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

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No. 1)***

Rapid Micro Biosystems, Inc.
(Name of Issuer)

Class A Common Stock, \$0.01 par value per share
(Title of Class of Securities)

75340L104
(CUSIP Number)

December 31, 2022
(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS	
	Longitude Capital Partners II, LLC	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER
		0
	6.	SHARED VOTING POWER
		4,039,845 (1)(2)
	7.	SOLE DISPOSITIVE POWER
		0
	8.	SHARED DISPOSITIVE POWER
		4,039,845 (1)(2)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	4,039,845 (1)(2)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)	
	<input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	10.9% (3)	
12.	TYPE OF REPORTING PERSON (see instructions)	
	OO	

- (1) All such shares are held of record by LVPII (as defined in the Explanatory Note below). LCPII (as defined in the Explanatory Note below) is the general partner of LVPII and may be deemed to have voting, investment and dispositive power with respect to these securities. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LCPII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Consists of (a) 3,407,952 outstanding shares of Class A Common Stock, and (b) 631,893 shares of Common Stock issuable upon exercise of Class A Common Stock Warrants ("Warrants").
- (3) Based on 37,072,799 shares of Class A Common Stock, as follows: (a) 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Form 10-Q, filed with the United States Securities and Exchange Commission (the "Commission") on November 10, 2022 (the "Form 10-Q") plus (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII.

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS	
	Longitude Venture Partners II, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 4,039,845 (1)(2)
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 4,039,845 (1)(2)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,039,845 (1)(2)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 10.9% (3)	
12.	TYPE OF REPORTING PERSON (see instructions) PN	

- (1) All such shares are held of record by LVPII. LCPII is the general partner of LVPII and may be deemed to have voting, investment and dispositive power with respect to these securities. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LCPII and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Consists of (a) 3,407,952 outstanding shares of Class A Common Stock, and (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII.
- (3) Based on 37,072,799 shares of Class A Common Stock, as follows: (a) 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Form 10-Q, *plus* (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII.

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS Longitude Prime Partners, LLC	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 150,000 (1)
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 150,000 (1)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 150,000 (1)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.4% (2)	
12.	TYPE OF REPORTING PERSON (see instructions) OO	

(1) All such shares are held of record by LPP (as defined in the Explanatory Note below). LPP (as defined the Explanatory Note below) is the general partner of LPP and may be deemed to have voting, investment and dispositive power with respect to these securities. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LPP and may each be deemed to share voting, investment and dispositive power with respect to these securities.

(2) Based on 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Form 10-Q.

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS	
	Longitude Prime Fund, L.P.	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 150,000 (1)
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 150,000 (1)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 150,000 (1)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0.4% (2)	
12.	TYPE OF REPORTING PERSON (see instructions) PN	

- (1) All such shares are held of record by LPP. LPP is the general partner of LPF and may be deemed to have voting, investment and dispositive power with respect to these securities. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LPP and may each be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Based on 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Form 10-Q.

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS	
	Patrick G. Enright	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER
		0
	6.	SHARED VOTING POWER
		4,189,845 (1)(2)
	7.	SOLE DISPOSITIVE POWER
		0
	8.	SHARED DISPOSITIVE POWER
		4,189,845 (1)(2)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	4,189,845 (1)(2)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)	
	<input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
	11.3% (3)	
12.	TYPE OF REPORTING PERSON (see instructions)	
	IN	

- (1) All such securities are held of record by LVPII and LPF. LCPII is the general partner of LVPII and may be deemed to have voting, investment and dispositive power with respect to the shares held by LVPII. LPP is the general partner of LPF and may be deemed to have voting, investment and dispositive power with respect to the securities held by LPF. Mr. Enright is a managing member of each of LCPII and LPP and may be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Consists of (a) 3,407,952 outstanding shares of Class A Common Stock held of record by LVPII, (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII and (c) 150,000 outstanding shares of Class A Common Stock held of record by LPF.
- (3) Based on 37,072,799 shares of Class A Common Stock, as follows: (a) 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Form 10-Q, *plus* (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII.

CUSIP No. 75340L104

1.	NAMES OF REPORTING PERSONS	
	Juliet Tammenoms Bakker	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	CITIZENSHIP OR PLACE OF ORGANIZATION	
	United States of America	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5.	SOLE VOTING POWER 0
	6.	SHARED VOTING POWER 4,189,845 (1)(2)
	7.	SOLE DISPOSITIVE POWER 0
	8.	SHARED DISPOSITIVE POWER 4,189,845 (1)(2)
9.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,189,845 (2)	
10.	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>	
11.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 11.3% (3)	
12.	TYPE OF REPORTING PERSON (see instructions) IN	

