# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

### **SCHEDULE 14A**

(RULE 14a-101)
SCHEDULE 14A INFORMATION
Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No. \_\_\_)

• Registrant ⊠ Filed by a Party other than the Registrant □
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ninary Proxy Statement.
idential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)).
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ting Material Pursuant to §240.14a-12.
ASSEMBLY BIOSCIENCES, INC.
(Name of Registrant as Specified in its Charter)
N/A
(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)
Filing Fee (Check the appropriate box):
e required.
omputed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
Title of each class of securities to which transaction applies:
Aggregate number of securities to which transaction applies:
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 fe is calculated and state how it was determined):
Proposed maximum aggregate value of transaction:
Total fee paid:
aid previously with preliminary materials.  k 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 ously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.  Amount Previously Paid:
Form, Schedule or Registration Statement No.:
Filing Party:
Date Filed:
of fee

#### **EXPLANATORY NOTE**

On April 13, 2015, Assembly Biosciences, Inc. (the "Company") filed its Definitive Proxy Statement on Schedule 14A (the "Original Proxy Statement") and the related Proxy Card (the "Original Proxy Card") with the Securities and Exchange Commission. The Company has discovered an error in the Original Proxy Statement and Original Proxy Card.

The Original Proxy Statement and Original Proxy Card inadvertently omitted an advisory vote on executive compensation, as set forth below:

The sole purpose of filing this supplement to the Definitive Proxy Statement is to correct that error. No other changes have been made to the Original Proxy Statement or to the Original Proxy Card.



#### ASSEMBLY BIOSCIENCES, INC.

99 Hudson Street, 5<sup>th</sup> Floor New York, New York 10013

#### PROXY STATEMENT SUPPLEMENT 2015 ANNUAL MEETING OF STOCKHOLDERS To Be Held Thursday, May 28, 2015

This Proxy Statement Supplement (the "Supplement") supplements and amends the original proxy statement of Assembly Biosciences, Inc. dated April 14, 2015 (the "Proxy Statement") to add a new Proposal 2 to approve a non-binding advisory vote on executive compensation. This Supplement, along with the accompanying Amended Notice of 2015 Annual Meeting of Stockholders, contains information about the Annual Meeting, including any adjournments or postponements of the Annual Meeting. We are holding the Annual Meeting at 10:00 a.m., on Thursday, May 28, 2015, at The Langham, 330 North Wabash Avenue, Chicago, Illinois.

This Supplement does not provide all of the information that is important to your decisions in voting at the Annual Meeting. Additional information is contained in the Proxy Statement, which was previously sent to you. To the extent that the information in this Supplement differs from, updates or conflicts with the information contained in the Proxy Statement, the information in this Supplement shall amend and supersede the information in the Proxy Statement. Except as so amended or superseded, all information set forth in the Proxy Statement remains unchanged. We urge you to read this Supplement carefully and in its entirety together with the Proxy Statement.

This Supplement relates to the solicitation of proxies by our Board of Directors for use at the Annual Meeting.

On May 14, 2015, we will send this Supplement, the attached Amended Notice of Annual Meeting and the enclosed new proxy card to all stockholders entitled to vote at the Annual Meeting.

## IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON MAY 28, 2015.

This Supplement, the Proxy Statement and our annual report to security holders are available for viewing, printing and downloading at <a href="http://proxy.assemblybio.com">http://proxy.assemblybio.com</a>. You can request a copy of our Annual Report on Form 10-K free of charge by calling 1-646-706-5208 or sending an e-mail to dbarrett@assemblybio.com. Please include your contact information with the request. The Form 10-K, without exhibits, is included in the 2014 Annual Report to Stockholders that accompanies this proxy statement.

Additionally, you can find a copy of our Annual Report on the website of the Securities and Exchange Commission, or the SEC, at <a href="https://www.sec.gov">www.sec.gov</a>,

#### PROPOSALS TO BE VOTED UPON BY STOCKHOLDERS

Additional information regarding Proposal No. 1 can be found in the Proxy Statement, which was previously sent to you. To the extent that the information in this Supplement differs from, updates or conflicts with the information contained in the Proxy Statement, the information in this Supplement shall amend and supersede the information in the Proxy Statement. Except as so amended or superseded, all information set forth in the Proxy Statement remains unchanged. We urge you to read this Supplement carefully and in its entirety together with the Proxy Statement.

A new Proposal No. 2 is hereby added as follows:

#### PROPOSAL NO. 2 -- ADVISORY VOTE ON EXECUTIVE COMPENSATION

At the 2012 Annual Meeting of Stockholders, in accordance with the Board of Directors' recommendation, the holders of approximately 54.9% of our outstanding stock voting voted for our Say-on-Pay proposal.

As part of its commitment to our stockholders, the Board of Directors is submitting a Say-on-Pay proposal for stockholder consideration again this year.

