

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

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): July 23, 2014

Signal Genetics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

001-36483
(Commission File Number)

47-1187261
(IRS Employer Identification No.)

Signal Genetics, Inc.
667 Madison Avenue, 14th Floor
New York, New York 10065
(Address of principal executive offices)

10065
(Zip Code)

Registrant's telephone number, including area code: **(212) 486-0040**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 5.02 Departures of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) Resignation of Chief Financial Officer.

On July 21, 2014, Robert Johnson submitted his resignation, effective August 4, 2014, as Chief Financial Officer of Signal Genetics, Inc. (the “Company”).

(c) Appointment of Chief Financial Officer.

On July 21, 2014, the Company's Board of Directors (the “Board”) appointed Tamara A. Seymour as the Company's new Chief Financial Officer, effective August 4, 2014. Prior to joining the Company, Ms. Seymour, age 55, served as chief financial officer of HemaQuest Pharmaceuticals, Inc., beginning in November 2010. From July 2009 through October 2010, Ms. Seymour served as a financial consultant for various life sciences companies, and from 2001 to 2009, she served as chief financial officer of Faville, Inc. (now MMRGlobal, Inc.). Ms. Seymour is a certified public accountant.

In connection with Ms. Seymour's appointment, the Company and Ms. Seymour will enter into an indemnity agreement, which is in substantially the form of the Indemnity Agreement for the Company's directors and executive officers that was filed as Exhibit 10.14 to the Company's Registration Statement on Form S-1 (Reg. No. 333-194668), as filed with the Securities and Exchange Commission on March 19, 2014.

On July 21, 2014, the Company entered into an employment agreement (the “Agreement”) with Ms. Seymour, effective August 4, 2014. The Agreement has an initial term through August 4, 2015 and automatically renews thereafter for additional one-year terms, unless otherwise terminated by the parties. The Agreement provides for, among other things: (i) an annual base salary equal to \$350,000; (ii) eligibility to receive, at the end of each fiscal year, an annual cash bonus of up to 30% of her then base salary; (iii) 92,000 shares of common stock subject to an equity-based incentive award; (iv) four weeks paid vacation time; and (v) eligibility to participate in the same group benefit plans and programs that are provided by the Company to other senior executives.

The description of the Agreement is not complete and is qualified in its entirety by reference to the full text of the Agreement, which is filed as Exhibit 10.1 to this Current Report on Form 8-K and incorporated herein by reference.

(e) Amendment to Chief Executive Officer's Employment Agreement

On July 23, 2014, the Company and the Chief Executive Officer entered into an amendment (the “Amendment”) to the Chief Executive Officer's employment agreement to bring the agreement into compliance with Section 409A of the Internal Revenue Code of 1986, as amended, and the Treasury Regulations and interpretive guidance issued thereunder.

The description of the Amendment is not complete and is qualified in its entirety by reference to the full text of the Amendment, which is filed as Exhibit 10.2 to this Current Report on Form 8-K and incorporated herein by reference.

Item 7.01 Regulation FD Disclosure.

On July 22, 2014, the Company issued a press release in which the Company announced Mr. Johnson's resignation as Chief Financial Officer and Ms. Seymour's appointment as Chief Financial Officer, as described in Item 5.02 of this Current Report on Form 8-K. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 7.01 and in Exhibit 99.1 furnished herewith shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that Section, nor shall it be deemed incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act unless specifically stated by the Company.

Item 9.01 Financial Statements and Exhibits.

Exhibit Description

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|------|---|
| 10.1 | Employment Agreement between Signal Genetics, Inc. and Tamara A. Seymour, dated July 21, 2014 (effective as of August 4, 2014). |
| 10.2 | Amendment to Amended and Restated Employment Agreement between Signal Genetics, Inc. and Samuel D. Riccitelli, dated July 23, 2014. |
| 99.1 | Press Release dated July 22, 2014. |
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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

SIGNAL GENETICS, INC.

