UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ENSYSCE BIOSCIENCES, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 82-2755287 (I.R.S. Employer Identification No.)

7946 Ivanhoe Avenue, Suite 201, La Jolla, California 92037 (Address of Principal Executive Offices) (Zip Code)

Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan (Full title of the plan) Dr. Lynn Kirkpatrick

President, Chief Executive Officer & Director
7946 Ivanhoe Avenue, Suite 201
La Jolla, California 92037
(858) 263-4196
(Name and address of agent for service)
(Telephone number, including area code, of agent for service)

Copy to:
Eric D. Kline, Esq.
David I Meyers, Esq.
Troutman Pepper Hamilton Sanders LLP
1001 Haxall Point, 15th Floor
Richmond, Virginia 23218-1122
(804) 697-1200

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	\boxtimes
		Emerging growth company	\boxtimes
	any, indicate by check mark if the Registed pursuant to Section 7(a)(2)(B) of the	istrant has elected not to use the extended transition period for complying with any new or revise Securities Act. \Box	ed financial
	CA	LCULATION OF REGISTRATION FEE	
		Pronosed	

Title of each class of securities to be registered Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan	Amount to be registered (1)	Proposed maximum offering price per share (3)	maximum ggregate offering price (3)	_	Amount of registration fee (4)
Common Stock, par value \$0.0001 per share	3,000,000(2)	\$ 1.79	\$ 5,370,000	\$	498

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers such additional and indeterminate number of shares of common stock, par value \$0.0001 per share (the "Common Stock"), of Ensysce Biosciences, Inc., a Delaware corporation (the "Registrant"), as may be issuable as a result of a stock dividend, stock split, split-up, recapitalization or similar event.
- (2) Represents 3,000,000 shares of Common Stock reserved for future grant under the Registrant's Amended and Restated 2021 Omnibus Incentive Plan (the "Plan").
- (3) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) and Rule 457(h) under the Securities Act, the proposed maximum offering price per share was determined based on the average of the high and low prices of the Common Stock reported by the NASDAQ Capital Market as of January 27,
- (4) Calculated by multiplying the proposed maximum aggregate offering price of securities to be registered by 0.0000927.

On October 7, 2021, Ensysce Biosciences, Inc. (the "Registrant") filed a Registration Statement on Form S-8 (File No. 333-260116) (the "Prior Registration Statement") with the Securities and Exchange Commission (the "Commission") to register 5,444,068 shares of its common stock, par value \$0.0001 per share ("Common Stock"), of which (i) 4,444,068 shares of Common Stock were reserved for issuance upon the exercise of outstanding options that were assumed under the Registrant's 2021 Omnibus Incentive Plan (the "2021 Incentive Plan") and (ii) 1,000,000 shares Common Stock were reserved for future grants of awards under the 2021 Incentive Plan. This Registration Statement registers 3,000,000 additional shares of Common Stock in connection with the amendment and restatement of the 2021 Incentive Plan, which was approved by the Registrant's shareholders on January 26, 2022. Accordingly, and pursuant to General Instruction E to Form S-8, the contents of the Prior Registration Statement are incorporated by reference herein, including the periodic reports that the Registrant filed after the Prior Registration Statement to maintain current information about the Registrant.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, which have been filed with the Commission pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are hereby incorporated by reference in, and shall be deemed to be a part of, this Registration Statement:

