UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT

Under

The Securities Act of 1933

Rapid Micro Biosystems, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 20-8121647 (IRS Employer Identification No.)

1001 Pawtucket Boulevard West, Suite 280 Lowell, MA 01854 (Address of principal executive offices) (Zip code)

Rapid Micro Biosystems, Inc. 2010 Stock Option and Grant Plan, as amended Rapid Micro Biosystems, Inc. 2021 Incentive Award Plan Rapid Micro Biosystems, Inc. 2021 Employee Stock Purchase Plan (Full title of the plans)

> Robert Spignesi President and Chief Executive Officer Rapid Micro Biosystems, Inc. 1001 Pawtucket Boulevard West, Suite 280 Lowell, MA 01854 (Name and address of agent for service)

(978) 349-3200 (Telephone number, including area code, of agent for service)

> Copy to: Stephen W. Ranere, Esq. Wesley C. Holmes, Esq. Latham & Watkins LLP 200 Clarendon Street Boston, MA 02116 (617) 948-6000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company," and (emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	\mathbf{X}
		Emerging growth company	\mathbf{X}

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.01 per share	4,518,884 shares ⁽²⁾	\$ 3.30(3) \$	14,912,318	\$ 1,627
Common Stock, par value \$0.01 per share	1,000,000 shares ⁽⁴⁾	\$ 20.00(6) \$	20,000,000	\$ 2,182
Common Stock, par value \$0.001 per share	7,200,000 shares ⁽⁵⁾	\$ 20.00(6) \$	144,000,000	\$ 15,711

Pursuant to Rule 416(a) and Rule 416(b) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement (1) shall also cover additional shares of the Registrant's Class A common stock, par value \$0.01 per share ("Common Stock"), which become issuable under the Rapid Micro Biosystems 2010 Stock Option and Grant Plan, as amended (the "2010 Plan"), the Rapid Micro Biosystems, Inc. 2021 Incentive Award Plan (the "2021 Plan"), and the Rapid Micro Biosystems, Inc. 2021 Employee Stock Purchase Plan (the "ESPP") by reason of any stock split, stock dividend, recapitalization, or other similar transaction.

- (2) Consists of 4,518,884 shares of Common Stock subject to outstanding stock options under the 2010 Plan as of June 30, 2021. To the extent stock options outstanding under the 2010 Plan are forfeited, lapse unexercised, or are settled in cash, the shares of Common Stock subject to the stock options will be available for future issuance under the 2021 Plan.
- Estimated in accordance with Rule 457(h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of the (3) weighted average exercise price of \$3.24 per share for outstanding stock options granted under the 2010 Plan.
- (4)Consists of 1,000,000 shares of Common Stock available for future issuance under the ESPP, which number consists of (a) 400,000 shares of Common Stock initially available for issuance under the ESPP and (b) an additional 600,000 shares of Common Stock that may become issuable under the ESPP pursuant to its terms.
- Consists of 7,2000,000 shares of Common Stock available for future issuance under the 2021 Plan, which number consists of (a) 4,200,000 (5)shares of Common Stock initially available for issuance under the 2021 Plan and (b) an additional 3,000,000 shares of Common Stock that may become issuable under the 2021 Plan pursuant to its terms.
- (6)With respect to shares available for future issuance, estimated in accordance with Rule 457(c) and 457(h) of the Securities Act for purposes of calculating the registration fee, the Proposed Maximum Offering Price Per Share is \$20.00, which is the initial public offering price set forth on the cover page of the Registrant's prospectus dated July 14, 2021, relating to its initial public offering of Common Stock.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information called for in Part I of Form S-8 is not being filed with or included in this Registration Statement (by incorporation by reference or otherwise) in accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission").

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Commission by Rapid Micro Biosystems, Inc. (the "Registrant"), pursuant to the Securities Act and the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as applicable, are hereby incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

(a) the Registrant's prospectus filed with the Commission pursuant to Rule 424(b) promulgated under the Securities Act on July 16, 2021, in connection with the registration statement on Form S-1, as amended (Reg. No. 333-257431), in which there is set forth the audited financial statements for the Registrant's fiscal year ended December 31, 2020; and

(b) the description of the Registrant's Common Stock contained in the prospectus included in the Registrant's registration statement on <u>Form S-1, as</u> <u>amended (Reg. No. 333-257431</u>), which description is incorporated by reference into the <u>Form 8-A (File No. 001-40592) filed with the Commission on</u> <u>July 12, 2021</u>, pursuant to the Exchange Act, and any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents.