By: /s/ Samuel D. Riccitelli

Samuel D. Riccitelli
Chief Executive Officer

Date: July 23, 2014

EMPLOYMENT AGREEMENT

This Employment Agreement (this "Agreement") is entered into as of the date set forth on the signature page below, and is effective as of August 4, 2014 (the "Effective Date") between Signal Genetics, Inc., a Delaware corporation (the "Company" or "SG"), and Tamara A. Seymour ("Executive") (Executive and the Company are referenced collectively herein as the "Parties"; each of the Parties is referred to individually as a "Party").

RECITALS

WHEREAS, SG desires to employ Executive as Chief Financial Officer, Secretary and Treasurer of the Company to manage and oversee certain business, financial and administrative aspects of the Company, and Executive desires to be employed by SG, in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the above recitals and the mutual promises contained in this Agreement, the Parties agree as follows:

ARTICLE I.**EMPLOYMENT AND DUTIES OF EXECUTIVE**

1.1 Employment. SG hereby employs Executive as Chief Financial Officer, Secretary and Treasurer of the Company (collectively, "CFO") and Executive accepts employment as CFO of SG in accordance with the terms and conditions, and for the consideration, provided in this Agreement.-

1.2 Employment Period. The term of this Agreement shall commence on the Effective Date and shall continue until the first anniversary thereof (the "Initial Term"), subject to the termination provisions set forth in this Agreement. On each anniversary of the Effective Date after the expiration of the Initial Term, this Agreement and Executive's employment shall be deemed to have been automatically extended for an additional one (1) year term, or such other period as mutually agreed to between the Parties, unless either Party shall give written notice of non-extension to the other Party at least thirty (30) days before such anniversary date, or unless sooner terminated as provided in this Agreement. Executive's total term of employment with the Company under this Agreement during the Initial Term and any extended term is collectively defined and referred to as the "Employment Period." To the extent that Executive remains employed by SG following the expiration of the Employment Period and/or the termination of this Agreement, Executive shall be considered, at all relevant times thereafter, an "at will" employee of SG and may be terminated at any time, for any reason, with or without cause or prior notice.

1.3 Duties of CFO.

1.3.1 During the Employment Period, Executive (i) shall have the title of CFO, (ii) shall devote her full business time and attention and expend her best efforts, energies and skills on a full-time basis to the business of the Company, and shall not engage in any other activity that would materially interfere with the performance of her duties under this Agreement (provided that Executive is permitted to serve on the board of directors of any entity or organization to the extent that doing so does not create a conflict of interest with Executive's obligations or duties under this Agreement, subject to approval of the Board of Directors of the Company (the "Board of Directors"), which approval not to be unreasonably withheld, or to engage in endeavors related to the community, her faith, personal finances and effects and other charitable functions that do not materially interfere with the performance of her duties hereunder), and (iii) shall perform such duties, and comply with all reasonable directions and instructions of the Chief Executive Officer and the Board of Directors.

1.3.2 During the Employment Period, Executive will report to the Chief Executive Officer of the Company.

1.3.3 In performing Executive's duties hereunder, Executive shall in all material respects (i) abide by and comply with all applicable laws, statutes, orders, rules, regulations, policies or guidelines promulgated, or judgments, decisions or orders entered, by any court, arbitrator tribunal, administrative agency, or commission or other governmental or regulatory body, agency or instrumentality or authority having appropriate jurisdiction and relating to the Company, (ii) abide by and adhere to the Company's general policies and procedures as may be adopted from time to time, and (iii) conduct herself with respect to the Company with the prudence, care, dedication and skill as would be manifested by one in the operation and management of her own assets and properties and in this regard shall owe a fiduciary duty of prudence and dedication and care to the Company.

1.4 Principal Employment.

1.4.1 Executive agrees that, during her employment with the Company, she will not engage in any matter whatsoever in a business or other endeavor that would or might create a conflict of interest with Executive's obligations or duties under this Agreement, or that is competitive with or similar in nature to the business of the Company. Nonetheless, Executive shall have the right to own up to 3% of the outstanding shares of a publicly held company if such shares are actively traded on a national stock exchange and she is not involved in the management of such company. Specifically excluded from the restrictions set forth in this Section, and other provisions of this Agreement, is Executive's ability (as expressly permitted by the Company hereby) to serve on the board of directors of certain entities and organizations in accordance with Section 1.3.1 of this Agreement.

