

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

SCHEDULE 13D

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

**Skye Bioscience, Inc.**

(Name of Issuer)

**Common Stock, par value \$0.001**  
(Title of Class of Securities)

**83086J101**  
(CUSIP Number)

**Rebecca Lucia**  
**5AM Venture Management, LLC**  
**501 2nd Street, Suite 350**  
**San Francisco, CA 94107**  
**(415) 993-8565**

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

**August 18, 2023**  
(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 Rule 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).

CUSIP No. 83086J101

1.	Names of Reporting Persons 5AM Ventures VII, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) " (b) " (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) "	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,110,709,567 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,110,709,567 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,110,709,567 shares (2)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) "	
13.	Percent of Class Represented by Amount in Row (11) 31.7% (3)	

14.	Type of Reporting Person (See Instructions) PN
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- (1) This Schedule 13D is filed by 5AM Ventures VII, L.P. (“Ventures VII”), 5AM Partners VII, LLC (“Partners VII”), 5AM Ventures II, L.P. (“Ventures II”), 5AM Co-Investors II, L.P. (“Co-Investors II”), 5AM Partners II, LLC (“Partners II”), Andrew J. Schwab (“Schwab”), Dr. Kush Parmar (“Parmar”), Dr. John D. Diekman (“Diekman”) and Dr. Scott M. Rocklage (“Rocklage” and, with Ventures VII, Partners VII, Ventures II, Co-Investors II, Partners II, Schwab, Parmar and Diekman collectively, the “Reporting Persons”). The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Consists of (i) 684,361,447 shares of Common Stock held by Ventures VII and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII that are currently exercisable. Partners VII serves as sole general partner of Ventures VII. Schwab and Parmar are managing members of Partners VII. Each of Partners VII, Schwab and Parmar shares voting and dispositive power over the securities held by Ventures VII.
- (3) This percentage is calculated based upon the sum of (i) an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023 and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII.

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CUSIP No. 83086J101

1.	Names of Reporting Persons 5AM Partners VII, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,110,709,567 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,110,709,567 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,110,709,567 shares (2)	
12.	Check 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) 31.7% (3)	
14.	Type of Reporting Person (See Instructions) OO	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Consists of (i) 684,361,447 shares of Common Stock held by Ventures VII; and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII that are currently exercisable. Partners VII serves as sole general partner of Ventures VII and shares voting and dispositive power over the securities held by Ventures VII.
- (3) This percentage is calculated based upon the sum of (i) an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023 and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII.

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CUSIP No. 83086J101

1.	Names of Reporting Persons 5AM Ventures II, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> (1)	
3.	SEC Use Only	

4.	Source of Funds (See Instructions) WC	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 429,546,911 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 429,546,911 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 429,546,911 shares (2)	
12.	Check 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) 13.9% (3)	
14.	Type of Reporting Person (See Instructions) PN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) The shares are directly held by Ventures II. Partners II serves as sole general partner of Ventures II. Schwab, Diekman and Rocklage are managing members of Partners II. Each of Partners II, Schwab, Diekman and Rocklage shares voting and dispositive power over the securities held by Ventures II.
- (3) This percentage is calculated based upon an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023.

CUSIP No. 83086J101

1.	Names of Reporting Persons 5AM Co-Investors II, L.P.	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) WC	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 16,948,799 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 16,948,799 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 16,948,799 shares (2)	
12.	Check 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) 0.6% (3)	
14.	Type of Reporting Person (See Instructions) PN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) The shares are directly held by Co-Investors II. Partners II serves as sole general partner of Co-Investors II. Schwab, Diekman and Rocklage and are managing members of Partners II. Each of Partners II, Schwab, Diekman and Rocklage shares voting and dispositive power over the securities held by Co-Investors II.

(3) This percentage is calculated based upon an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023.

