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

FORM S-8

REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

SKYE BIOSCIENCE, INC.

		(Exact name of Registrant as spec	ied in its charter)			
	Nevada		45-0692882			
	or other jurisdiction oration or organizatio	n)	(I.R.S. Employer Identification Number)			
		11250 El Camino Real, Suite 100, Sar (Address of Principal Executive				
		Skye Bioscience, 2024 Inducement Equity I				
		(Full Title of the l	lan)			
		Punit Dhillor Chief Executive O Skye Bioscience, 11250 El Camino Real San Diego, CA 9 (858) 410-026	fficer Inc. Suite 100 130			
	(Nā	me, Address, and Telephone number, Includi Copies to:	g Area Code, of Agent for Service)			
Steven G. Rowles Morrison & Foerster LLP 12531 High Bluff Drive, #100 San Diego, CA 92130 (858) 720-5100			Emily K. Beers Morrison & Foerster LLP 2100 L Street NW, Suite 900 Washington, D.C. 20037 (202) 887-1563			
Indicate by check mark wh company. See the definition	nether the registrant is s of "large accelerated	s a large accelerated filer, an accelerated file d filer," "accelerated filer," "smaller reporting	r, a non-accelerated filer, a smaller reporting company or an emergic company," and "emerging growth company" in Rule 12b-2 of the Exc	ng growth		
Large accelerated filer		Accelerated filer				
Non-accelerated filer	\boxtimes	Smaller reporting company				
		Emerging growth company				
		ck mark if the registrant has elected not to us in $7(a)(2)(B)$ of the Securities Act. \square	the extended transition period for complying with any new or revise	d financia		

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Item 1 and Item 2 of Part I of Form S-8 is omitted from this Registration Statement on Form S-8 (the "Registration Statement") in accordance with the provisions of Rule 424 under the Securities Act of 1933, as amended (the "Securities Act"), and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I of Form S-8 will be delivered to the participants in the equity benefit plan covered by this Registration Statement as specified by Rule 428(b)(1) under the Securities Act. These documents, and the documents incorporated by reference into this Registration Statement pursuant to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which are on file with the Securities and Exchange Commission (the "Commission"), are incorporated herein by reference:

- a. the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as filed with the Commission on March 22, 2024;
- b. the Registrant's Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2024 and June 30, 2024, as filed with the Commission on May 10, 2024 and August 9, 2024, respectively;
- c. the Registrant's Current Reports on Form 8-K (other than information furnished rather than filed) filed with the Commission on Innuary 29, 2024, February 12, 2024, March 13, 2024, June 10, 2024, and July 3, 2024; and
- d. the description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A filed with the Commission on April 10, 2024, pursuant to Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All reports and other documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (other than Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K, including any exhibits included with such information, unless otherwise indicated therein) after the date of this Registration Statement, but prior to the filing of a post-effective amendment that indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersededs such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Names Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers

Section 78.7502 of the Nevada Revised Statutes ("NRS") allows, and the Company wishes to adopt, discretionary indemnification of its directors, officers, employees, and agents as provided below.

Subsection (1) of Section 78.7502 of the NRS empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party of any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a

director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or as a manager of a limited-liability company, against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred by him or her in connection with the action, suit, or proceeding if the person (a) is not in breach of their fiduciary duty which breach involved intentional misconduct, fraud or a knowing violation of law, or (b) acted in good faith and in a manner in which he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct was unlawful.

Subsection (2) of Section 78.7502 of the NRS empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit by or in the right of the corporation to procure a judgment in favor by reason of the fact that such person acted in any of the capacities set forth in subsection (1) enumerated above, against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person (a) was not in breach of their fiduciary duty, which breach involved intentional misconduct, fraud or a knowing violation of law, or (b) acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation except that no indemnification may be made for any claim, issue, or matter as to which such person shall have been adjudged by a court of competent jurisdiction, after exhaustion of any appeals taken therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

Subsection (3) of Section 78.7502 of the NRS provides that, unless a court orders indemnification or amounts are advanced pursuant to NRS 78.751(2) or any discretionary indemnification under Subsections (1) or (2) of NRS 75.7502 must be authorized by a determination that such indemnification is proper. This determination must be made by the stockholders, the majority vote of a quorum of the board of the directors not parties to the action, suit or proceeding, or a written opinion by independent legal counsel ordered by a majority of the directors who were not parties to the action, suit, or proceeding, or a quorum of directors who were not parties to the action, suit or proceeding cannot be obtained.