ARTICLE II.

COMPENSATION AND BENEFITS

2.1 Compensation. For all services rendered and required to be rendered by, covenants of and restrictions in respect to, Executive under this Agreement, SG shall compensate Executive as follows:

A. CFO Base Salary. The Company shall pay to Executive during and with respect to the Employment Period, and Executive agrees to accept, an annual base salary (“Base Salary”) equal to \$350,000.00, payable on a semi-monthly basis in accordance with the standard payroll practices of the Company. Executive’s Base Salary will be re-evaluated on an annual basis and subject to a merit increase, pursuant to the normal practices of the Company.

B. Incentive Compensation. At the end of each fiscal year of the Company, in addition to the Base Salary then in effect, Executive shall be eligible to receive a bonus payment (the “Bonus Payment”) of up to 30% of the Base Salary then in effect. The Bonus Payment, if any, will be paid in accordance with the Company’s bonus payment practices in effect from time to time for senior executives of the Company. Such Bonus Payment will be awarded in the sole discretion of the Compensation Committee of the Company (the “Compensation Committee”) based upon performance goals established by the Compensation Committee during the first ninety (90) days of each fiscal year, which goals shall be set after consultation with the Executive. Determinations as to whether Executive has met such performance goals will be determined in the sole discretion of the Compensation Committee (or, at its discretion, the Board of Directors). In order to earn and receive the Bonus Payment, Executive must be employed by the Company, without having received from or tendered to the Company notice of an anticipated termination (for any reason), at the time that the Bonus Payment is to be paid to Executive.

C. Equity-Based Compensation. Effective as soon as practicable after the Effective Date and the filing of a Form S-8 Registration Statement, and subject to approval by the Compensation Committee, Executive shall receive grants of equity-based incentive awards (the “Awards”) pursuant to Grant Agreements under the Signal Genetics, Inc. 2014 Stock Incentive Plan (the “Plan”). Vesting commencement date shall be August 4, 2014. 92,000 shares of common stock of the Company shall be subject to the Awards, all of which shall be issuable pursuant to a restricted stock unit award. The Awards shall vest 25% on August 4, 2015, and thereafter shall vest in thirty-six (36) equal monthly installments, subject to Executive’s continued employment on the applicable vesting dates, with 25% becoming payable upon August 4 in each of the calendar years 2016, 2017 and 2018; provided, however, that each outstanding Award shall become fully vested and payable if Executive is terminated by the Company for any reason other than Cause (as defined in Section 3.1(A)), or if Executive resigns with Good Reason (as defined in Section 3.1(D)), in either case only if such termination or resignation occurs within the period beginning three (3) months before and ending twelve (12) months after a Change in Control (as such term is defined in the Plan). Notwithstanding the general description of the Awards in this Section, no Awards shall be issued, or shall be deemed to be issued, under the Plan unless and until the Compensation Committee has approved and issued the Awards. The Plan and Grant Agreement shall be the exclusive documents governing any such Awards.

2.2 Benefits.

A. Paid Time Off. For each calendar year during the Employment Period, Executive shall be entitled to paid time off (“PTO”) at the rate consistent with the SG accrual rate for paid time off for SG senior executives. As such, Executive shall be entitled to 4 weeks of paid vacation time (which equates to 20 days / 160 hours per year). In addition, Executive shall be entitled to sick leave and personal leave pursuant to the SG policies applicable to senior executives. Such PTO will be accrued on a pro-rata basis during the initial calendar year of the Employment Period and will otherwise be subject to the Company’s policies and procedures, as in effect from time to time.

B. General Benefits. Executive shall be entitled to participate in the same group benefit plans and programs as are provided by the Company to other senior executives, subject to the terms and conditions of such plans and programs as are in effect from time to time. Such benefits currently include group health insurance, group life insurance, and disability insurance coverage and a 401(k) retirement plan.