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CUSIP No. 83086J101

1.	Names of Reporting Persons 5AM Partners II, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) " (b) " (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) "	
6.	Citizenship or Place of Organization Delaware	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 446,495,710 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 446,495,710 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 446,495,710 shares (2)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) "	
13.	Percent of Class Represented by Amount in Row (11) 14.5% (3)	
14.	Type of Reporting Person (See Instructions) OO	

(1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.

(2) Consists of (i) 429,546,911 shares of Common Stock held by Ventures II and (ii) 16,948,799 shares of Common Stock held by Co-Investors II. Partners II serves as sole general partner of each of Ventures II and Co-Investors II and shares voting and dispositive power over the securities held by Ventures II and Co-Investors II.

(3) This percentage is calculated based upon an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023.

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CUSIP No. 83086J101

1.	Names of Reporting Persons Andrew J. Schwab	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) " (b) " (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) "	
6.	Citizenship or Place of Organization United States	
Number of Shares Beneficially Owned by Each Reporting	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,557,205,277 shares (2)
	9.	Sole Dispositive Power 0

Person With	10.	Shared Dispositive Power 1,557,205,277 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,557,205,277 shares (2)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) "	
13.	Percent of Class Represented by Amount in Row (11) 44.4% (3)	
14.	Type of Reporting Person (See Instructions) IN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.
- (2) Consists of (i) 684,361,447 shares of Common Stock held by Ventures VII; (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII that are currently exercisable; (iii) 429,546,911 shares of Common Stock held by Ventures II; and (iv) 16,948,799 shares of Common Stock held by Co-Investors II. Partners VII serves as sole general partner of Ventures VII. Partners II serves as sole general partner of each of Ventures II and Co-Investors II. Schwab is a managing member of each of Partners VII and Partners II and shares voting and dispositive power over the securities held by Partners VII, Ventures II and Co-Investors II.
- (3) This percentage is calculated based upon the sum of (i) an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023 and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII.

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CUSIP No. 83086J101

1.	Names of Reporting Persons Kush Parmar	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) " (b) " (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) "	
6.	Citizenship or Place of Organization United States	
Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power 0
	8.	Shared Voting Power 1,110,709,567 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 1,110,709,567 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,110,709,567 shares (2)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) "	
13.	Percent of Class Represented by Amount in Row (11) 31.7% (3)	
14.	Type of Reporting Person (See Instructions) IN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Schedule 13D.
- (2) Consists of (i) 684,361,447 shares of Common Stock held by Ventures VII; and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII that are currently exercisable. Partners VII serves as sole general partner of Ventures VII. Parmar is a managing member of Partners VII and shares voting and dispositive power over the securities held by Ventures VII.
- (3) This percentage is calculated based upon the sum of (i) an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023 and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII.

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CUSIP No. 83086J101

1.	Names of Reporting Persons John D. Diekman	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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
	8.	Shared Voting Power 446,495,710 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 446,495,710 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 446,495,710 shares (2)	
12.	Check 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) 14.5% (3)	
14.	Type of Reporting Person (See Instructions) IN	

- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Consists of (i) 429,546,911 shares of Common Stock held by Ventures II and (ii) 16,948,799 shares of Common Stock held by Co-Investors II. Partners II serves as sole general partner of each of Ventures II and Co-Investors II. Diekman, is a managing member of Partners II and shares voting and dispositive power over the securities held by Ventures II and Co-Investors II.
- (3) This percentage is calculated based upon an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023.

CUSIP No. 83086J101

1.	Names of Reporting Persons Scott M. Rocklage	
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/> (1)	
3.	SEC Use Only	
4.	Source of Funds (See Instructions) AF	
5.	Check 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
	8.	Shared Voting Power 446,495,710 shares (2)
	9.	Sole Dispositive Power 0
	10.	Shared Dispositive Power 446,495,710 shares (2)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person 446,495,710 shares (2)	
12.	Check 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) 14.5% (3)	

14.	Type of Reporting Person (See Instructions) IN
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- (1) This Schedule 13D is filed by the Reporting Persons. The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (2) Consists of (i) 429,546,911 shares of Common Stock held by Ventures II and (ii) 16,948,799 shares of Common Stock held by Co-Investors II. Partners II serves as sole general partner of each of Ventures II and Co-Investors II. Rocklage is a managing member of Partners II and shares voting and dispositive power over the securities held by Ventures II and Co-Investors II.
- (3) This percentage is calculated based upon an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023.

