SENESCO TECHNOLOGIES INC Form SC 13D May 29, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No.)¹

SENESCO TECHNOLOGIES, INC. (Name of Issuer)

Common Stock, par value \$0.01 per share (Title of Class of Securities)

817208507 (CUSIP Number)

Vaughn Smider, M.D., Ph.D.

11099 North Torrey Pines Road, Suite 230

La Jolla, California 92037

(858) 909-0749(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

May 16, 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. o

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

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*).

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¹The 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.

| CUSII <u>817208</u> | 13D 2 | | |
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Item 1. Security and Issuer

This Schedule 13D (the "Schedule 13D") relates to the common stock, par value \$0.01 per share (the "Common Stock") of Senesco Technologies, Inc., a Delaware corporation (the "Issuer"). The principal executive offices of the Issuer are located at 721 Route 202-206, Suite 130, Bridgewater, New Jersey 08807.

Item 2. Identity and Background

(a) This statement is being filed by Vaughn Smider, M.D., Ph.D. (the "Filing Person").

(b) The address of the Filing Person is 11099 North Torrey Pines Road, Suite 230, La Jolla, California 92037.

(c) The Filing Person's principal occupation is acting Chief Executive Officer, Chief Scientific Officer and director of the Issuer.

(d) During the five years prior to the date hereof, the Filing Person has not been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) During the last five years prior to the date hereof, the Filing Person was not a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of which such person 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) United States of America.

Item 3. Source and Amount of Funds or Other Consideration

On May 16, 2014 (the "Closing Date"), the Issuer acquired Fabrus, Inc., a Delaware corporation ("Fabrus"), pursuant to that certain Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of the Closing Date, by and among the Issuer, Senesco Fab Acquisition Corporation, a Delaware corporation and wholly-owned subsidiary of the Issuer ("Merger Sub") and Fabrus.

Pursuant to the terms of the Merger Agreement, at the effective time of the merger (the "Merger"), Merger Sub merged with and into Fabrus, with Fabrus surviving the merger as a wholly-owned subsidiary of the Issuer. In accordance with the terms of the Merger Agreement, at the effective time of the Merger, each issued and outstanding share of common stock of Merger Sub was automatically converted into one share of common stock of the surviving company and each issued and outstanding share of common stock of Fabrus was cancelled and automatically converted into the right to receive a pro rata portion of the transaction consideration.

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In connection with the Merger, Dr. Smider received (i) 1,058,970 shares of Common Stock, (ii) warrants to purchase 242,563 shares of Common Stock with an exercise price of \$3 per share and an expiration date of June 16, 2014 (the "Series FA Warrants"), (iii) warrants to purchase 7,936 shares of Common Stock with an exercise price of \$4 per share and an expiration date of June 16, 2014 (the "Series FB Warrants"), (iv) warrants to purchase 267,862 shares of Common Stock with an exercise price of \$4 per share and an expiration date of December 16, 2016 (the "Series FC Warrants"), (v) warrants to purchase 739 shares of Common Stock with an exercise price of \$2 per share and an expiration date of September 30, 2016 (the "Series FD Warrants") and (vi) warrants to purchase 13,394 shares of Common Stock with an exercise price of \$2 per share and an expiration date of May 16, 2019 (the "Series FE Warrants", and collectively with the Series FA Warrants, Series FB Warrants, Series FC Warrants and Series FD Warrants").

Additionally, in connection with the Merger, Smider Biomed, a sole proprietorship owned and controlled by Dr. Smider ("Smider Biomed"), received (i) 31,396 shares of Common Stock, (ii) 7,411 Series FA Warrants, (iii) 244 Series FB Warrants, (iv) 8,185 Series FC Warrants, (v) 23 Series FD Warrants and (vi) 410 Series FE Warrants.

The Series FA Warrants, Series FB Warrants, Series FC Warrants and Series FE Warrants each contain a provision restricting the holder's ability to exercise such warrant to the extent that after giving effect to such issuance after exercise, the holder (together with the holder's affiliates, and any other persons acting as a group together with the holder or any of the holder's affiliates), would beneficially own in excess of 9.9% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of such warrant.

In addition, upon the closing of the Merger, Dr. Smider was appointed to serve on the board of directors of the Issuer and to serve as the Chief Scientific Officer and acting Chief Executive Officer of the Issuer.

The Merger Agreement and the forms of the Warrants are filed as exhibits to this Schedule 13D and are incorporated herein by reference. The foregoing is only a brief description of the material terms of the Merger Agreement and the Warrants, does not purport to be a complete description of the rights and obligations of the parties thereunder and is qualified in its entirety by reference to the exhibits.

The securities described above were issued pursuant to the terms of a Merger Agreement among the Issuer, a subsidiary of the Issuer and a third party. No part of the purchase price of the securities described above was represented by funds or other consideration borrowed or otherwise obtained for the purpose of acquiring, holding, trading or voting the securities described above.

