may vote in one of four ways:

- (1) *You may vote over the Internet.* You may vote your shares by following the “Vote by Internet” instructions on the enclosed proxy card. If you vote over the Internet, you do not need to vote by telephone or complete and mail your proxy card.
- (2) *You may vote by telephone.* You may vote your shares by following the “Vote by Phone” instructions on the enclosed proxy card. If you vote by telephone, you do not need to vote over the Internet or complete and mail your proxy card.
- (3) *You may vote by mail.* You may vote by completing, dating and signing the proxy card delivered with this proxy statement and promptly mailing it in the enclosed postage-paid envelope. If you vote by mail, you do not need to vote over the Internet or by telephone.
- (4) *You may vote in person.* If you attend the Annual Meeting, you may vote by delivering your completed proxy card in person or you may vote by completing a ballot at the Annual Meeting. Ballots will be available at the Annual Meeting.

All proxies that are executed or are otherwise submitted over the Internet or by telephone will be voted on the matters set forth in the accompanying Notice of Annual Meeting of Stockholders in accordance with the stockholders’ instructions. However, if no choice is specified on a proxy as to one or more of the proposals, the proxy will be voted in accordance with our board of directors’ recommendations on such proposals as set forth in this proxy statement.

After you have submitted a proxy, you may still change your vote and revoke your proxy prior to the Annual Meeting by doing any one of the following things:

- submitting a new proxy by following the “Vote by Internet” or “Vote by Phone” instructions on the enclosed proxy card up until 11:59 p.m., Eastern time, the day before the Annual Meeting;
- signing another proxy card with a later date and either arranging for delivery of that proxy card by mail prior to the start of the Annual Meeting, or by delivering that signed proxy card in person at the Annual Meeting;

- giving our Corporate Secretary a written notice before or at the Annual Meeting that you want to revoke your proxy; or
- voting in person at the Annual Meeting.

Your attendance at the Annual Meeting alone will not revoke your proxy.

If the shares you own are held in “street name” by a bank, broker or other nominee record holder, which, for convenience, we collectively refer to in this proxy statement as brokerage firms, your brokerage firm, as the record holder of your shares, is required to vote your shares according to your instructions. In order to vote your shares, you will need to follow the directions your brokerage firm provides you. Many brokerage firms also offer the option of providing for voting over the Internet or by telephone, instructions for which, if available, would be provided by your brokerage firm on the voting instruction form that it delivers to you. Under applicable stock exchange rules, if you do not give instructions to your brokerage firm subject to these rules, it will still be able to vote your shares with respect to certain “discretionary” items, but will not be allowed to vote your shares with respect to certain “non-discretionary” items. The ratification of PricewaterhouseCoopers LLP as our independent registered public accounting firm (Proposal 3) and the approval of an amendment to our certificate of incorporation to increase the number of authorized shares of common stock (Proposal 4) are considered to be discretionary items, and your brokerage firm will be able to vote on those items even if it does not receive instructions from you, so long as it holds your shares in its name. The election of directors (Proposal 1) and the non-binding, advisory vote on executive compensation, or “say-on-pay” vote (Proposal 2), are “non-discretionary” items, meaning that if you do not instruct your brokerage firm on how to vote with respect to either of these proposals, your brokerage firm will not vote with respect to that proposal and your shares will be counted as “broker non-votes.” “Broker non-votes” are shares that are held in “street name” by a brokerage firm that indicates on its proxy that it does not have or did not exercise discretionary authority to vote on a particular matter.

If your shares are held in street name, you must bring an account statement from your brokerage firm showing that you are the beneficial owner of the shares as of the record date (April 17, 2018) in order to be admitted to the Annual Meeting. To be able to vote your shares held in street name at the Annual Meeting, you will need to obtain a proxy card from the holder of record.

Votes Required

The holders of a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting will constitute a quorum for the transaction of business at the Annual Meeting. Shares of common stock represented in person or by proxy (including “broker non-votes” and shares that abstain or do not vote with respect to one or more of the matters presented for stockholder approval) will be counted for purposes of determining whether a quorum is present at the Annual Meeting. The following votes are required for approval of the proposals being presented at the Annual Meeting:

Proposal 1: Election of Directors. A nominee will be elected as a director at the Annual Meeting if the nominee receives a plurality of the votes cast “FOR” the applicable seat on our board of directors.

Proposal 2: Advisory Vote on Executive Compensation, or “Say-on-Pay.” This proposal calls for a non-binding, advisory vote, and accordingly there is no “required vote” that would constitute approval. However, our board, including our organization and compensation committee, values the opinions of our stockholders and, to the extent there are a substantial number of votes cast against the executive officer compensation as disclosed in this proxy statement, we will consider our stockholders’ concerns and evaluate what actions may be appropriate to address those concerns.

Proposal 3: Ratification of Independent Auditors. The affirmative vote of the holders of shares of common stock representing a majority of the votes cast on the matter is required for the ratification of the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the current fiscal year.

Proposal 4: Approval of an Amendment to our Certificate of Incorporation to Increase the Number of Authorized Shares of Common Stock. The affirmative vote of the holders of a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting is required for approval of an amendment to our certificate of incorporation to increase the number of authorized shares of common stock.

Shares that abstain from voting as to a particular matter and shares held in “street name” by brokerage firms who indicate on their proxies that they do not have discretionary authority to vote such shares as to a particular matter will not be counted as votes in favor of such matter, and will also not be counted as shares voting on such matter. Accordingly, abstentions and “broker non-votes” will have no effect on the voting on Proposals 1, 2 and 3 referenced above. Proposal 4 is a “discretionary” item, so if your shares are held in “street name” and you do not provide voting instructions with respect to your shares, your brokerage firm may vote your unvoted shares on Proposal 4. If you abstain from voting on Proposal 4, your shares will not be voted for or against the proposal. Because Proposal 4 requires the affirmative vote of the holders of a majority of the shares of our common stock issued and outstanding and entitled to vote at the Annual Meeting, abstentions will have the same effect as votes against this proposal.

**Important Notice Regarding the Availability of Proxy Materials for
the Annual Meeting of Stockholders to Be Held on June 12, 2018:**

**This proxy statement and our 2017 annual report to stockholders are available at
www.proxyvote.com for viewing, downloading and printing.**

A copy of our Annual Report on Form 10-K for the year ended December 31, 2017 as filed with the Securities and Exchange Commission, or SEC, except for exhibits, will be furnished without charge to any stockholder upon written or oral request to Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, Attention: Corporate Secretary, Telephone: (617) 441-1000.

CORPORATE GOVERNANCE

Board of Directors

Members of Our Board of Directors

Set forth below are the names and certain information about each of our directors as of April 17, 2018. The information presented includes each director's principal occupation and business experience for the past five years and the names of other public companies of which he or she has served as a director during the past five years. We believe that all of our directors possess the attributes and characteristics described in “—Board Processes—Director Nomination Process.”

| Name | Age | Position |
|-----------------------------------|-----|---|
| Richard Peters, M.D., Ph.D. (4) | 55 | President, Chief Executive Officer and Director |
| Gary L. Crocker (2)(4) | 66 | Chairman of the Board |
| George D. Demetri, M.D. (3) | 61 | Director |
| John M. Dineen (3) | 55 | Director |
| Vivian S. Lee, M.D., Ph.D. (1)(3) | 51 | Director |
| Ulrik B. Nielsen, Ph.D. | 46 | Director |
| Michael E. Porter, Ph.D. (2)(4) | 70 | Director |
| James H. Quigley (1) | 66 | Director |
| Russell T. Ray (1) | 70 | Director |

- (1) Member of the audit committee.
- (2) Member of the corporate governance and nominating committee.
- (3) Member of the organization and compensation committee.
- (4) Member of the executive committee.

Richard Peters, M.D., Ph.D. has served as our President and Chief Executive Officer and a member of our board of directors since February 2017. Prior to joining us, Dr. Peters served in various capacities at Sanofi Genzyme, a global pharmaceutical company, since 2008, including as Senior Vice President, Head of Global Rare Diseases Business Unit since January 2015, Vice President, Strategy Development Officer, U.S. Rare Disease Unit from May 2014 to December 2014, Vice President, Division Medical Officer, Global Oncology Division from 2011 to May 2014, and Vice President, Head of Global and U.S. Medical Affairs, Hematology and Transplant from 2008 to 2011. Prior to Sanofi Genzyme, Dr. Peters held medical affairs roles at Onyx Pharmaceuticals, Inc. and Amgen Inc., both pharmaceutical companies, and was a co-founder and Chief Executive Officer of Mednav, Inc., a healthcare information technology company. Dr. Peters has also served on the faculty at Harvard Medical School/Massachusetts General Hospital. Dr. Peters holds an M.D. and a Ph.D. in pharmacology from the Medical University of South Carolina and a B.S. from the College of Charleston. We believe that Dr. Peters is qualified to serve on our board of directors because of his extensive leadership experience in oncology and specialty care, his extensive knowledge of our industry and his medical oncology expertise.

Gary L. Crocker has served as a member of our board of directors since 2004 and as Chairman of the Board since 2005. Mr. Crocker also served as our Interim President and Chief Executive Officer from October 2016 to February 2017. Since 2002, Mr. Crocker has served as President and Managing Director of Crocker Ventures, LLC, a privately-held life science investment firm funding differentiated biotechnology and medical device companies. Mr. Crocker has held senior executive positions or served on the board of directors of several life science companies, including as Chairman of the Board of ARUP Laboratories, co-founder and director of Theratech, Inc. (acquired by Actavis plc) and President, Chief Executive Officer and founder of Research Medical, Inc. (acquired by Baxter International). Mr. Crocker also served on the boards of directors of the publicly traded firms Interleuken Genetics, Inc. and The Med-Design Corporation. Mr. Crocker served as a member of the board of the Federal Reserve Branch of San Francisco from 1999 to 2007, and currently serves as the Chairman of the University of Utah's Center for Medical Innovation and on the board of the Sorenson Legacy Foundation. Mr. Crocker holds an M.B.A. from Harvard Business School and a B.S. from Harvard College. We believe that Mr. Crocker is qualified to serve on our board of directors due to his experience in the life sciences industry as an entrepreneur, venture capitalist and executive and his service on the boards of directors of a range of public and private companies and government institutions, as well as his ability to provide us with his expertise in diagnostics and therapeutic development.

George D. Demetri, M.D. has served as a member of our board of directors since November 2017. Since 1986, Dr. Demetri has served as a Professor of Medicine at Harvard Medical School and as a Physician-Scientist Faculty Member at the Dana-Farber Cancer Institute. Dr. Demetri leads a multidisciplinary team at the Dana-Farber/Harvard Cancer Center focused on developing novel therapies for solid tumors, with an emphasis on sarcomas. Dr. Demetri's research and clinical interests have centered on mechanism-based drug development for solid tumors, and he is a world-renowned expert in the clinical translation of innovative treatment strategies for cancer. Dr. Demetri has contributed to the development of numerous approved therapies, including Gleevec (imatinib), Sutent (sunitinib), Stivarga (regorafenib), Zelboraf (vemurafenib) and Votrient (pazopanib), as well as other new targeted therapies in development. Dr. Demetri also currently serves on the board of directors and scientific advisory board of Blueprint Medicines Corporation. Dr. Demetri holds an M.D. from Stanford University School of Medicine and an A.B. from Harvard College. We believe that Dr. Demetri is qualified to serve on our board of directors due to his more than 25 years of experience as an oncologist and his significant leadership experience on a board of directors and on various scientific and editorial advisory boards.

John M. Dineen has served as a member of our board of directors since June 2015. Mr. Dineen has been an Operating Advisor to Clayton, Dublier & Rice, LLC, a private equity firm, since January 2015. From 1986 to October 2014, Mr. Dineen served in a variety of leadership roles with General Electric Company, or GE, including as Chief Executive Officer of GE Healthcare, Chief Executive Officer of GE Transportation, President of GE Plastics, General Manager of GE's Power Equipment business and General Manager of GE's Appliances, Microwave and Air-Conditioning businesses. Mr. Dineen also currently serves on the board of directors of Cognizant Technology Solutions Corp. Mr. Dineen holds a B.S. from the University of Vermont. We believe that Mr. Dineen is qualified to serve on our board of directors due to his experience in the leadership and management of several businesses, including a large healthcare company.

Vivian S. Lee, M.D., Ph.D. has served as a member of our board of directors since November 2014. Dr. Lee has served as a Professor of Radiology at the University of Utah's School of Medicine since May 2017. From July 2011 to April 2017, Dr. Lee served as Senior Vice President for Health Sciences at the University of Utah, Dean of the University of Utah's School of Medicine and Chief Executive Officer of University of Utah Health Care. From 2007 to June 2011, Dr. Lee served as Vice Dean for Science, Senior Vice President and Chief Scientific Officer of New York University Medical Center. Dr. Lee also currently serves on the board of directors of Zions Bancorporation. Dr. Lee is a member of the Institute of Medicine/National Academy of Medicine and is a Fellow and past President of the International Society of Magnetic Resonance in Medicine. Dr. Lee holds a Ph.D. in medical engineering from Oxford University, an M.D. from Harvard Medical School, an M.B.A. from the Stern School of Business at New York University and a B.A. from Harvard-Radcliffe College. We believe that Dr. Lee is qualified to serve on our board of directors due to her knowledge of the healthcare industry, her expertise in medical imaging and her leadership and management experience. Dr. Lee is not standing for re-election to the board of directors at the Annual Meeting.

Ulrik B. Nielsen, Ph.D. has served as a member of our board of directors since January 2015 and is one of our co-founders. Dr. Nielsen led our research and drug discovery in various roles from when he joined us in 2002 to January 2015, including as our Senior Vice President and Chief Scientific Officer from March 2009 until January 2015. Dr. Nielsen is the Founder Chairman of Torque Therapeutics Inc., a biotechnology company, where he has served as President since January 2015 and served as Chief Executive Officer from January 2015 to November 2017. Dr. Nielsen also served as Chief Executive Officer of Silver Creek Pharmaceuticals, Inc., a former majority owned subsidiary of ours, from July 2010 to March 2014. Dr. Nielsen holds a Ph.D. in molecular biology and an M.S. in biochemistry from the University of Copenhagen. We believe that Dr. Nielsen is qualified to serve on our board of directors due to his extensive knowledge of Merrimack, his leadership and management experience at Merrimack and Torque Therapeutics Inc. and his thorough understanding of our business and industry.

Michael E. Porter, Ph.D. has served as a member of our board of directors since December 2010. Dr. Porter was also a strategy advisor to us from 1999 until he joined our board in December 2010. Dr. Porter is the Bishop William Lawrence University Professor at Harvard Business School and has been on the faculty at Harvard Business School since 1973. Dr. Porter also served on the boards of directors of PTC Inc. from 1995 to 2015, The Scotts Miracle-Gro Company from 2013 to 2015 and Thermo Fisher Scientific Inc. from 2001 to 2012. Dr. Porter has written extensively on healthcare delivery and has worked with leading healthcare providers in multiple countries and with government leaders on healthcare policy issues. Dr. Porter holds a Ph.D. in business economics from Harvard University, an M.B.A. from Harvard Business School and a B.S.E. from Princeton University. We believe that Dr. Porter is qualified to serve on our board of directors due to his expertise in corporate strategy, healthcare delivery and the development of companies in the life sciences industry, as well as his experience as an advisor and consultant to many leading companies globally, including a range of healthcare and pharmaceutical companies. Dr. Porter is not standing for re-election to the board of directors at the Annual Meeting.