Any statement contained in this Registration Statement, in an amendment hereto or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed amendment to this Registration Statement or in any document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement, except as to such specific section of such statements as set forth therein.

Under no circumstances shall any information furnished under Item 2.02 or 7.01 of Form 8-K be deemed incorporated herein by reference unless such Form 8-K expressly provides to the contrary.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.



Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant's certificate of incorporation provides that the Registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of it) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. The Registrant's certificate of incorporation provides that the Registrant will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the Registrant to procure a judgment in the Registrant's favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at the Registrant's request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the Registrant's best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by the Registrant against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

The Registrant has entered into indemnification agreements with each of the Registrant's directors and executive officers. These indemnification agreements may require the Registrant, among other things, to indemnify its directors and executive officers for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by a director or executive officer in any action or proceeding arising out of his or her service as one of the Registrant's directors or executive officers, or any other company or enterprise to which the person provides services at the Registrant's request.

The Registrant maintains a general liability insurance policy that covers certain liabilities of directors and officers of the Registrant's corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8.	Exhibits.
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Exhibit Number	Description of Exhibit
<u>4.1</u>	<u>Certificate of Incorporation of the Registrant (currently in effect) (incorporated by reference to Exhibit 3.1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on June 25, 2021).</u>
<u>4.1.1</u>	Certificate of Amendment to Certificate of Incorporation of the Registrant (currently in effect) (incorporated by reference to Exhibit 3.1.1 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on July 12, 2021).
<u>4.2</u>	Bylaws of the Registrant, as amended (currently in effect) (incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on June 25, 2021).
<u>4.3+</u>	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of the Registrant's initial public offering of its Common Stock).
<u>4.4</u>	Form of Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.4 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on July 12, 2021).
<u>4.5</u>	Specimen Stock Certificate evidencing the shares of Common Stock (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on June 25, 2021).
<u>5.1+</u>	Opinion of Latham & Watkins LLP.
<u>23.1+</u>	Consent of PricewaterhouseCoopers LLP.
<u>23.2+</u>	Consent of Latham & Watkins LLP (included in Exhibit 5.1).
<u>24.1</u>	Power of Attorney (included on signature page).
<u>99.1</u>	Rapid Micro Biosystems, Inc. 2010 Stock Option and Grant Plan, as amended (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on June 25, 2021).
<u>99.2</u>	Rapid Micro Biosystems, Inc. 2021 Incentive Award Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on July 12, 2021).
<u>99.3</u>	Rapid Micro Biosystems, Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.3 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (Reg. No. 333-257431) filed on July 12, 2021).

+ Filed herewith

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the Registration Statement is on Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(h) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lowell, Commonwealth of Massachusetts, on the 16th day of July, 2021.

RAPID MICRO BIOSYSTEMS, INC.

By: /s/ Robert Spignesi Robert Spignesi President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Rapid Micro Biosystems, Inc., hereby severally constitute and appoint Robert Spignesi and Sean Wirtjes, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him or her and in his or her name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

Signature	Title	Date
/s/ Robert Spignesi Robert Spignesi	President, Chief Executive Officer and Director (principal executive officer)	July 16, 2021
/s/ Sean Wirtjes Sean Wirtjes	Chief Financial Officer (principal financial officer and principal accounting officer)	July 16, 2021
/s/ Jeffrey Schwartz Jeffrey Schwartz	Chairperson of the Board of Directors	July 16, 2021
/s/ David Hirsch David Hirsch, M.D., Ph.D.	Director	July 16, 2021
/s/ Richard Kollender Richard Kollender	Director	July 16, 2021
/s/ Melinda Litherland Melinda Litherland	Director	July 16, 2021
/s/ Natale Ricciardi Natale Ricciardi	Director	July 16, 2021
/s/ Alexander Schmitz Alexander Schmitz	Director	July 16, 2021

RESTATED CERTIFICATE OF INCORPORATION

OF

RAPID MICRO BIOSYSTEMS, INC.

