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

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No. 5)***

Synlogic, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

87166L209

(CUSIP Number)

**Stephanie Brecher
New Enterprise Associates
1954 Greenspring Drive, Suite 600
Timonium, MD 21093
(410) 842-4000**

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

May 14, 2024

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

*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 on 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).

1.	NAMES OF REPORTING PERSONS. New Enterprise Associates 14, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) WC		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION Cayman Islands		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 0 Shares	
	8.	SHARED VOTING POWER 2,922,774 Shares	
	9.	SOLE DISPOSITIVE POWER 0 Shares	
	10.	SHARED DISPOSITIVE POWER 2,922,774 Shares	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,922,774 Shares		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%		
14.	TYPE OF REPORTING PERSON (see instructions) PN		

1.	NAMES OF REPORTING PERSONS. NEA Partners 14, L.P.		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) AF		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>		
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13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%		
14.	TYPE OF REPORTING PERSON (see instructions) PN		

1.	NAMES OF REPORTING PERSONS. NEA 14 GP, LTD		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) AF		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>		
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13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%		
14.	TYPE OF REPORTING PERSON (see instructions) CO		

1.	NAMES OF REPORTING PERSONS. Forest Baskettt		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) AF		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)		<input type="checkbox"/>
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 0 Shares	
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14.	TYPE OF REPORTING PERSON (see instructions) IN		

1.	NAMES OF REPORTING PERSONS. Anthony A. Florence, Jr.		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) AF		
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14.	TYPE OF REPORTING PERSON (see instructions) IN		

1.	NAMES OF REPORTING PERSONS. Patrick J. Kerins	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS (see instructions) AF	
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)	<input type="checkbox"/>
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13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%	
14.	TYPE OF REPORTING PERSON (see instructions) IN	

1.	NAMES OF REPORTING PERSONS. Mohamad H. Makhzoumi	
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC USE ONLY	
4.	SOURCE OF FUNDS (see instructions) AF	
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13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%	
14.	TYPE OF REPORTING PERSON (see instructions) IN	

1.	NAMES OF REPORTING PERSONS. Scott D. Sandell		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) AF		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)		<input type="checkbox"/>
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13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 25.0%		
14.	TYPE OF REPORTING PERSON (see instructions) IN		

Item 1. Security and Issuer.

This Amendment No. 5 to Schedule 13D (“Amendment No. 5”) amends and supplements the statement on 13D originally filed on October 14, 2015, Amendment No. 1 thereto filed on May 16, 2017, Amendment No. 2 thereto filed on September 7, 2017, Amendment No. 3 thereto filed on February 1, 2018, and Amendment No. 4 thereto filed on October 13, 2023, relating to the common stock, \$0.001 par value (“Common Stock”) of Synlogic, Inc. (the “Issuer”) having its principal executive office at 301 Binney St., Suite 402, Cambridge, Massachusetts 02142.

Certain terms used but not defined in this Amendment No. 5 have the meanings assigned thereto in the Schedule 13D (including Amendment No. 1, Amendment No. 2, Amendment No. 3 and Amendment No. 4 thereto). Except as specifically provided herein, this Amendment No. 5 does not modify any of the information previously reported on the Schedule 13D (including Amendment No. 1, Amendment No. 2, Amendment No. 3 and Amendment No. 4 thereto).

This Amendment No. 5 is being filed to report that the beneficial ownership of Common Stock by the Reporting Persons (as defined below) has decreased by more than 1% as a result of an increase in the number of Common Stock outstanding.

Item 2. Identity and Background.

This statement is being filed by:

(a) New Enterprise Associates 14, L.P. (“NEA 14”); NEA Partners 14, L.P. (“NEA Partners 14”), which is the sole general partner of NEA 14; and NEA 14 GP, LTD (“NEA 14 LTD” and together with NEA Partners 14, the “Control Entities”), which is the sole general partner of NEA Partners 14; and

(b) Forest Baskett (“Baskett”), Anthony A. Florence, Jr. (“Florence”), Patrick J. Kerins (“Kerins”) and Scott D. Sandell (“Sandell”) (together, the “Directors”), and Mohamad H. Makhzoumi (“Makhzoumi”).