James H. Quigley has served as a member of our board of directors since July 2012. Mr. Quigley also currently serves as Chairman of the Board of Hess Corporation and on the board of directors of Wells Fargo & Company. Mr. Quigley retired as a Senior Partner from Deloitte LLP, a global public accounting firm, in June 2012, where he also served as Chief Executive Officer of Deloitte Touche Tohmatsu, Limited (Deloitte's global network) from June 2007 to June 2011. Mr. Quigley is also a member of the board of directors of the German Marshall Fund of the United States, a trustee of the International Financial Reporting Standards (IFRS) Foundation and a member of the National Advisory Committee of Brigham Young University. Mr. Quigley holds a B.S. and an honorary Doctorate of Business from Utah State University. We believe that Mr. Quigley is qualified to serve on our board of directors due to his expertise in financial reporting and auditing, his experience as a leader of a global firm and his experience working with the boards of directors of a range of public and private companies as their independent auditor.

Russell T. Ray has served as a member of our board of directors since January 2015. Mr. Ray has been a Senior Advisor to HLM Venture Partners, a healthcare venture capital firm, since February 2017. Mr. Ray was also a Senior Advisor to HLM Venture Partners from January 2014 to December 2015 and a Partner from 2003 to December 2013. From January 2016 to February 2017, Mr. Ray was a Managing Director and Vice Chairman of Healthcare Investment Banking at Stifel, Nicolaus & Company, Incorporated, an investment banking firm. From 1999 to 2003, Mr. Ray was a Managing Director and Global Co-Head of Healthcare Investment Banking at Credit Suisse First Boston. From 1987 to 1999, Mr. Ray was a Managing Director and Global Head of Healthcare Investment Banking at Deutsche Bank and its predecessor entities, BT Alex. Brown and Alex. Brown & Sons. Mr. Ray served on the board of directors of Allergan, Inc. from 2003 to 2015. Mr. Ray holds an M.B.A. from the Wharton School at the University of Pennsylvania, an M.S. in evolutionary biology from the University of Pennsylvania and B.S. degrees from the United States Military Academy and the University of Washington. We believe that Mr. Ray is qualified to serve on our board of directors due to his knowledge of the healthcare industry, his financial expertise and his management background as an executive in the financial services industry.

Board Composition

Our board of directors is currently authorized to have nine members. However, our board has approved a decrease in its size to seven members effective as of the Annual Meeting. All of our directors are elected annually for a one year term expiring at the next annual meeting of stockholders. Each director will hold office until his or her successor has been elected and qualified or until his or her earlier death, resignation or removal. Our bylaws provide that the authorized number of directors may be changed only by resolution of our board of directors. Our bylaws also provide that our directors may be removed with or without cause by the affirmative vote of the holders of at least a majority of the votes that all of our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Due to the decrease in the size of our board of directors, two of our current directors whose terms are scheduled to expire at the Annual Meeting, Dr. Lee and Dr. Porter, are not standing for re-election. In connection with the conclusion of their service as directors, we expect Dr. Lee and Dr. Porter to deliver letters confirming that their respective service as directors has ceased upon the election of the director nominees named in "Matters to Be Voted On— Proposal 1: Election of Directors" below at the Annual Meeting.

Board Determination of Independence

Rule 5605 of the Nasdaq Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and corporate governance and nominating committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries. In addition, in affirmatively determining the independence of any director who will serve on a company's compensation committee, Rule 10C-1 under the Exchange Act requires that a company's board of directors consider all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (i) the source of compensation of the director, including any consulting, advisory or other compensatory fee paid by such company to the director; and (ii) whether the director is affiliated with the company or any of its subsidiaries or affiliates.

Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that none of Mr. Crocker, Dr. Demetri, Mr. Dineen, Dr. Lee, Dr. Nielsen, Dr. Porter, Mr. Quigley and Mr. Ray, representing eight of our nine current directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under Rule 5605(a)(2) of the Nasdaq Listing Rules. Our board of directors had previously made a similar determination of independence with respect to John Mendelsohn, who served as a director until November 2017. Our board of directors has also determined that Dr. Lee, Mr. Quigley and Mr. Ray, who comprise our audit committee, Mr. Crocker and Dr. Porter, who comprise our corporate governance and nominating committee, and Dr. Demetri, Mr. Dineen and Dr. Lee, who comprise our organization and compensation committee, each satisfy the independence standards for such committees established by the SEC and the Nasdaq Listing Rules, as applicable. In making such determination, our board of directors considered the relationships that each such non-employee director has with Merrimack, including any transactions of the type described below in "—Board Policies—Related Person Transactions," and all other facts and circumstances our board of directors deemed relevant in determining independence. From October 2016 to February 2017 when Mr. Crocker served as our Interim President and Chief Executive Officer, he was not independent under Nasdaq Listing Rules and he did not serve on our audit committee or corporate governance and nominating committee, but he was independent under Nasdaq Listing Rules following the end of his term as our Interim President and Chief Executive Officer. Dr. Lee served on our audit committee during such time in lieu of Mr. Crocker, and our board of directors determined that she satisfied the independence standards for such committee established by the SEC and the Nasdaq Listing Rules.

How Our Board Is Organized

Board Leadership Structure

Our board of directors, upon the recommendation of our corporate governance and nominating committee, has determined that the roles of Chairman of the Board and Chief Executive Officer should be separated at the current time. Accordingly, our board has appointed Mr. Crocker, an independent director within the meaning of Nasdaq Listing Rules, as the Chairman of the Board.

Mr. Crocker's duties as Chairman of the Board include the following:

- chairing meetings of our board and of the independent directors in executive session;
- meeting with any director who is not adequately performing his or her duties as a member of our board or any committee;

- facilitating communications between other members of our board and the Chief Executive Officer;
- determining the frequency and length of board meetings and recommending when special meetings of our board should be held;
- preparing or approving the agenda for each board meeting; and
- reviewing and, if appropriate, recommending action to be taken with respect to written communications from stockholders submitted to our board.

Our board of directors decided to separate the roles of Chairman of the Board and Chief Executive Officer because it believes that a bifurcated leadership structure offers the following benefits:

- increasing the independent oversight of Merrimack and enhancing our board's objective evaluation of the Chief Executive Officer;
- freeing the Chief Executive Officer to focus on company operations instead of board administration;
- providing the Chief Executive Officer with an experienced sounding board;
- providing greater opportunities for communication between stockholders and our board;
- enhancing the independent and objective assessment of risk by our board; and
- providing an independent spokesman for Merrimack.

Notwithstanding the above, Mr. Crocker did continue to serve as Chairman of the Board while he served as Interim President and Chief Executive Officer from October 2016 to February 2017.

Board Committees

Our board of directors has established an audit committee, a corporate governance and nominating committee, an organization and compensation committee and an executive committee, each of which operates under a charter that has been approved by our board. Copies of the committee charters are posted on the Investors section of our website, which is located at investors.merrimack.com.

Audit Committee

The members of our audit committee are Dr. Lee, Mr. Quigley and Mr. Ray. Mr. Quigley chairs the audit committee. Our audit committee's responsibilities include:

- appointing, approving the compensation of and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports and other communications from such firm;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from the independent registered public accounting firm and procedures for the receipt and retention of accounting-related complaints and concerns;

- meeting independently with our internal auditors, independent registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that Mr. Quigley is an “audit committee financial expert” as defined in applicable SEC rules. We believe that the composition of our audit committee meets the requirements for independence under the current Nasdaq Listing Rules and SEC rules and regulations.

The audit committee met eight times during 2017.

Corporate Governance and Nominating Committee

The members of our corporate governance and nominating committee are Mr. Crocker and Dr. Porter. Dr. Porter chairs the corporate governance and nominating committee. Our corporate governance and nominating committee’s responsibilities include:

- identifying individuals qualified to become members of our board;
- recommending to our board the persons to be nominated for election as directors and to each of our board’s committees;
- reviewing and making recommendations to our board with respect to our board leadership structure;
- developing and recommending to our board corporate governance principles; and
- overseeing an annual evaluation of our board.

The corporate governance and nominating committee met eight times during 2017.

Organization and Compensation Committee

The members of our organization and compensation committee are Dr. Demetri, Mr. Dineen and Dr. Lee. Mr. Dineen chairs the organization and compensation committee. Our organization and compensation committee’s responsibilities include:

- reviewing and making recommendations to our board with respect to our Chief Executive Officer’s compensation;
- reviewing and approving, or making recommendations to our board with respect to, the compensation of our other executive officers;
- overseeing an evaluation of our executive officers;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board with respect to director compensation;
- reviewing and making recommendations to our board with respect to management succession planning;
- reviewing and discussing annually with management our “Compensation Discussion and Analysis” disclosure required by SEC rules; and
- preparing the organization and compensation committee report required by SEC rules.

The processes and procedures followed by our organization and compensation committee in considering and determining executive and director compensation are described below under “—Board Processes—Executive and Director Compensation Processes.”

The organization and compensation committee met nine times during 2017.

Executive Committee

The members of our executive committee are Mr. Crocker, Dr. Peters and Dr. Porter. Mr. Crocker chairs the executive committee. Our executive committee has, and may exercise when necessary, all of the authority and powers of our full board of directors during the intervals between meetings of our board, except as limited by Delaware law.

The executive committee met one time during 2017.

Compensation Committee Interlocks and Insider Participation

The members of our organization and compensation committee during 2017 were Dr. Demetri (starting in November 2017), Mr. Dineen, Dr. Lee and Dr. Mendelsohn (until November 2017). No other person served as a member of our organization and compensation committee during 2017. None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any entity that has one or more executive officers who serve as members of our board of directors or our organization and compensation committee. None of the members of our organization and compensation committee is an officer or employee of Merrimack, nor have they ever been an officer or employee of Merrimack.

Board Meetings and Attendance

Our board of directors met 21 times during 2017. During 2017, each director attended at least 75% of the aggregate of the number of board meetings and the number of meetings held by all committees of our board on which he or she then served, except for Mr. Dineen, who attended 70% of such meetings.

Our directors are encouraged to attend our annual meetings of stockholders. One of our nine directors then serving attended our 2017 Annual Meeting of Stockholders.

Board Processes

Oversight of Risk

Our board oversees our risk management processes directly and through its committees. Our management is responsible for risk management on a day-to-day basis. The role of our board and its committees is to oversee the risk management activities of management. They fulfill this duty by discussing with management the policies and practices utilized by management in assessing and managing risks and providing input on those policies and practices. In general, our board oversees risk management activities relating to business strategy, acquisitions, capital allocation, organizational structure and certain operational risks; our audit committee oversees risk management activities related to financial controls and legal and compliance risks; our corporate governance and nominating committee oversees risk management activities relating to board composition; and our organization and compensation committee oversees risk management activities relating to our compensation policies and practices and management succession planning. Each committee reports to the full board on a regular basis, including reports with respect to the committee’s risk oversight activities as appropriate. In addition, since risk issues often overlap, committees from time to time request that the full board discuss particular risks.

Director Nomination Process

The process followed by our corporate governance and nominating committee to identify and evaluate director candidates may include requests to board members and others for recommendations, evaluation of the performance on our board and its committees of any existing directors being considered for nomination, consideration of biographical information and background material relating to potential candidates and, particularly in the case of potential candidates who are not then serving on our board, interviews of selected candidates by members of the committee and our board.

In considering whether to recommend any particular candidate for inclusion in our board's slate of recommended director nominees, our corporate governance and nominating committee applies the criteria set forth in our corporate governance guidelines. Consistent with these criteria, our corporate governance and nominating committee expects every nominee to have the following attributes or characteristics, among others: integrity, honesty, adherence to high ethical standards, business acumen, good judgment and a commitment to understand our business and industry.

All of the director nominees are currently members of our board of directors. The nominee biographies under “—Board of Directors—Members of Our Board of Directors” indicate the experience, qualifications, attributes and skills of each nominee that led our corporate governance and nominating committee and our board to conclude he or she should continue to serve as a director of Merrimack. Our corporate governance and nominating committee and our board believe that each of the nominees has the individual attributes and characteristics required of our directors, and that the nominees as a group possess the skill sets and specific experience desired of our board as a whole. At the Annual Meeting, stockholders will be asked to consider the election of Dr. Demetri, who has been nominated for election as a director for the first time. Dr. Demetri was appointed to our board in November 2017 by board action. He was initially recommended by our corporate governance and nominating committee, and our board determined to include Dr. Demetri among its nominees.

Our corporate governance and nominating committee considers the value of diversity when selecting nominees, and believes that our board, taken as a whole, should embody a diverse set of skills, experiences and backgrounds. The committee does not make any particular weighting of diversity or any other characteristic in evaluating nominees and directors.

Stockholders may recommend individuals for consideration as potential director candidates by submitting their names, together with appropriate biographical information and background materials, and information with respect to the stockholder or group of stockholders making the recommendation, including the number of shares of common stock owned by such stockholder or group of stockholders, to our Corporate Secretary at Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, Attention: Corporate Secretary. The specific requirements for the information that is required to be provided for such recommendations to be considered are specified in our bylaws and must be received by us no later than the date referenced below in “Other Matters—Deadline for Submission of Stockholder Proposals for 2019 Annual Meeting of Stockholders.” Assuming that appropriate biographical and background material has been provided on a timely basis, the corporate governance and nominating committee will evaluate stockholder-recommended candidates by following substantially the same process, and applying substantially the same criteria, as it follows for candidates submitted by others.

Executive and Director Compensation Processes

Our executive compensation program is administered by the organization and compensation committee of our board of directors, subject to the oversight and approval of our full board of directors. Our organization and compensation committee reviews our executive compensation practices on an annual basis and based on this review makes recommendations to our board of directors for approval, which has full discretion to approve or modify the recommendations of the organization and compensation committee.

In designing our executive compensation program, our organization and compensation committee considers publicly available compensation data for national and regional companies in the biotechnology/pharmaceutical industry to help guide its executive compensation decisions at the time of hiring and for subsequent adjustments in compensation. In 2017 and prior years, our organization and compensation committee also retained the services of Mercer, LLC, or Mercer, an independent compensation consultant, to provide it with additional comparative data on executive compensation practices in our industry and to advise it on our executive compensation program generally. Although the organization and compensation committee considered Mercer's advice and recommendations about our executive compensation program, the organization and compensation committee ultimately made its own decisions about these matters. None of our executive officers or directors have any relationship with Mercer or the individual consultants employed by Mercer. Mercer has not provided any other services to Merrimack other than compensation consulting services to the organization and compensation committee. The organization and compensation committee has determined that no conflicts of interest exist between Merrimack and Mercer. The organization and compensation committee is directly responsible for the appointment and oversight of any compensation consultants and other advisors it retains.

Our director compensation program is administered by our board of directors with the assistance of the organization and compensation committee. The organization and compensation committee periodically reviews director compensation and makes recommendations to our board with respect thereto.