The name of the corporation is Rapid Micro Biosystems, Inc. The corporation was originally incorporated by the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware on December 29, 2006. This Restated Certificate of Incorporation of the corporation, which restates and integrates and also further amends the provisions of the corporation's Certificate of Incorporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware and by the written consent of its stockholders in accordance with Section 228 of the General Corporation Law of the State of Delaware. The Certificate of Incorporation of the corporation is hereby amended, integrated and restated to read in its entirety as follows:

FIRST: The name of the Corporation is Rapid Micro Biosystems, Inc. (the "Corporation").

SECOND: The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at that address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 230,000,000 shares, consisting of (a) 220,000,000 shares of Common Stock, \$0.01 par value per share ("Common Stock"), 210,000,000 of which shall be designated Class A Common Stock, \$0.01 par value per share ("Class B Common Stock"), and 10,000,000 of which shall be designated Class B Common Stock, \$0.01 par value per share ("Class B Common Stock"), and (b) 10,000,000 shares of Preferred Stock, \$0.01 par value per share ("Preferred Stock").

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. <u>COMMON STOCK</u>.

1. <u>General</u>. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors of the Corporation (the "Board of Directors") upon any issuance of the Preferred Stock of any series.

2. Identical Rights.

(a) Except as otherwise provided in this Restated Certificate of Incorporation or required by applicable law, shares of Common Stock shall have the same rights and powers, rank equally (including as to dividends and distributions, and upon any liquidation, dissolution or winding up of the Corporation), share ratably and be identical in all respects as to all matters.

(b) If the Corporation in any manner subdivides (by stock split or otherwise) or combines (by reverse stock split or otherwise) the outstanding shares of Class A Common Stock or Class B Common Stock, then the outstanding shares of all Common Stock will be subdivided or combined in the same proportion and manner.

3. Voting.

(a) The holders of Class A Common Stock shall have voting rights at all meetings of stockholders, each such holder being entitled to one vote for each share thereof held by such holder; <u>provided</u>, <u>however</u>, that, except as otherwise required by law, holders of Class A Common Stock shall not be entitled to vote on any amendment to this Restated Certificate of Incorporation (which, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together as a class with the holders of one or more other such series, to vote thereon pursuant to this Restated Certificate of Incorporation or the General Corporation Law of the State of Delaware. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware (the "DGCL").

(b) Except as otherwise provided herein or as otherwise required by the DGCL, the Class B Common Stock shall have no voting rights, and shall not entitle the holders thereof to any vote at any meeting of stockholders, with respect to any matter, and the shares of Class B Common Stock shall not be considered present or entitled to vote or otherwise accounted for in connection with any meeting or vote that occurs during such time (including for purposes of determining the presence or absence of a quorum or the minimum vote required to approve any matter). However, subject to the rights of the holders of any series of Preferred Stock pursuant to the terms of this Restated Certificate of Incorporation or any resolutions providing for the issuance of such series of stock adopted by the Board of Directors, as long as any shares of Class B Common Stock, the Corporation shall not, directly or indirectly, whether by or through any subsidiary and whether by merger, consolidation or otherwise, amend, modify or repeal any provision of this Restated Certificate of Incorporation if the effect thereof would be to modify the voting, conversion or other rights, powers, preferences, privileges or restrictions of the Class B Common Stock.

4. <u>Dividends</u>. Dividends may be declared and paid on the Common Stock if, as and when determined by the Board of Directors subject to any preferential dividend or other rights of any then outstanding Preferred Stock and to the requirements of applicable law. Without limiting the preceding sentence, the Corporation shall not declare or pay any dividend or make any other distribution to the holders of Common Stock unless the same dividend or other distribution with the same record date and payment date shall be declared and paid on all shares of Common Stock; *provided, however*, that any dividend or other distribution payable in additional shares of Common Stock or rights to acquire shares of Class A Common Stock and on the Class B Common Stock or rights to acquire shares of Class A Common Stock and on the Class B Common Stock or rights to acquire shares of Class B Common Stock or rights to acquire shares of Class B Common Stock and on the same record date and payment date and payment date.

