

PROGENICS PHARMACEUTICALS, INC.
ONE WORLD TRADE CENTER
47TH FLOOR, SUITE J
NEW YORK, NY 10007
ATTN: CORPORATE SECRETARY

VOTE BY INTERNET - www.proxyvote.com

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

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

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

VOTE BY PHONE - 1-800-690-6903

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

VOTE BY MAIL

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

VOTE IN PERSON

Attend the Annual Shareholders Meeting at 10:00 AM EDT on Wednesday, June 13, 2018. The Company's offices are located at One World Trade Center, 47th Floor New York, NY 10007

You must RSVP that you will attend the meeting in person by sending an e-mail with your contact information to investorrelations@progenics.com.

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

E47523-P01514

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

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

PROGENICS PHARMACEUTICALS, INC.

The Board of Directors recommends you vote FOR the following:

1. Election of Directors

Nominees:

For Against Abstain

- | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 1a. Peter J. Crowley | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1b. Mark R. Baker | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1c. Bradley L. Campbell | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1d. Karen J. Ferrante | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1e. Michael D. Kishbauch | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1f. David A. Scheinberg | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1g. Nicole S. Williams | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The Board of Directors recommends you vote FOR proposals 2, 3 and 4.

For Against Abstain

- | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| 2. Approving, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this year's Proxy Statement. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Ratifying the Board's selection of Ernst & Young LLP to serve as the Company's independent registered public accounting firm for 2018. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Approving the 2018 Performance Incentive Plan. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

The Board of Directors recommends you vote AGAINST proposal 5.

- | | | | |
|------------------------------------------|--------------------------|--------------------------|--------------------------|
| 5. Considering the Stockholder Proposal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|------------------------------------------|--------------------------|--------------------------|--------------------------|

NOTE: Such other business as may properly come before the meeting or any adjournment 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.

Signature [PLEASE SIGN WITHIN BOX] Date

Signature (Joint Owners) Date

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:

The Notice and Proxy Statement and 10-K Wrap are available at www.proxyvote.com.

E47524-P01514

**PROGENICS PHARMACEUTICALS, INC.
Annual Meeting of Stockholders
June 13, 2018 10:00 AM EDT
This proxy is solicited by the Board of Directors**

The undersigned hereby appoint(s) Mark R. Baker and Patrick Fabbio, and each of them, as proxies, each with the power to appoint his 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 PROGENICS PHARMACEUTICALS, INC. that the stockholder(s) is/are entitled to vote at the Annual Meeting of Stockholders to be held at 10:00 AM EDT on June 13, 2018 at the Company's offices at One World Trade Center, 47th Floor, New York, NY 10007 and any adjournment or postponement thereof.

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

(Continued and to be signed on reverse side)