- a) The Registrant's prospectus filed pursuant to Rule 424(b) under the Securities Act (File No. 333-258609), on September 27, 2021, relating to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-258609), which contains the Registrant's audited financial statements for the latest fiscal year for which such statements have been filed;
- b) The Registrant's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the Commission on March 15, 2021, as amended by its Form 10-K/A filed with the Commission on June 8, 2021.
- c) The Registrant's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021, June 30, 2021, and September 30, 2021, filed with the Commission on June 8, 2021; August 16, 2021; and November 15, 2021, respectively;
- d) The Registrant's Current Reports on Form 8-K, filed with the Commission on February 1, 2021, February 2, 2021, February 25, 2021, May 14, 2021, June 1, 2021, June 11, 2021, June 29, 2021, as amended June 30, 2021, July 1, 2021, July 7, 2021, September 27, 2021, November 10, 2021, December 27, 2021, and January 18, 2022, (in each case other than portions of those documents deemed to be furnished and not filed); and
- The description of the Registrant's Common Stock contained in its Registration Statement on Form S-1, as filed with the Commission on November 3, 2017, as updated by Exhibit 4.5 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the Commission on March 15, 2021, including any subsequently filed amendments or reports updating such description.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated herein by reference and shall be deemed a part hereof from the date of filing of such documents. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein and to be a part hereof 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 such 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 of the Exhibit				
5.1*	Opinion of Troutman Pepper Hamilton Sanders LLP				
23.1*	Consent of Marcum LLP				
23.2*	Consent of Mayer Hoffman McCann P.C.				
23.3*	Consent of Troutman Pepper Hamilton Sanders LLP (contained in Exhibit 5.1 hereto)				
24.1*	Power of Attorney (included on signature page to this registration statement)				
99.1	Ensysce Biosciences, Inc. Amended and Restated 2021 Omnibus Incentive Plan (incorporated by reference to Annex A to Ensysce Biosciences, Inc. Definitive Proxy Statement on Form DEF 14A Filed on December 17, 2021 (File No. 001-38306)				

^{*} Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act, 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 January 28, 2022.

ENSYSCE BIOSCIENCES, INC.

By: /s/ Dr. Lynn Kirkpatrick
Dr. Lynn Kirkpatrick

President, Chief Executive Officer and Director

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Lynn Kirkpatrick and David Humphrey, and each of them, as his true and lawful attorney-in-fact and agent, upon the action of such appointee, with full power of substitution and resubstitution, to do any and all acts and things and execute, in the name of the undersigned, any and all instruments which each of said attorneys-in-fact and agents may deem necessary or advisable in order to enable Ensysce Biosciences, Inc. to comply with the Securities Act, and any requirements of the Commission in respect thereof, in connection with the filing with the Commission of this Registration Statement on Form S-8 under the Securities Act, including specifically but without limitation, power and authority to sign the name of the undersigned to such

Registration Statement, and any amendments to such Registration Statement (including post-effective amendments), and to file the same with all exhibits thereto and other documents in connection therewith, with the Commission, to sign any and all applications, Registration Statements, notices or other documents necessary or advisable to comply with applicable state securities laws, and to file the same, together with other documents in connection therewith with the appropriate state securities authorities, granting unto each of said attorneys-in-fact and agents full power and authority to do and to perform each and every act and thing requisite or necessary to be done in and about the premises, as fully and to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities indicated on January 28, 2022.

Signature	Title	Date
/s/ Dr. Lynn Kirkpatrick Dr. Lynn Kirkpatrick	President, Chief Executive Officer and Director (Principal Executive Officer)	January 28, 2022
/s/ David Humphrey David Humphrey	Chief Financial Officer, Secretary and Treasurer (Principal Financial and Accounting Officer)	January 28, 2022
/s/ Andrew Benton Andrew Benton	Director	January 28, 2022
/s/ William Chang William Chang	Director	January 28, 2022
/s/ Bob Gower Bob Gower	Director and Chairman of the Board	January 28, 2022
/s/ Adam Levin Adam Levin	Director	January 28, 2022
/s/ Steve Martin Steve Martin	Director	January 28, 2022
/s/ Curtis Rosebraugh Curtis Rosebraugh	Director	January 28, 2022

Troutman Pepper Hamilton Sanders LLP 600 Peachtree Street NE, Suite 3000 Atlanta, GA 30308-2216

troutman.com



January 28, 2022 Ensysce Biosciences, Inc. 7946 Ivanhoe Avenue, Suite 201 La Jolla, California 92037

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Ensysce Biosciences, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-8 (the "Registration Statement"), as filed by the Company with the Securities and Exchange Commission (the "Commission") on the date hereof, pursuant to the Securities Act of 1933, as amended (the "Securities Act"), to register 3,000,000 shares of common stock, par value \$0.0001 per share of the Company (the "Shares"), issuable by the Company from time to time pursuant to the Company's Amended and Restated 2021 Omnibus Incentive Plan.