5. <u>Liquidation</u>. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

6. Conversion of Class B Common Stock.

(a) <u>Conversion at Option of Holder</u>. Each share of Class B Common Stock shall be convertible, at any time and from time to time from and after the date of issuance, at the option of the holder thereof, into one share of Class A Common Stock. A holder of Class B Common Stock shall effect conversions by providing the Corporation with written notice that such holder elects to convert all or any number of the shares of Class B Common Stock held by such holder (a "Class B Notice of Conversion"). The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such Class B Notice of Conversion shall be the time of conversion (the "Class B Conversion Time") and the shares of Class A Common Stock issuable upon conversion of such shares of Class B Common Stock shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Class B Conversion Time, issue and deliver to such holder of Class B Common Stock, or to his, her or its nominees, a book-entry statement evidencing the number of full shares of Class A Common Stock issuable upon such conversion in accordance with the provisions hereof and a book-entry statement evidencing the number (if any) of the shares of Class B Common Stock that were not converted into Class A Common Stock.

(b) Beneficial Ownership Limitation. Notwithstanding anything herein to the contrary, but subject to the second to last sentence of this Subsection 6(b), the Corporation shall not effect any conversion of the Class B Common Stock, and a holder shall not have the right to convert any portion of the Class B Common Stock, to the extent that, after giving effect to an attempted conversion set forth in the applicable Class B Notice of Conversion, such holder together with any Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the applicable rules and regulations of the Securities and Exchange Commission (the "Commission"), including any "group" of which the holder is a member, would beneficially own a number of shares of Class A Common Stock in excess of 4.9% of the total number of shares of Class A Common Stock then issued and outstanding (the "Beneficial Ownership Limitation"); provided that the Beneficial Ownership Limitation shall not apply to the extent that the Class A Common Stock is not deemed to constitute an "equity security" pursuant to Rule 13d-1(i) under the Exchange Act. Delivery of a Class B Notice of Conversion by a holder in respect of the conversion of Class B Common Stock shall constitute a representation by such holder that the issuance of shares of Class A Common Stock in accordance with such Class B Notice of Conversion will not cause such holder (together with any Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the Commission) to beneficially own a number of shares of Class A Common Stock in excess of the Beneficial Ownership Limitation, as determined in accordance with this Restated Certificate of Incorporation. For purposes of this Subsection 6(b), the number of shares of Class A Common Stock beneficially owned by such holder shall include the number of shares of Class A Common Stock issuable upon conversion of the Class B Common Stock subject to the Class B Notice of Conversion with respect to which such determination is being made, but shall exclude the number of shares of Class A Common Stock which are issuable upon (A) conversion of the remaining, unconverted Class B Common Stock beneficially owned by such holder (and any Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the Commission), and (B) exercise, exchange or conversion of the unexercised, unexchanged or unconverted portion of any other securities of the Corporation subject to a limitation on conversion, exchange or exercise analogous to the limitation contained herein (including any class or series of preferred stock and warrants) beneficially owned by such holder (and any Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the Commission). Except as set forth in the preceding sentence, for purposes of this Subsection 6(b), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. In addition, a determination as to any "group" status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Subsection 6(b), in determining the number of outstanding shares of Class A Common Stock, a holder may rely on the number of outstanding shares of Class A Common Stock as stated in the Corporation's most recent quarterly or annual report filed with the Commission, any current report or other filing filed by the Corporation with the Commission subsequent thereto or any confirmation provided by the Corporation in accordance with the next sentence. Upon the written request of a holder (which may be via electronic mail), the Corporation shall promptly following such request, confirm in writing via electronic mail to such holder the number of shares of Class A Common Stock then outstanding. In any case, the number of outstanding shares of Class A Common Stock shall be determined after giving effect to any actual conversion, exchange or exercise of securities of the Corporation, including Class B Common Stock, by such holder (and any Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the Commission) since the date as of which such number of outstanding shares of Class A Common Stock was last publicly reported. Notwithstanding anything herein to the contrary, in the event of an error in the Class B Notice of Conversion that would result in the holder beneficially owning shares of Class A Common Stock in excess of the Beneficial Ownership Limitation, then such Class B Notice of Conversion shall only be effective with respect to that number of shares of Class A Common Stock that would not result in the holder exceeding the Beneficial Ownership Limitation.