**Item 1. Security and Issuer**

The class of equity security to which this statement on Schedule 13D relates is the Common Stock, par value \$0.001 (“Common Stock”) of Skye Bioscience, Inc., a Nevada corporation (the “Issuer”). The address of the principal executive offices of the Issuer is 11250 El Camino Real, Suite 100, San Diego, CA 92130. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

**Item 2. Identity and Background**

- (a) This Schedule 13D is filed by 5AM Ventures VII, L.P. (“Ventures VII”), 5AM Partners VII, LLC (“Partners VII”), 5AM Ventures II, L.P. (“Ventures II”), 5AM Co-Investors II, L.P. (“Co-Investors II”), 5AM Partners II, LLC (“Partners II”), Andrew J. Schwab (“Schwab”), Dr. Kush Parmar (“Parmar”), Dr. John D. Diekman (“Diekman”) and Dr. Scott M. Rocklage (“Rocklage” and, with Ventures VII, Partners VII, Ventures II, Co-Investors II, Partners II, Schwab, Parmar and Diekman collectively, the “Reporting Persons”). The Reporting Persons expressly disclaim status as a “group” for purposes of this Schedule 13D.
- (b) The principal business office of the Reporting Persons is 501 2nd Street, Suite 350, San Francisco, CA 94107.
- (c) The principal business of the Reporting Persons is venture capital investments. Each of Diekman and Rocklage serves as a Managing Member of Partners II, which is the general partner of Ventures II. Parmar serves as a Managing Member of Partners VII, which is the general partner of Ventures VII. Schwab serves as a Managing Member of each of Partners II and Partners VII.
- (d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Reporting Persons was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction or were subject to 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.
- (f) Each of Ventures VII, Partners VII, Ventures II, Co-Investors II and Partners II was organized in the state of Delaware and each of the individuals is a citizen of the United States.

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

Between December 23, 2008 and October 19, 2016, Ventures II and Co-Investors II purchased an aggregate of 14,417,984 and 568,896 shares of Bird Rock’s preferred common stock at aggregate purchase prices of \$16,305,757 and \$643,383, respectively.

On August 15, 2023, the Issuer and Bird Rock Bio, Inc. (“Bird Rock”) entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”). Pursuant to the terms of the Merger Agreement, on August 18, 2023, a wholly-owned subsidiary of the Issuer merged with and into Bird Rock, with Bird Rock surviving the Merger as a wholly-owned subsidiary of the Issuer (the “Merger”).

At the effective time of the Merger, each outstanding share of Bird Rock’s preferred stock converted into shares of the Issuer’s Common Stock based on an exchange ratio determined in accordance with the Merger Agreement.

In connection with the Merger Agreement, on August 15, 2023, Ventures VII and other unrelated investors entered into a Securities Purchase Agreement with the Issuer (the “Purchase Agreement”), pursuant to which Ventures VII purchased an aggregate of 852,696,240 shares of Common Stock (of which Ventures II and Co-Investors II were allocated 161,944,872 shares and 6,389,921 shares, respectively) for the total purchase price of \$8.8 million and received warrants to purchase 426,348,120 shares of Common Stock for no additional consideration (the “PIPE Transaction”). The PIPE Transaction closed concurrently with the Merger on August 18, 2023.

Following the closing of the Merger and the PIPE Transaction, Ventures VII, Ventures II and Co-Investors II directly own 684,361,447, 429,546,911 and 16,948,799 shares of Common Stock, respectively, and Ventures VII directly owns Warrants to purchase 426,348,120 shares of Common Stock.

The source of the funds for the purchases by each of Ventures VII, Ventures II and Co-Investors II described above was from capital contributions made by each of their general and limited partners.