Communications with Stockholders

Our management will give appropriate attention to written communications that are submitted by stockholders, and will respond if and as appropriate. Stockholders may communicate with our management by writing to our Corporate Secretary at Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, Attention: Corporate Secretary, or by calling (617) 441-1000. Additional information about contacting Merrimack is available on the Investors section of our website, which is located at investors.merrimack.com.

In addition, stockholders who wish to communicate with our entire board may do so by writing to Gary L. Crocker, Chairman of the Board, Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139. Communications will be forwarded to other directors if they relate to substantive matters that the Chairman of the Board, in consultation with our General Counsel, considers appropriate for attention by the other directors. In general, communications relating to corporate governance and long-term corporate strategy are more likely to be forwarded than communications relating to ordinary business affairs, personal grievances or matters as to which we tend to receive repetitive or duplicative communications.

Corporate Governance Guidelines

Our board of directors has adopted corporate governance guidelines to assist in the exercise of its duties and responsibilities and to serve the best interests of Merrimack and our stockholders. The guidelines provide that:

- our board's principal responsibility is to oversee the management of Merrimack;
- a majority of the members of our board must be independent directors;
- the independent directors meet in executive session at least twice a year;
- directors have full and free access to management and, as necessary, independent advisors;
- new directors participate in an orientation program and all directors are expected to participate in continuing director education on an ongoing basis; and
- our board will conduct an annual self-evaluation to determine whether it and its committees are functioning effectively.

A copy of the corporate governance guidelines is posted on the Investors section of our website, which is located at investors.merrimack.com.

Board Policies

Related Person Transactions

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

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

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

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

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

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

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

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

Since January 1, 2017, we have not engaged in any related person transactions.

Code of Business Conduct and Ethics

Our board of directors has adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of the code of business conduct and ethics is posted on the Investors section of our website, which is located at investors.merrimack.com. In addition, we intend to post on our website all disclosures that are required by law or the Nasdaq Listing Rules concerning any amendments to, or waivers from, any provision of our code of business conduct and ethics.

EXECUTIVE COMPENSATION

Executives

Our executives, their current positions and their ages as of April 17, 2018 are set forth below:

| Name | Age | Position(s) |
|-----------------------------|-----|---|
| Richard Peters, M.D., Ph.D. | 55 | President, Chief Executive Officer and Director |
| Daryl C. Drummond, Ph.D. | 48 | Head of Research |
| Ellen K. Forest | 54 | Head of Human Resources |
| Jean M. Franchi | 51 | Chief Financial Officer and Treasurer |
| Jeffrey A. Munsie | 41 | General Counsel, Head of Corporate Operations and Secretary |
| Sergio L. Santillana, M.D. | 55 | Chief Medical Officer |

In addition to Dr. Peters, whose biography is set forth above in “Corporate Governance—Board of Directors—Members of Our Board of Directors,” the biographies of our executives are as follows:

Daryl C. Drummond, Ph.D. has served as our Head of Research since March 2017. Dr. Drummond served as our Vice President of Discovery from July 2014 to March 2017 and our Senior Director of Nanotherapeutics from October 2009 to July 2014. Dr. Drummond previously served as Director of Liposome Research and Development at Hermes BioSciences, Inc., a biotechnology company that was acquired by Merrimack in October 2009. Prior to joining Hermes BioSciences, Inc. in 2000, Dr. Drummond was a post-doctoral fellow at California Pacific Medical Center, where he focused on lipid-based drug delivery systems. Dr. Drummond is a principal inventor for many of Merrimack’s nanotechnology-based drugs and platform technologies, including ONIVYDE®, which Merrimack sold to Ipsen S.A., or Ipsen, in April 2017. Dr. Drummond holds a Ph.D. in biochemistry and a B.S. from Indiana University.

Ellen K. Forest has served as our Head of Human Resources since May 2017. Ms. Forest previously served as a Director of Human Resources at Baxalta, a global biopharmaceutical company, from January 2016 to July 2016. From January 2014 to December 2015, Ms. Forest served as Human Resources Manager at Partners HealthCare System, Inc., a not-for-profit healthcare system. From January 2013 to July 2013, Ms. Forest served as Director at Dovetail Health, a provider of medication management solutions. From 2006 to January 2013, Ms. Forest served as Director of Human Resources at TA Associates Management, LP, a private equity firm. Ms. Forest holds an M.S. in human resources management and a B.S. from Emmanuel College.

Jean M. Franchi has served as our Chief Financial Officer and Treasurer since August 2017. Ms. Franchi previously served as Chief Financial Officer, Treasurer and Secretary at Dimension Therapeutics, Inc., a biotechnology company, from August 2015 to July 2017. From February 2012 to July 2015, Ms. Franchi served as Chief Financial Officer at Good Start Genetics, Inc., a molecular genetics information company. From 1995 to 2011, Ms. Franchi held various positions at Sanofi Genzyme, a global pharmaceutical company, including Senior Vice President of Corporate Finance, Senior Vice President of Business Unit Finance, Vice President of Finance and Controller, Product Line and International Group. Ms. Franchi holds a B.B.A. from Hofstra University and successfully completed the Uniform CPA Examination.

Jeffrey A. Munsie has served as our General Counsel since January 2013, as our Head of Corporate Operations since March 2017 and as our Secretary since August 2011. Mr. Munsie served as our Corporate Counsel from February 2011 to January 2013. Previously, Mr. Munsie was Counsel in the corporate department at Wilmer Cutler Pickering Hale and Dorr LLP, a law firm, where he practiced from 2002 to January 2011. Mr. Munsie holds a J.D. from Harvard Law School and an A.B. from Dartmouth College.

Sergio L. Santillana, M.D. has served as our Chief Medical Officer since June 2017. Dr. Santillana previously served as Vice President of Clinical Research at ARIAD Pharmaceuticals, Inc., a pharmaceutical company, from March 2016 to June 2017, and as Chief Medical Officer at ARIAD from May 2016 to June 2017. From August 2014 to March 2016, Dr. Santillana served as Senior Medical Director and Global Clinical Lead of Oncology Clinical Research at Takeda Pharmaceuticals International, Inc., a global pharmaceutical company. From 2006 to August 2014, Dr. Santillana served in various capacities at GlaxoSmithKline plc, a global pharmaceutical company, including as Global Project Physician Leader and Director of Clinical Development from February 2012 to August 2014. Dr. Santillana also served as a Clinical Research Physician for Eli Lilly and Company, a global pharmaceutical company, from 2002 to 2006. Dr. Santillana was also a practicing medical oncologist for 15 years, first at the National Cancer Institute of Peru (INEN) from 1994 to 2002, and then in private practice from 2002 to 2006. Dr. Santillana holds an M.S. in experimental therapeutics from Kellogg College at the University of Oxford and an M.D. and B.S. from the Universidad Nacional Federico Villarreal School of Medicine.

Our executive officers are elected by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors or executive officers.

Compensation Discussion and Analysis

Overview

This section discusses the principles underlying our policies and decisions with respect to the compensation of our executive officers and the most important factors relevant to an analysis of these policies and decisions. This section also describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers for 2017. Our “named executive officers” for 2017 are Richard Peters, our President and Chief Executive Officer, Gary L. Crocker, our Chairman of the Board and former Interim President and Chief Executive Officer, Jean M. Franchi, our Chief Financial Officer and Treasurer, Yasir B. Al-Wakeel, our former Chief Financial Officer and Head of Corporate Development, and our three other most highly compensated executive officers, Daryl C. Drummond, our Head of Research, Jeffrey A. Munsie, our General Counsel, Head of Corporate Operations and Secretary, and Sergio L. Santillana, our Chief Medical Officer. In addition, this section provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

Our organization and compensation committee and board of directors oversee our policies governing the compensation of our executive officers. Our organization and compensation committee reviews and recommends for approval by our board of directors all compensation decisions relating to our President and Chief Executive Officer. Our organization and compensation committee also reviews and approves all compensation decisions relating to our other executive officers. Our organization and compensation committee consists of three members of our board of directors, all of whom have extensive experience in our industry and each of whom is an independent director. Our organization and compensation committee uses its judgment and experience and has historically considered the recommendations of our President and Chief Executive Officer when determining the amount and appropriate mix of compensation for each of our other executive officers. Specifically, our President and Chief Executive Officer provides input and recommendations, via an annual review of executive performance and otherwise, regarding salary adjustments, the corporate and individual objectives used to determine annual performance-based cash bonuses and appropriate equity incentive compensation levels. Historically, our President and Chief Executive Officer has provided input to the organization and compensation committee and the board of directors on his own compensation, but has not had any control over setting the amount or mix of his compensation and is not present when the organization and compensation committee or the board of directors discusses and determines his compensation.

The organization and compensation committee and board of directors periodically evaluate the need for revisions to our executive compensation program to ensure our program is competitive with the companies with which we compete for executive talent.

Objectives and Philosophy of Our Executive Compensation Program

The primary objectives of the organization and compensation committee and board of directors with respect to executive compensation are to:

- attract, retain and motivate experienced and talented executives;
- ensure executive compensation is aligned with our corporate strategies, research and development programs and business objectives;
- recognize the individual contributions of executives, but foster a shared commitment among executives by aligning their individual objectives with our corporate objectives;
- promote the achievement of key strategic, development and operational performance measures by linking compensation to the achievement of measurable corporate and individual performance objectives; and
- align the interests of our executives with our stockholders by rewarding performance that leads to the creation of stockholder value.

To achieve these objectives, the organization and compensation committee and board of directors evaluate our executive compensation program with the goal of setting compensation at levels that are justifiable based on each executive's level of experience, performance and responsibility and that they believe are competitive with those of other companies in our industry and our region that compete with us for executive talent. In addition, our executive compensation program ties a portion of each executive's overall compensation to the achievement of key corporate and individual objectives. We provide a portion of our executive compensation in the form of stock options that vest over time, which we believe helps to retain our executives and aligns their interests with those of our stockholders by allowing them to participate in the longer term success of Merrimack as reflected in the appreciation of our stock price.

Consideration of 2017 Advisory Vote on Executive Compensation

At our 2017 Annual Meeting of Stockholders, we held an advisory vote on our 2016 executive compensation program, and 88% of the votes cast on the matter were voted in support of the program. The organization and compensation committee and board of directors considered the results of this advisory vote, together with the other factors and data discussed in this proxy statement, in determining executive compensation decisions and policies and believe that the result affirms stockholders' support of our approach to and structure of executive compensation. The organization and compensation committee and board of directors will continue to consider the outcome of our say-on-pay votes when making future compensation decisions for our executive officers.

Use of Compensation Consultants and Market Benchmarking

In designing our executive compensation program, our organization and compensation committee considers publicly available compensation data for national and regional companies in the biotechnology/pharmaceutical industry to help guide its executive compensation decisions at the time of hiring and for subsequent adjustments in compensation. In 2017 and prior years, our organization and compensation committee also retained the services of Mercer, an independent compensation consultant, to provide it with additional comparative data on executive compensation practices in our industry and to advise it on our executive compensation program generally. Although the organization and compensation committee considered Mercer's advice and recommendations about our executive compensation program, the organization and compensation committee ultimately made its own decisions about these matters. None of our executive officers or directors have any relationship with Mercer or the individual consultants employed by Mercer. Mercer has not provided any other services to Merrimack other than compensation consulting services to the organization and compensation committee. The organization and compensation committee has determined that no conflicts of interest exist between Merrimack and Mercer.

In December 2015, Mercer provided our organization and compensation committee with comparative data showing where our total compensation and each element of our compensation ranked among (1) both public and private companies in the biotechnology/pharmaceutical industry generally, according to compensation data from the 2015 Radford Global Life Sciences Survey, and (2) a peer group of publicly traded companies in the biotechnology/pharmaceutical industry at a stage of development, market capitalization or size comparable to ours at the time with which the organization and compensation committee believed we competed against for executive talent, according to publicly available compensation data for years prior to 2015. The companies included in that peer group were Aegerion Pharmaceuticals, Inc., AMAG Pharmaceuticals, Inc., Arena Pharmaceuticals, Inc., Ariad Pharmaceuticals, Inc., Array BioPharma Inc., Clovis Oncology, Inc., Exelixis, Inc., FibroGen, Inc., Halozyme Therapeutics, Inc., ImmunoGen, Inc., Infinity Pharmaceuticals, Inc., Ironwood Pharmaceuticals, Inc., Momenta Pharmaceuticals, Inc., Raptor Pharmaceuticals Corp. and Spectrum Pharmaceuticals, Inc.

Our organization and compensation committee retained Mercer in 2017 to help guide its compensation decisions with respect to the hiring of Dr. Peters and Dr. Santillana, but did not retain Mercer to provide any other updated comparative data on compensation practices for 2017. Our peer group is subject to change, and we expect that our organization and compensation committee will continue to periodically review and update the list, including in 2018.

Our peer group is used for purposes of gathering data to compare against our existing executive compensation practices and for guiding future compensation decisions. Our compensation consultant also makes suggestions for changes to our executive compensation practices based on the data they provide to us as well as compensation trends in our industry. However, although the organization and compensation committee may consider peer group and other industry compensation data and the recommendations of our compensation consultant when making decisions related to executive compensation, to date, it has not made and does not intend to make adjustments to overall executive compensation or any element thereof solely or primarily either to target a specified threshold level of compensation or market benchmark within the peer group, our larger industry or some other group of comparable companies or to act on the recommendations of our compensation consultant.

Annual Compensation Review Process

After the end of each calendar year, we evaluate each executive officer's performance for the completed year. Our President and Chief Executive Officer prepares a written evaluation of each executive officer other than himself based on the executive officer's self-assessment, his own evaluation of the executive officer and input from others within Merrimack. Our President and Chief Executive Officer also prepares his own self-assessment. This process leads to a recommendation by our President and Chief Executive Officer to the organization and compensation committee with respect to each executive officer other than himself as to:

- the need for salary increases;
- the amount of bonuses to be paid; and
- whether or not stock option awards should be made.

These recommendations are reviewed by the organization and compensation committee and are taken into account when they make a final determination on all such matters.

Components of Our Executive Compensation Program

The primary elements of our executive compensation program are:

- base salary;
- annual performance-based cash bonuses;
- equity incentive awards;
- benefits and other compensation; and
- severance and change in control benefits.

We do not have a formal or informal policy for allocating between long-term and short-term compensation, between cash and non-cash compensation or among different forms of non-cash compensation. Instead, our organization and compensation committee and board of directors, after reviewing information provided by our compensation consultant and other relevant data, determine subjectively what they believe to be the appropriate level and mix of the various compensation components. We generally strive to provide our executive officers with a balance of short-term and long-term incentives to encourage consistently strong performance. Ultimately, the objective in allocating between long-term and currently paid compensation is to ensure adequate base compensation to attract and retain personnel, while providing incentives to maximize long-term value for Merrimack and our stockholders. Therefore, we provide cash compensation in the form of base salary to meet competitive salary norms and reward good performance on an annual basis and in the form of bonus compensation to incentivize and reward superior performance based on specific annual objectives. To further focus our executive officers on longer-term performance and the creation of stockholder value, we rely upon equity-based awards that vest over a meaningful period of time. In addition, we provide our executive officers with benefits that are generally available to our salaried employees and severance benefits to incentivize them to continue to strive to achieve stockholder value in connection with change in control situations.

