FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

OMB APPROVAL

| OMB Number:            | 3235-0287 |
|------------------------|-----------|
| Estimated average burd | en        |
| hours per response:    | 0.5       |

# Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the

### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| affirmative defens<br>10b5-1(c). See Ins | e conditions of Rule struction 10. |   |   |            |  |                                       |
|--|------------------------------------|---|---|------------|--|---------------------------------------|
| 1. Name and Address ARSENAUL             | s of Reporting Perso               | ın *                                      | 2. Issuer Name <b>and</b> Ticker or Trading Symbol Skye Bioscience, Inc. [SKYE] | (Check all | nship of Reporting Pers<br>applicable)<br>Director | on(s) to Issuer                       |
| (Last)<br>11250 EL CAM                   | (First)                            | (Middle)                                  | 3. Date of Earliest Transaction (Month/Day/Year) 02/29/2024                     | X (        | Officer (give title below)  Chief Financi          | Other (specify below)                 |
| C/O SKYE BIO                             | SCIENCE, INC.                      | st) (Middle) 02/29/2024<br>EAL, SUITE 100 |   | - 1        | al or Joint/Group Filing<br>Form filed by One Rep  | (Check Applicable Line) orting Person |
| (Street)                                 |                                    |   |   |            | Form filed by More that                            | n One Reporting Person                |
| SAN DIEGO                                | CA                                 | 92130                                     |   |            |  |                                       |
| (City)                                   | (State)                            | (Zip)                                     |   |            |  |                                       |

#### Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction<br>Date<br>(Month/Day/Year) | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year) | Transaction Code (Instr. |   | Disposed Of (D) (Instr. 3, 4 and 5) |               |                           | 5. Amount of<br>Securities<br>Beneficially Owned<br>Following Reported | Form: Direct (D) | Beneficial<br>Ownership |
|---------------------------------|--|---|--------------------------|---|-------------------------------------|---------------|---------------------------|--|------------------|-------------------------|
|                                 |  |   | Code                     | v | Amount                              | (A) or<br>(D) | Price                     | Transaction(s)<br>(Instr. 3 and 4)                                     |                  | (Instr. 4)              |
| Common Stock                    | 02/29/2024                                 |   | A                        |   | 25,000(1)                           | A             | <b>\$0</b> <sup>(2)</sup> | 210,738  | D                |                         |

## Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of<br>Derivative<br>Security (Instr.<br>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>Transac<br>Code (In<br>8) |   | Derivative |     | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                    | 7. Title and Amount of<br>Securities Underlying<br>Derivative Security (Instr.<br>3 and 4) |                                     | Derivative | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported | 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 Shares |            | Transaction(s)<br>(Instr. 4)   |  |  |
| Stock Option<br>(Right to Buy)                      | \$14.56   | 02/29/2024                                 |   | A                               |   | 75,000     |     | (3)  | 03/01/2034         | Common<br>Stock  | 75,000                              | \$0        | 75,000   | D  |  |

#### Explanation of Responses:

- 1. Represents a restricted stock unit ("RSU") award that vests on the following performance milestones: 25% vests upon achieving a market cap of \$750M and a stock price of \$20.00 per share, an additional 25% vests upon achieving a market cap of \$11 and a stock price of \$30.00 per share, an additional 25% vests upon achieving a market cap of \$1.25B and a stock price of \$30.00 per share, an additional 25% vest at if the Company is acquired for total consideration of \$1.5B or greater and a stock price of \$35.00 per share; provided, however, that no RSUs shall vest until the compensation committee of the Issuer determines that shares can be sold into the market to cover withholding tax obligations associated with the vesting of the RSUs. Upon a change in control of the Issuer, 100% of the options will become fully vested.
- 2. Each RSU represents a contingent right to receive one share of the Issuer's common stock
- 3. The option grant shall be exercisable for a price of \$14.56 per option share for ten years from February 29, 2024 and the options will vest in equal monthly installments over the four year period beginning February 29, 2024. Upon a change in control of the Issuer, 100% of the options will become fully vested.

#### Remarks:

/s/ Kaitlyn Arsenault 0:

\*\* Signature of Reporting Person

Date

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.