

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No.)*

STELLAR BIOTECHNOLOGIES, INC.

(Name of Issuer)

Common Shares, without par value

(Title of Class of Securities)

85855A 10 4

(CUSIP Number)

**Frank R. Oakes
c/o Stellar Biotechnologies, Inc.
332 East Scott Street
Port Hueneme, California 93041
(805) 488-2800**

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

September 1, 2014

(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).

1. NAME OF REPORTING PERSON:

Frank R. Oakes

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3. SEC USE ONLY

4. SOURCE OF FUNDS

OO, PF

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)

6. CITIZENSHIP OR PLACE OF ORGANIZATION

United States of America

NUMBER OF SHARES	7.	SOLE VOTING POWER 5,343,846 (1)
BENEFICIALLY OWNED BY	8.	SHARED VOTING POWER 0
EACH REPORTING PERSON	9.	SOLE DISPOSITIVE POWER 5,343,846 (1)
WITH	10.	SHARED DISPOSITIVE POWER 0

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,343,846 (1)

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

6.8%, based on 78,268,850 common shares of the Issuer issued and outstanding as of September 1, 2014

14. TYPE OF REPORTING PERSON

IN

(1) Beneficial ownership of common shares of the Issuer (i) includes 1,836,200 common shares issuable upon the exercise of outstanding options and 40,000 common shares issuable upon exercise of outstanding warrants; and (ii) excludes 464,273 common shares and 50,000 common shares issuable upon the exercise of outstanding options which are held by the Reporting Person's spouse who has sole voting and dispositive power over the securities, and as to which the Reporting Person disclaims beneficial ownership. The Reporting Person does not have the power to vote or dispose of, or to direct the voting or disposition of, the shares held by his spouse, or with respect to any shares acquired under her outstanding options.

ITEM 1. SECURITY AND ISSUER.

This Schedule 13D (this "Schedule 13D") relates to the common shares, without par value, of Stellar Biotechnologies Inc., a British Columbia corporation (the "Issuer"). The principal executive offices of the Issuer are located at 332 E. Scott Street, Port Hueneme, CA 93041.

ITEM 2. IDENTITY AND BACKGROUND.

- (a) This Schedule 13D is being filed by Frank R. Oakes (the "Reporting Person").
- (b) The principal business address for the Reporting Person is c/o Stellar Biotechnologies Inc., 332 E. Scott Street, Port Hueneme, CA 93041.
- (c) The Reporting Person is President and Chief Executive Officer of the Issuer, and a member of the Issuer's board of directors.
- (d) During the past five years, the Reporting Person has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the past five years, the Reporting Person has not been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is 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) The Reporting Person is a citizen of the United States of America.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

The Reporting Person initially acquired 4,005,979 common shares and 1,075,000 stock options to purchase the Issuer's common shares as a result of the Issuer's qualifying transaction in April 2010 through a reverse merger transaction with Stellar Biotechnologies Inc., a California corporation of which the Reporting Person was affiliated, and has since disposed of an aggregate of 618,333 common shares. He received 801,200 stock options to purchase the Issuer's common shares through his employment with the Issuer during the period commencing April 2010 to present. On June 14, 2012, using personal funds, the Reporting Person exercised options to purchase 40,000 common shares at price per share of C\$0.28. He purchased 40,000 common shares and warrants to purchase 40,000 common shares in the Issuer's January 2013 private placement.

ITEM 4. PURPOSE OF TRANSACTION.

As described herein, the securities deemed to be beneficially owned by the Reporting Person were originally acquired in connection with (i) the Issuer's qualifying transaction through a reverse merger transaction with Stellar Biotechnologies Inc., a California corporation, in April 2010; (ii) his services as President and Chief Executive Officer of the Issuer, and a member of the Issuer's board of directors; and (iii) a private placement conducted by the Issuer in January 2013.

As part of his role with the Issuer, the Reporting Person continuously assesses the Issuer's business, financial condition, results of operations and prospects, general economic conditions, other developments and additional investment opportunities. The Reporting Person does not currently have any specific plans or proposals that relate to, or would result in, any actions or events specified in clauses (a) through (j) of Item 4 to Schedule 13D.

The Reporting Person reserves the right to change plans and take any and all actions that he may deem appropriate to maximize the value of his investments in the Issuer, including, among other things, purchasing or otherwise acquiring additional securities of the Issuer, selling or otherwise disposing of any securities of the Issuer beneficially owned by him, in each case in the open market or in privately negotiated transactions, or formulating other plans or proposals regarding the Issuer or its securities to the extent deemed advisable by the Reporting Person in light of his general investment policies, market conditions, subsequent developments affecting the Issuer and the general business and future prospects of the Issuer.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

- (a) The Reporting Person is the beneficial owner of 5,343,846 common shares, or 6.8% of the Issuer's issued and outstanding shares, and such amount (i) includes 1,836,200 common shares issuable upon the exercise of outstanding options and 40,000 common shares issuable upon exercise of outstanding warrants; and (ii) excludes 464,273 common shares and 50,000 common shares issuable upon the exercise of outstanding options which are held by the Reporting Person's spouse and as to which the Reporting Person disclaims beneficial ownership. There were 78,268,850 common shares of the Issuer issued and outstanding as of September 1, 2014.
 - (b) The Reporting Person has the sole power to vote and dispose of 5,343,846 common shares of the Issuer, which includes 1,846,200 common shares issuable upon the exercise of outstanding options and 40,000 common shares issuable upon exercise of outstanding warrants. The Reporting Person's spouse has sole voting and dispositive power with respect to 464,273 common shares owned by her and as to any shares acquired by her under her outstanding options.
 - (c) None, there have been no transactions by the Reporting Person that were effected during the past sixty days.
 - (d) Not applicable.
 - (e) Not applicable.
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ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO THE SECURITIES OF THE ISSUER.

Not applicable.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Not applicable.

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: September 26, 2014

/s/ Frank R. Oakes
Frank R. Oakes