**Item 4. Purpose of Transaction**

The Reporting Persons purchased the aforementioned securities for investment purposes with the aim of increasing the value of their investments and the Issuer. Subject to applicable legal requirements, one or more of the Reporting Persons may purchase additional securities of the Issuer from time to time in open market or private transactions, depending on its evaluation of the Issuer’s business, prospects and financial condition, the market for the Issuer’s securities, other developments concerning the Issuer, the reaction of the Issuer to the Reporting Persons’ ownership of the Issuer’s securities, other opportunities available to the Reporting Persons, and general economic, money market and stock market conditions. In addition, depending upon the factors referred to above, the Reporting Persons may dispose of all or a portion of their securities of the Issuer at

any time (including by means of programs adopted pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934 (the “Act”). Each of the Reporting Persons reserve the right to increase or decrease its holdings on such terms and at such times as each may decide.

Except as set forth in this Item 4 and Item 6 below, none of the Reporting Persons have a present plan or proposal that relates to or would result in any of the actions specified in clauses (a) through (j) of Item 4 of Schedule 13D of the Act. However, each of the Reporting Persons reserves the right to propose or participate in future transactions which may result in one or more of such actions, including but not limited to, an extraordinary corporate transaction, such as a merger, reorganization or liquidation, sale of a material amount of assets of the Issuer or its subsidiaries, or other transactions which might have the effect of causing the Common Stock to become eligible for termination of registration under Section 12(g) of the Act. The Reporting Persons also retain the right to change their investment intent at any time, to acquire additional shares of Common Stock or other securities of the Issuer from time to time, or to sell or otherwise dispose of all or part of the Common Stock beneficially owned by them (or any shares of Common Stock into which such securities are converted) in any manner permitted by law. The Reporting Persons may engage from time to time in ordinary course transactions with financial institutions with respect to the securities described herein.

Andrew J. Schwab, a Managing Member of each of Partners VII and Partners II, joined the board of directors of the Issuer concurrently with the closing of the Merger and PIPE Transaction. As a director of the Issuer, Schwab may have influence over the corporate activities of the Issuer, including activities which may relate to the transactions described in clauses (a) through (j) of Item 4 of Schedule 13D.

#### Item 5. Interest in Securities of the Issuer

(a) – (b). The following information with respect to the ownership of the Common Stock of the Issuer by the persons filing this statement on Schedule 13D is provided as of August 28, 2023:

Reporting Persons	Shares Held Directly	Sole Voting Power	Shared Voting Power	Sole Dispositive Power	Shared Dispositive Power	Beneficial Ownership	Percentage of Class (4)
Ventures VII (1)	1,110,709,567	0	1,110,709,567	0	1,110,709,567	1,110,709,567	31.7%
Partners VII (1)	0	0	1,110,709,567	0	1,110,709,567	1,110,709,567	31.7%
Ventures II (2)	429,546,911	0	429,546,911	0	429,546,911	429,546,911	13.9%
Co-Investors II (3)	16,948,799	0	16,948,799	0	16,948,799	16,948,799	0.6%
Partners II (2)(3)	0	0	446,495,710	0	446,495,710	446,495,710	14.5%
Schwab (1)(2)(3)	0	0	1,557,205,277	0	1,557,205,277	1,557,205,277	44.4%
Parmar (1)	0	0	1,110,709,567	0	1,110,709,567	1,110,709,567	31.7%
Diekman (2)(3)	0	0	446,495,710	0	446,495,710	446,495,710	14.5%
Rocklage (2)(3)	0	0	446,495,710	0	446,495,710	446,495,710	14.5%