Base salary

We use base salaries to recognize the experience, skills, knowledge and responsibilities of our employees, including our executive officers. Base salaries for our executive officers typically are established through arm's length negotiation at the time the executive officer is hired, taking into account the position for which the executive officer is being considered and the executive officer's qualifications, prior experience and prior salary. None of our executive officers is currently party to an employment agreement that provides for automatic or scheduled increases in base salary. However, on an annual basis, our organization and compensation committee and board of directors review and evaluate, with input from our President and Chief Executive Officer, the need for adjustment of the base salaries of our executive officers based on changes and expected changes in the scope of an executive officer's responsibilities, including promotions, the individual contributions made by and performance of the executive officer during the prior fiscal year, the executive officer's performance over a period of years, overall labor market conditions, the relative ease or difficulty of replacing the executive officer with a well-qualified person, our overall growth and development as a company and general salary trends in our industry and among our peer group and where the executive officer's salary falls in the salary range presented by that data. In making decisions regarding salary increases, we may also draw upon the experience of members of our board of directors with other companies. No formulaic base salary increases are provided to our executive officers, and we do not target the base salaries of our executive officers at a specified compensation level within our peer group or other market benchmark.

The following table sets forth the annual base salaries for 2016 and 2017 for our named executive officers:

| Name | 2016 Base Salary(\$) | 2017 Base Salary(\$) |
|--|-----------------------------|-----------------------------|
| Richard Peters (1) <i>President and Chief Executive Officer</i> | — | 700,000 |
| Gary L. Crocker (2) <i>Chairman of the Board and Former Interim President and Chief Executive Officer</i> | 260,000 | 260,000 |
| Jean M. Franchi (3) <i>Chief Financial Officer and Treasurer</i> | — | 400,000 |
| Yasir B. Al-Wakeel (4) <i>Former Chief Financial Officer and Head of Corporate Development</i> | 370,000 | 407,000 |
| Daryl C. Drummond (5) <i>Head of Research</i> | 236,000 | 272,580 |
| Jeffrey A. Munsie (6) <i>General Counsel, Head of Corporate Operations and Secretary</i> | 267,725 | 360,000 |
| Sergio L. Santillana (7) <i>Chief Medical Officer</i> | — | 375,000 |

(1) Dr. Peters joined Merrimack in February 2017.

- (2) Mr. Crocker served as Merrimack’s Interim President and Chief Executive Officer from October 2016 to February 2017.
- (3) Ms. Franchi joined Merrimack in August 2017.
- (4) Dr. Al-Wakeel resigned from Merrimack in June 2017.
- (5) Dr. Drummond became an executive officer on March 31, 2017. The amount listed for 2017 reflects an adjustment made by our organization and compensation committee effective March 31, 2017. From January 1, 2017 to March 30, 2017, Dr. Drummond’s base salary was \$247,800.
- (6) Mr. Munsie became an executive officer on March 31, 2017. The amount listed for 2016 reflects an adjustment made by our organization and compensation committee effective February 8, 2016.
- (7) Dr. Santillana joined Merrimack in June 2017.

For 2017, the organization and compensation committee generally determined to adjust the base salaries of Dr. Al-Wakeel, Dr. Drummond and Mr. Munsie based on their overall performance in 2016 and their increased level of experience and responsibility, and to ensure that their salaries remained competitive with those of similarly situated executives in our peer group. More specifically, our organization and compensation committee:

- increased Dr. Al-Wakeel’s base salary by 10% for 2017 to bring his salary closer to the median of similarly situated executives in our peer group;
- increased Dr. Drummond’s base salary by 16% for 2017 to reflect his promotion to being an executive officer; and
- increased Mr. Munsie’s base salary by 34% for 2017 to reflect the added responsibility of being our Head of Corporate Operations and to bring his salary closer to the median of similarly situated executives in our peer group.

In addition, our board of directors approved an annual base salary of \$260,000 for Mr. Crocker while he served as our Interim President and Chief Executive Officer from October 2016 to February 2017.

Please refer to “—Employment Agreements” for a listing of the base salaries of each of our currently-serving named executive officers for 2018.

Annual performance-based cash bonuses

Each executive officer is eligible to receive an annual performance-based cash bonus, which we refer to as an annual cash bonus, in an amount up to a fixed percentage of his or her base salary, or bonus percentage.

We designed our annual cash bonus program for 2017 to emphasize pay-for-performance and to reward our executive officers for (1) the achievement of specified annual individual performance objectives and (2) the embodiment of our values and expected behaviors. For each of these two elements, the organization and compensation committee (or the board of directors with respect to our President and Chief Executive Officer) assessed retroactively whether our executive officers did not meet expectations, met expectations or far exceeded expectations. The organization and compensation committee and board of directors then used the following table to determine the maximum percentage of each executive officer’s target bonus for which he or she was eligible. The organization and compensation committee and board of directors then used their discretion to determine the amount of each executive officer’s annual cash bonus up to the maximum percentage provided.

| | | Percentage of Target Bonus Payable | | |
|---|----------------------------|------------------------------------|--------------------|----------------------------|
| | | Far Exceeds Expectations | Meets Expectations | Does Not Meet Expectations |
| Achievement of Specified Annual Individual Performance Objectives | Far Exceeds Expectations | up to 75% | up to 125% | up to 150% |
| | Meets Expectations | up to 50% | up to 110% | up to 125% |
| | Does Not Meet Expectations | 0% | up to 50% | up to 75% |
| | | Does Not Meet Expectations | Meets Expectations | Far Exceeds Expectations |
| Embodiment of Values and Expected Behaviors | | | | |

The annual individual performance objectives component of the annual cash bonus focuses on contributions made by each individual executive officer within his or her respective area of responsibility. Each executive officer, including our President and Chief Executive Officer, proposes his or her own annual individual objectives at the start of each fiscal year or beginning of employment, which are then reviewed and approved by the organization and compensation committee or board of directors, with such modifications as the committee or board deems appropriate.

Our organization and compensation committee and board of directors have the authority to shift individual objectives to subsequent fiscal years and eliminate them from the current year's bonus assessment if it determines that circumstances that were beyond the control of the executive officer were the primary cause of an objective not being attained. The individual objectives established by the organization and compensation committee and board of directors are designed to require significant effort and operational success on the part of our executive officers, but also to be achievable with hard work and dedication.

Our values consist of being passionate, team focused, authentic and a continuous learner, and our expected behaviors include thinking strategically, innovating and building the organization. While this element of the annual cash bonus is inherently subjective in nature, we believe that it is important to recognize the contributions made by our executive officers that do not appear in annual individual performance objectives. These contributions may have an impact beyond the current fiscal year, and we believe that giving a weighting in the annual cash bonus calculation to these intangible contributions made by an executive officer is appropriate in light of our long-term objective of developing a motivated workforce and creating stockholder value.

The bonus percentages for each executive officer are set by the organization and compensation committee and board of directors. These bonus percentages are derived from peer group data that is adjusted to match the level of qualification and experience of the executive officer, but are guided by our overarching "team-based" philosophy. Our organization and compensation committee and board of directors believe that our executive officers should function as a team and that one way to foster a collaborative, team-based environment is to provide for each executive officer other than our President and Chief Executive Officer to have a similar bonus percentage.

Our organization and compensation committee and board of directors have the authority to, in their sole discretion, increase the amount of an executive officer's annual cash bonus above the maximum percentage provided in the table above for exceptional performance and to adjust the bonus percentage of an executive officer in connection with the review of the executive officer's performance.

2017 bonuses

Mr. Crocker was not eligible for an annual cash bonus for 2017 for his service as our Interim President and Chief Executive Officer from October 2016 to February 2017. In addition, Dr. Al-Wakeel was not eligible for an annual cash bonus for 2017 because he resigned from Merrimack in June 2017.

Dr. Peters' target cash bonus for 2017 was 65% of a prorated portion of his 2017 base salary based on his start date of February 6, 2017. Ms. Franchi's target cash bonus for 2017 was 35% of a prorated portion of her 2017 base salary based on her start date of August 21, 2017. Dr. Drummond's target cash bonus for 2017 was 35% of a prorated portion of his 2017 base salary based on his becoming an executive officer on March 31, 2017 (Dr. Drummond was also eligible to receive a prorated bonus of up to 27% of his base salary for the portion of 2017 prior to becoming an executive officer). Mr. Munsie's target cash bonus for 2017 was 35% of his 2017 base salary. Dr. Santillana's target cash bonus for 2017 was 35% of a prorated portion of his 2017 base salary based on his start date of June 12, 2017.

Dr. Peters' individual performance objectives for 2017 related to deploying a new vision, mission and strategy for Merrimack, implementing performance objectives across the company, staffing key positions, meeting enrollment goals for our clinical trials, prioritizing our portfolio, engaging with investors, implementing a corporate rebranding, pursuing various business development opportunities and managing our relationship with Ipsen following our asset sale to them in April 2017. Our board of directors determined that Dr. Peters generally far exceeded expectations with respect to both the achievement of his individual performance objectives and the embodiment of our values and expected behaviors, which made him eligible for a cash bonus of up to 150% of his target cash bonus. Our board of directors ultimately decided to give Dr. Peters a cash bonus equal to 130% of his target cash bonus based on having far exceeded expectations on some, but not all, of his individual performance objectives.

Ms. Franchi's individual performance objectives for 2017 related to strengthening our finance team, managing our budget, engaging with investors, supporting our corporate rebranding, supporting our business development efforts and meeting our public company reporting requirements. Our organization and compensation committee determined that Ms. Franchi generally met expectations with respect to both the achievement of her individual performance objectives and the embodiment of our values and expected behaviors, which made her eligible for a cash bonus of up to 110% of her target cash bonus. Our organization and compensation committee ultimately decided to give Ms. Franchi a cash bonus equal to 105% of her target cash bonus because it determined that she had far exceeded expectations with respect to managing our budget.

Dr. Drummond's individual performance objectives for 2017 related to strengthening our research team, prioritizing our preclinical portfolio, advancing our preclinical product candidates and providing support to Ipsen following our asset sale to them. Our organization and compensation committee determined that Dr. Drummond generally met expectations with respect to the achievement of his individual performance objectives and far exceeded expectations with respect to the embodiment of our values and expected behaviors, which made him eligible for a cash bonus of up to 125% of his target cash bonus for the period after he became an executive officer. Our organization and compensation committee ultimately decided to give Dr. Drummond a cash bonus equal to 115% of his target cash bonus for the portion of 2017 after he became an executive officer based on having satisfied most of his objectives related to advancing our preclinical product candidates. Our organization and compensation committee also decided to give Dr. Drummond a cash bonus equal to 100% of his target cash bonus for the portion of 2017 before he became an executive officer.

Mr. Munsie's individual performance objectives for 2017 related to meeting our public company reporting requirements, assessing our intellectual property portfolio, managing our relationship with Ipsen following our asset sale to them, ensuring continuity of operations as a smaller company and assessing our long-term facilities needs. Our organization and compensation committee determined that Mr. Munsie generally met expectations with respect to both the achievement of his individual performance objectives and the embodiment of our values and expected behaviors, which made him eligible for a cash bonus of up to 110% of his target cash bonus. Our organization and compensation committee ultimately decided to give Mr. Munsie a cash bonus equal to 105% of his target cash bonus because it determined that he far exceeded expectations with respect to managing our relationship with Ipsen.

Dr. Santillana's individual performance objectives for 2017 related to strengthening our clinical team, preparing for the availability of clinical trial data and meeting enrollment goals for our clinical trials. Our organization and compensation committee determined that Dr. Santillana far exceeded expectations with respect to the achievement of his individual performance objectives and met expectations with respect to the embodiment of our values and expected behaviors, which made him eligible for a cash bonus of up to 125% of his target cash bonus. Our organization and compensation committee ultimately decided to give Dr. Santillana a cash bonus equal to 120% of his target cash bonus based on having far exceeded certain enrollment goals for our clinical trials.

The following table sets forth each of Dr. Peters', Ms. Franchi's, Dr. Drummond's, Mr. Munsie's and Dr. Santillana's target cash bonus (both as a percentage of 2017 base salary and in actual dollars), actual cash bonus paid and actual cash bonus paid as a percentage of target cash bonus:

| Name | 2017 Base Salary (\$) | Target Cash Bonus Percentage | Target Cash Bonus (\$) | | Actual Cash Bonus (\$) | Actual Cash Bonus as Percentage of Target Cash Bonus |
|----------------------|-----------------------|------------------------------|------------------------|-----|------------------------|--|
| Richard Peters | 700,000 | 65% | 410,123 | (1) | 533,160 | 130% |
| Jean M. Franchi | 400,000 | 35% | 51,014 | (2) | 53,564 | 105% |
| Daryl C. Drummond | 272,580 | 35% | 88,532 | (3) | 99,393 | 112% |
| Jeffrey A. Munsie | 360,000 | 35% | 126,000 | | 132,300 | 105% |
| Sergio L. Santillana | 375,000 | 35% | 72,997 | (4) | 87,596 | 120% |

(1) Dr. Peters' target cash bonus for 2017 was prorated based on his start date of February 6, 2017.

(2) Ms. Franchi's target cash bonus for 2017 was prorated based on her start date of August 21, 2017.

- (3) Dr. Drummond's target cash bonus for 2017 reflects (i) a target cash bonus percentage of 35% based on a base salary of \$272,580 for the period beginning on March 31, 2017 when he became an executive officer and (ii) a target cash bonus percentage of 27% based on a base salary of \$247,800 for the period before he became an executive officer.
- (4) Dr. Santillana's target cash bonus for 2017 was prorated based on his start date of June 12, 2017.

In addition, on March 30, 2017, our organization and compensation committee approved payment of a retention bonus of \$350,000 to each of Dr. Al-Wakeel and Mr. Munsie in order to incentivize them to remain with us for a period of time following our asset sale to Ipsen. Under the terms of the retention bonuses, (i) if either of them terminates his employment with us on or before December 31, 2017 without Good Reason (as defined in each of their employment agreements) or we terminate either of their employment on or before December 31, 2017 for Cause (as defined in each of their employment agreements), Dr. Al-Wakeel or Mr. Munsie, as applicable, will be required to repay two-thirds of such amount, minus any applicable taxes and withholding that he was required to pay with respect to such amount, within 60 days after his termination, and (ii) if either of them terminates his employment with us on or after January 1, 2018 but on or before June 30, 2018 without Good Reason or we terminate either of their employment on or after January 1, 2018 but on or before June 30, 2018 for Cause, Dr. Al-Wakeel or Mr. Munsie, as applicable, will be required to repay one-third of such amount, minus any applicable taxes and withholding that he was required to pay with respect to such amount, within 60 days after his termination. Dr. Al-Wakeel resigned from Merrimack in June 2017 and repaid two-thirds of such amount, minus any applicable taxes and withholding that he was required to pay with respect to such amount, in accordance with the terms of the retention bonus. Mr. Munsie will not be required to repay any portion of the retention bonus if he terminates his employment with us at any time for Good Reason or if we terminate his employment at any time without Cause.