C. Civic Affairs, Service Clubs and Social Functions. The Parties agree that Executive's participation in civic affairs, service clubs, professional organizations, and social functions is appropriate for the proper professional administration of the Company. Executive may participate in such affairs, professional organizations, clubs, and functions as Executive determines are appropriate to enhance the operations and professional stature of the Company. SG shall, upon presentation by Executive of the documentation, expense statements, vouchers, and such other supporting information as SG may request or as may be consistent with SG practices, reimburse Executive for reasonable expenses incurred while representing the Company pursuant to this Agreement.

2.3 Reimbursement of Expenses. During the Employment Period, Executive will be reimbursed for all reasonable business expenses, including travel and entertainment expenses, incurred in the performance of her duties, responsibilities, or services performed for the Company, upon presentation by Executive of the documentation, expense statements, vouchers, and such other supporting information as SG may request or as may be consistent with SG practices. Executive will comply with the Company's policies in incurring and seeking reimbursement for such expenses.

ARTICLE III.

TERMINATION

3.1 Termination. This Agreement may be terminated in the following circumstances:

A. Termination For Cause. SG may, at any time during the Employment Period by written notice to Executive (the "Termination Notice"), terminate this Agreement for "Cause" effective immediately. The Termination Notice shall specify the reason for termination. In such an event, Executive shall only be entitled to receive any earned but unpaid Base Salary, accrued unused PTO, and unreimbursed expenses payable for all periods through the effective date of termination, as well as any vested amount arising from Executive's participation in, or benefits under, any employee benefit plan, program or arrangement, payable in accordance with the terms of such SG employee benefit plans, programs or arrangements (collectively, "the Accrued Benefits"). Executive shall not be entitled to earn, accrue, or receive any additional compensation or other amount, other than as set forth in this Section 3.1(A) of this Agreement, from the Company after the effective date of termination.

For purposes hereof, "Cause" shall mean:

(i) A material breach by Executive of her fiduciary duty to SG;

(ii) A material breach or violation by Executive of the terms of this Agreement or any other material agreement between Executive and SG, or of any of the Company's policies, or any of SG's material practices or procedures, which remains uncured for a period of 30 days following Executive's receipt of written notice specifying the nature of the breach or violation, or, where such breach or violation is not subject to or capable of cure, effective immediately;

(iii) The commission by Executive of any act of embezzlement, fraud, larceny or theft on or from SG;

(iv) Substantial and continuing willful neglect or inattention by Executive of the duties of her employment, refusal to perform the lawful and reasonable directives of the Chief Executive Officer or the Board of Directors, or the willful misconduct or gross negligence of Executive in connection with the performance of such duties which remain uncured for a period of 30 days following Executive's receipt of written notice specifying the nature of the misconduct, or, where such misconduct is not subject to or capable of cure, effective immediately;

(v) The commission by Executive of any crime involving moral turpitude or a felony; and

(vi) Executive's performance or omission of any act which, in the reasonable judgment of the Company, if known to the customers, clients, stockholders or any regulators of SG, would have a material adverse impact on the business of SG.

B. Termination Without Cause. Subject to Sections 3.1(A) and 3.1(F), the Company may terminate this Agreement at any time for any reason, by delivering a written notice to Executive, effective thirty (30) days after Executive receives such notice in accordance with the terms hereof. In such an event, Executive shall only be entitled to receive:

(i) the Accrued Benefits; plus

(ii) in addition to the amounts specified above, and subject to the effectiveness of Executive's execution of a general release of claims against the Company and its affiliates no later than 54 days after Executive's employment termination date (as described in Section 3.1(G)): (A) the severance payments outlined below (the "Severance Payments"); and (B) accelerated vesting of all time-based equity compensation awards then held by Executive to the extent that such awards would have vested during the Severance Period, as that term is defined below (the "Accelerated Vesting"). Executive shall not be required to mitigate the amount of any Severance Payments received by seeking other employment during any period in which she is eligible or entitled to receive any Severance Payments (the "Severance Period"). However, should Executive obtain other employment during the term of the Severance Period, SG shall pay Executive, for the remaining length of the Severance Period, only the difference between her new salary and her Base Salary (as in effect at the time of termination), if the new salary is less than her Base Salary. For the avoidance of doubt, the Company shall not be obligated to make any Severance Payments thereafter if the new salary is greater than her applicable Base Salary. Executive agrees to promptly notify the Company in the event that she obtains new employment during the term of the Severance Period and of her salary and/or rate of pay thereunder.