(c) <u>Automatic Conversion Upon Certain Transfers</u>. Upon a transfer of shares of Class B Common Stock by a holder to a Person that is neither an Affiliate of such holder nor a Person whose beneficial ownership of Class A Common Stock would be aggregated with such holder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the Commission (a "Permitted Transferee"), each share of Class B Common Stock so transferred shall automatically, without further action by the transferor or Permitted Transferee, convert into a share of Class A Common Stock; and upon delivery to the Corporation of written notice from the transferor of any such transfer, the Corporation shall issue and deliver the shares of Class A Common Stock into which such transferred shares of Class B Common Stock shall have thereby converted, with the same effect as if such notice of transfer were a Class B Notice of Conversion delivered in accordance with Subsection 6(a). For purposes of this Subsection 6(c), a transfer of Class B Common Stock shall be deemed to have occurred when the Permitted Transferee has delivered the agreed consideration for such shares to the transferor. The written notice of transfer to be delivered to the Corporation in accordance with this Subsection 6(c) shall be deemed a representation by the transferor that it has received such consideration, and the Corporation shall be entitled to rely upon such representation.

(d) <u>Reservation of Shares</u>. The Corporation shall at all times when any shares of Class B Common Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of Class B Common Stock, such number of its duly authorized shares of Class A Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Class B Common Stock; and if at any time the number of authorized but unissued shares of Class A Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of Class B Common Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Class A Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Restated Certificate of Incorporation.

(e) <u>Effect of Conversion</u>. All shares of Class B Common Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate on the Class B Conversion Date, except only the right of the holders thereof to receive shares of Class A Common Stock in exchange therefor. Any shares of Class B Common Stock so converted shall be retired and cancelled and may not be reissued, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Class B Common Stock accordingly.

(f) <u>Taxes</u>. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Class A Common Stock upon conversion of shares of Class B Common Stock pursuant to this Section 6. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Class A Common Stock in a name other than that in which the shares of Class B Common Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

(g) <u>Certain Defined Terms</u>. For the purposes of this Section 6, the following terms shall have the following meanings:

(i) "Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 144. For this purpose, "control" (including, with its correlative meanings, "controlled by" and "under common control with") shall mean the possession, directly or indirectly, of the power to direct or cause the direction of management or policies of a Person, whether through the ownership of securities or partnership or other ownership interests, by contract or otherwise. With respect to a holder of capital stock, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such holder will be deemed to be an Affiliate of such holder.

(ii) "Person" means any individual, sole proprietorship, partnership (general or limited), limited liability company, joint venture, company, trust (statutory or common law), unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental or regulatory agency.

B. <u>PREFERRED STOCK</u>.

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors as hereinafter provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the General Corporation Law of the State of Delaware, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such designations, preferences and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the fullest extent now or hereafter permitted by the General Corporation Law of the State of Delaware. The powers, preferences and relative, participating, optional and other special rights of each such series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding. Without limiting the generality of the foregoing, the resolution or resolutions providing for the issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law.

Subject to the rights of the holders of any series of Preferred Stock pursuant to the terms of this Restated Certificate of Incorporation or any resolution or resolutions providing for the issuance of such series of stock adopted by the Board of Directors, the number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

FIFTH: Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Restated Certificate of Incorporation, and all rights conferred upon stockholders, directors or any other persons herein are granted subject to this reservation.

SIXTH: In furtherance and not in limitation of the powers conferred upon it by the General Corporation Law of the State of Delaware, and subject to the terms of any series of Preferred Stock, the Board of Directors shall have the power to adopt, amend, alter or repeal the Bylaws of the Corporation. The stockholders may not adopt, amend, alter or repeal the Bylaws of the Corporation, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Restated Certificate of Incorporation, by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class. In addition to any other vote required by this Restated Certificate of Incorporation or otherwise required by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or to adopt any provision inconsistent with, whether by merger or consolidation or otherwise by operation of law, this Article SIXTH.

SEVENTH: Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware as so amended.

EIGHTH: This Article EIGHTH is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

2. <u>Number of Directors; Election of Directors</u>. Subject to the rights of holders of any series of Preferred Stock to elect directors, the number of directors of the Corporation shall be established from time to time by the Board of Directors. Election of directors need not be by written ballot, except as and to the extent provided in the Bylaws of the Corporation.

3. <u>Classes of Directors</u>. The directors (other than those directors elected by the holders of any series of Preferred Stock, voting separately as a series or together with one or more other such series, as the case may be (the "Preferred Stock Directors")) shall be and are divided into three classes, designated as Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. The Board of Directors is authorized to assign members of the Board of Directors to Class II.