The Filing Person acquired the securities described above for investment purposes. Depending on market conditions, the Filing Person may dispose of or acquire additional shares of the Issuer. The Filing Person expects to consider and evaluate on an ongoing basis all his options with respect to his investment in the Issuer.

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The Filing Person may at any time or from time to time formulate plans or proposals regarding the Issuer or its securities to the extent deemed advisable by the Filing Person in light of his general investment policies, market conditions, subsequent developments affecting the Issuer, the general business and future prospects of the Issuer, or other factors. The Filing Person may change any of his plans or proposals at any time or from time to time, and may take any actions he deems appropriate with respect to his investment. Subject to market conditions, the Filing Person's general investment goals and other factors, the Filing Person may continue to hold some or all of his ownership in the Issuer or may at any time or from time to time decrease his ownership interest in the Issuer (including by way of open market or privately negotiated transactions). There can be no assurance as to when, over what period of time, or to what extent he may decide to decrease his ownership interest in the Issuer.

Other than as described herein, the Filing Person does not have any plans that would result in:

(a) The acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;

(b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;

(c) A sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;

(d) Any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;

(e) Any material change in the present capitalization or dividend policy of the Issuer;

Any other material change in the Issuer's business or corporate structure including but not limited to, if the Issuer is (f) a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by section 13 of the Investment Company Act of 1940;

(g) Changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;

(h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(i) A class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or

(j) Any action similar to any of those enumerated above.

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Item 5. Interest in Securities of the Issuer

As more fully described in Item 3 above, Dr. Smider is the beneficial owner of 1,400,970 shares of the Issuer's Common Stock, representing 9.9% of the Issuer's shares of Common Stock outstanding (based upon 13,811,361 shares of Common Stock outstanding, as reported in the Issuer's Form 10-Q filed on May 9, 2014 and as supplemented in the Issuer's Form 8-K filed on May 19, 2014). Such 1,400,970 shares of Common Stock include: (i) 1,058,970 shares of Common Stock and (ii) warrants to purchase 342,000 shares of Common Stock that are exercisable within 60 days of the date of this filing. As more fully described in Item 3 above, Dr. Smider is also the beneficial owner of 47,669 shares of the Issuer's Common Stock held by Smider Biomed, representing 0.3% of the (a) Issuer's shares of Common Stock outstanding (based upon 13,811,361 shares of Common Stock outstanding, as reported in the Issuer's Form 10-Q filed on May 9, 2014 and as supplemented in the Issuer's Form 8-K filed on May 9, 2014 and as supplemented in the Issuer's Form 8-K filed on May 9, 2014). Such 47,669 shares of Common Stock include: (i) 31,396 shares of Common Stock and (ii) warrants to purchase 16,273 shares of Common Stock that are exercisable within 60 days of the date of this filing. By virtue of Dr. Smider's status as sole proprietor of Smider Biomed, Dr. Smider may be deemed the beneficial owner of 47,669 shares of 47,669 shares of Common Stock beneficially owned by Smider Biomed. However, due to certain beneficial ownership restrictions contained in the Warrants held by Dr. Smider and Smider Biomed, Dr. Smider's beneficial ownership remains at 9.9%.

(b)Dr. Smider has sole voting and dispositive power with respect to the Issuer's securities disclosed above in Item 5(a).

(c) During the past sixty days prior to the date hereof, the following transactions occurred:

Other than as described in Items 3 and 4 above, during the past sixty days prior to the date hereof, the Filing Person has not engaged in any transaction in the Issuer's Common Stock.

No person, other than the Filing Person, is known to have the right to receive or the power to direct the receipt of (d) dividends from, or any proceeds from the sale of, the shares of Common Stock beneficially owned by the Filing Person or Smider Biomed.

(e)

Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Other than as described in this Schedule 13D, to the knowledge of the Filing Person, there are no contracts, arrangements, understanding or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

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Item 7. Material to be Filed as Exhibits

Exhibit No. Description of Document

| Exhibit 1 | Agreement and Plan of Merger and Reorganization (the "Merger Agreement"), dated as of May 16, 2014, by and among Senesco Technologies, Inc., Senesco Fab Acquisition Corporation and Fabrus, Inc. (Incorporated by reference to Exhibit 2.1 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
|-----------|--|
| Exhibit 2 | Form of Series FA Warrant. (Incorporated by reference to Exhibit 4.1 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
| Exhibit 3 | Form of Series FB Warrant. (Incorporated by reference to Exhibit 4.2 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
| Exhibit 4 | Form of Series FC Warrant. (Incorporated by reference to Exhibit 4.3 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
| Exhibit 5 | Form of Series FD Warrant. (Incorporated by reference to Exhibit 4.4 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
| Exhibit 6 | Form of Series FE Warrant. (Incorporated by reference to Exhibit 4.5 of Senesco Technologies, Inc. current report on Form 8-K filed on May 19, 2014). |
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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: May 28, 2014

/s/ Vaughn Smider, M.D., Ph.D. Vaughn Smider, M.D., Ph.D.

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