The Severance Payments shall be calculated as follows:

(1) should Executive's termination pursuant to this Section 3.1(B) occur during or upon the expiration of the Initial Term, Executive shall, subject to Section 3.1(G) of this Agreement, become entitled to receive an amount equal to the greater of: (a) the Base Salary that would otherwise have been paid during the remainder of the Initial Term, payable over the number of calendar months remaining in the Initial Term; or (b) six (6) months of the Base Salary, payable over six (6) months; or

(2) should Executive's termination pursuant to this Section 3.1(B) occur at any time following the Initial Term, Executive shall, subject to Section 3.1(G) of this Agreement, become entitled to receive an amount equal to twelve (12) months of her then-current monthly Base Salary, payable over a period of twelve (12) months.

The Severance Payments (less all applicable withholdings) will be paid in substantially equal monthly installments over the applicable period in accordance with the Company's normal payroll practices, commencing with the first regular payroll following the date on which the general release of claims becomes effective and irrevocable as described in Section 3.1(G) below (and, if at all, not later than 90 days after Executive's employment termination date). In addition, if Executive meets the requirements of Section 3.1(G) below, the Company shall reimburse Executive for the full cost of premiums for continuation coverage under the Company's group health plan pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") for Executive (and to the extent she has family coverage as of her termination date, her family) (the "COBRA Subsidies"), provided that Executive elects and remains eligible for such coverage, during the Severance Period. Notwithstanding anything to the contrary set forth herein, if the Company determines, in its sole discretion, that its provision of the COBRA Subsidies could reasonably be expected to result in taxes to the Company under Section 4980D of the Internal Revenue Code, then Company shall in lieu thereof, to the extent that doing so would not subject the Company to such taxes, pay to Executive a taxable monthly amount to continue Executive's group health insurance coverage in effect on the date of separation from service (which amount shall be equal to 150% of the premium for the COBRA coverage), which payments shall (i) be made regardless of whether Executive elects COBRA continuation coverage, (ii) commence in the month following the month in which Executive's termination of employment occurs and (iii) continue for such period of time as shall equal the period of Severance Payments.

Should Executive obtain other employment during such period of COBRA coverage, and Executive is provided the opportunity to obtain from a subsequent employer comparable health insurance benefits to those benefits provided by SG, then the Company shall no longer reimburse Executive for premiums for COBRA coverage for Executive (and to the extent she has family coverage, her family), from the date Executive may obtain such health insurance benefits, whether or not Executive elects such coverage. Executive agrees to promptly notify the Company in the event that she obtains new employment during such period of COBRA coverage and/or becomes eligible for comparable health insurance benefits through another employer. Executive agrees and acknowledges that for so long as Executive is covered by COBRA and receiving Severance Payments at a time when Executive is not eligible for the COBRA Subsidies, then the amount of the full cost of COBRA premiums under the Company's group health plan shall be deducted from such Severance Payments. Coverage under the Company's group health plan, including coverage pursuant to the COBRA Subsidies shall run concurrently with such plan's obligation to provide continuation coverage pursuant to COBRA and does not limit such plan's obligation to provide continuation coverage under COBRA. The Company shall be entitled to discontinue the Severance Payments in the event that Executive violates any of the provisions of Sections 4.9, 4.10 or 4.11, or any other restrictive covenants with the Company or any affiliate of the Company to which Executive has agreed.

C. Termination After Disability or Death.

(i) In the event Executive becomes totally disabled or disabled such that she is rendered unable to perform the essential functions of her position for the Company, with or without the provision of a reasonable accommodation, and if such disability shall persist for a continuous period of one hundred eighty (180) days or more, or an aggregate period in excess of one hundred eighty (180) days in any one fiscal year, the Company shall have the right at any time after the end of such period, during the continuance of Executive's disability, by the delivery of not less than thirty (30) days' prior written notice to Executive, to terminate Executive's employment under this Agreement whereupon the applicable provisions of this Section below shall apply.

