## SCHEDULE 14A INFORMATION

### Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant  $\boxtimes$ 

Filed by a Party other than the Registrant  $\ \square$ 

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
- x Definitive Additional Materials
- □ Soliciting Material Pursuant to § 240.14a-12

## **ASSEMBLY BIOSCIENCES, INC.**

(Name of Registrant as Specified In Its Charter)

Payment of Filing Fee (Check the appropriate box)

- x No fee required.
- $\Box$  Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.
  - 1. Title of each class of securities to which transaction applies:
  - 2. Aggregate number of securities to which transaction applies:
  - 3. Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
  - 4. Proposed maximum aggregate value of transaction:
  - 5. Total fee paid:

□ Fee paid previously with preliminary materials.

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

- 1. Amount Previously Paid:
- 2. Form, Schedule or Registration Statement No.:
- 3. Filing Party:
- 4. Date Filed:

# \*\*\* Exercise Your *Right* to Vote \*\*\* Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting To Be Held on May 17, 2019.

## ASSEMBLY BIOSCIENCES, INC.

Meeting Information

 Meeting Type:
 Annual Meeting

 For Stockholders as of the close of business on:
 March 22, 2019

 Date:
 May 17, 2019
 Time:
 8:00 A.M. PDT

Location: Assembly Biosciences, Inc. 331 Oyster Point Blvd., 4th Floor South San Francisco, California 94080

You are receiving this communication because you hold shares of common stock of Assembly Biosciences, Inc.

This is not a ballot. You cannot use this notice to vote. This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. You may view the proxy materials online at www.proxyvote.com, or you may request a paper copy (see reverse side).

We encourage you to access and review all of the important information contained in the proxy materials before voting.

See the reverse side of this notice to obtain proxy materials and voting instructions.

Assembly Blosciences, Inc. 11711 N. Meridian Street, Suite 310 Cannel, IN 46032 **Before You Vote** 

How to Access the Proxy Materials

## Proxy Materials Available to VIEW or RECEIVE:

1. Notice of Assembly Biosciences, Inc.'s 2019 Annual Meeting of Stockholders and Proxy Statement 2. Annual Report for the fiscal year ended December 31, 2018

How to View Online:

following page) and visit: www.proxyvote.com.

## How to Request and Receive a PAPER or E-MAIL Copy:

If you want to receive a paper or e-mail copy of these documents, you must request one. There is NO charge for requesting a copy. Please choose one of the following methods to make your request:

|                                  | _                 |
|----------------------------------|-------------------|
| <ol> <li>BY INTERNET:</li> </ol> | www.proxyvote.com |
| 2) BY TELEPHONE:                 | 1-800-579-1639    |
| DY F MAAU *                      | 1                 |

BY E-MAIL\*: sendmaterial@proxyvote.com

\* If requesting materials by e-mail, please send a blank e-mail with the information that is printed in the box marked by the arrow  $\rightarrow$  [XXXX XXXX XXXX (located on the following page) in the subject line.

Requests, instructions and other inquiries sent to this e-mail address will NOT be forwarded to your investment advisor. Please make the request as instructed above on or before May 3, 2019 to facilitate timely delivery.

Vote In Person: Many stockholder meetings have attendance requirements including, but not limited to, the possession of an attendance ticket issued by the entity holding the meeting. Please check the meeting materials for any special requirements for meeting attendance. At the meeting, you will be provided with a ballot to vote these shares.

Vote By Internet or Telephone: To vote now by Internet or by telephone, go to www.proxyvote.com or call the phone number specified on your proxy card, as applicable. Have the information that is printed in the box marked by the arrow  $\rightarrow$  [XXXX XXXX XXXX XXXX] (located on the following page) and follow the instructions. The deadline to vote by Internet or by telephone is 11:59 P.M. EDT on Thursday, May 16, 2019.

Vote By Mail: You can vote by mail by requesting a paper copy of the materials, which will include a proxy card. The marked, signed and dated proxy card must be received by Thursday, May 16, 2019.

#### Voting Items

1. Election of Directors

#### The Board of Directors recommends you vote FOR all nominees.

#### Nominees:

| 01 | Anthony E. Altig           | 04 | Myron Z. Holubiak    | 07 | Susan Mahony, Ph.D.   |
|----|----------------------------|----|----------------------|----|-----------------------|
| 02 | Mark Auerbach              | 05 | Helen S. Kim         | 08 | William R. Ringo, Jr. |
| 03 | Richard D. DiMarchi, Ph.D. | 06 | Alan J. Lewis, Ph.D. | 09 | Derek A. Small        |

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

- 2. Approval, on a non-binding advisory basis, of our named executive officers' compensation.
- Ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2019.
- Approval of an amendment to our 2018 Stock Incentive Plan to, among other things, increase the number of shares reserved for issuance thereunder by 1,100,000 shares.

NOTE: Your proxy holder will also vote in their discretion upon such other matters that may properly come before the meeting and any adjournment or postponement thereof. E69916-P18186