

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934
(Amendment No.)*

Restoration Robotics, Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

76133C103

(CUSIP Number)

December 31, 2017

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*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 the disclosures provided in a prior cover page.

The information required in 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. Names of Reporting Persons
Sutter Hill Ventures, a California Limited Partnership

2. Check the Appropriate Box if a Member of a Group (See Instructions)
(a) o
(b) x

3. SEC Use Only

4. Citizenship or Place of Organization
California, USA

5. Sole Voting Power
2,079,590*

6. Shared Voting Power
-0-

7. Sole Dispositive Power
2,079,590*

8. Shared Dispositive Power
-0-

9. Aggregate Amount Beneficially Owned by Each Reporting Person
2,079,590

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o

11. Percent of Class Represented by Amount in Row (9)
7.2%

12. Type of Reporting Person (See Instructions)
PN

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

* See Appendix A.

1. Names of Reporting Persons

Tench Coxe

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization

USA

5. Sole Voting Power

443,306*

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

2,079,590**

7. Sole Dispositive Power

443,306*

8. Shared Dispositive Power

2,079,590**

9. Aggregate Amount Beneficially Owned by Each Reporting Person

2,522,896

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

8.7%

12. Type of Reporting Person (See Instructions)

IN

* See Appendix A, Note 2.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

1. Names of Reporting Persons

James N. White

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization

USA

5. Sole Voting Power

113,965*

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

2,079,590**

7. Sole Dispositive Power

113,965*

8. Shared Dispositive Power

2,079,590**

9. Aggregate Amount Beneficially Owned by Each Reporting Person

2,193,555

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

7.6%

12. Type of Reporting Person (See Instructions)

IN

* See Appendix A, Note 3.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

1. Names of Reporting Persons

Jeffrey W. Bird

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization

USA

5. Sole Voting Power

255,323*

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

2,079,590**

7. Sole Dispositive Power

255,323*

8. Shared Dispositive Power

2,079,590**

9. Aggregate Amount Beneficially Owned by Each Reporting Person

2,334,913

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9)

8.1%

12. Type of Reporting Person (See Instructions)

IN

* See Appendix A, Note 4.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

1. Names of Reporting Persons

Michael L. Speiser

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) o

(b) x

3. SEC Use Only

4. Citizenship or Place of Organization

USA

5. Sole Voting Power

160,832*

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

2,079,590**

7. Sole Dispositive Power

160,832*

8. Shared Dispositive Power

2,079,590**

9. Aggregate Amount Beneficially Owned by Each Reporting Person

2,240,422

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o

11. Percent of Class Represented by Amount in Row (9)

7.7%

12. Type of Reporting Person (See Instructions)

IN

* See Appendix A, Note 5.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

1. Names of Reporting Persons

Stefan A. Dyckerhoff

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) o

(b) x

3. SEC Use Only

4. Citizenship or Place of Organization

German citizen (U.S. permanent resident)

5. Sole Voting Power

18,686*

Number of
Shares
Beneficially
Owned by
Each
Reporting
Person With

6. Shared Voting Power

2,079,590**

7. Sole Dispositive Power

18,686*

8. Shared Dispositive Power

2,079,590**

9. Aggregate Amount Beneficially Owned by Each Reporting Person

2,098,276

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) o

11. Percent of Class Represented by Amount in Row (9)

7.3%

12. Type of Reporting Person (See Instructions)

IN

* See Appendix A, Note 6.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

| | | |
|---|---|---|
| 1. | Names of Reporting Persons | Samuel J. Pullara III |
| 2. | Check the Appropriate Box if a Member of a Group (See Instructions) | |
| | (a) | <input type="radio"/> |
| | (b) | <input checked="" type="radio"/> |
| 3. | SEC Use Only | |
| 4. | Citizenship or Place of Organization | USA |
| | 5. | Sole Voting Power 20,823* |
| Number of Shares Beneficially Owned by Each Reporting Person With | 6. | Shared Voting Power 2,079,590** |
| | 7. | Sole Dispositive Power 20,823* |
| | 8. | Shared Dispositive Power 2,079,590** |
| 9. | Aggregate Amount Beneficially Owned by Each Reporting Person | 2,100,413 |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) | <input type="radio"/> |
| 11. | Percent of Class Represented by Amount in Row (9) | 7.3% |
| 12. | Type of Reporting Person (See Instructions) | IN |

* See Appendix A, Note 7.

** Comprised of shares owned by Sutter Hill Ventures, a California Limited Partnership. See Appendix A.

Item 1.

- (a) Name of Issuer
Restoration Robotics, Inc.
- (b) Address of Issuer's Principal Executive Offices
128 Baytech Drive, San Jose, CA 95134
-

Item 2.