(ii) For purposes of this Agreement, if Executive and the Company disagree as to whether Executive is totally disabled, or disabled such that she is rendered unable to perform the essential functions of her position for the Company as set forth above, or as to the date at which time such total disability began, the decision of a licensed medical practitioner, mutually agreed upon by the Parties, shall be binding as to both questions. If the Parties cannot agree as to the identity of the licensed medical practitioner, Executive shall select a licensed medical practitioner of her choice and the Company shall select a licensed medical practitioner of its choice. The two licensed medical practitioners so selected shall select a third licensed medical practitioner, which third individual shall resolve either or both of the questions referred to above and which resolution shall be binding upon the Parties. The costs of such a third licensed medical practitioner shall be borne by the Company.

(iii) If Executive's employment with the Company is terminated on account of Executive's disability as provided for in this Section above, or on account of Executive's death, then Executive (or Executive's estate or personal representative, as applicable) shall only be entitled to receive, and the Company shall pay to Executive (or Executive's estate or personal representative, as applicable), the following amounts:

(1) the Accrued Benefits; plus

(2) in the case of termination due to disability only, Executive shall receive, subject to the effectiveness of Executive's execution of a general release of claims against the Company and its affiliates no later than 54 days after Executive's employment termination date (as described in Section 3.1(G)), a series of substantially equal monthly installment payments cumulatively equal to six (6) months of the then-current monthly Base Salary (the "Continuation Payments"), payable over a period of six (6) months (the "Continuation Period"). The Continuation Payments (less all applicable withholdings) will be paid in substantially equal monthly installments over the 6-month Continuation Period in accordance with the Company's normal payroll practices, commencing with the first regular payroll following the date on which the general release of claims becomes effective and irrevocable as described in Section 3.1(G) below (and in any event, if at all, no later than ninety (90) days after Executive's employment termination date). Executive shall be entitled to the full amount of the Continuation Payments if and only if she does not receive any payments under short-term or long-term disability insurance benefit programs established, sponsored or maintained by the Company ("Insurance Payments"). If Executive is provided with any such Insurance Payments, then SG shall pay Executive, during the Continuation Period, only the difference between the Insurance Payments provided to Executive and her Continuation Payments, if the Insurance Payments are less than her Continuation Payments. In any event, Executive shall not be entitled to receive more than the full amount of her Base Salary with SG for the time period covered by the Continuation Period, considering the aggregate amount of Continuation Payments and Insurance Payments. Accordingly, if Executive becomes entitled to any Insurance Payments for any portion of the Continuation Period, then Executive shall immediately inform SG of the amounts of such Insurance Payments and any future Continuation Payments shall be reduced, as appropriate. Moreover, if Executive obtains such Insurance Payments attributable to any portion of the Continuation Period, at any time after SG pays Continuation Payments to Executive, Executive shall make payment to SG of an amount equal to the amount of received Insurance Payments to reimburse SG for such Continuation Payments it previously made or otherwise inform SG of such Insurance Payments so that any future Continuation Payments may be reduced.

D. Termination by Executive for “Good Reason”. Executive shall have the right to terminate her employment for “Good Reason” under this Agreement by the delivery of written notice to the Company within sixty (60) days after the initial existence of any of the events herein below defined as “Good Reason,” in which event she shall only be entitled to the Accrued Benefits; plus, subject to the effectiveness of Executive’s execution of a general release of claims against the Company and its affiliates no later than 54 days after Executive’s employment termination date (as described in Section 3.1(G)), the Severance Payments, the Accelerated Vesting, and the COBRA Subsidies, in the same amounts and at the same times and subject to the same terms and conditions as set forth in Section 3.1(B)(ii) above.

