| SEC For                                                       | m 4                                                                   |                                                                          |                                                             |                     |                                                                |                                                                                                                |                  |                                              |                               |                                                |                                        |                                                                                         |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
|---------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------|---------------------|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------|-------------------------------|------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|                                                               | UNITED ST                                                             | NITED STATES SECURITIES AND EXCHANGE COMMISSIO<br>Washington, D.C. 20549 |                                                             |                     |                                                                |                                                                                                                |                  |                                              |                               |                                                |                                        |                                                                                         | OMB APPROVAL                                                                                                               |                                                                              |                                                                          |                                                                    |  |
| Section 16. Form 4 or Form 5<br>obligations may continue. See |                                                                       |                                                                          |                                                             |                     | NT OF CHANGES IN BENEFICIAL OWNERSHIP                          |                                                                                                                |                  |                                              |                               |                                                |                                        |                                                                                         |                                                                                                                            | OMB Number: 3235-0287<br>Estimated average burden<br>hours per response: 0.5 |                                                                          |                                                                    |  |
| Instruc                                                       | tion 1(b).                                                            |                                                                          |                                                             | lied pui            | rsuant f<br>r Sectio                                           | o Sectior<br>on 30(h) c                                                                                        | n 16(a<br>of the | a) of the Secu<br>Investment C               | irities Exchar<br>Company Act | nge Act of 1<br>of 1940                        | .934                                   |                                                                                         | <u></u>                                                                                                                    |                                                                              |                                                                          |                                                                    |  |
| 1. Name and Address of Reporting Person*<br>BELOFF GREGG      |                                                                       |                                                                          |                                                             |                     |                                                                |                                                                                                                |                  | ker or Trading<br>[ <u>C.</u> [ SYB2         |                               |                                                | neck all applie<br>Directo             | able)                                                                                   | 10% Owner                                                                                                                  |                                                                              |                                                                          |                                                                    |  |
|                                                               | C/O SYNLOGIC, INC.                                                    |                                                                          |                                                             |                     | 3. Date of Earliest Transaction (Month/Day/Year)<br>12/06/2021 |                                                                                                                |                  |                                              |                               |                                                |                                        | X Onicer (give title of below)<br>below) below)<br>See Remarks                          |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
| 301 BINNEY STREET, SUITE 402                                  |                                                                       |                                                                          |                                                             |                     | 4. If Amendment, Date of Original Filed (Month/Day/Year)       |                                                                                                                |                  |                                              |                               |                                                |                                        | 6. Individual or Joint/Group Filing (Check Applicable<br>Line)                          |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
| (Street)<br>CAMBRIDGE MA 02142                                |                                                                       |                                                                          |                                                             |                     |                                                                |                                                                                                                |                  |                                              |                               |                                                |                                        | X Form filed by One Reporting Person<br>Form filed by More than One Reporting<br>Person |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
| (City)                                                        | (S                                                                    | tate)                                                                    | (Zip)                                                       |                     |                                                                |                                                                                                                |                  |                                              |                               |                                                |                                        |                                                                                         |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
|                                                               |                                                                       | Tab                                                                      | ole I - Non-De                                              | rivativ             | ve Seo                                                         | curities                                                                                                       | s Ac             | quired, Di                                   | isposed o                     | of, or Be                                      | neficia                                | ly Owned                                                                                |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
| 1. Title of Security (Instr. 3)<br>Date<br>(Month/Date)       |                                                                       |                                                                          |                                                             |                     | Executio                                                       |                                                                                                                |                  | Code (Ins                                    | on Dispose                    |                                                |                                        | Beneficia<br>Owned F                                                                    | s<br>ally<br>ollowing                                                                                                      | Form:<br>(D) or                                                              | m: Direct<br>or Indirect<br>nstr. 4)                                     | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership                |  |
|                                                               |                                                                       |                                                                          |                                                             |                     |                                                                | Code V                                                                                                         | Amount           | (A) o<br>(D)                                 | r Price                       | Price Reported<br>Transaction<br>(Instr. 3 and |                                        |                                                                                         |                                                                                                                            | (Instr. 4)                                                                   |                                                                          |                                                                    |  |
|                                                               |                                                                       | -                                                                        | Table II - Deri<br>(e.g.                                    |                     |                                                                |                                                                                                                |                  | uired, Dis<br>, options,                     |                               |                                                |                                        | Owned                                                                                   |                                                                                                                            |                                                                              | · · · ·                                                                  |                                                                    |  |
| 1. Title of<br>Derivative<br>Security<br>(Instr. 3)           | 2.<br>Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Transaction<br>Date<br>(Month/Day/Year)                               | 3A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | 4.<br>Trans<br>Code | action                                                         | 5. Number<br>of<br>Derivative<br>Securities<br>Acquired<br>(A) or<br>Disposed<br>of (D) (Instr.<br>3, 4 and 5) |                  | 6. Date Exerc<br>Expiration D<br>(Month/Day/ | cisable and ate               |                                                |                                        | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)                                     | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) |                                                                              | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |  |
|                                                               |                                                                       |                                                                          |                                                             | Code                | v                                                              | (A)                                                                                                            | (D)              | Date<br>Exercisable                          | Expiration<br>Date            | Title                                          | Amount<br>or<br>Number<br>of<br>Shares |                                                                                         |                                                                                                                            |                                                                              |                                                                          |                                                                    |  |
| Stock<br>Option<br>(right to<br>buy)                          | \$2.34                                                                | 12/06/2021                                                               |                                                             | A                   |                                                                | 50,000                                                                                                         |                  | (1)                                          | 12/06/2031                    | Common<br>Stock                                | 50,000                                 | \$0.00                                                                                  | 50,000                                                                                                                     | )                                                                            | D                                                                        |                                                                    |  |

Explanation of Responses:

1. The options were issued to the Reporting Person pursuant to the Issuer's 2015 Equity Incentive Award Plan. Such options vest in 12 equal monthly installments starting November 1, 2021, provided the Reporting Person continues to provide services to the Issuer. An aggregate of 50% of the options shall vest immediately if the Issuer terminates the Reporting Person's services before May 1, 2022.

## **Remarks:**

Interim Chief Financial Officer

## /s/ Gregg Beloff

02/01/2022 Date

\*\* Signature of Reporting Person

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.