This opinion is being furnished in accordance with the requirements of Item 8(a) of Form S-8 and Item 601(b)(5)(i) of Regulation S-K.

We have examined originals or copies, certified or otherwise identified to our satisfaction, of such corporate records, agreements and instruments of the Company, statements and certificates of public officials and officers of the Company, and such other documents, records and instruments, and we have made such legal and factual inquiries as we have deemed necessary or appropriate as a basis for us to render the opinions hereinafter expressed. In our examination of the foregoing, we have assumed the genuineness of all signatures, the legal competence and capacity of natural persons, the authenticity of documents submitted to us as originals and the conformity with authentic original documents of all documents submitted to us as copies. When relevant facts were not independently established, we have relied without independent investigation as to matters of fact upon statements of governmental officials and upon representations made in or pursuant to the certificates and statements of appropriate representatives of the Company.

In connection herewith, we have assumed that all of the documents referred to in this opinion letter have been duly authorized by, have been duly executed and delivered by, and constitute the valid, binding and enforceable obligations of, all of the parties to such documents, all of the signatories to such documents have been duly authorized and all such parties are duly organized and validly existing and have the power and authority (corporate or other) to execute, deliver and perform such documents.

We do not purport to express an opinion on any laws other than the laws of the State of Delaware. The opinions set forth herein are made as of the date hereof and are subject to, and may be limited by, future changes in the factual matters set forth herein, and we undertake no duty to advise you of the same. The opinions expressed herein are based upon the law in effect (and published or otherwise generally available) on the date hereof, and we assume no obligation to revise or supplement these opinions should such law be changed by legislative action, judicial decision or otherwise. In rendering our opinions, we have not considered, and hereby disclaim any opinion as to, the application or impact of any laws, cases, decisions, rules or regulations of any other jurisdiction, court or administrative agency.

Based upon the foregoing and in reliance thereon, and subject to the assumptions, comments, qualifications, limitations and exceptions set forth herein, we are of the opinion that the Shares have been duly authorized for issuance, and when issued, delivered and paid for in accordance with the Plan (assuming that, upon any issuance of the Shares, the total number of shares of common stock issued and outstanding will not exceed the total number of shares of common stock that the Company is then authorized to issue under its Certificate of Incorporation), the Shares will be legally issued, fully paid and non-assessable.

We do not render any opinions except as set forth above. We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the prospectus filed as a part thereof. We also consent to your filing copies of this opinion as an exhibit to the Registration Statement with such agencies of such states as you deem necessary in the course of complying with the laws of such states regarding the offering and sale of the securities addressed herein. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations promulgated thereunder by the Commission.

Very truly yours,

/s/ Troutman Pepper Hamilton Sanders LLP

Troutman Pepper Hamilton Sanders LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Ensysce Biosciences, Inc. (the "Company") (f/k/a Leisure Acquisition Corp.) on Form S-8 of our report dated March 15, 2021, except for the effects of the restatement discussed in Note 2 and Contingent Forward Purchase Contract in Note 7, as to which the date is June 7, 2021, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audit of the financial statements of Leisure Acquisition Corp. as of December 31, 2020 and 2019 and for the years then ended, which report appears in the Prospectus, which is part of this Registration Statement. We were dismissed as auditors on July 7, 2021 and, accordingly, we have not performed any audit or review procedures with respect to any financial statements appearing in such Prospectus for the periods after the date of our dismissal.

/s/ Marcum LLP Marcum LLP Tampa, FL January 28, 2022

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 15, 2021 (except for the exchange ratio as detailed in Note 12, as to which the date is September 21, 2021), with respect to the consolidated financial statements of Ensysce Biosciences, Inc. as of December 31, 2020 and 2019 and for the years then ended (which report includes an explanatory paragraph regarding the existence of substantial doubt about the Company's ability to continue as a going concern), included in the Registration Statement and accompanying prospectus on Form S-1 (File No. 333-258609), as amended.

/s/ Mayer Hoffman McCann P.C. Mayer Hoffman McCann P.C. San Diego, California January 28, 2022