For purposes hereof, “Good Reason” shall mean:

(i) A material breach by the Company of this Agreement and the Company’s failure to cure or remedy such breach within 30 days of its receipt of written notice thereof from Executive;

(ii) A material and substantial diminution or reduction in Executive’s duties, Base Salary, or authority or responsibilities (which includes, but is not limited to, a change in position such that Executive is not the Chief Financial Officer or the equivalent thereof of the surviving entity, or an affiliate of the surviving entity, following a Change in Control (as that term is defined in Section 2(e) of the Company’s 2014 Stock Incentive Plan)), and the Company’s failure to cure or remedy such diminution or reduction within 30 days of its receipt of written notice thereof from Executive;

(iii) relocation by the Company of the principal place of Executive’s employment outside a 50-mile radius from San Diego County, California, and the Company’s failure to cure or remedy such relocation within 30 days of its receipt of written notice thereof from Executive;

(iv) The Company’s request or demand that Executive perform an act, or refrain from performing an act, that would be in violation of applicable law, and the Company’s failure to rescind or revoke such request or demand within 30 days of its receipt of written notice thereof from Executive.

Notwithstanding anything to the contrary herein, Executive must resign within -sixty (60) days after expiration of the applicable 30-day notice period as set forth, respectively, in Sections 3(D)(i)-(iv), without cure, remedy, rescission, or revocation by the Company, as applicable, for such resignation to constitute a Termination for Good Reason.

E. Termination by Executive Without “Good Reason.” Executive shall have the right to terminate her employment under this Agreement, at any time and for any reason, by delivering a written notice to the Company effective no less than thirty (30) days after the Company receives such notice in accordance with the terms hereof. However, should Executive terminate her employment with the Company for any reason (other than for Good Reason in accordance with the requirements of Section 3.1(D) above), Executive shall only be entitled to receive from the Company the Accrued Benefits. Executive shall not be entitled to earn, accrue, or receive any additional compensation or other amount, other than as set forth in this Section 3.1(E) of this Agreement, from the Company after the effective date of termination.

F. Termination by Executive upon Notice of Non-Extension. Either Party may terminate this Agreement, effective upon the expiration of the Initial Term or applicable extended term of this Agreement, as applicable, by providing written notice of non-extension to the other Party in accordance with Section 1.2 of this Agreement.

(i) In the event that Executive terminates this Agreement by providing such written notice of non-extension, Executive shall only be entitled to receive from the Company the Accrued Benefits, and she shall not be entitled to earn, accrue, or receive any additional compensation or other amount from the Company after the effective date of termination.

(ii) In the event that the Company terminates this Agreement by providing such written notice of non-extension, Executive shall only be entitled to the Accrued Benefits; plus, subject to the effectiveness of Executive's execution of a general release of claims against the Company and its affiliates no later than 54 days after Executive's employment termination date (as described in Section 3.1(G)), the Severance Payments, the Accelerated Vesting, and the COBRA Subsidies, in the same amounts and at the same times and subject to the same terms and conditions as set forth in Section 3.1(B)(ii) above.

G. Release of All Claims Against the Company. Notwithstanding any other provision of this Section 3.1 of this Agreement, no payment shall be made or benefit provided to Executive or Executive's estate or personal representative, as applicable, pursuant to this Section 3.1 of this Agreement, other than those required by law, unless Executive or a representative or agent of Executive's estate, as applicable, signs and returns to the Company and, if applicable, does not revoke, a general release of all claims against the Company, and any related, affiliated, or associated persons and/or entities as the Company may designate or determine in its sole discretion, in such form as the Company may require (the "Release"), and, on or prior to the 54th day following Executive's employment termination date, such Release becomes effective and irrevocable in accordance with the terms thereof.

ARTICLE IV.

MISCELLANEOUS PROVISIONS

4.1 Notice. All notices, requests, demands, consents, and other communications required or permitted to be given or made hereunder shall be in writing and shall be deemed to have been duly given and received, (i) if delivered by hand, the day it is so delivered, (ii) if mailed via the United States mail, certified or registered first class mail, postage prepaid, return receipt requested, five business days after it is mailed, or (iii) if sent by a nationally recognized overnight courier for next business day delivery, the business day after it is sent, to the Party to whom the same is so given or made, as follows: (a) to the Company, at its administrative offices and (b) to Executive, at the address maintained on the personnel records of the Company. Either Party may change the address to which notice is required to be sent by providing notice of the change of address in accordance with this Agreement.