The Directors are the directors of NEA 14 LTD. Florence, Makhzoumi and Sandell are each a member of the Executive Committee of NEA Management Company, LLC (the “Executive Committee”).

The persons named in this Item 2 are referred to individually herein as a “Reporting Person” and collectively as the “Reporting Persons.”

The address of the principal business office of NEA 14, each Control Entity, Kerins and Sandell is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093. The address of the principal business office of Baskett and Makhzoumi is New Enterprise Associates, 2855 Sand Hill Road, Menlo Park, CA 94025. The address of the principal business office of Florence is New Enterprise Associates, 104 5th Avenue, 19th Floor, New York, NY 10011.

The principal business of NEA 14 is to invest in and assist growth-oriented businesses located principally in the United States. The principal business of NEA Partners 14 is to act as the sole general partner of NEA 14. The principal business of NEA 14 LTD is to act as the sole general partner of NEA Partners 14. The principal business of each of the Directors and the Executive Committee is to manage the Control Entities, NEA 14 and a number of affiliated partnerships with similar businesses.

During the five years prior to the date hereof, none of the Reporting Persons has been convicted in a criminal proceeding or has been a party to a civil proceeding ending in a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

NEA 14 and NEA Partners 14 are exempted limited partnerships organized under the laws of the Cayman Islands. NEA 14 LTD is an exempted company organized under the laws of the Cayman Islands. Each of the Directors is a United States citizen. Makhzoumi is a United States Citizen.

Item 3. Source and Amount of Funds or Other Consideration.

Not applicable.

Item 4. Purpose of Transaction.

Not applicable.

Item 5. Interest in Securities of the Issuer.

- (a) NEA 14 is the record owner of the NEA 14 Shares. As the sole general partner of NEA 14, NEA Partners 14 may be deemed to own beneficially the NEA 14 Shares. As the sole general partner of NEA Partners 14, NEA 14 LTD may be deemed to own beneficially the NEA 14 Shares. As members of NEA 14 LTD, each of the Directors may be deemed to own beneficially the NEA 14 Shares. As an individual member of the Executive Committee, which committee has been delegated certain approval rights with respect to dispositions of the NEA 14 Shares, Makhzoumi may also be deemed to own beneficially the NEA 14 Shares.

Each Reporting Person disclaims beneficial ownership of the NEA 14 Shares other than those shares which such person owns of record.

The percentage of outstanding Common Stock of the Issuer which may be deemed to be beneficially owned by each Reporting Person is set forth on Line 13 of such Reporting Person's cover sheet. Such percentage was calculated based on the 11,707,011 shares of Common Stock reported to be outstanding as of May 7, 2024 in the Issuer's Form 10-Q filed on May 14, 2024.

- (b) Regarding the number of shares as to which such person has:
- (i) sole power to vote or to direct the vote: See line 7 of cover sheets
 - (ii) shared power to vote or to direct the vote: See line 8 of cover sheets
 - (iii) sole power to dispose or to direct the disposition: See line 9 of cover sheets
 - (iv) shared power to dispose or to direct the disposition: See line 10 of cover sheets
- (c) None of the Reporting Persons has effected any transaction in shares of Common Stock during the last 60 days.
- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, Shares beneficially owned by any of the Reporting Persons.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Not applicable.

Item 7. Material to be Filed as Exhibits.

[Exhibit 1 – Agreement regarding filing of joint Schedule 13D.](#)

[Exhibit 2 – Power of Attorney regarding filings under the Securities Exchange Act of 1934, as amended.](#)

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

EXECUTED this 16th day of May, 2024.

NEW ENTERPRISE ASSOCIATES 14, L.P.

By: NEA PARTNERS 14, L.P.
General Partner

By: NEA 14 GP, LTD
General Partner

By: _____
*
Scott D. Sandell
Director

NEA PARTNERS 14, L.P.

By: NEA 14 GP, LTD
General Partner

By: _____
*
Scott D. Sandell
Director

NEA 14 GP, LTD

By: _____
*
Scott D. Sandell
Director

*

Forest Baskett

*

Anthony A. Florence, Jr.