- (1) Includes (i) 684,361,447 shares of Common Stock held by Ventures VII and (ii) 426,348,120 shares of Common Stock issuable upon exercise of warrants held by Ventures VII that are currently exercisable. Partners VII serves as sole general partner of Ventures VII. Schwab and Parmar are managing members of Partners VII. Each of Partners VII, Schwab and Parmar shares voting and dispositive power over the securities held by Ventures VII.
- (2) Includes 429,546,911 shares of Common Stock held by Ventures II. Partners II serves as sole general partner of Ventures II. Schwab, Diekman and Rocklage are managing members of Partners II. Each of Partners II, Schwab, Diekman and Rocklage shares voting and dispositive power over the securities held by Ventures II.
- (3) Includes 16,948,799 shares of Common Stock held by Co-Investors II. Partners II serves as sole general partner of Co-Investors II. Schwab, Diekman and Rocklage are managing members of Partners II. Each of Partners II, Schwab, Diekman and Rocklage shares voting and dispositive power over the securities held by Co-Investors II.
- (4) This percentage is calculated based upon the sum of (i) an approximate 3.08 billion shares of Common Stock outstanding as of August 18, 2023, as reported in the Issuer’s Current Report on Form 8-K filed with the Securities and Exchange Commission on August 21, 2023 and (ii) as applicable, Common Stock issuable upon exercise of warrants held by Ventures VII.

- (c) Except as set forth herein, none of the Reporting Persons has effected any transactions in shares of the Issuer’s 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, the shares of Common Stock 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

##### Registration Rights Agreement

On August 15, 2023, in connection with the execution of the Merger Agreement and the Purchase Agreement, the Issuer entered into a Registration Rights Agreement (the “Registration Rights Agreement”) with certain investors (collectively the “Holders”), including Ventures VII, Ventures II and Co-Investors II, pursuant to which the Issuer has agreed, subject to the terms and conditions of the agreement, to file a registration statement under the Securities Act of 1933 promptly and, in any event, within 180 days from the of the Registration Rights Agreement to register the resale of the shares of Common Stock beneficially owned by the Holders, including all shares of Common Stock held by Ventures VII, Ventures II and Co-Investors II, as well as the shares issuable upon exercise of the Warrants (as defined below) held by Ventures II. The Registration Rights Agreement also includes customary provisions, including with respect to the payment of fees and expenses associated with the registration, as well as indemnification provisions.

The foregoing description is qualified in its entirety by the full text and form of the Registration Rights Agreement, a copy of which is filed herewith as Exhibit B and incorporated herein by reference.

##### Common Stock Purchase Warrants

The common stock purchase warrants (the “Warrants”) held by Ventures VII are exercisable at any time during the period beginning on August 18, 2023 and ending on August 18, 2033. The exercise price per share of Common Stock under these Warrants is \$0.02064041, subject to adjustment as described in the Form of Common Stock Purchase Warrant.

The foregoing description is qualified in its entirety by the full text and form of Warrant, a copy of which is filed herewith as Exhibit C and incorporated herein by reference.

Concurrently and in connection with the execution of the Merger Agreement and the Purchase Agreement, certain former stockholders of Bird Rock, certain officers, directors and stockholders of the Issuer immediately prior to the Merger, the investors in the PIPE Transaction (including Ventures VII, Ventures II and Co-Investors II) and an unaffiliated provider of convertible debt to the Issuer entered into separate lock-up agreements with the Issuer, pursuant to which each such party is restricted from selling or transferring any shares of Common Stock held by each such person as of the closing of the Merger and the PIPE Transaction for a period of one year following the closing of the Merger and the PIPE Transaction (the "Lock-Up Agreements").

The foregoing description is qualified in its entirety by the full text and form of the Lock-Up Agreement, a copy of which is filed herewith as Exhibit D and incorporated herein by reference.

*Non-Employee Director Compensation*

Schwab, in his capacity as a non-employee director of the Issuer, may be entitled to receive, from time to time, stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors.