Equity incentive awards

Our equity award program is the primary vehicle for offering long-term incentives to our executives. While we do not currently have any equity ownership guidelines for our executives, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. Because our executives profit from stock options only if our stock price increases relative to the stock option's exercise price, we believe that stock options provide meaningful incentives to our executives to achieve increases in the value of our stock over time. In addition, the vesting feature of our equity grants contributes to executive retention by providing an incentive to our executives to remain employed by us during the vesting period. During 2017, all stock options were granted pursuant to our 2011 Stock Incentive Plan. Under our 2011 Stock Incentive Plan, our employees and executive officers are eligible to receive grants of stock options, restricted stock, restricted stock units, stock appreciation rights and other stock-based equity awards at the discretion of our organization and compensation committee.

We use stock options to compensate our executive officers both in the form of initial grants in connection with the commencement of employment and generally on an annual basis thereafter. Our organization and compensation committee may also make additional discretionary grants, typically in connection with the promotion of an employee, to reward an employee, for retention purposes or for other circumstances recommended by management. Typically, the stock options we grant to our executive officers vest quarterly over a three year period. Vesting and exercise rights cease shortly after termination of employment, except in the case of death or disability. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including voting rights or the right to receive dividends or dividend equivalents.

The exercise price of all stock options granted since the closing of our initial public offering is equal to the fair market value of shares of our common stock on the date of grant, which generally is determined by reference to the closing market price of our common stock on the date of grant. It is our intention to grant equity awards annually.

In determining the size of the annual stock option grants to our executive officers, our organization and compensation committee considers recommendations developed by our compensation consultant, including information regarding comparative stock ownership of and equity grants received by the executives in our peer group and our industry. In addition, our organization and compensation committee considers our corporate performance, the potential for enhancing the creation of value for our stockholders, the amount of equity previously awarded to the executives and the vesting of such awards.

On May 26, 2017, we paid a special cash dividend (the “special dividend”) of approximately \$1.055 per outstanding share of common stock. As required by our 1999 Stock Option Plan, as amended, our 2008 Stock Incentive Plan, as amended, and our 2011 Stock Incentive Plan, equitable adjustments were made in June 2017 to all awards outstanding under such plans at the time of the special dividend. As a result, the exercise prices of outstanding stock options were reduced and the number of shares subject to such options was increased. All numbers of shares issuable and exercise prices for stock option awards in this proxy statement reflect the equitable adjustment described above.

On September 5, 2017, we filed an amendment to our certificate of incorporation to effect a one-for-ten reverse stock split of our issued and outstanding common stock (the “reverse split”), and on September 6, 2017, the reverse split was effective for trading purposes. As a result of the reverse split, every ten shares of common stock issued and outstanding was converted into one share of common stock. All outstanding stock options were also adjusted as a result of the reverse split. All numbers of shares issuable and exercise prices for stock option awards in this proxy statement reflect the reverse split.

2017 grants

In June 2017, as part of our annual grant process, our organization and compensation committee granted an option to purchase 45,000 shares of our common stock to Dr. Drummond and an option to purchase 55,000 shares of our common stock to Mr. Munsie. Each of these options vests quarterly over a three year period and has an exercise price of \$14.50, the closing market price of our common stock on the date of grant.

In granting these annual options, our organization and compensation committee considered the significant restructuring that Merrimack had undergone in connection with our asset sale to Ipsen, which had been completed in April 2017, and that the exercise prices of most of Dr. Drummond’s and all of Mr. Munsie’s outstanding stock options were below the then-current market price of our common stock. As such, based on the recommendation of our President and Chief Executive Officer, our organization and compensation committee determined that it would be appropriate to provide Dr. Drummond and Mr. Munsie with a larger annual option grant that was more in line with an initial grant in connection with the commencement of employment. Our organization and compensation committee determined that the appropriate size of initial grant for executive officers (other than the Chief Executive Officer) was 45,000 shares of our common stock, except that it determined to grant Mr. Munsie an option to purchase 55,000 shares of our common stock because he was serving a dual role of both General Counsel and Head of Corporate Operations.

Also in June 2017, our organization and compensation committee granted an option to purchase 200,000 shares of our common stock to Dr. Peters in connection with him joining Merrimack. This option vested 25% on February 6, 2018 and the remainder vests quarterly over the three year period following such date, and has an exercise price of \$14.50, the closing market price of our common stock on the date of grant.

Also in June 2017, our organization and compensation committee granted an option to purchase 45,000 shares of our common stock to Dr. Santillana in connection with him joining Merrimack. This option vested 16.7% on December 12, 2017 and the remainder vests quarterly over the 2.5 year period following such date, and has an exercise price of \$13.50, the closing market price of our common stock on the date of grant.

In August 2017, our organization and compensation committee granted an option to purchase 45,000 shares of our common stock to Ms. Franchi in connection with her joining Merrimack. This option vested 16.7% on February 21, 2018 and the remainder vests quarterly over the 2.5 year period following such date, and has an exercise price of \$13.20, the closing market price of our common stock on the date of grant.

Mr. Crocker did not receive an option grant during 2017 for his service as Interim President and Chief Executive Officer. Please refer to “Director Compensation” below for information regarding the option grant that Mr. Crocker received as a member of our board of directors.

Dr. Al-Wakeel was not eligible for an option grant during 2017 because he resigned from Merrimack in June 2017.

Benefits and other compensation

We believe that establishing competitive benefit packages for our employees is an important factor in attracting and retaining highly qualified personnel. We maintain broad-based benefits that are provided to all employees, including medical insurance, dental insurance, vision insurance, group life insurance, accidental death and dismemberment insurance, long and short term disability insurance, medical and dependent care flexible spending accounts, work welfare stipends and matching contributions in our 401(k) plan. All of our executive officers are eligible to participate in all of our employee benefit plans, in each case on the same basis as other employees. Under our 401(k) plan, we are permitted to make discretionary contributions and matching contributions, subject to established limits and a vesting schedule. Currently, we generally match 50% of employee contributions up to a maximum contribution by us of 3% of the employee's deferrable income, subject to employer match limitations by the Internal Revenue Service. The match and any earnings thereon generally vest at 25% per year over the first four years of an employee's employment, after which, any match that is contributed is 100% vested. We also provide each employee, including our executive officers, with an annual \$1,250 work welfare stipend that can be used to pay for services such as personal professional development, public transportation passes, gym memberships and medical insurance co-pays. In addition, we subsidize \$15 per month of the membership fee to the gym in our office complex for all employees, including our executive officers. Our executive officers are also entitled to supplemental long-term disability insurance coverage that is not available to our other employees. Consistent with our compensation philosophy, we intend to continue to maintain our current benefits for our executive officers. The organization and compensation committee in its discretion may revise, amend or add to the executive officer's benefits and perquisites if it deems it advisable.

In particular circumstances, we sometimes award cash signing bonuses when executive officers first join us. Such cash signing bonuses typically must be repaid in full, minus any applicable taxes and withholding that the executive was required to pay with respect to such amount, if the executive officer voluntarily terminates employment with us prior to the first anniversary of the date of hire. Whether a signing bonus is paid and the amount of the bonus is determined on a case-by-case basis under the specific hiring circumstances. For example, we will consider paying signing bonuses to compensate for amounts forfeited by an executive upon terminating prior employment, to assist with relocation expenses or to create additional incentive for an executive to join Merrimack in a position where there is high market demand. Please refer to "—Summary Compensation Table" below for information regarding signing bonuses paid to Dr. Peters and Ms. Franchi upon their joining Merrimack.

Severance and change in control benefits

Pursuant to employment agreements we have entered into with our executive officers, our executive officers are entitled to specified benefits in the event of the termination of their employment under specified circumstances, including termination following a change in control of Merrimack. Please refer to "—Employment Agreements" for a more detailed discussion of these benefits. We have provided estimates of the value of the severance payments and other benefits that would have been made or provided to executive officers under various termination circumstances under the caption "—Potential Payments Upon Termination or Change in Control" below.

We believe that providing these benefits helps us compete for executive talent. After reviewing the practices of companies represented in our peer group, we believe that our severance and change in control benefits are generally in line with severance packages offered to executives of the companies in our peer group.

We have structured our change in control benefits as "double trigger" benefits. In other words, the change in control does not itself trigger benefits. Rather, benefits are paid only if the employment of the executive officer is terminated during a specified period after the change in control. We believe that a "double trigger" benefit maximizes stockholder value because it prevents an unintended windfall to executive officers in the event of a friendly change in control, while still providing them appropriate incentives to cooperate in negotiating any change in control in which they believe they may lose their jobs.

Organization and Compensation Committee Report

The organization and compensation committee of the board of directors of Merrimack Pharmaceuticals, Inc. has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with Merrimack's management. Based on such review and discussions, the organization and compensation committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this proxy statement.

By the organization and compensation committee of the board of directors of Merrimack Pharmaceuticals, Inc.

George D. Demetri
John M. Dineen
Vivian S. Lee

Risk Considerations in Our Compensation Program

Our organization and compensation committee has reviewed and evaluated the philosophy and standards on which our compensation plans have been developed and implemented across Merrimack. It is our belief that our compensation programs do not encourage inappropriate actions or risk taking by our executive officers. We do not believe that any risks arising from our employee compensation policies and practices are reasonably likely to have a material adverse effect on Merrimack. In addition, we do not believe that the mix and design of the components of our executive compensation program encourage management to assume excessive risks. We believe that our current business process and planning cycle fosters the behaviors and controls that would mitigate the potential for adverse risk caused by the action of our executives, including the following:

- annual establishment of corporate and individual objectives for our performance-based cash bonus programs for our executive officers that are consistent with our annual operating and strategic plans, that are designed to achieve the proper risk/reward balance, and that should not require excessive risk taking to achieve;
- the mix between fixed and variable, annual and long-term and cash and equity compensation are designed to encourage strategies and actions that balance our short-term and long-term best interests; and
- stock option awards vest over a period of time, which we believe encourages executives to take a long-term view of our business.

Limits on Hedging and Pledging

As part of our insider trading policy, all employees, including executive officers, and members of our board of directors are prohibited from engaging in certain types of hedging transactions involving our securities, specifically short sales, including short sales “against the box,” and purchases or sales of puts, calls or other derivative securities. Our insider trading policy also prohibits certain types of pledges of our securities by all employees, including executive officers, and members of our board of directors, specifically purchases of our securities on margin, borrowing against our securities held in a margin account or pledging our securities as collateral for a loan, with an exception for pledges of our securities as collateral for a loan only after certain prerequisites are met and only with the pre-approval of our Chief Financial Officer or General Counsel.

Tax and Accounting Considerations

Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code, generally disallows a tax deduction to public companies for compensation in excess of \$1 million paid to each of the company’s chief executive officer and the three most highly compensated executive officers (other than the chief executive officer and chief financial officer). Pursuant to tax legislation signed into law on December 22, 2017, or the Tax Act, for taxable years beginning after December 31, 2017, the Section 162(m) deduction limitation is expanded so that it also applies to compensation in excess of \$1 million paid to a public company’s chief financial officer. Historically, compensation that qualified under Section 162(m) as performance-based compensation was exempt from the deduction limitation. However, subject to certain transition rules, the Tax Act eliminated the qualified performance-based compensation exception. As a result, for taxable years beginning after December 31, 2017, all compensation in excess of \$1 million paid to each of the executives described above (other than certain grandfathered compensation or compensation paid pursuant to certain equity awards granted during the transition period following our IPO) will not be deductible by us.

We account for equity compensation paid to our employees in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, *Compensation—Stock Compensation*, or ASC 718, which requires us to measure and recognize compensation expense in our financial statements for all stock-based payments based on an estimate of their fair value over the service period of the award. We record cash compensation as an expense at the time the obligation is accrued.

Summary Compensation Table

The following table sets forth the total compensation awarded to, earned by or paid to our named executive officers during 2015, 2016 and 2017.

| Name and Principal Position | Year | Salary (\$) | Bonus (\$) | Option Awards (\$)(1) | Non-Equity Incentive Plan Compensation (\$)(2) | All Other Compensation (\$)(3) | Total (\$) |
|--|------|----------------|---------------|-----------------------------|---|--------------------------------------|---------------|
| Richard Peters (4) <i>President and Chief Executive Officer</i> | 2017 | 619,231 | 900,000 (5) | 1,710,400 | 533,160 | 15,433 | 3,778,224 |
| Gary L. Crocker (6) <i>Chairman of the Board and former Interim President and Chief Executive Officer</i> | 2017 | 31,000 | — | 67,552 (7) | — | 76,722 (8) | 175,274 |
| | 2016 | 63,368 | — | 175,928 | — | 70,633 (8) | 309,929 |
| Jean M. Franchi (9) <i>Chief Financial Officer and Treasurer</i> | 2017 | 138,462 | 100,000 (10) | 346,784 | 53,564 | 1,781 | 640,591 |
| Yasir B. Al-Wakeel (11) <i>Former Chief Financial Officer and Head of Corporate Development</i> | 2017 | 179,308 | 116,667 (12) | — | — | 5,891 | 301,866 |
| | 2016 | 369,096 | — | 340,977 | 129,500 | 8,636 | 848,209 |
| | 2015 | 145,002 | 100,000 (13) | 1,820,880 | 129,500 | 90,017 | 2,285,399 |
| Daryl C. Drummond (14) <i>Head of Research</i> | 2017 | 263,376 | — | 390,240 | 99,393 | 11,612 | 764,621 |
| Jeffrey A. Munsie (15) <i>General Counsel, Head of Corporate Operations and Secretary</i> | 2017 | 338,706 | 350,000 (16) | 476,960 | 132,300 | 13,368 | 1,311,334 |
| Sergio L. Santillana (17) <i>Chief Medical Officer</i> | 2017 | 201,923 | — | 355,815 | 87,596 | 6,927 | 652,261 |

- (1) The amounts in the “Option Awards” column reflect the aggregate grant date fair value of stock options granted during the year computed in accordance with the provisions of ASC 718, excluding the impact of estimated forfeitures related to service-based vesting conditions (which in our case were none). The assumptions that we used to calculate these amounts are discussed in Note 14 to our consolidated financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2017.
- (2) The amounts in the “Non-Equity Incentive Plan Compensation” column represent awards to our named executive officers under our annual cash bonus program.
- (3) The amounts in the “All Other Compensation” column represent the value of perquisites and other personal benefits, which are further detailed below for 2017.

| Name | 401(k) Match (\$) | Group Life and Disability Insurance Premium (\$) | Stipend \$(a) | Total (\$) |
|----------------------|-------------------------|---|------------------|---------------|
| Richard Peters | 4,846 | 9,337 | 1,250 | 15,433 |
| Gary L. Crocker | — | 62 | — | 62 |
| Jean M. Franchi | 923 | 208 | 650 | 1,781 |
| Yasir B. Al-Wakeel | 5,614 | 277 | — | 5,891 |
| Daryl C. Drummond | 9,000 | 1,362 | 1,250 | 11,612 |
| Jeffrey A. Munsie | 7,633 | 4,485 | 1,250 | 13,368 |
| Sergio L. Santillana | 5,654 | 323 | 950 | 6,927 |

(a) Represents the value of the work welfare stipend provided to the named executive officer, as described in “—Compensation Discussion and Analysis—Components of Our Executive Compensation Program—Benefits and other compensation.”