Subsection (1) of Section 78.751 of the NRS provides for mandatory indemnification of any person who is a director, officer, employee or agent to the extent that the person is successful on the merits or otherwise in defense of (i) any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, including, without limitation, an action by or in the right of the corporation, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise; or (ii) any claim, issue or matter therein, against expenses actually and reasonably incurred by the person in connection with defending the action, including, without limitation, attorney's fees.

Additionally, NRS 78.138(7) provides, with limited statutory exceptions relating to a director's duty when confronted with a change or potential change in control of the corporation, or unless the articles of incorporation or an amendment thereto (in each case filed on or after October 1, 2003) provide for greater individual liability, that a director or officer is not individually liable to a corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his or her capacity as a director or officer unless it is proven that: (i) the presumption that a director has acted in good faith, on an informed basis and with a view to the interest of the corporation has been overcome; (ii) the act or failure to act constituted a breach of his or her fiduciary duties as a director or officer; and (ii) the breach of those duties involved intentional misconduct, fraud or a knowing violation of law.

Pursuant to the above indemnification provisions, our amended and restated articles of incorporation and amended and restated bylaws provide that we must indemnify and advance expenses to our directors and officers to the fullest extent permitted under the NRS and other applicable law. In addition, we have entered into indemnification agreements with each of our directors and executive officers that require us to indemnify these persons to the full extent provided by the law as stated above.

Item 7. Exemption from Registration Claims.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Description
3.1	Articles of Incorporation of Registrant, as amended (incorporated by reference to Exhibit 3.1 to our Annual Report on Form 10-K filed on March 22, 2024)
3.2	Amended and Restated Bylaws of Registrant (incorporated by reference to Exhibit 3.1 to our Report on Form 10-K filed on March 2, 2021)
5.1*	Opinion of Fennemore Craig, P.C.
23.1*	Consent of Fennemore Craig, P.C. (included in Exhibit 5.1)
23.2*	Consent of Marcum LLP
24.1*	Power of Attorney (included on signature page of this Registration Statement)
99.1	2024 Inducement Equity Incentive Plan (incorporated by reference to Exhibit10.1 to our Quarterly Report on Form 10-Q filed on August9, 2024)
99.2	Form of Stock Option Grant Notice and Stock Option Agreement under the 2024 Inducement Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q filed on August9, 2024)
99.3	Form of Restricted Stock Unit Award Grant Notice and Restricted Stock Unit Award Agreement under the 2024 Inducement Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q filed on August9, 2024)
107*	Filing Fee Table

^{*} Filed herewith.

Item 9. Undertakings

- (a) The undersigned registrant hereby undertakes:
- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed

to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Diego, state of California, on August 9, 2024.

SKYE BIOSCIENCE, INC.

By: /s/ Kaitlyn Arsenault

Name: Kaitlyn Arsenault Title: Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Punit Dhillon and/or Kaitlyn Arsenault as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or any of them, or his/her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Position	Date	
/s/ Punit Dhillon	Chief Executive Officer, Chairman of the Board, and Director	August 9, 2024	
Punit Dhillon	(Principal Executive Officer)		
/s/ Kaitlyn Arsenault	Chief Financial Officer	August 9, 2024	
Kaitlyn Arsenault	(Principal Financial Officer and Principal Accounting Officer)		
/s/ Deborah Charych	Director	August 9, 2024	
Deborah Charych			
/s/ Annalisa Jenkins	Director	August 9, 2024	
Annalisa Jenkins			
/s/ Paul Grayson	Director	August 9, 2024	
Paul Grayson			
/s/ Andrew J. Schwab	Director	August 9, 2024	
Andrew J. Schwab			
/s/ Karen Smith	Director	August 9, 2024	
Karen Smith			

Calculation of Filing Fee Table

Form S-8 (Form Type)

Skye Bioscience, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Title of Securities to be Registered	Fee Calculation Rule	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
	Common stock \$0.001 par value per share, reserved for issuance under the 2024 Inducement Equity Incentive Plan	457(c), 457(h)	600,000	\$ 5.36	\$ 3,216,000.00	\$0.00014760	\$ 474.68
Total Offering Amounts			600,000		\$ 3,216,000.00		\$ 474.68
Total Fee Offsets							s —
Net Fee Due							\$ 474.68

⁽¹⁾ Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, this Registration Statement shall also cover any additional shares of the Registrant's common stock that become issuable under the Skye Bioscience, Inc. 2024 Inducement Equity Incentive Plan by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the Registrant's receipt of consideration that increases the number of the Registrant's outstanding shares of common stock.