**Item 7. Material to be Filed as Exhibits**

- A. [Joint Filing Agreement as required by Rule 13d-1\(k\)\(1\) under the Securities Exchange Act of 1934, as amended.](#)
- B. [Registration Rights Agreement \(incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K \(File No. 000-55136\), filed on August 21, 2023\).](#)
- C. [Form of Common Stock Purchase Warrant \(incorporated by reference to Exhibit 4.1 to the Issuer's Current Report on Form 8-K \(File No. 000-55136\), filed on August 21, 2023\).](#)
- D. [Form of Lock-Up Agreement](#)

**Signature**

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

Dated: August 28, 2023

**5AM Ventures VII, L.P.**

By: 5AM Partners VII, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Partners VII, LLC**

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Ventures II, L.P.**

By: 5AM Partners II, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Partners II, LLC**

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Co-Investors II, L.P.**

By: 5AM Partners II, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

/s/ Andrew J. Schwab  
Andrew J. Schwab

/s/ Dr. Kush Parmar  
Dr. Kush Parmar

/s/ Dr. John D. Diekman  
Dr. John D. Diekman

/s/ Dr. Scott M. Rocklage  
Dr. Scott M. Rocklage

ATTENTION

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Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

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**Exhibit(s):**

A     [Joint Filing Agreement](#)

D.     [Form of Lock-Up Agreement](#)

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EXHIBIT A

JOINT FILING AGREEMENT

The undersigned hereby agree that a single Schedule 13D (or any amendment thereto) relating to the Common Stock of Skye Bioscience, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13D.

Dated: August 28, 2023

**5AM Ventures VII, L.P.**

By: 5AM Partners VII, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Ventures II, L.P.**

By: 5AM Partners II, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Co-Investors II, L.P.**

By: 5AM Partners II, LLC  
its General Partner

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

/s/ Andrew J. Schwab  
Andrew J. Schwab

/s/ Dr. Kush Parmar  
Dr. Kush Parmar

/s/ Dr. John D. Diekman  
Dr. John D. Diekman

/s/ Dr. Scott M. Rocklage  
Dr. Scott M. Rocklage

**5AM Partners VII, LLC**

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

**5AM Partners II, LLC**

By: /s/ Andrew J. Schwab  
Name: Andrew J. Schwab  
Title: Managing Member

## FORM OF LOCK-UP AGREEMENT

August 15, 2023

Skye Bioscience, Inc.  
 11250 El Camino Real  
 San Diego, CA 92130  
 Attention: Punit Dhillon  
 Email: pd@skyebioscience.com

Re: Lock-Up Agreement

Ladies and Gentlemen:

This letter agreement (this "Letter Agreement") is being delivered to Skye Bioscience, Inc., a Nevada corporation (the "Company"), in accordance with the [Securities Purchase Agreement (the "Purchase Agreement"), dated as of August 15, 2023, by and among the Company and the investors party thereto][Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of August 15, 2023, by and among the Company, Aquila Merger Sub Inc, a Delaware corporation, and Bird Rock Bio, Inc., a Delaware Corporation]. Capitalized terms used but not otherwise defined in this Letter Agreement shall have the meanings ascribed thereto in the [Purchase Agreement][Merger Agreement].

In order to induce the Company to enter into the transactions contemplated in the [Purchase Agreement][Merger Agreement] (collectively, the "Transactions") and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned (the "Securityholder") hereby agrees with the Company as follows.

Subject to the exceptions set forth herein, during the applicable Lock-Up Period (as defined below) the Securityholder agrees not to, without the prior written consent of the board of directors of the Company, (i) sell, offer to sell, contract or agree to sell, hypothecate, pledge, grant any option, right or warrant to purchase or otherwise transfer or dispose of, or agree to transfer or dispose of, directly or indirectly, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Securities and Exchange Commission promulgated thereunder, any [(a) shares of common stock, par value \$0.001 per share, of the Company (the "Common Stock") received by the Securityholder in connection with the Transactions on the closing date of the Transactions (the "Closing Date") and (b) shares of Common Stock received upon the conversion, exercise or exchange of any options, warrants or other securities held by the Securityholder as of the Closing Date (collectively, the "Securities"), (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any of such Securities, whether any such transaction is to be settled by delivery of such Securities, in cash or otherwise or (iii) publicly announce any intention to effect any transaction specified in clause (i) or (ii) (the actions specified in clauses (i)-(iii), collectively, a "Transfer"). The foregoing limitations shall remain in full force and effect until the first anniversary of the Closing Date (the "Lock-Up Period").