*

Patrick J. Kerins

*

Scott D. Sandell

EXECUTIVE COMMITTEE

*

Mohamad H. Makhzoumi

*/s/ Zachary Bambach
Zachary Bambach
As attorney-in-fact

This Amendment No. 5 to Schedule 13D was executed by Zachary Bambach on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached as Exhibit 2.

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of shares of stock of Synlogic, Inc.

EXECUTED this 16th day of May, 2024.

NEW ENTERPRISE ASSOCIATES 14, L.P.

By: NEA PARTNERS 14, L.P.
General Partner

By: NEA 14 GP, LTD
General Partner

By: _____
*
Scott D. Sandell
Director

NEA PARTNERS 14, L.P.

By: NEA 14 GP, LTD
General Partner

By: _____
*
Scott D. Sandell
Director

NEA 14 GP, LTD

By: _____
*
Scott D. Sandell
Director

*

Forest Basket

*

Anthony A. Florence, Jr.

*

Patrick J. Kerins

*

Scott D. Sandell

EXECUTIVE COMMITTEE

*

Mohamad H. Makhzoumi

*/s/ Zachary Bambach
Zachary Bambach
As attorney-in-fact

This Agreement relating to Schedule 13D was executed by Zachary Bambach on behalf of the individuals listed above pursuant to a Power of Attorney a copy of which is attached hereto as Exhibit 2.

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints Zachary Bambach, Nicole Hatcher and Stephanie Brecher, and each of them, with full power to act without the others, his or her true and lawful attorney-in-fact, with full power of substitution, to sign any and all instruments, certificates and documents that may be necessary, desirable or appropriate to be executed on behalf of himself as an individual or in his or her capacity as a direct or indirect general partner, director, officer or manager of any partnership, corporation or limited liability company, pursuant to section 13 or 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any and all regulations promulgated thereunder, including, without limitation, Forms 3, 4 and 5 and Schedules 13D and 13G (and any amendments thereto), and to file the same, with all exhibits thereto, and any other documents in connection therewith, with the Securities and Exchange Commission (the "SEC"), including, but not limited to, signing a Form ID for and on behalf of the undersigned and filing such Form ID with the SEC, and with any other entity when and if such is mandated by the Exchange Act or by the Financial Industry Regulatory Authority, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing necessary, desirable or appropriate, fully to all intents and purposes as he or she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact, or his or her substitutes, may lawfully do or cause to be done by virtue hereof. This power of attorney is perpetual, unless revoked by the undersigned in a signed writing delivered to each of the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 29th day of February, 2024.

/s/ Peter J. Barris

Peter J. Barris

/s/ Forest Baskett

Forest Baskett

/s/ Ali Behbahani

Ali Behbahani

/s/ Ronald D. Bernal

Ronald D. Bernal

/s/ Ann Bordetsky

Ann Bordetsky

/s/ Carmen Chang

Carmen Chang

/s/ Philip Chopin

Philip Chopin

/s/ Anthony A. Florence, Jr.

Anthony A. Florence, Jr.

/s/ Jonathan Golden

Jonathan Golden

/s/ Scott Gottlieb

Scott Gottlieb

/s/ Mark Hawkins

Mark Hawkins

/s/ Jeffrey R. Immelt

Jeffrey R. Immelt

/s/ Aaron Jacobson

Aaron Jacobson

/s/ Patrick J. Kerins

Patrick J. Kerins

/s/ Hilarie Koplou-McAdams

Hilarie Koplou-McAdams

/s/ Vanessa Larco

Vanessa Larco

/s/ Julio C. Lopez

Julio C. Lopez

/s/ Tiffany Le

Tiffany Le

/s/ Mohamad H. Makhzoumi

Mohamad H. Makhzoumi

/s/ Edward T. Mathers

Edward T. Mathers

/s/ Gregory Papadopoulos

Gregory Papadopoulos

/s/ Kavita Patel

Kavita Patel

/s/ Scott D. Sandell

Scott D. Sandell

/s/ A. Brooke Seawell

A. Brooke Seawell

/s/ Peter Sonsini

Peter Sonsini

/s/ Melissa Taunton

Melissa Taunton

/s/ Paul E. Walker

Paul E. Walker

/s/ Rick Yang

Rick Yang