4. <u>Terms of Office</u>. Each director (other than Preferred Stock Directors) shall serve for a term ending on the date of the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected; <u>provided</u> that each director initially assigned to Class I shall serve for a term expiring at the Corporation's first annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; each director initially assigned to Class II shall serve for a term expiring at the Corporation; and each director initially assigned to Class III shall serve for a term expiring at the Corporation's first annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; and each director initially assigned to Class III shall serve for a term expiring at the Corporation's third annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; at the Corporation's third annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; at the term of each director shall continue until the election and qualification of his or her successor and be subject to his or her earlier death, resignation or removal.

5. <u>Quorum</u>. The greater of (a) a majority of the directors at any time in office and (b) one-third of the number of directors fixed pursuant to Section 2 of this Article EIGHTH shall constitute a quorum of the Board of Directors. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

6. <u>Action at Meeting</u>. Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present shall be regarded as the act of the Board of Directors unless a greater number is required by law or by this Restated Certificate of Incorporation.

7. <u>Removal</u>. Except for any Preferred Stock Directors, directors of the Corporation may be removed but only for cause and only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote at an election of directors.

8. <u>Vacancies</u>. Subject to the rights of holders of any series of Preferred Stock in respect of any Preferred Stock Directors, any vacancy or newly created directorship in the Board of Directors, however occurring, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director and shall not be filled by the stockholders, unless the Board of Directors determines by resolution that any such vacancy or newly created directorship shall be filled by the stockholders. A director elected to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen, subject to the election and qualification of a successor and to such director's earlier death, resignation or removal.

9. <u>Stockholder Nominations and Introduction of Business, Etc</u>. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the Bylaws of the Corporation.

10. <u>Preferred Stock Directors</u>. During any period when the holders of one or more series of Preferred Stock have the right to elect additional directors as provided for or fixed pursuant to the provisions of Article FOURTH hereof or any certificate of designations of any series of Preferred Stock, then upon commencement and for the duration of the period during which such right continues: (i) the then otherwise total number of authorized directors of the Corporation shall automatically be increased by such specified number of directors, and the holders of such Preferred Stock shall be entitled to elect the additional directors so provided for or fixed pursuant to said provisions, and (ii) each such additional director shall serve until such director's successor shall have been duly elected and qualification, resignation or removal. Except as otherwise provided for or fixed pursuant to the provisions of Article FOURTH hereof or any certificate of designations of any series of Preferred Stock, whenever the holders of any series of Preferred Stock having such right to elect additional directors are divested of such right pursuant to the provisions of such stock, such person or persons then serving as additional directors shall eatomatically cease to be a director, the terms of office of all such additional directors elected by the holders of such stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional directors, shall forthwith terminate, and the total authorized number of directors of the Corporation shall be reduced accordingly.

11. <u>Amendments to Article</u>. In addition to any other vote required by this Restated Certificate of Incorporation or the Bylaws of the Corporation or otherwise required by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or to adopt any provision inconsistent with, whether by merger or consolidation or otherwise by operation of law, this Article EIGHTH.

NINTH: Except as otherwise provided in the terms of any series of Preferred Stock, no action that is required or permitted to be taken by the stockholders of the Corporation at any annual or special meeting of stockholders may be effected by written consent of stockholders in lieu of a meeting. In addition to any other vote required by this Restated Certificate of Incorporation or the Bylaws of the Corporation or otherwise required by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or to adopt any provision inconsistent with, whether by merger or consolidation or otherwise by operation of law, this Article NINTH.

TENTH: Special meetings of stockholders for any purpose or purposes may be called at any time only by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer) of the Corporation, and may not be called by any other person or persons. Business transacted at any special meeting of stockholders shall be limited to the purpose or purposes stated in the notice of meeting. In addition to any other vote required by this Restated Certificate of Incorporation or the Bylaws of the Corporation or otherwise required by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or to adopt any provision inconsistent with, whether by merger or consolidation or otherwise by operation of law, this Article TENTH.

ELEVENTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (a) any derivative action or proceeding brought on behalf of the Corporation, (b) any action asserting a claim of breach of fiduciary duty owed by any current or former director, officer, employee or stockholder of the Corporation to the Corporation or the Corporation's stockholders, (c) any action asserting a claim arising pursuant to any provision of the General Corporation Law of the State of Delaware, this Restated Certificate of Incorporation or the Bylaws of the Corporation or as to which the General Corporation Law of the State of Delaware confers jurisdiction on the Court of Chancery of the State of Delaware or (d) any action asserting a claim governed by the internal affairs doctrine, in each case subject to said Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein; provided that, the provisions of this sentence will not apply to suits brought to enforce any liability or duty created by the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Unless the Corporation consents in writing to the selection of an alternative forum, the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended. To the fullest extent permitted by applicable law, any person or entity purchasing or otherwise acquiring or holding any interest in shares of capital stock of the Corporation shall be deemed to have notice of and consented to the provisions of this Article ELEVENTH. In addition to any other vote required by this Restated Certificate of Incorporation or the Bylaws of the Corporation or otherwise required by law, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to amend or repeal, or to adopt any provision inconsistent with, whether by merger or consolidation or otherwise by operation of law, this Article ELEVENTH. If any provision or provisions of this Article ELEVENTH shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article ELEVENTH (including, without limitation, each portion of any sentence of this Article ELEVENTH containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation, which restates, integrates and amends the certificate of incorporation of the Corporation, and which has been duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware, has been executed by its duly authorized officer this _____ day of ______, 2021.

RAPID MICRO BIOSYSTEMS, INC.

By:

Name:Robert SpignesiTitle:President and Chief Executive Officer

200 Clarendon Street Boston, Massachusetts 02116 Tel: +1.617.948.6000 Fax: +1.617.948.6001 www.lw.com

FIRM / AFFILIATE OFFICES Beijing Moscow Boston Munich Brussels New York Century City Orange County Paris Chicago Dubai Rivadh Düsseldorf San Diego Frankfurt San Francisco Hamburg Seoul Hong Kong Shanghai Silicon Valley Houston London Singapore Los Angeles Tokvo Madrid Washington, D.C. Milan

LATHAM&WATKINS LLP

Rapid Micro Biosystems, Inc. 1001 Pawtucket Boulevard West, Suite 280 Lowell, MA 01854

Re: Registration Statement on Form S-8; 12,718,884 shares of Class A Common Stock, \$0.01 par value per share

Ladies and Gentlemen:

July 16, 2021

We have acted as special counsel to Rapid Micro Biosystems, Inc., a Delaware corporation (the "*Company*"), in connection with the proposed issuance by the Company of up to 12,718,884 shares of Class A common stock of the Company, \$0.01 par value per share (the "*Shares*"), issuable under the Rapid Micro Biosystems, Inc. 2010 Stock Option and Grant Plan, as amended (the "*2010 Plan*"), the Rapid Micro Biosystems, Inc. 2021 Incentive Award Plan (the "*2021 Plan*") and the Rapid Micro Biosystems, Inc. 2021 Employee Stock Purchase Plan (the "*2021 ESPP*" and, together with the 2010 Plan and the 2021 Plan, the "*Plans*"). The Shares are included in a registration statement on Form S-8 under the Securities Act of 1933, as amended (the "*Act*"), filed with the Securities and Exchange Commission (the "*Commission*") on July 16, 2021 (the "*Registration Statement*"). This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus, other than as expressly stated herein with respect to the issue of the Shares.

As such counsel, we have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. With your consent, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. We are opining herein as to the General Corporation Law of the State of Delaware and we express no opinion with respect to any other laws.

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Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof, when the Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers, and have been issued by the Company for legal consideration in excess of par value in the circumstances contemplated by the Plans, assuming in each case that the individual grants or awards under the Plans are duly authorized by all necessary corporate action and duly granted or awarded and exercised in accordance with the requirements of law and the Plans (and the agreements and awards duly adopted thereunder and in accordance therewith), the issue and sale of the Shares will have been duly authorized by all necessary corporate action of the Company, and the Shares will be validly issued, fully paid and nonassessable. In rendering the foregoing opinion, we have assumed that the Company will comply with all applicable notice requirements regarding uncertificated shares provided in the General Corporation Law of the State of Delaware.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of the Act. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Latham & Watkins LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of Rapid Micro Biosystems, Inc. of our report dated March 22, 2021, except for the effects of the revision discussed in Note 1, as to which the date is May 6, 2021, and except for the effects of the reverse stock split discussed in Note 18, as to which the date is July 12, 2021, relating to the financial statements, which appears in Rapid Micro Biosystems, Inc.'s Amendment No. 1 to the Registration Statement on Form S-1 (No. 333-257431) of Rapid Micro Biosystems, Inc.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts July 16, 2021