Executive compensation is an important matter for stockholders. The core of the Company's executive compensation philosophy and practice continues to be to pay-for-performance. The Company's executive officers are compensated in a manner consistent with the Company's strategy, competitive practice, sound corporate governance principles and stockholder interests and concerns. The Company believes its compensation program is strongly aligned with the long-term interests of the Company's stockholders. Compensation of the Company's executive officers is designed to enable the Company to attract and retain talented and experienced senior executives to lead the Company successfully in a competitive environment.

The compensation of the named executive officers is described on pages 15-20 of the Proxy Statement, which includes the Compensation Discussion and Analysis, or CD&A. The CD&A provides additional details on executive compensation, including the Company's compensation philosophy and objectives, and the fiscal 2014 compensation of the named executive officers.

The Company is asking stockholders to vote on the following resolution:

"RESOLVED, that the Company's stockholders approve, on an advisory basis, the compensation of the named executive officers as disclosed in the proxy statement for the 2015 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission (which disclosure includes the Compensation Discussion and Analysis, the Summary Compensation Table for fiscal year 2014, and the other related tables and disclosures)."

As indicated above, the stockholder vote on this resolution will not be binding on the Company or the Board of Directors, and will not be construed as overruling any decision by the Company or by the Board. The vote will not be construed to create or imply any change to the Company's fiduciary duties or those of the Board, or to create or imply any additional fiduciary duties for the Company or the Board.

#### **Vote Required**

The affirmative vote of the holders of a majority of the outstanding shares of the Company's common stock entitled to vote that are present or represented at the meeting and voted is required to approve, on an advisory basis, the compensation of the Company's named executive officers. In accordance with Delaware law, abstentions will be counted for purposes of determining the presence or absence of a quorum, but broker non-votes will not. Abstentions and broker non-votes will not be counted for purposes of determining the number of shares represented and voted in the meeting and, accordingly, will not affect the outcome of the Say-on-Pay vote.

The Board of Directors unanimously recommends stockholders vote, on an advisory basis, FOR the Company's 2014 executive compensation.

### Appendix A Amended Notice of Meeting



#### ASSEMBLY BIOSCIENCES, INC.

99 Hudson Street, 5<sup>th</sup> Floor New York, New York 10013

## AMENDED NOTICE OF ANNUAL MEETING OF STOCKHOLDERS To Be Held Thursday, May 28, 2015

#### To The Stockholders of Assembly Biosciences, Inc.:

The Annual Meeting of Stockholders of Assembly Biosciences, Inc., a Delaware corporation, will be held at The Langham, 330 North Wabash Avenue, Chicago, Illinois, on Thursday, May 28, 2015, at 10:00 a.m. for the following purposes:

- to elect six directors to serve for one-year terms expiring in 2016;
- · to hold a non-binding advisory vote on executive compensation; and
- to act upon such other matters that may properly come before the meeting or any adjournment thereof.

These matters are more fully described in the proxy statement dated April 14, 2015 and proxy statement supplement dated May 14, 2015.

The Board of Directors has fixed the close of business on April 7, 2015 as the record date for the determination of stockholders entitled to notice of and to vote at the meeting or any adjournment thereof.