⁽²⁾ Estimated solely for the purpose of calculating the amount of the registration fee. Pursuant to Rule 457(c) and 457(h) under the Securities Act, the proposed maximum offering price per share and the proposed maximum offering price have been determined on the basis of the average of the high and low sales prices of the Common Stock as reported on the Nasdaq Global Market on August 2, 2024, which date is within five business days prior to filing this Registration Statement.

FENNEMORE.

Exhibit 5.1

7800 Rancharrah Parkway Reno, NV 89511 PH (775) 788-2200 | FX (775) 786-1177 fennemorelaw.com

August 9, 2024

Skye Bioscience, Inc. 11250 El Camino Real Suite 100 San Diego, CA 92130

Re: Registration Statement on U.S. Securities Exchange Commission form S-8

Ladies and Gentlemen:

We have acted as special Nevada counsel for Skye Bioscience, Inc., a Nevada corporation (the "Company"). We are providing this opinion in connection with the registration under the Securities Act of 1933, as amended (the "Act"), by the Company of 600,000 shares of its common stock, par value \$0.001 per share (the "Shares"), for issuance under the Skye Bioscience, Inc. 2024 Inducement Equity Incentive Plan (the "Incentive Plan"), by means of filing a Registration Statement on Form S-8 (as it may be amended and supplemented, the "Registration Statement"), with the United States Securities and Exchange Commission (the "Commission")

In connection with this opinion, we have examined and relied upon:

- (i) the Registration Statement;
- (ii) The Incentive Plan;
- (iii) Resolutions of the Company's Board of Directors dated as of July 2, 2024; and
- (iv) the Company's Articles of Incorporation and Bylaws, each as amended and currently in effect, and the originals or copies certified to our satisfaction of such other documents, records, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below (the "Organizational Documents").

We have examined originals or copies of such corporate records and certificates of public officials as we have deemed necessary or advisable for purposes of this opinion. We have relied upon the certificates of all corporate officials with respect to the accuracy of all matters contained therein. We have assumed the authenticity of all documents submitted to us as

FENNEMORE.

Skye Bioscience, Inc. August 9, 2024 Page 2

originals, the genuineness of all signatures, the legal capacity of natural persons and the conformity to originals of all copies of all documents submitted to us. We note that the Company reserved, and assume that it will continue to reserve, sufficient authorized but unissued shares of its common stock to allow for all of the above issuances.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares have been duly authorized and, when issued and delivered pursuant to the Incentive Plan, the Shares will be validly issued, fully paid and nonassessable.

This opinion is issued in the State of Nevada. By issuing this opinion, Fennemore Craig, P.C. (i) shall not be deemed to be transacting business in any other state or jurisdiction other than the State of Nevada and (ii) does not consent to the jurisdiction of any state other than the State of Nevada. Nothing herein shall be deemed an opinion as the laws of any jurisdiction other than the State of Nevada except we express no opinion concerning any securities law or rule or any law or rule regulating the purchasers of the Shares.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm therein. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations thereunder.

The opinions expressed herein are given as of the date hereof, and we expressly decline any undertaking to revise or update any of the opinions subsequent to the date hereof or to advise you of any matter arising subsequent to the date hereof which would cause us to modify our opinions, in whole or in part. This opinion letter is provided for use in connection with the Registration Statement and may only be relied upon by the Company and its, agents, successors, and assigns. To the extent required, the Company and any of its respective permitted successors and assigns is permitted to show this letter to any auditor, accountant, attorney or other professional advisor or regulator. Delivery of this opinion letter pursuant to the previous sentence, however, shall not entitle the persons to whom it is delivered to rely on it. This letter may not be used or relied upon by any other person for any other purposes.

Very truly yours,

/s/ Fennemore Craig, P.C.

Fennemore Craig, P.C.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Skye Bioscience, Inc. on Form S-8 of our report dated March 21, 2024 with respect to our audits of the consolidated financial statements of Skye Bioscience, Inc. as of December 31, 2023 and 2022 and for the two years ended December 31, 2023 appearing in the Annual Report on Form 10-K of Skye Bioscience, Inc., for the year ended December 31, 2023.

/s/ Marcum LLP

Marcum LLP East Hanover, NJ August 9, 2024