- (4) Dr. Peters’ start date was February 6, 2017.
- (5) Reflects a signing bonus paid to Dr. Peters upon joining Merrimack to partially compensate him for benefits that he forfeited as a result of leaving his previous employment.
- (6) Mr. Crocker, our Chairman of the Board, also served as our Interim President and Chief Executive Officer from October 3, 2016 to February 6, 2017.
- (7) Reflects the grant date fair value of an option award granted to Mr. Crocker for his service on our board of directors.
- (8) Includes the \$76,660 and \$70,633 of fees earned or paid to Mr. Crocker in 2017 and 2016, respectively, for his service on our board of directors before and after serving as our Interim President and Chief Executive Officer from October 2016 to February 2017.
- (9) Ms. Franchi’s start date was August 21, 2017.
- (10) Reflects a signing bonus paid to Ms. Franchi upon joining Merrimack.
- (11) Dr. Al-Wakeel resigned from Merrimack in June 2017.
- (12) Reflects a retention bonus paid to Dr. Al-Wakeel in April 2017 in connection with our asset sale to Ipsen.
- (13) Reflects a signing bonus paid to Dr. Al-Wakeel upon joining Merrimack.
- (14) Dr. Drummond became an executive officer in March 2017.
- (15) Mr. Munsie became an executive officer in March 2017.
- (16) Reflects a retention bonus paid to Mr. Munsie in April 2017 in connection with our asset sale to Ipsen.
- (17) Dr. Santillana’s start date was June 12, 2017.

2017 Grants of Plan-Based Awards Table

The following table sets forth information regarding grants of plan-based awards to our named executive officers during 2017. All equity awards were issued under our 2011 Stock Incentive Plan.

| Name | Grant Date | Estimated Possible Payouts Under Non-Equity Incentive Plan Awards | | | All Other Option Awards: Number of Securities Underlying Options (#) | Exercise or Base Price of Option Awards (\$/share)(2) | Grant Date Fair Value of Option Awards (\$)(3) |
|------------------------|------------|---|----------------|--------------|--|---|--|
| | | Threshold (\$) | Target (\$)(1) | Maximum (\$) | | | |
| Richard Peters | 6/6/2017 | — | — | — | 200,000 | 14.50 | 1,710,400 |
| | 9/13/2017 | — | 410,123 (4) | — | — | — | — |
| Gary L. Crocker (5) | 9/13/2017 | — | — | — | 8,625 (6) | 13.99 | 67,552 |
| Jean M. Franchi | 8/24/2017 | — | — | — | 45,000 | 13.20 | 346,784 |
| | 9/13/2017 | — | 51,014 (7) | — | — | — | — |
| Yasir B. Al-Wakeel (8) | — | — | — | — | — | — | — |
| Daryl C. Drummond | 6/6/2017 | — | — | — | 44,999 | 14.50 | 390,240 |
| | 9/13/2017 | — | 88,532 (9) | — | — | — | — |
| Jeffrey A. Munsie | 6/6/2017 | — | — | — | 54,999 | 14.50 | 476,960 |
| | 9/13/2017 | — | 126,000 | — | — | — | — |
| Sergio L. Santillana | 6/13/2017 | — | — | — | 45,000 | 13.50 | 355,815 |
| | 9/13/2017 | — | 72,997 (10) | — | — | — | — |

- (1) The target amounts in the “Estimated Possible Payouts Under Non-Equity Incentive Plan Awards” column represent the amount determined by our board of directors as the target annual cash bonus payable to each named executive officer for 2017.
- (2) The exercise price per share of each option award is equal to the closing market price of our common stock on the date of grant.
- (3) The amounts in the “Grant Date Fair Value of Option Awards” column reflect the grant date fair value of option awards granted in 2017 calculated in accordance with ASC 718.
- (4) Dr. Peters’ target cash bonus for 2017 was prorated based on his start date of February 6, 2017.
- (5) Mr. Crocker was not eligible for an annual cash bonus for 2017 for his service as our Interim President and Chief Executive Officer.
- (6) Represents the option award granted to Mr. Crocker for his service on our board of directors.
- (7) Ms. Franchi’s target cash bonus for 2017 was prorated based on her start date of August 21, 2017.
- (8) Dr. Al-Wakeel was not eligible for an equity award or annual cash bonus for 2017 because he resigned from Merrimack in June 2017.
- (9) Dr. Drummond’s target cash bonus for 2017 reflects (i) a target cash bonus percentage of 35% based on a base salary of \$272,580 for the period beginning on March 31, 2017 when he became an executive officer and (ii) a target cash bonus percentage of 27% based on a base salary of \$247,800 for the period before he became an executive officer.
- (10) Dr. Santillana’s target cash bonus for 2017 was prorated based on his start date of June 12, 2017.

Outstanding Equity Awards at 2017 Year End

The following table sets forth information regarding outstanding stock options held by our named executive officers as of December 31, 2017.

| Name | Option Awards | | | |
|----------------------|---|---|----------------------------------|------------------------|
| | Number of Securities Underlying Unexercised Options (#) Exercisable | Number of Securities Underlying Unexercised Options (#) Unexercisable | Option Exercise Price (\$/share) | Option Expiration Date |
| Richard Peters | — | 200,000 (1) | 14.50 | 6/5/2027 |
| Gary L. Crocker | 6,872 | — | 9.30 | 9/22/2018 |
| | 9,817 | — | 10.80 | 11/5/2019 |
| | 13,008 | — | 28.30 | 5/3/2021 |
| | 6,204 | — | 38.40 | 8/22/2022 |
| | 7,428 | — | 27.60 | 6/10/2023 |
| | 7,428 | — | 33.80 | 5/13/2024 |
| | 3,436 | — | 60.60 | 5/13/2025 |
| | 9,719 | — | 31.70 | 6/14/2026 |
| | 8,625 | — | 13.99 | 9/12/2027 |
| Jean M. Franchi | — | 45,000 (2) | 13.20 | 8/23/2027 |
| Yasir B. Al-Wakeel | — | — | — | — |
| Daryl C. Drummond | 15,708 | — | 10.80 | 2/1/2020 |
| | 5,399 | — | 13.70 | 10/15/2020 |
| | 3,927 | — | 28.30 | 5/3/2021 |
| | 2,768 | — | 38.40 | 8/22/2022 |
| | 9,816 | — | 32.40 | 3/11/2023 |
| | 5,889 | — | 25.60 | 2/10/2024 |
| | 5,849 | 532 (3) | 46.30 | 2/8/2025 |
| | 4,809 | 3,418 (4) | 27.70 | 2/7/2026 |
| | 7,498 | 37,501 (5) | 14.50 | 6/5/2027 |
| Jeffrey A. Munsie | 17,576 | — | 28.30 | 5/3/2021 |
| | 1,963 | — | 34.70 | 6/12/2022 |
| | 2,768 | — | 38.40 | 8/22/2022 |
| | 6,381 | — | 32.40 | 3/11/2023 |
| | 6,871 | — | 25.60 | 2/10/2024 |
| | 5,398 | 491 (3) | 46.30 | 2/8/2025 |
| | 6,871 | 4,909 (4) | 27.70 | 2/7/2026 |
| | 9,166 | 45,833 (5) | 14.50 | 6/5/2027 |
| Sergio L. Santillana | 7,499 | 37,501 (6) | 13.50 | 6/12/2027 |

- (1) The vested shares under this option are scheduled to vest as to 1/4th of the total number of shares granted on February 6, 2018 and an additional 1/16th of the total number of shares granted at the end of each successive three month period thereafter until February 6, 2021.
- (2) The vested shares under this option are scheduled to vest as to 1/6th of the total number of shares granted on February 21, 2018 and an additional 1/12th of the total number of shares granted at the end of each successive three month period thereafter until August 21, 2020.
- (3) The vested shares under this option are scheduled to vest in approximately equal quarterly installments through February 9, 2018.
- (4) The vested shares under this option are scheduled to vest in approximately equal quarterly installments through February 8, 2019.

- (5) The unvested shares under this option are scheduled to vest in approximately equal quarterly installments through June 6, 2020.
- (6) The unvested shares under this option are scheduled to vest in approximately equal quarterly installments through June 12, 2020.

2017 Option Exercises and Stock Vested Table

The following table sets forth information regarding stock options exercised by our named executive officers during 2017.

| Name | Option Awards | |
|-------------------|---|---------------------------------|
| | Number of Shares Acquired on Exercise (#) | Value Realized on Exercise (\$) |
| Daryl C. Drummond | 409 | 3,929 |

In 2017, none of our named executive officers held any restricted stock that was subject to vesting.

Securities Authorized for Issuance under Equity Compensation Plans

The following table contains information about our equity compensation plans as of December 31, 2017. As of December 31, 2017, we had three equity compensation plans, all of which were approved by our stockholders: our 1999 Stock Option Plan, as amended, our 2008 Stock Incentive Plan, as amended, and our 2011 Stock Incentive Plan.

Equity Compensation Plan Information

| Plan category | Number of securities to be issued upon exercise of outstanding options, warrants and rights | Weighted- average exercise price of outstanding options, warrants and rights | Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) |
|--|---|--|---|
| | (a) | (b) | (c) |
| Equity compensation plans approved by security holders | 1,616,250 | \$ 22.07 | 437,524 (1) |
| Equity compensation plans not approved by security holders | — | — | — |
| Total | 1,616,250 | \$ 22.07 | 437,524 (1) |

- (1) Reflects the total number of shares of our common stock available for future issuance under our 2011 Stock Incentive Plan as of December 31, 2017. Our 2011 Stock Incentive Plan contains an “evergreen” provision, which allows for an annual increase in the number of shares of our common stock available for issuance under the plan on the first day of each fiscal year. The annual increase in the number of shares is equal to the lowest of: (i) 450,000 shares of our common stock; (ii) 3.5% of the number of shares of our common stock outstanding on the first day of the fiscal year; and (iii) an amount determined by our board of directors. On January 1, 2018, 450,000 shares of our common stock were added to our 2011 Stock Incentive Plan pursuant to this provision.

Employment Agreements

We were previously a party to an employment agreement with Dr. Al-Wakeel prior to his resignation. We did not enter into an employment agreement with Mr. Crocker for his service as Interim President and Chief Executive Officer.

We have entered into employment agreements with each of our other named executive officers. Each of these agreements renews automatically on December 31 of each year for successive one year terms, unless either we or the named executive officer gives notice of non-renewal.

These employment agreements, and the non-disclosure, developments, non-competition and non-solicitation agreements that are incorporated therein, prohibit our named executive officers, during the term of employment and for a period of one year thereafter (or during the term of employment, any severance period and for a period of one year thereafter for Mr. Munsie), from competing with us and soliciting or hiring our employees.

Pursuant to the terms of these employment agreements, our named executive officers currently receive the following base salaries, which have been adjusted by our organization and compensation committee and board of directors since our named executive officers originally entered into the employment agreements, and are eligible for the following bonus percentages.

| <u>Name</u> | <u>2018 Base Salary (\$)(1)</u> | <u>2018 Bonus Percentage</u> |
|----------------------|---------------------------------|------------------------------|
| Richard Peters | 722,084 | 65% |
| Jean M. Franchi | 402,915 | 35% |
| Daryl C. Drummond | 276,717 | 35% |
| Jeffrey A. Munsie | 367,200 | 35% |
| Sergio L. Santillana | 379,171 | 35% |

(1) Amount reflects adjustment made by our organization and compensation committee and board of directors effective as of January 1, 2018.

Upon execution and effectiveness of a severance agreement and release of claims, each named executive officer is entitled to severance payments if we terminate the named executive officer's employment without cause, as defined in the employment agreement, including our decision not to renew the named executive officer's term of employment, or the named executive officer terminates employment with us for good reason, as defined in the employment agreement.

If a named executive officer's employment terminates under these circumstances, in each case prior to a change in control, as defined in the employment agreement, we are obligated for a period of 12 months to pay such named executive officer his or her base salary and pay for coverage for such named executive officer under any company sponsored insurance and benefit programs available to our senior management employees. In addition, we would be obligated to pay to each of our named executive officers a pro-rata bonus for the portion of the year in which such named executive officer was employed by us based on his or her average annual bonus payments over each of the three years prior to the year of termination, or such lesser period during which such named executive officer served as one of our executive officers.

If a named executive officer's employment terminates under these circumstances, in each case within 18 months following a change in control, we are obligated to pay such named executive officer a lump sum amount equal to 36 months of his or her base salary plus a bonus equal to three times the average of his or her annual bonus payments over each of the three years prior to the year of termination, or such lesser period during which such named executive officer served as one of our executive officers, accelerate the vesting of all outstanding stock options, restricted stock or other equity awards granted to the named executive officer and pay for coverage for such named executive officer under any company sponsored insurance and benefit programs available to our senior management employees for a period of 18 months.

In the event of termination of the named executive officer's employment due to death (other than for Mr. Munsie) or disability, the named executive officer (or his or her estate in the event of death) will be eligible to receive a pro-rata bonus for the portion of the year in which such named executive officer was employed by us based on his or her average annual bonus payments over each of the three years prior to the year of termination, or such lesser period during which such named executive officer served as one of our executive officers.

Potential Payments Upon Termination or Change in Control

The following tables set forth information regarding potential payments that each named executive officer who was serving as an executive officer as of December 31, 2017 would have received if the named executive officer's employment had terminated as of December 31, 2017 under the circumstances set forth below. Mr. Crocker was not eligible to receive any such payments for his service as Interim President and Chief Executive Officer. Dr. Al-Wakeel, who resigned from Merrimack in June 2017, is not eligible to receive the payments described below.

| Name | Termination Without Cause or For Good Reason Prior to a Change in Control | |
|----------------------|---|------------------------------|
| | Cash Payment (\$) | Value of Benefits (\$) |
| Richard Peters | 1,069,673 | 15,555 |
| Jean M. Franchi | 418,589 | 31,879 |
| Daryl C. Drummond | 361,112 | 21,016 |
| Jeffrey A. Munsie | 486,000 | 20,794 |
| Sergio L. Santillana | 415,598 | 2,922 |

| Name | Termination Without Cause or for Good Reason Within 18 Months Following a Change in Control | | |
|----------------------|---|---|------------------------------|
| | Cash Payment (\$) | Value of Stock Options with Accelerated Vesting (\$)(1) | Value of Benefits (\$) |
| Richard Peters | 3,209,018 | — | 23,332 |
| Jean M. Franchi | 1,255,766 | — | 47,818 |
| Daryl C. Drummond | 1,083,336 | — | 31,524 |
| Jeffrey A. Munsie | 1,458,000 | — | 31,190 |
| Sergio L. Santillana | 1,246,795 | — | 4,384 |

- (1) The amounts in the "Value of Stock Options with Accelerated Vesting" column represent the value of unvested stock options, calculated by multiplying the number of shares subject to the accelerated portion of the option by the amount (if any) by which \$10.25, the closing market price of our common stock on December 29, 2017, exceeds the exercise price of such option.

| Name | Termination for Death/Disability Cash Payment (\$) |
|-----------------------|---|
| Richard Peters | 369,673 |
| Jean M. Franchi | 18,589 |
| Daryl C. Drummond | 88,532 |
| Jeffrey A. Munsie (1) | 126,000 |
| Sergio L. Santillana | 40,598 |

- (1) Mr. Munsie is not eligible for a cash payment upon termination of his employment due to death.

