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 speci	led in its charter)			
	Nevada		45-0692882 (I.R.S. Employer Identification Number)			
	or other jurisdiction ration or organization	on)				
		11250 El Camino Real, Suite 100, Sar (Address of Principal Executive				
		Skye Bioscience, Inc. Amended and Rest	ted Omnibus Incentive Plan			
		(Full Title of the l	an)			
		Punit Dhillor Chief Executive O Skye Bioscience, 11250 El Camino Real San Diego, CA 9: (858) 410-026	nc. Suite 100			
	(Nā	ame, 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			
			, a non-accelerated filer, a smaller reporting compa company," and "emerging growth company" in Rule			
Large accelerated filer		Accelerated filer				
Non-accelerated filer	\boxtimes	Smaller reporting company Emerging growth company				
f an emerging growth comp accounting standards provide	any, indicate by che ed pursuant to Section		the extended transition period for complying with a	ny new or revised financia		

EXPLANATORY NOTE

Skye Bioscience, Inc., a Nevada corporation (the "Registrant" or "Company"), is filing this registration statement on Form S-8 (the "Registration Statement") to register the issuance of an additional 1,535,655 shares of its common stock, par value \$0.001 per share (the "Common Stock"), issuable under the Skye Bioscience, Inc. Amended and Restated Omnibus Incentive Plan (previously named the Skye Bioscience, Inc. Amended and Restated 2014 Omnibus Incentive Plan), which was amended and restated effective October 22, 2024 to increase the number of shares of Common Stock issuable thereunder by 1,535,655, while retaining the automatic share replenishment feature of the plan, increase the number of incentive stock options that may be granted thereunder to 4,000,000, extend the expiration date of the plan to September 10, 2034, update the name of the plan and make certain housekeeping amendments (as so amended and restated, the "Amended and Restated Plan").

Pursuant to General Instruction E of Form S-8, the contents of the prior registration statements on Form S-8, File No. 333-281460, File No. 333-276211, File No. 333-245177, File No. 333-227860 and File No. 333-226259, previously filed with respect to the Amended and Restated Plan, are incorporated into this Registration Statement by reference to the extent not modified or superseded hereby or by any subsequently filed document, which is incorporated by reference herein or therein.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which are on file with 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, June 30, 2024 and September 30, 2024, as filed with the Commission on May 10, 2024, August 9, 2024 and November 7, 2024, respectively;
- c. the Registrant's Current Reports on Form 8-K (other than information furnished rather than filed) filed with the Commission on January 29, 2024, February 12, 2024, March 4, 2024, March 13, 2024, June 10, 2024, July 3, 2024, September 4, 2024, October 24, 2024 and October 29, 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 supersedes 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 8. Exhibits.

Exhibit Number	Description
3.1	Amended and Restated Articles of Incorporation of Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 22, 2024)
3.2	Amended and Restated Bylaws of Registrant (incorporated by reference to Exhibit 3.2 to our Report on Form 10-K filed on March 2, 2021)
5.1*	Opinion of Fennemore Craig, P.C.
10.1	Skye Bioscience, Inc. Amended and Restated Omnibus Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q filed with the SEC on November 7, 2024)
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)
107*	Filing Fee Table

^{*} Filed herewith.

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 November 7, 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 and Director	November 7, 2024	
Punit Dhillon	(Principal Executive Officer)		
/s/ Kaitlyn Arsenault	Chief Financial Officer	November 7, 2024	
Kaitlyn Arsenault	(Principal Financial Officer and Principal Accounting Officer)		
/s/ Deborah Charych	Director	November 7, 2024	
Deborah Charych			
/s/ Annalisa Jenkins	Director	November 7, 2024	
Annalisa Jenkins			
/s/ Paul Grayson	Chairman of the Board	November 7, 2024	
Paul Grayson			
/s/ Andrew J. Schwab	Director	November 7, 2024	
Andrew J. Schwab			
/s/ Karen Smith	Director	November 7, 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
Equity	Common stock \$0.001 par value per share, reserved for issuance under the Amended and Restated Plan	457(c), 457(h)	1,535,655	\$5.10	\$ 7,831,840.50	\$0.00015310	\$ 1.199.05
Total Offering Amounts		(//	1,535,655		\$ 7,831,840.50		\$ 1,199.05
Total Fee Offsets							N/A
Net Fee Due							\$ 1,199.05

- (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. Amended and Restated Omnibus Incentive Plan (the "Amended and Restated 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 October 31, 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

November 7, 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"). Our opinion is provided below regarding certain matters in connection with the registration under the Securities Act of 1933, as amended (the "Act"), by the Company, by means of a registration statement on Form S-8 (as it may be amended and supplemented, the "Registration Statement"), filed with the United States Securities and Exchange Commission (the "Commission") relating to the registration of 1,535,655 shares (the "Shares") of common stock, par value \$0.001 per share of the Company, issuable pursuant to the Skye Bioscience, Inc. Amended and Restated Omnibus Incentive Plan (collectively, the "Plan").

In connection with this opinion, we have examined and relied upon (i) the Registration Statement, (ii) the Plan and (iii) 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.

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 originals, the genuineness of all signatures, the legal capacity of natural persons and the

FENNEMORE.

Skye Bioscience, Inc. November 7, 2024 Page 2

conformity to originals of all copies of all documents submitted to us. We have assumed that at the time of issuance of the Shares, the Company will have sufficient authorized, but unissued, shares of its common stock available to allow for such issuance.

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 Plan, or pursuant to stock options or other instruments that have been issued pursuant to the Plan, the Shares will be validly issued, fully paid and nonassessable.

Our opinion is limited to the laws of the State of Nevada. We express no opinion as to the effect of the law of any other jurisdiction. Our opinion is rendered as of the date hereof, and we assume no obligation to advise you of changes in law or fact (or the effect thereof on the opinions expressed herein) that hereafter may come to our attention.

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.

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 Morristown, NJ November 7, 2024