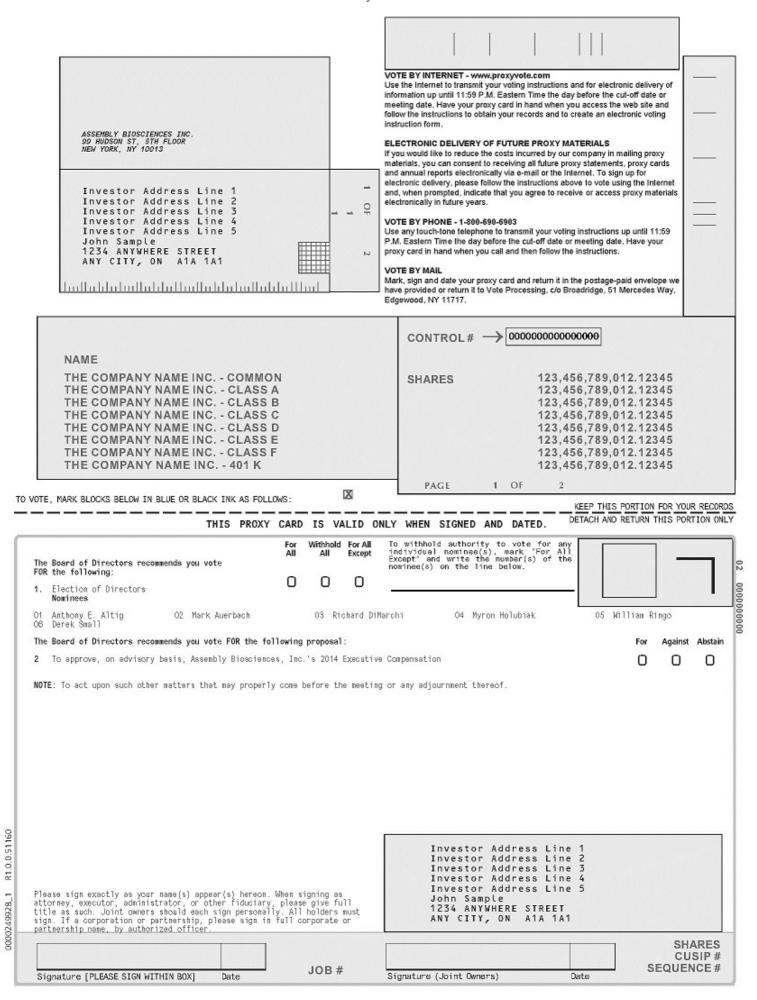
Under Securities and Exchange Commission rules, the Company is providing access to the proxy materials for the Annual Meeting to stockholders via the Internet, including an electronic proxy card for the meeting and our 2014 Annual Report to Stockholders. Accordingly, you can access the proxy materials and vote at www.proxyvote.com. Instructions for accessing the proxy materials and voting are described below and in the Notice of Annual Meeting that you received in the mail. If you are a stockholder of record, you may vote over the Internet, by telephone, or, if you request to receive a printed set of the proxy materials, by completing, signing, dating and mailing the accompanying proxy card in the return envelope. Submitting your vote via the Internet or by telephone or proxy card will not affect your right to vote in person if you decide to attend the Annual Meeting. If your shares are held in street name (held for your account by a broker or other nominee), you will receive instructions from your broker or other nominee explaining how to vote your shares, and you will have the option to cast your vote by telephone or over the Internet if your voting instruction form from your broker or nominee includes instructions and a toll-free telephone number or Internet website to do so. In any event, to be sure that your vote will be received in time, please cast your vote by your choice of available means at your earliest convenience. Your vote is very important. Whether or not you plan to attend the meeting, please carefully review the enclosed proxy statement and then cast your vote, regardless of the number of shares you hold.

We hope that you will attend the meeting in person on May 28<sup>th</sup>, 2015, and we very much appreciate your continuing interest in Assembly.

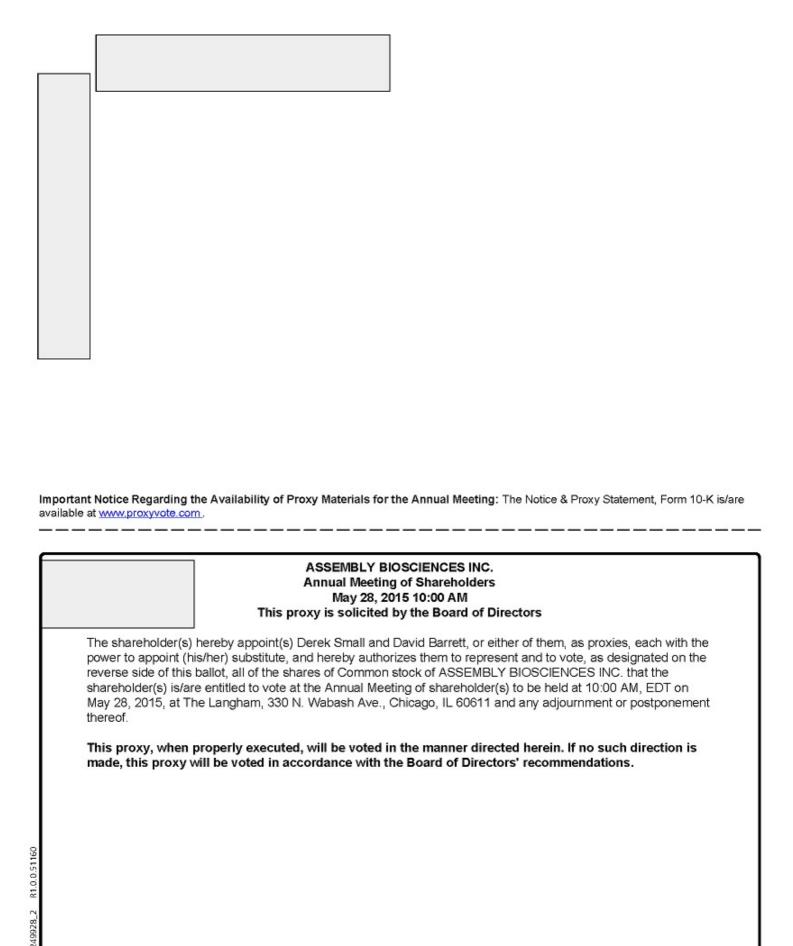
By Order of the Board of Directors

Derek A. Small
President and Chief Executive Officer

May 14, 2015







Continued and to be signed on reverse side