Pension Benefits

We do not maintain any defined benefit pension plans.

Nonqualified Deferred Compensation

We do not maintain any nonqualified deferred compensation plans.

401(k) Plan

We maintain a defined contribution employee retirement plan for our employees. Our 401(k) plan is intended to qualify as a tax-qualified plan under Section 401 of the Code so that contributions to our 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan. Our 401(k) plan provides that each participant may contribute up to 100% of his or her pre-tax compensation, up to a statutory limit, which was \$18,000 for 2017. Participants who are at least 50 years old can also make “catch-up” contributions, which in 2017 was up to an additional \$6,000 above the statutory limit. Under our 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan’s trustee. Our 401(k) plan also permits us to make discretionary contributions and matching contributions, subject to established limits and a vesting schedule. For 2017, we generally matched 50% of employee contributions up to a maximum contribution by us of 3% of the employee’s deferrable income, subject to employer match limitations by the Internal Revenue Service. The match and any earnings thereon generally vest at 25% per year over the first four years of an employee’s employment, after which, any match that is contributed is 100% vested.

CEO Pay Ratio

Following is a reasonable estimate, prepared under applicable SEC rules, of the ratio of the annual total compensation of Dr. Peters, our President and Chief Executive Officer, to the median of the annual total compensation of our other employees. We determined our median employee based on the salary and target cash bonus for 2017 of each of our employees (excluding Dr. Peters) as of December 31, 2017 (annualized in the case of full- and part-time employees who joined the company during 2017). The annual total compensation of our median employee for 2017 was \$244,655. As disclosed in the Summary Compensation Table, the total compensation for 2017 for Dr. Peters was \$3,778,224. Because Dr. Peters was not serving as our President and Chief Executive Officer for all of 2017, we have annualized his base salary, annual bonus compensation, and perquisites and other personal benefits (other than stipend), but not his one-time signing bonus or his options award, resulting in an annualized 2017 compensation of \$3,909,819. Based on the foregoing, our estimate of the ratio of the annualized total compensation of Dr. Peters to the median of the annual total compensation of all other employees was 16.0 to 1. Given the different methodologies that various public companies will use to determine an estimate of their pay ratio, we do not believe the estimated ratio reported above should be used as a basis for comparison between companies.

DIRECTOR COMPENSATION

Compensation for 2017

The following table sets forth information regarding the total compensation awarded to, earned by or paid to each of our non-employee directors during the year ended December 31, 2017 for their service on our board of directors. The compensation amounts presented in the table below are historical and are not indicative of the amounts we may pay our directors in the future. Richard Peters, our President and Chief Executive Officer, did not receive any compensation for his service as a director. The compensation that we pay to Dr. Peters is discussed under “Executive Compensation” above. Gary L. Crocker, our Chairman of the Board, also served as our Interim President and Chief Executive Officer from October 2016 to February 2017. Mr. Crocker did not receive any compensation for his service as a director during such time. The compensation that we paid to Mr. Crocker during such time is discussed under “Executive Compensation” above.

| Name | Fees Earned or Paid in | | Total (\$) |
|-----------------------|---------------------------|--------------------------|---------------|
| | Cash (\$)(1) | Option Awards (\$)(2) | |
| Gary L. Crocker | 76,660 | 67,552 | 144,212 |
| George D. Demetri (3) | 4,708 | 28,613 | 33,321 |
| John M. Dineen | 60,000 | 58,741 | 118,741 |
| Vivian S. Lee | 60,571 | 58,741 | 119,312 |
| John Mendelsohn (4) | 47,935 | 58,741 | 106,676 |
| Ulrik B. Nielsen | 45,000 | 58,741 | 103,741 |
| Michael E. Porter | 61,000 | 58,741 | 119,741 |
| James H. Quigley | 67,250 | 58,741 | 125,991 |
| Russell T. Ray | 57,000 | 58,741 | 115,741 |

- (1) Fees earned or paid in cash consist of:
- for Mr. Crocker, \$62,805 as a retainer for serving as Chairman of the Board and \$13,855 as a retainer for committee membership;
 - for Dr. Demetri, \$4,035 as a retainer for board service and \$673 as a retainer for committee membership;
 - for Mr. Dineen, \$45,000 as a retainer for board service and \$15,000 as a retainer for committee membership;
 - for Dr. Lee, \$45,000 as a retainer for board service and \$15,571 as a retainer for committee membership;
 - for Dr. Mendelsohn, \$41,087 as a retainer for board service and \$6,848 as a retainer for committee membership;
 - for Dr. Nielsen, \$45,000 as a retainer for board service;
 - for Dr. Porter, \$45,000 as a retainer for board service and \$16,000 as a retainer for committee membership;
 - for Mr. Quigley, \$45,000 as a retainer for board service and \$22,250 as a retainer for committee membership; and
 - for Mr. Ray, \$45,000 as a retainer for board service and \$12,000 as a retainer for committee membership.
- (2) Amount reflects the aggregate grant date fair value of a stock option granted for service as a director. The grant date fair value was computed in accordance with the provisions of ASC 718 and treated for accounting purposes as employee awards. The assumptions that we used to calculate this amount are discussed in Note 14 to our consolidated financial statements appearing in our Annual Report on Form 10-K for the year ended December 31, 2017.

As of December 31, 2017, the aggregate number of shares of our common stock subject to each non-employee director's outstanding option awards was as follows: Mr. Crocker, 72,537; Dr. Demetri, 4,890; Mr. Dineen, 18,555; Dr. Lee, 20,061; Dr. Mendelsohn, 34,759; Dr. Nielsen, 333,651; Dr. Porter, 39,667; Mr. Quigley, 34,759; and Mr. Ray, 19,685.

- (3) Dr. Demetri joined our board on November 29, 2017.
- (4) Dr. Mendelsohn resigned from our board on November 29, 2017.

Director Compensation Arrangements

For 2017, our non-employee directors were compensated for their services to our board as follows:

- an annual retainer for board service of \$45,000 (\$70,000 for the Chairman of the Board);
- for members of the audit committee, an additional annual retainer of \$12,000 (\$22,250 for the committee chair);
- for members of the corporate governance and nominating committee, an additional annual retainer of \$5,500 (\$12,000 for the committee chair);
- for members of the organization and compensation committee, an additional annual retainer of \$7,500 (\$15,000 for the committee chair);
- for members of the executive committee, an additional annual retainer of \$4,000 (\$6,000 for the committee chair); and
- an annual stock option grant, granted in connection with each annual meeting of stockholders, to purchase 7,500 shares of our common stock (8,625 shares of our common stock for the Chairman of the Board), provided that if a non-employee director was elected to our board in between annual meetings of stockholders, such director received a stock option grant in connection with such election for a pro-rated portion of the annual amount. Because Dr. Demetri joined our board on November 29, 2017, his stock option grant was based on a pro-rated portion of the annual amount for 2018 (as discussed below).

For 2018, our non-employee directors will be compensated for their services to our board as follows:

- an annual retainer for board service of \$45,000 (\$70,000 for the Chairman of the Board);
- for members of the audit committee, an additional annual retainer of \$12,000 (\$22,250 for the committee chair);
- for members of the corporate governance and nominating committee, an additional annual retainer of \$5,500 (\$12,000 for the committee chair);
- for members of the organization and compensation committee, an additional annual retainer of \$7,500 (\$15,000 for the committee chair);
- for members of the executive committee, no additional annual retainer; and
- an annual stock option grant, granted in connection with each annual meeting of stockholders, to purchase 7,000 shares of our common stock (8,000 shares of our common stock for the Chairman of the Board), provided that if a non-employee director is elected to our board in between annual meetings of stockholders, such director will receive a stock option grant in connection with such election for a pro-rated portion of the annual amount.

In addition, we have reimbursed, and will continue to reimburse, our non-employee directors for their travel, lodging and other reasonable expenses incurred in attending meetings of our board and committees of our board.

AUDIT-RELATED MATTERS

Audit Committee Report

The audit committee of the board of directors of Merrimack Pharmaceuticals, Inc. has reviewed Merrimack's audited financial statements for the fiscal year ended December 31, 2017 and discussed them with Merrimack's management and PricewaterhouseCoopers LLP, Merrimack's independent registered public accounting firm.

The audit committee has received from, and discussed with, PricewaterhouseCoopers LLP various communications that PricewaterhouseCoopers LLP is required to provide to the audit committee, including the matters required to be discussed by AS 1301, *Communications with Audit Committees*, as adopted by the Public Company Accounting Oversight Board.

The audit committee has received the written disclosures and the letter from PricewaterhouseCoopers LLP required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and has discussed with Merrimack's independent registered public accounting firm its independence.

Based on the review and discussions referred to above, the audit committee recommended to Merrimack's board of directors that the audited financial statements referred to above be included in Merrimack's Annual Report on Form 10-K for the year ended December 31, 2017.

By the audit committee of the board of directors of Merrimack Pharmaceuticals, Inc.

James H. Quigley
Russell T. Ray
Vivian S. Lee, M.D., Ph.D.

Audit Fees and Services

The following table summarizes the fees of PricewaterhouseCoopers LLP, our independent registered public accounting firm, billed to us for each of the last two fiscal years.

| <u>Fee Category</u> | <u>2016</u> <u>(\$)</u> | <u>2017</u> <u>(\$)</u> |
|------------------------|----------------------------|----------------------------|
| Audit Fees (1) | 632,500 | 1,067,000 |
| Audit-Related Fees (2) | 615,000 | 229,000 |
| Tax Fees | — | — |
| All Other Fees (3) | 1,814 | 900 |
| Total Fees | 1,249,314 | 1,296,900 |

- (1) Audit Fees are fees for the audit of our 2016 and 2017 consolidated financial statements including audits of the effectiveness of our internal control over financial reporting, reviews of our interim condensed consolidated financial statements and reviews of consolidated financial statements incorporated by reference into our outstanding registration statements. The increase from 2016 to 2017 primarily relates to procedures performed due to the asset sale to Ipsen.
- (2) Audit-Related Fees are fees that principally relate to assurance services that are also provided by our independent registered public accounting firm. In 2016, these fees include accounting consultations related to the asset sale to Ipsen. In 2017, these fees primarily include work related to filing our Current Report on Form 8-K filed with the SEC on December 15, 2017.
- (3) All Other Fees for 2016 and 2017 consist of subscriptions to online accounting research tools.

All such accountant services and fees were pre-approved by our audit committee in accordance with the "Pre-Approval Policies and Procedures" described below.

Pre-Approval Policies and Procedures

Our audit committee has adopted policies and procedures relating to the approval of all audit and non-audit services that are to be performed by our independent registered public accounting firm. This policy generally provides that we will not engage our independent registered public accounting firm to render audit or non-audit

services unless the service is specifically approved in advance by our audit committee or the engagement is entered into pursuant to a *de minimis* exception in accordance with applicable SEC rules.

MATTERS TO BE VOTED ON

Proposal 1: Election of Directors

At the Annual Meeting, stockholders will vote to elect seven directors for a one year term beginning at the Annual Meeting and ending at our 2019 Annual Meeting of Stockholders.

Our board of directors is currently comprised of nine members. However, our board has approved a decrease in its size to seven members effective as of the Annual Meeting. Our board has nominated Mr. Crocker, Dr. Demetri, Mr. Dineen, Dr. Nielsen, Dr. Peters, Mr. Quigley and Mr. Ray for re-election as directors, each to hold office until the 2019 Annual Meeting of Stockholders and until their respective successors have been duly elected and qualified or until their earlier death, resignation or removal. Each of the nominees is currently a member of our board. The persons named in the enclosed proxy card will vote to elect each of the nominees as directors, unless and to the extent authority to vote for the election of one or more of the nominees is withheld by marking the proxy to that effect. In the event that any nominee should be unable to serve, discretionary authority is reserved for the named proxy holders to vote for a substitute, or to reduce the number of directors to be elected, or both. We believe that each of our nominees will be willing and able to serve if elected.

OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE ELECTION OF EACH OF THE NOMINEES AS DIRECTORS.

Proposal 2: Advisory Vote on Executive Compensation

We are providing our stockholders the opportunity to vote to approve, on an advisory, non-binding basis, the compensation of our named executive officers as disclosed in this proxy statement in accordance with the SEC's rules. This proposal, which is commonly referred to as "say-on-pay," is required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which added Section 14A to the Exchange Act. Consistent with the preference expressed by our stockholders at our 2015 Annual Meeting of Stockholders, we have determined to hold an advisory vote on executive compensation annually.

Our executive compensation programs are designed to attract, motivate and retain our executive officers, who are critical to our success. Under these programs, our named executive officers are rewarded for the achievement of our short-term and longer-term financial and strategic objectives and for driving corporate financial performance and stability. The programs contain elements of cash and equity-based compensation and are designed to align the interests of our executives with those of our stockholders.

The "Executive Compensation" section of this proxy statement, including "Compensation Discussion and Analysis," describes in detail our executive compensation programs and the decisions made by the organization and compensation committee and our board with respect to the year ended December 31, 2017. As we describe in the Compensation Discussion and Analysis, our executive compensation program embodies a pay-for-performance philosophy that supports our business strategy and aligns the interests of our executives with our stockholders. Our board believes this link between compensation and the achievement of our short- and long-term business objectives has helped drive our performance over time. At the same time, we believe our program does not encourage excessive risk-taking by management.

Our board is asking stockholders to approve a non-binding advisory vote on the following resolution:

RESOLVED, that the compensation paid to Merrimack's named executive officers, as disclosed pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the compensation discussion and analysis, the compensation tables and any related material disclosed in this proxy statement, is hereby approved.

As an advisory vote, this proposal is not binding. The outcome of this advisory vote does not overrule any decision by us or our board (or any committee thereof), create or imply any change to the fiduciary duties of us or our board (or any committee thereof), or create or imply any additional fiduciary duties for us or our board (or any committee thereof). However, our organization and compensation committee and our board value the opinions expressed by our stockholders in their vote on this proposal and will consider the outcome of the vote when making future compensation decisions for our named executive officers.

OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR APPROVAL OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.

Proposal 3: Ratification of Independent Auditors

The audit committee of our board of directors has selected the firm of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018. PricewaterhouseCoopers LLP has served as our independent registered public accounting firm since the fiscal year ended December 31, 2001. Although stockholder approval of the selection of PricewaterhouseCoopers LLP is not required by law or Nasdaq Listing Rules, our audit committee believes that it is advisable and has decided to give our stockholders the opportunity to ratify this selection. If this proposal is not approved at the Annual Meeting, our audit committee may reconsider this selection.

Representatives of PricewaterhouseCoopers LLP are expected to be present at the Annual Meeting and will have the opportunity to make a statement if they desire to do so. It is also expected that they will be available to respond to appropriate questions from stockholders.

OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE RATIFICATION OF THE SELECTION OF PRICEWATERHOUSECOOPERS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2018.