The restrictions set forth in the immediately preceding paragraph shall not apply to:

- (i) in the case of an entity, Transfers to (A) such entity's officers or directors or any affiliate (as defined below) or immediate family (as defined below) of any of such entity's officers or directors, (B) any shareholder, partner or member of such entity or their affiliates, (C) any affiliate of such entity or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the undersigned or affiliates of the undersigned (including, for the avoidance of doubt, where the undersigned is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), (D) any employees of such entity or of its affiliates or (E) as part of a distribution to limited partners, limited liability company members or stockholders of the undersigned or holders of similar equity interests in the undersigned;

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- (ii) in the case of an individual, Transfers by *bona fide* gift or gifts, including, without limitation, to a charitable organization or educational institution, or for *bona fide* estate planning purposes;
- (iii) in the case of an individual, Transfers by virtue of laws of descent, will, testamentary document or intestate succession to the legal representative, heir, beneficiary or a member of the immediate family of the undersigned individual upon death of such individual;
- (iv) in the case of an individual, Transfers by operation of law or pursuant to a court order, such as a qualified domestic relations order, divorce settlement, divorce decree or separation agreement;
- (v) in the case of an individual, Transfers to a partnership, limited liability company or other entity of which the undersigned and/or the immediate family of the undersigned are the legal and beneficial owner of all of the outstanding equity securities or similar interests;
- (vi) in the case of an entity that is a trust, to a trustor or beneficiary of the trust or to the estate of a beneficiary of such trust;
- (vii) in the case of an entity, Transfers by virtue of the laws of the state or jurisdiction of the entity's organization and the entity's organizational documents upon dissolution of the entity;
- (viii) pledges of any Securities to a financial institution that create a mere security interest in such Securities pursuant to a bona fide loan or indebtedness transaction so long as the Securityholder continues to control the exercise of the voting rights of such pledged Securities as well as any foreclosures on such pledged Securities;
- (ix) the establishment of a trading plan that meets the requirements of Rule 10b5-1(c) under the Exchange Act (a "Trading Plan"); *provided, however*, that no sales of Securities, shall be made by Securityholder pursuant to such Trading Plan during the applicable Lock-Up Period and, except as required by applicable rules of the Securities and Exchange Commission, no public announcement or filing is voluntarily made regarding such plan during the applicable Lock-Up Period; and
- (x) transactions in the event of completion of a liquidation, merger, consolidation, stock exchange, reorganization, tender offer or other similar transaction which results in all of the Company's securityholders having the right to exchange their shares of Common Stock for cash, securities or other property;

*provided, however*, that in the case of clauses (i) through (viii), these permitted transferees must enter into a written agreement, in substantially the form of this Letter Agreement (it being understood that any references to "immediate family" in the agreement executed by such transferee shall expressly refer only to the immediate family of the Securityholder and not to the immediate family of the transferee), agreeing to be bound by these Transfer restrictions. For purposes of this paragraph, "immediate family" shall

mean a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, life partner or similar statutorily-recognized domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law of the Securityholder (in each case, including adoptive relationships); and "affiliate" shall have the meaning set forth in Rule 405 under the Securities Act of 1933, as amended.

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In furtherance of the foregoing, the Company, and any duly appointed transfer agent for the Common Stock, are hereby authorized to decline to make any transfer of securities if such Transfer would constitute a violation or breach of this Letter Agreement.

For the avoidance of doubt, the Securityholder shall retain all of its rights as a shareholder of the Company during the Lock-Up Period, including the right to vote any Securities.

The Securityholder hereby represents and warrants that such Securityholder has full power and authority to enter into this Letter Agreement and that this Letter Agreement constitutes the legal, valid and binding obligation of the Securityholder, enforceable in accordance with its terms. Upon request, the Securityholder will execute any additional documents necessary in connection with enforcement hereof.

