

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

**SCHEDULE 13G**

Under the Securities Exchange Act of 1934

**(Amendment No. )\***

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SYNLOGIC, INC.

(Name of Issuer)

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Common Stock, par value \$0.001 per share

(Title of Class of Securities)

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87166L100

(CUSIP Number)

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December 31, 2018

(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 PERSONS<br>Aquila Capital Management, LLC                            |                                       |                       |
| 2.   | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP<br>(see instructions)                 |                                       |                       |
|  |  | (a)                                   | <input type="radio"/> |
|  |  | (b)                                   | <input type="radio"/> |
| 3.   | SEC USE ONLY   |                                       |                       |
| 4.   | CITIZENSHIP OR PLACE OF ORGANIZATION<br>California                                     |                                       |                       |
| NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5.   | SOLE VOTING POWER<br>0                |                       |
|  | 6.   | SHARED VOTING POWER<br>1,334,179      |                       |
|  | 7.   | SOLE DISPOSITIVE POWER<br>0           |                       |
|  | 8.   | SHARED DISPOSITIVE POWER<br>1,334,179 |                       |
| 9.   | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON<br>1,334,179              |                                       |                       |
| 10.  | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES<br>(SEE INSTRUCTIONS) |                                       |                       |
|  |  |                                       | <input type="radio"/> |
| 11.  | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)<br>5.2% (See Note 1)                 |                                       |                       |
| 12.  | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)<br>IA, OO, HC                              |                                       |                       |

(1) Based on 25,447,729 outstanding Common Stock as of November 5, 2018 represented on the 10-Q filed with the Securities and Exchange Commission ("SEC") on November 13, 2018.

|     |  |     |                                       |
|-----|--|-----|---------------------------------------|
| 1.  | NAME OF REPORTING PERSONS<br>Mr. Marc Schneidman                                       |     |                                       |
| 2.  | CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP<br>(see instructions)                 |     |                                       |
|     |  | (a) | <input type="radio"/>                 |
|     |  | (b) | <input type="radio"/>                 |
| 3.  | SEC USE ONLY   |     |                                       |
| 4.  | CITIZENSHIP OR PLACE OF ORGANIZATION<br>United States                                  |     |                                       |
|     | NUMBER OF<br>SHARES<br>BENEFICIALLY<br>OWNED BY<br>EACH<br>REPORTING<br>PERSON<br>WITH | 5.  | SOLE VOTING POWER<br>0                |
|     |  | 6.  | SHARED VOTING POWER<br>1,334,179      |
|     |  | 7.  | SOLE DISPOSITIVE POWER<br>0           |
|     |  | 8.  | SHARED DISPOSITIVE POWER<br>1,334,179 |
| 9.  | AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON<br>1,334,179              |     |                                       |
| 10. | CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES<br>(SEE INSTRUCTIONS) |     |                                       |
|     |  |     | <input type="radio"/>                 |
| 11. | PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)<br>5.2% (See Note 2)                 |     |                                       |
| 12. | TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)<br>IN, HC                                  |     |                                       |

(2) See Note (1) Above

**Item 1(a). Name of Issuer:**

Synlogic, Inc. (the "Issuer")

**Item 1(b). Address of Issuer's Principal Executive Offices:**

301 Binney St., Suite 402  
Cambridge, MA 02142

**Item 2(a). Name of Persons Filing:**

This statement is filed by the entities and persons listed below, who are collectively referred to herein as "Reporting Persons", with respect to the Common Stock (as defined in Item 2(d) below) of the Company:

- (i) Aquilo Capital Management, LLC
- (ii) Mr. Marc Schneidman

**Item 2(b). Address of Principal Business Office or, if none, Residence:**

- (i) Aquilo Capital Management, LLC  
One Letterman Drive, Suite D4900  
Building D, The Presidio  
San Francisco, CA 94129
- (ii) Mr. Marc Schneidman  
c/o Aquilo Capital Management, LLC  
One Letterman Drive, Suite D4900  
Building D, The Presidio  
San Francisco, CA 94129

**Item 2(c). Citizenship:**

- (i) Aquilo Capital Management, LLC – CA
- (ii) Mr. Marc Schneidman – USA

**Item 2(d). Title of Class of Securities:**

Common Stock, par value \$0.001 per share ("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 a:**