- (a) Name of Person Filing
See Appendix A; Appendix A is hereby incorporated by reference
- (b) Address of Principal Business Office or, if none, Residence
See Appendix A
- (c) Citizenship
See Appendix A
- (d) Title of Class of Securities
Common Stock
- (e) CUSIP Number
76133C103
-

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3I(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

N/A

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:

See Appendix A, which is hereby incorporated by reference and related pages 2 to 8

(b) Percent of class:

See Appendix A, which is hereby incorporated by reference and related pages 2 to 8

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote

(ii) Shared power to vote or to direct the vote

(iii) Sole power to dispose or to direct the disposition of

(iv) Shared power to dispose or to direct the disposition of

*** See Appendix A, which is hereby incorporated by reference and related pages 2 to 8. Messrs. Coxe, White, Bird, Speiser, Dyckerhoff and Pullara are managing directors and members of the management committee of the general partner of Sutter Hill Ventures, a California Limited Partnership, and as such, they share voting and dispositive power over the shares held by the partnership.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

N/A

Item 6. Ownership of More than Five Percent on Behalf of Another Person

N/A

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person

N/A

Item 8. Identification and Classification of Members of the Group

See Appendix A

Item 9. Notice of Dissolution of Group

N/A

Item 10. Certification

N/A

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.

February 14, 2018
Date

SUTTER HILL VENTURES, A CALIFORNIA LIMITED PARTNERSHIP

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Jeffrey W. Bird, Managing Director of the
General Partner*

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Tench Coxe*

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for James N. White*

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Jeffrey W. Bird*

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Michael L. Speiser*

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Stefan A. Dyckerhoff**

By: /s/ Robert Yin
Robert Yin, Attorney-in-Fact for Samuel J. Pullara III**

* Power of attorney incorporated by reference to Schedule 13D (File No. 5-86365), filed on August 2, 2012.

** Power of attorney incorporated by reference to Schedule 13D (File No. 5-58863), filed on December 6, 2013.

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).

APPENDIX A TO SCHEDULE 13G – RESTORATION ROBOTICS, INC.

| Name of Reporting Person | Aggregate Number of Shares Beneficially Owned | | | | % of Total Shares |
|--|--|--------|------------------|--------|--------------------------|
| | Individual | | Aggregate | | |
| Sutter Hill Ventures, a California Limited Partnership | 2,079,590 | | | | 7.2% |
| Tench Coxe | 443,306 | Note 2 | 2,522,896 | Note 1 | 1.5% 8.7% |
| James N. White | 113,965 | Note 3 | 2,193,555 | Note 1 | 0.4% 7.6% |
| Jeffrey W. Bird | 255,323 | Note 4 | 2,334,913 | Note 1 | 0.9% 8.1% |
| Michael L. Speiser | 160,832 | Note 5 | 2,240,422 | Note 1 | 0.6% 7.7% |
| Stefan A. Dyckerhoff | 18,686 | Note 6 | 2,098,276 | Note 1 | 0.1% 7.3% |
| Samuel J. Pullara III | 20,823 | Note 7 | 2,100,413 | Note 1 | 0.1% 7.3% |

The address for all of the above is: 755 Page Mill Road, Suite A-200, Palo Alto, CA 94304.

The partnership is organized in California. The individuals are all U.S. citizens and residents with the exception of Mr. Dyckerhoff who is a German citizen and U.S. permanent resident.

None of the above has been convicted in any criminal proceedings nor have they been subject to judgments, decrees, or final orders enjoining future violations of Federal or State securities laws.

All of the parties are individuals or entities in the venture capital business.

Note 1: Includes individual shares plus all shares held by Sutter Hill Ventures, a California Limited Partnership of which the reporting person is a managing director and member of the management committee of the general partner.

Note 2: Comprised of 270,622 shares held in The Coxe Revocable Trust of which the reporting person is a trustee, 160,619 shares held by a retirement trust for the benefit of the reporting person, 2,116 shares held in a Roth IRA for the benefit of the reporting person and 9,949 shares held by Rooster Partners, L.P. of which the reporting person is a trustee of a trust which is the general partner.

Note 3: Comprised of 41,857 shares held in The White Revocable Trust of which the reporting person is a trustee, 5,890 shares held by an irrevocable trust for the benefit of the reporting person's children and 66,218 shares held by RoseTime Partners L.P. of which the reporting person is a trustee of a trust which is the general partner.

Note 4: Comprised of 182,594 shares held in the Jeffrey W. and Christina R. Bird Trust of which the reporting person is a trustee, 40,982 shares held by an irrevocable trust for the benefit of the reporting person's children and 31,747 shares held by NestEgg Holdings, LP of which the reporting person is a trustee of a trust which is the general partner.

Note 5: Comprised of 138,340 shares held in the Speiser Trust of which the reporting person is a trustee, 3,600 shares held by a retirement trust for the benefit of the reporting person and 18,892 shares held in Chatter Peak Partners, L.P. of which the reporting person is a trustee of a trust which is a general partner.

Note 6: Comprised of 18,686 shares held in the Dyckerhoff 2001 Revocable Trust of which the reporting person is a trustee.

Note 7: Comprised of 20,823 shares held in The Pullara Revocable Trust of which the reporting person is a trustee.