This Letter Agreement constitutes the entire agreement and understanding between the parties hereto relating to the subject matter hereof and the transactions contemplated hereby and supersedes any other agreements and understandings, whether written or oral, that may have been made or entered into by or between the parties hereto relating to the subject matter hereof or the transactions contemplated hereby. This Letter Agreement may not be changed, amended, modified or waived (other than to correct a typographical error or error immaterial to the Company) as to any particular provision.

No party hereto shall assign this Letter Agreement or any part hereof without the prior written consent of the other party hereto; *provided*, that no such assignment shall relieve the assigning party of its, his or her obligations hereunder. Subject to the foregoing, this Letter Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns. Any attempted assignment in violation of the terms of this paragraph shall be null and void, *ab initio*.

This Letter Agreement shall be governed by, and construed in accordance with, the internal substantive laws of the State of Delaware applicable to contracts entered into and to be performed solely within such state, without giving effect to principles or rules of conflict of laws to the extent such principles or rules would require or permit the application of laws of another jurisdiction. Any suit, action or proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Letter Agreement shall be brought against any of the parties in the courts of the State of California located in San Diego County or the United States District Court for the Southern District of California and each of the parties hereby consents to the exclusive jurisdiction of such courts (and of the appropriate appellate courts) in any such suit, action or proceeding and waives any objection to venue laid therein. Process in any such suit, action or proceeding may be served on any party anywhere in the world, whether within or without the jurisdiction of any such courts.

The Securityholder acknowledges that its obligations under this Letter Agreement are unique, recognizes and affirms that in the event of a breach of this Letter Agreement by it, money damages will be inadequate and the Company will have no adequate remedy at law, and agrees that irreparable damage would occur in the event that any of the provisions of this Letter Agreement were not performed by it in accordance with their specific terms or were otherwise breached. Accordingly, the Company shall be entitled to an injunction or restraining order to prevent breaches of this Letter Agreement by the Securityholder and to enforce specifically the terms and provisions hereof, without the requirement to post any bond or other security or to prove that money damages would be inadequate, this being in addition to any other right or remedy to which the Company may be entitled under this Letter Agreement, at law or in equity.

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In the event that any holder of Securities or other shares of Common Stock that are subject to a substantially similar agreement entered into by such holder, other than the undersigned Securityholder, is permitted by the Company to sell or otherwise transfer or dispose of Securities or other shares of Common Stock for value other than as permitted by this Letter Agreement or a substantially similar agreement entered into by such holder (a "Triggering Release" and the holder that is the subject of such Triggering Release, the "Triggering Release Party"), (a) the Company shall notify the Securityholder within 24 hours of providing the Triggering Release and (b) the same pro rata percentage of the Securities held by the undersigned (including, for clarity, shares of Common Stock issuable upon exercise of any options, warrants or other securities held as of the Closing date) shall be deemed immediately and fully released on the same terms from any remaining restrictions set forth herein (the "Pro-Rata Release"); *provided, however*, that such Pro-Rata Release shall not be applied unless and until permission has been granted by the Company to a securityholder or securityholders to sell or otherwise transfer or dispose of all or a portion of such equity holder's Securities or other shares of Common Stock in an aggregate amount in excess of 1% of the number of Securities or other shares of Common Stock originally subject to a substantially similar agreement.

This Letter Agreement may be executed in two or more counterparts (any of which may be delivered by electronic transmission), each of which shall constitute an original, and all of which taken together shall constitute one and the same instrument.

This Letter Agreement shall become effective on the date hereof and terminate upon the expiration of the Lock-Up Period.

*[remainder of page intentionally left blank]*

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Please confirm your agreement with the foregoing by signing and returning to the undersigned the duplicate copy of this Letter Agreement.

Very truly yours,

[•]

By:

Name: [•]

Title: [•]

Accepted and agreed as of the date first written above:

By: \_\_\_\_\_  
Name:  
Title:

[Signature Page to Lock-Up Agreement]

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