- (1) All such securities are held of record by LVPII and LPF. LCPII is the general partner of LVPII and may be deemed to have voting, investment and dispositive power with respect to the shares held by LVPII. LPP is the general partner of LPF and may be deemed to have voting, investment and dispositive power with respect to the securities held by LPF. Ms. Bakker is a managing member of each of LCPII and LPP and may be deemed to share voting, investment and dispositive power with respect to these securities.
- (2) Consists of (a) 3,407,952 outstanding shares of Class A Common Stock held of record by LVPII, (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII and (c) 150,000 outstanding shares of Class A Common Stock held of record by LPF.
- (3) Based on 37,072,799 shares of Class A Common Stock, as follows: (a) 36,440,906 shares of Class A Common Stock outstanding as of November 7, 2022 as reported by the Issuer in the Issuer's Form 10-Q, plus (b) 631,893 shares of Class A Common Stock issuable upon exercise of the Warrants held of record by LVPII.

CUSIP No. 75340L104

Explanatory Note

This Amendment No. 1 (“Amendment No. 1”) amends and supplements the Schedule 13G initially filed with the Commission on February 15, 2022 (the “Original Schedule 13G”) and is being filed by Longitude Capital Partners II, LLC (“LCPII”), Longitude Venture Partners II, L.P. (“LVPII”), Longitude Prime Partners, LLC (“LPP”) and Longitude Prime Fund, L.P. (“LPF” and together with LCPII, LVPII and LPP, the “Reporting Entities”) and Patrick G. Enright and Juliet Tammenoms Bakker (together, the “Reporting Individuals”). The Reporting Entities and the Reporting Individuals are collectively referred to as the “Reporting Persons.” The agreement among the Reporting Persons to file jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Act is filed as Exhibit 1 to the Original Schedule 13G. David Hirsch, a reporting person on the Original Schedule 13D, is no longer a managing director of entities affiliated with LCPII, and accordingly, is not deemed to share voting, investment and dispositive power with respect to the securities held by the Reporting Entities. As such, David Hirsch is no longer a reporting person on this Amendment No. 1. The Original Schedule 13D is hereby amended to delete all references to David Hirsch. Only those items that are hereby reported are amended; all other items reported in the Original Schedule 13G remain unchanged. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable. Capitalized terms not defined in this Amendment No. 1 have the meanings ascribed to them in the Original Schedule 13G.

Item 4. Ownership.

(a) Amount beneficially owned:

See Row 9 of the cover page for each Reporting Person.

LVPII is the record owner of 3,407,952 shares of Class A Common Stock and 631,893 Class A Common Stock Warrants (collectively, the “LVPII Shares”). As general partner of LVPII, LCPII may be deemed to beneficially own the LVPII Shares. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LCPII and may be deemed to share voting, investment and dispositive power with respect to the LVPII Shares. LPF is the record owner of 150,000 shares of Class A Common Stock (the “LPF Shares”). As general partner of LPF, LPP may be deemed to beneficially own the LPF Shares. Patrick G. Enright and Juliet Tammenoms Bakker are the managing members of LPP and may be deemed to share voting, investment and dispositive power with respect to the LPF Shares.

(b) Percent of class:

See Row 11 of the cover page for each Reporting Person and the corresponding footnotes.*

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

See Row 5 of the cover page for each Reporting Person and the corresponding footnotes.*

(ii) Shared power to vote or to direct the vote

See Row 6 of the cover page for each Reporting Person and the corresponding footnotes.*

(iii) Sole power to dispose or to direct the disposition of

See Row 7 of the cover page for each Reporting Person and the corresponding footnotes.*

(iv) Shared power to dispose or to direct the disposition of

See Row 8 of the cover page for each Reporting Person and the corresponding footnotes.*

* Except to the extent of his, her or its pecuniary interest therein, each Reporting Person disclaims beneficial ownership of such shares of Class A Common Stock, except for the shares, if any, such Reporting Person holds of record.

CUSIP No. 75340L104

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2023.

LONGITUDE CAPITAL PARTNERS II, LLC

By: /s/ Cristiana Blauth Oliveira
Cristiana Blauth Oliveira
Its: Authorized Signatory

LONGITUDE VENTURE PARTNERS II, L.P.

By: Longitude Capital Partners II, LLC
Its: General Partner

By: /s/ Cristiana Blauth Oliveira
Cristiana Blauth Oliveira
Its: Authorized Signatory

LONGITUDE PRIME PARTNERS, LLC

By: /s/ Cristiana Blauth Oliveira
Cristiana Blauth Oliveira
Its: Authorized Signatory

LONGITUDE PRIME FUND, L.P.

By: Longitude Prime Partners, LLC
Its: General Partner

By: /s/ Cristiana Blauth Oliveira
Cristiana Blauth Oliveira
Its: Authorized Signatory

/s/ Patrick G. Enright
Patrick G. Enright

/s/ Juliet Tammenoms Bakker
Juliet Tammenoms Bakker