Proposal 4: Approval of an Amendment to our Certificate of Incorporation to Increase the Number of Authorized Shares of Common Stock

Background

Our authorized capital stock presently consists of 20,000,000 shares of common stock, \$0.01 par value per share (“common stock”), and 10,000,000 shares of preferred stock, \$0.01 par value per share. Our board of directors has adopted and is recommending that our stockholders approve a proposed amendment to our certificate of incorporation to increase the number of authorized shares of common stock from 20,000,000 to 30,000,000. The number of shares of preferred stock authorized for issuance would not be affected by the proposed amendment.

As of April 17, 2018, a total of [] shares of common stock were issued and outstanding, no shares were held in treasury, and there were no shares of preferred stock issued or outstanding. As of April 17, 2018, there were an aggregate of [] options outstanding to purchase common stock under our equity incentive plans and an aggregate of [] shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan. Additionally, an aggregate of [] shares of common stock are reserved for issuance upon conversion of our outstanding 4.50% convertible notes due 2020. Accordingly, out of the 20,000,000 shares of common stock presently authorized, [] shares are issued or reserved for issuance and [] authorized shares of common stock remain available for future issuance.

If stockholders approve the proposed amendment, the first three paragraphs of Article Fourth of our certificate of incorporation will be deleted in their entirety and replaced by the following:

“FOURTH: The total number of shares of all classes of stock which the Corporation shall have the authority to issue is 40,000,000 shares, consisting of (i) 30,000,000 shares of Common Stock, \$0.01 par value per share (“Common Stock”), and (ii) 10,000,000 shares of Preferred Stock, \$0.01 par value per share (“Preferred Stock”).”

The proposed amendment, if approved by our stockholders, would become effective upon the filing of an amendment to our certificate of incorporation with the Secretary of State of the State of Delaware, in the form of Appendix A hereto, or at the later time set forth in such amendment. The board reserves the right, notwithstanding stockholder approval and without further action by stockholders, to elect not to proceed with the proposed amendment if the board determines that the proposed amendment is no longer in our best interests and the best interests of our stockholders.

If our stockholders approve the proposed amendment, subject to the discretion of the board, we intend to file the amendment to our certificate of incorporation with the Secretary of State of the State of Delaware as soon as practicable after the Annual Meeting.

Reasons for the Proposed Increase

Over the past several years, we have used shares of our common stock to, among other things, engage in financings, compensate employees and for other general corporate purposes. The additional authorized shares of common stock permitted by the proposed amendment to our certificate of incorporation would allow us to continue to use common stock for purposes such as financings, compensation plans, business development activities and other general corporate purposes. The board believes that having a sufficient number of authorized shares of our common stock allows engagement in strategic activities without using the company’s cash and provides flexibility to raise cash to carry out our overall strategy. The proposed amendment to our certificate of incorporation is intended to facilitate future financings, compensation plans, business development activities and other general corporate purposes from time to time as the board may approve. We do not currently have any specific plans, proposals or arrangements, written or oral, to issue any of the proposed additional authorized shares of common stock for general corporate or any other purposes. Unless required by applicable law or stock exchange rules, no further vote of the holders of common stock will be required.

Potential Effects of the Proposed Increase

The additional shares of common stock for which authorization is sought would be identical in powers, privileges and rights to the shares of common stock that are now authorized. Holders of common stock do not have preemptive rights to subscribe to additional securities which may be issued by the company.

The issuance of additional shares of common stock may, among other things, have a dilutive effect on earnings per share and on stockholders’ equity and voting rights. Furthermore, future sales of substantial amounts of our common stock, or the perception that these sales might occur, could adversely affect the prevailing market price of our common stock or limit our ability to raise additional capital. Stockholders should recognize that, as a result of this proposal, they will own a smaller percentage of shares relative to the total authorized shares of the company than they presently own.

The board has not proposed the increase in the amount of authorized shares with the intention of discouraging tender offers or takeover attempts. However, the availability of additional authorized shares for issuance may have the effect of discouraging a merger, tender offer, proxy contest or other attempt to obtain control.

Effectiveness of Amendment

If the proposed amendment is adopted, it will become effective upon the filing of a certificate of amendment to our certificate of incorporation with the Secretary of State of the State of Delaware.

OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR THE APPROVAL OF AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK.

STOCK OWNERSHIP AND REPORTING

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information with respect to the beneficial ownership of our common stock as of April 12, 2018 by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our current directors and director nominees; and
- all of our executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days after April 12, 2018 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person, but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, to our knowledge, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. The inclusion herein of any shares as beneficially owned does not constitute an admission of beneficial ownership.

The column entitled “Percentage of Shares Beneficially Owned” is based on a total of 13,342,784 shares of our common stock outstanding as of April 12, 2018. Except as otherwise set forth below, the address of the beneficial owner is c/o Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139. Beneficial ownership representing less than one percent of our outstanding common stock as of April 12, 2018 is denoted with an “*.”

| Name and Address of Beneficial Owner | Number of Shares Beneficially Owned | Percentage of Shares Beneficially Owned |
|--|--|--|
| 5% Stockholders | | |
| FMR LLC (1) | 1,603,053 | 12.01% |
| BlackRock, Inc. (2) | 813,041 | 6.09% |
| Named Executive Officers and Directors | | |
| Richard Peters (3) | 81,248 | * |
| Jean M. Franchi (4) | 15,000 | * |
| Yasir B. Al-Wakeel (5) | — | * |
| Daryl C. Drummond (6) | 84,572 | * |
| Jeffrey A. Munsie (7) | 72,362 | * |
| Sergio L. Santillana (8) | 14,998 | * |
| Gary L. Crocker (9) | 473,320 | 3.53% |
| George D. Demetri (10) | 1,222 | * |
| John M. Dineen (11) | 28,555 | * |
| Vivian S. Lee (12) | 26,561 | * |
| Ulrik B. Nielsen (13) | 356,332 | 2.61% |
| Michael E. Porter (14) | 123,611 | * |
| James H. Quigley (15) | 40,409 | * |
| Russell T. Ray (16) | 20,685 | * |
| All executive officers and directors as a group (13 persons) (17) | 1,338,875 | 9.47% |

- (1) Based on information provided in a Schedule 13G/A filed by FMR LLC on February 13, 2018. 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, a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Boards of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address of FMR LLC is 245 Summer Street, Boston, Massachusetts 02210. FMR LLC reports that it holds sole voting power with respect to 387,970 shares and sole dispositive power with respect to 1,603,053 shares.

- (2) Based on information provided in a Schedule 13G/A filed by BlackRock, Inc. on January 25, 2018. The address of BlackRock, Inc. is 55 East 52nd Street, New York, NY 10055. BlackRock, Inc. reports that it holds sole voting power with respect to 796,865 shares and sole dispositive power with respect to 813,041 shares.
- (3) Consists of 81,248 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (4) Consists of 15,000 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (5) The share amount reported is as of June 9, 2017, which was Dr. Al-Wakeel's last day of employment with us.
- (6) Consists of (i) 10,173 shares of common stock and (ii) 74,399 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (7) Consists of 72,362 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (8) Consists of 14,998 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (9) Consists of (i) 22,986 shares of common stock, (ii) 164,296 shares of common stock held by or jointly with Ann Crocker, Mr. Crocker's wife, (iii) 213,501 shares of common stock held by certain members of Mr. Crocker's family, certain trusts established for members of Mr. Crocker's family and certain entities controlled by Mr. Crocker or members of his family and (iv) 72,537 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date. Mr. and Mrs. Crocker, certain members of Mr. Crocker's family, certain trusts established for members of Mr. Crocker's family and certain entities controlled by Mr. Crocker or members of his family are parties to a Shareholder Voting Agreement, dated December 20, 2010, or the Crocker voting agreement, pursuant to which the parties to the agreement have agreed to vote his, her or its shares as directed by Crocker Ventures, LLC. Mr. Crocker is the President, Manager and Chairman of Crocker Ventures, LLC and in connection therewith shares voting control over all of the shares subject to the Crocker voting agreement.
- (10) Consists of 1,222 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (11) Consists of (i) 10,000 shares of common stock and (ii) 18,555 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (12) Consists of (i) 6,500 shares of common stock and (ii) 20,061 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (13) Consists of (i) 22,681 shares of common stock and (ii) 333,651 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (14) Consists of (i) 83,944 shares of common stock and (ii) 39,667 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.

- (15) Consists of (i) 5,650 shares of common stock and (ii) 34,759 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (16) Consists of (i) 1,000 shares of common stock and (ii) 19,685 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.
- (17) Includes 798,144 shares of common stock underlying options that are exercisable as of April 12, 2018 or will become exercisable within 60 days after such date.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, executive officers and holders of more than 10% of our common stock to file with the SEC initial reports of ownership of our common stock and other equity securities on a Form 3 and reports of changes in such ownership on a Form 4 or Form 5. Directors, executive officers and holders of more than 10% of our common stock are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. Based solely on a review of our records and representations made by the persons required to file these reports, we believe that, during the year ended December 31, 2017, our directors, executive officers and holders of more than 10% of our common stock complied with all Section 16(a) filing requirements applicable to them.

OTHER MATTERS

Our board of directors does not know of any other matters that may come before the Annual Meeting. However, if any other matters are properly presented to the Annual Meeting, it is the intention of the persons named in the accompanying proxy to vote, or otherwise act, in accordance with their judgment on such matters.

Solicitation of Proxies

This proxy is solicited on behalf of our board of directors. We will bear the expenses connected with this proxy solicitation. We have retained Morrow Sodali LLC to assist us in our proxy solicitation for an aggregate fee of approximately \$7,000, plus out-of-pocket expenses. We expect to pay banks, brokers and other nominees their reasonable expenses for forwarding proxy materials and annual reports to principals and obtaining their voting instructions. In addition to the use of the mails, our directors, officers and employees may, without additional remuneration, solicit proxies in person or by use of other communications media.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our proxy statement or annual report may have been sent to multiple stockholders in the same household. We will promptly deliver a separate copy of either document to any stockholder upon request submitted in writing to us at Merrimack Pharmaceuticals, Inc., One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, Attention: Corporate Secretary, or by calling (617) 441-1000. Any stockholder who wants to receive separate copies of the annual report and proxy statement in the future, or who is currently receiving multiple copies and would like to receive only one copy for his or her household, should contact his or her bank, broker or other nominee record holder, or contact us at the above address or phone number.

Deadline for Submission of Stockholder Proposals for 2019 Annual Meeting of Stockholders

Proposals of stockholders intended to be presented at our 2019 Annual Meeting of Stockholders pursuant to Rule 14a-8 promulgated under the Exchange Act must be received by us at our principal executive offices, One Kendall Square, Suite B7201, Cambridge, Massachusetts 02139, no later than [] in order to be included in the proxy statement and proxy card relating to that meeting.

If a stockholder wishes to present a proposal at our 2019 Annual Meeting of Stockholders, but does not wish to have the proposal considered for inclusion in our proxy statement and proxy card, pursuant to the advance notice provision in our bylaws, such stockholder must give written notice to our Corporate Secretary at our principal executive offices at the address noted above. Our Corporate Secretary must receive such notice no earlier than February 12, 2019 and no later than March 14, 2019, provided that if the date of the 2019 Annual Meeting of Stockholders is advanced by more than 20 days, or delayed by more than 60 days, from the first anniversary of the Annual Meeting, such notice must instead be received by our Corporate Secretary no earlier than the 120th day prior to the 2019 Annual Meeting of Stockholders and not later than the close of business on the later of (i) the 90th day prior to the 2019 Annual Meeting of Stockholders and (ii) the tenth day following the day on which notice of the date of the 2019 Annual Meeting of Stockholders was mailed or public disclosure of the date of the 2019 Annual Meeting of Stockholders was made, whichever occurs first.

**CERTIFICATE OF AMENDMENT TO
RESTATED CERTIFICATE OF INCORPORATION
OF
MERRIMACK PHARMACEUTICALS, INC.**

(Pursuant to Section 242 of the
General Corporation Law of the State of Delaware)

Merrimack Pharmaceuticals, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware, does hereby certify as follows:

A resolution was duly adopted by the Board of Directors of the Corporation pursuant to Section 242 of the General Corporation Law of the State of Delaware setting forth a proposed amendment to the Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment in accordance with Section 242 of the General Corporation Law of the State of Delaware. The resolution setting forth the amendment is as follows:

RESOLVED: That the first three paragraphs of Article FOURTH of the Restated Certificate of Incorporation of the Corporation be and hereby are deleted in their entirety and the following is inserted in lieu thereof:


“FOURTH: The total number of shares of all classes of stock which the Corporation shall have the authority to issue is 40,000,000 shares, consisting of (i) 30,000,000 shares of Common Stock, \$0.01 par value per share (“Common Stock”), and (ii) 10,000,000 shares of Preferred Stock, \$0.01 par value per share (“Preferred Stock”).”

IN WITNESS WHEREOF, this Certificate of Amendment has been executed by a duly authorized officer of the Corporation on this ____ day of _____, 2018.

MERRIMACK PHARMACEUTICALS, INC.

By:

Richard Peters
President and Chief Executive Officer



merrimack

MERRIMACK PHARMACEUTICALS, INC.

ONE KENDALL SQUARE

SUITE B7201

CAMBRIDGE, MA 02139

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 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 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:

E46392-PO8670

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

| | | | | | |
|---|-----------------------------|--------------------------|--------------------------|--------------------------|---|
| MERRIMACK PHARMACEUTICALS, INC. | | 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. |
| The Board of Directors recommends you vote FOR each director nominee: | | | | | |
| 1. Election of Directors | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| Nominees: | | | | | |
| 01) Richard Peters, M.D., Ph.D. | 05) Ulrik B. Nielsen, Ph.D. | | | | |
| 02) Gary L. Crocker | 06) James H. Quigley | | | | |
| 03) George D. Demetri, M.D. | 07) Russell T. Ray | | | | |
| 04) John M. Dineen | | | | | |
| The Board of Directors recommends you vote FOR the following proposals: | | | | | |
| 2. To approve, on an advisory basis, our executive compensation. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3. To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2018. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4. To approve an amendment to our certificate of incorporation to increase the number of authorized shares of common stock from 20,000,000 to 30,000,000. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| NOTE: The proxies are authorized to vote, in their discretion, upon such other business as may properly come before the meeting or any adjournment or postponement thereof. | | | | | |
| Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer. | | | | | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Signature [PLEASE SIGN WITHIN BOX] | Date | Signature (Joint Owners) | Date | | |

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice, Proxy Statement and Annual Report to Stockholders are available at www.proxyvote.com.

E46393-P08670

MERRIMACK PHARMACEUTICALS, INC.
Annual Meeting of Stockholders
June 12, 2018 4:00 PM ET
This proxy is solicited by the Board of Directors

The stockholder(s) hereby appoint(s) Richard Peters and Jean M. Franchi, or either of them, as proxies, each with the power to appoint his or her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of MERRIMACK PHARMACEUTICALS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 4:00 p.m., Eastern time, on June 12, 2018, at our headquarters at One Kendall Square, Suite B7201, Cambridge, MA 02139. The proxies are further authorized to vote, in their discretion, upon such other business as may properly come before the meeting or 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