- (e)  Investment Adviser registered under Section 203 of the Investment Advisers Act of 1940
- (g)  Parent Holding Company or control person in accordance with Rule 13d-1(b)(1)(ii)(G)

**Item 4. Ownership**

- (i) Aquilo Capital Management, LLC
  - (a) Amount beneficially owned: 1,334,179 (see Note 3)
  - (b) Percent of class: 5.2% (See Note 4)
  - (c) Number of shares as to which the person has:
    - (i) Sole power to vote or to direct the vote: 0
    - (ii) Shared power to vote or to direct the vote: 1,334,179 (see Note 3)
    - (iii) Sole power to dispose or to direct the disposition of: 0
    - (iv) Shared power to dispose or to direct the disposition of: 1,334,179 (see Note 3)
  
- (ii) Mr. Marc Schneidman
  - (a) Amount beneficially owned: 1,334,179 (See Note 3)
  - (b) Percent of class: 5.2% (See Note 4)
  - (c) Number of shares as to which the person has:
    - (i) Sole power to vote or to direct the vote: 0
    - (ii) Shared power to vote or to direct the vote: 1,334,179 (see Note 3)
    - (iii) Sole power to dispose or to direct the disposition of: 0
    - (iv) Shared power to dispose or to direct the disposition of: 1,334,179 (see Note 3)

Note 3:

Aquilo Capital Management, LLC is an investment advisor that is registered under the Investment Advisors Act of 1940. Aquilo Capital Management, LLC, which serves as the general partner and investment manager to each of Aquilo Capital, L.P. and Aquilo Capital II, L.P., (collectively "the Funds"), may be deemed to be the beneficial owner of all shares of Common Stock held by the Funds. Mr. Schneidman, as Managing Member of Aquilo Capital Management, LLC, with the power to exercise investment and voting discretion, may be deemed to be the beneficial owner of all shares of Common Stock held by the Funds. Pursuant to Rule 13d-4 under the Securities Exchange Act of 1934, as amended, each of the Funds and Mr. Schneidman expressly disclaim beneficial ownership over any of the securities reported in this statement, and the filing of this statement shall not be construed as an admission that either of the Funds or Mr. Schneidman are the beneficial owner of any of the securities reported herein.

Note 4:

Based on 25,447,729 outstanding Common Stock as of November 5, 2018 represented on the 10-Q filed with the SEC on November 13, 2018.

**Item 5. Ownership of Five Percent or Less of a Class:**

Not Applicable

**Item 6. Ownership of More Than Five Percent on Behalf of Another Person:**

See Note 3 above. The Funds have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock covered by this Statement.

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company:**

See Note 3 above.

**Item 8. Identification and Classification of Members of the Group:**

Not Applicable

**Item 9. Notice of Dissolution of Group:**

Not Applicable

**Item 10. Certifications:**

Each of the Reporting Persons makes the following certification:

By signing below each Reporting Person certifies that, to the best of its 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 that purpose or effect. After reasonable inquiry and to the best of my knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

Date: February 12, 2019

**AQUILO CAPITAL MANAGEMENT, LLC**

By: /s/ Marc Schneidman

Name: Marc Schneidman

Title: Managing Member

**MARC SCHNEIDMAN**

By: /s/ Marc Schneidman

**EXHIBIT A**

Joint Filing Agreement Pursuant to Rule 13d-1

This agreement is made pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended (the "Act") by and among the parties listed below, each referenced to herein as a "Joint Filer". The Joint Filers agree that a statement of beneficial ownership as required by Sections 13(g) or 13(d) of the Act and the rules thereunder may be filed on each of his, her or its behalf on Schedule 13G or Schedule 13D, as appropriate, and that said joint filing may thereafter be amended by further joint filings. The Joint Filers state that they each satisfy the requirements for making a joint filing under Rule 13d-1(k).

Date: February 12, 2019

**AQUILO CAPITAL MANAGEMENT, LLC**

By: /s/ Marc Schneidman  
Name: Marc Schneidman  
Title: Managing Member

**MARC SCHNEIDMAN**

By: /s/ Marc Schneidman