

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

SCHEDULE 14A  
(Rule 14a-101)

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

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

**Assembly Biosciences, Inc.**

(Name of Registrant as Specified In Its Charter)

Payment of Filing Fee (Check the appropriate box)

- No fee required.  
 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 June 11, 2020.**

**ASSEMBLY BIOSCIENCES, INC.**

Assembly Biosciences, Inc.  
331 Oyster Point Blvd., Fourth Floor  
South San Francisco, CA 94080

**Meeting Information\***

**Meeting Type:** Annual Meeting  
**For Stockholders as of the close of business on:** April 13, 2020  
**Date:** June 11, 2020 **Time:** 8:00 A.M. PDT  
**Location:** Assembly Biosciences, Inc.  
331 Oyster Point Blvd., Fourth 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](http://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.

\*Due to the ongoing public health impact of the coronavirus and the related COVID-19 pandemic, we are planning for the possibility that the Annual Meeting of Stockholders may be held solely by means of remote communication (i.e., a virtual-only stockholder meeting). If we take this step, we will announce the decision to do so in advance, and details regarding how to participate will be set forth in a press release issued by the Company and available at [investor.assemblybio.com](http://investor.assemblybio.com).

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

D123894-P2578

— Before You Vote —  
How to Access the Proxy Materials

**Proxy Materials Available to VIEW or RECEIVE:**

1. Notice of Assembly Biosciences, Inc.'s 2020 Annual Meeting of Stockholders and Proxy Statement
2. Annual Report for the fiscal year ended December 31, 2019

**How to View Online:**

Have the information that is printed in the box marked by the arrow → [XXXXXXXXXX XXXX XXXX] (located on the following page) and visit: [www.proxyvote.com](http://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:

- 1) BY INTERNET: [www.proxyvote.com](http://www.proxyvote.com)
- 2) BY TELEPHONE: 1-800-579-1639
- 3) BY E-MAIL\*: [sendmaterial@proxyvote.com](mailto: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 → [XXXXXXXXXX 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 28, 2020 to facilitate timely delivery.

— How To Vote —

Please Choose One of the Following Voting Methods

**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](http://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 → [XXXXXXXXXX XXXX XXXX] (located on the following page) and follow the instructions. The deadline to vote by Internet or by telephone is 11:59 PM, EDT on Wednesday, June 10, 2020.

**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 Wednesday, June 10, 2020.

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**Voting Items**

1. Election of Directors

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

**Nominees:**

01	Anthony E. Albig	04	Helen S. Kim	07	John G. McHutchison, A.O., M.D.
02	Richard D. Dimachi, Ph.D.	05	Alan J. Lewis, Ph.D.	08	William R. Ringo, Jr.
03	Myron Z. Holubak	06	Susan Mahony, Ph.D.		

**The Board of Directors recommends you vote FOR proposals 2, 3, 4 and 5 and AGAINST proposal 6.**

- 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, 2020.
- Approval of an amendment to our 2018 Stock Incentive Plan to increase the number of shares reserved for issuance thereunder by 1,600,000 shares.
- Approval of an amendment and restatement of our Fourth Amended and Restated Certificate of Incorporation to enable stockholders who hold in the aggregate at least 25% of our outstanding common stock to request special stockholder meetings.
- Vote on a stockholder proposal requesting the Board of Directors to take steps necessary to give stockholders who hold at least 15% of our outstanding common stock the right to request a special stockholder meeting.

**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.

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