

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

SCHEDULE 13G  
Under the Securities Exchange Act of 1934

(Amendment No. \_\_\_)\*

**Synlogic, Inc.**

(Name of Issuer)

**Common Stock, \$0.001 par value**

(Title of Class of Securities)

87166L100

(CUSIP Number)

June 11, 2019

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 the 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).

**1** Name of Reporting Person:  
 Ginkgo Bioworks, Inc.  
 I.R.S. Identification No. of above Person (entities only) (voluntary)

**2** Check the Appropriate Box if a Member of a Group

(a)   
 (b)

**3** SEC USE ONLY

**4** Citizenship or Place of Organization

Delaware

**5** SOLE VOTING POWER

NUMBER OF

8,888,888\*

**6** SHARED VOTING POWER

SHARES  
 BENEFICIALLY  
 OWNED BY

0

**7** SOLE DISPOSITIVE POWER

EACH  
 REPORTING  
 PERSON

8,888,888\*

**8** SHARED DISPOSITIVE POWER

WITH

0

**9** AGGREGATE AMOUNT BENEFICIALLY OWNED

8,888,888\*

**10** CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

**11** PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

19.99% \*\*

**12** TYPE OF REPORTING PERSON

CO

\* Includes 6,340,771 shares of Common Stock and 2,548,117 shares of Common Stock issuable upon exercise of Warrants.

\*\* Based on 31,729,414 shares of Common Stock outstanding as of June 11, 2019, comprised of (i) 25,388,643 shares of Common Stock outstanding as of May 2, 2019, as reported in the Issuer's Report on Form 10-Q for the period ended March 31, 2019 filed with the Securities and Exchange Commission on May 9, 2019 and (ii) 6,340,771 shares of Common Stock issued by the Issuer in a private placement on June 11, 2019 pursuant to which the Reporting Person acquired the securities reported herein, such 8,888,888 shares of Common Stock represent approximately 25.9% of the Common Stock outstanding, however the terms of the Warrants include a beneficial ownership limitation pursuant to which the Warrants are exercisable only to the extent that such exercise does not result in the Reporting Person's beneficial ownership exceeding 19.99% of the Common Stock outstanding at any time.

**SCHEDULE 13G**

- Item 1(a)** Name of Issuer: Synlogic, Inc.
- Item 1(b)** Address of Issuer's Principal Executive Offices:  
301 Binney Street, Suite 402, Cambridge, MA 02142
- Item 2(a)** Name of Person Filing: Ginkgo Bioworks, Inc. (the "Reporting Person")
- Item 2(b)** Address of Principal Business Office, or if None, Residence:  
27 Drydock Avenue, 8<sup>th</sup> Floor, Boston, MA 02210
- Item 2(c)** Citizenship or Place of Organization: Delaware
- Item 2(d)** Title of Class of Securities: Common Stock, \$0.001 par value (the "Common Stock")
- Item 2(e)** CUSIP Number: 87166L100
- Item 3** If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is: Not Applicable
- Item 4** Ownership:  
The information set forth in the cover page to this Schedule 13G is incorporated herein by reference thereto.
- Item 5** Ownership of Five Percent or Less of the Class: Not Applicable
- Item 6** Ownership of More than Five Percent on Behalf of Another Person: Not Applicable
- Item 7** Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company: Not Applicable
- Item 8** Identification and Classification of Members of the Group: Not Applicable
- Item 9** Notice of Dissolution of Group: Not Applicable
- Item 10** Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

**SIGNATURE**

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

Date: June 19, 2019

GINKGO BIOWORKS, INC.

By: /s/ Reshma Shetty

Name: Reshma Shetty

Title: Attorney-in-Fact