4.2 Headings. All descriptive headings in this Agreement are inserted for convenience only and shall be disregarded in construing or applying any provision of this Agreement.

4.3 Counterparts. This Agreement may be executed in counterparts (including via e-mail with scan attachment or by facsimile transmission), and when each Party has signed and delivered at least one such counterpart, each counterpart shall be deemed an original, and, when taken together with other signed counterparts, shall constitute one Agreement, which shall be binding upon and effective as to all Parties.

4.4 Severability. In the event that any term or provision of this Agreement, or part thereof, is held to be invalid, such invalidation shall not affect the validity of the remainder of this Agreement. Further, the invalid provision shall be modified by the minimum amount legally required to make the provision valid and enforceable and to carry out the purposes of this Agreement. Moreover, the remainder of such provision and this Agreement, as the case may be, shall nevertheless remain in full force and effect.

4.5 Entire Agreement. This Agreement, together with the Indemnification Agreement (as that term is defined below) that has been, or will be, executed by and between the Parties, contains the entire agreement and understanding among and between the Parties with respect to the subject matter hereof, and supersedes any prior agreement and understanding among them with respect to the subject matter of this Agreement. Except as otherwise provided herein, this Agreement cannot be changed or terminated except by an instrument in writing signed by the Parties hereto. Any oral representations, modifications or amendments concerning this Agreement shall be of no force or effect unless contained in a subsequent written modification signed by Executive and a duly authorized representative of the Company.

4.6 Personal Services Contract. This contract is a personal services contract and shall not be assignable by Executive, but shall be binding upon her and upon her heirs, administrators, representatives, executors, and successors. Notwithstanding the foregoing, Executive shall have the right, after consultation with the Chief Executive Officer or the Board of Directors, to reasonably delegate appropriate administrative duties to any person who is an employee of the Company. This Agreement shall be freely assignable by the Company without restriction and shall be deemed automatically assigned by the Company with Executive's consent in the event of any sale, merger, share exchange, consolidation, or other business reorganization.

4.7 Successors. This Agreement shall inure to the benefit of the Company and its successors and assigns.

4.8 Indemnification. Upon presentment by the Company to Executive, the Parties agree to promptly execute an agreement specifying their respective obligations or promises, if any, to each other regarding indemnification of claims, in such form as the Company may reasonably require or provide (the "Indemnification Agreement"), which, upon execution by the Parties, shall automatically be incorporated herein by reference.

4.9 Confidentiality; Disclosure of Information.

(a) Executive recognizes and acknowledges that she will have access to Confidential Information (as defined below) relating to the business or interests of the Company or of persons with whom the Company may have business relationships. Except as permitted herein or as may be approved by the Company from time to time, Executive will not during the Employment Period or for a period of 12 months thereafter, use or disclose to any other person or entity, any Confidential Information of the Company (except as required by applicable law or in connection with performance of Executive's duties and responsibilities hereunder or to Executive's legal and financial advisors so long as such advisors agree to be bound by the terms and conditions of this Paragraph 4.9(a)). Executive may disclose the existence of the obligations under this Paragraph 4.9(a) to future employers. If Executive is requested or becomes legally compelled to disclose any of the Confidential Information, she, if permitted by applicable law, will give prompt notice of such request or legal compulsion to the Company. The Company may waive compliance with this Paragraph 4.9(a) or will provide Executive with legal counsel at no cost to Executive to seek an appropriate remedy; provided however Executive may disclose any Confidential Information in the event notwithstanding all such efforts of the Company and such legal counsel if compelled by court order to do so.

The term "Confidential Information" shall mean information relating to the Company's business affairs, proprietary technology, trade secrets, patented processes, research and development data, know-how, market studies and forecasts, competitive analyses, pricing policies, executive lists, the substance of agreements with patients, customers, suppliers, and others, marketing arrangements, patient lists, customer lists, commercial arrangements, or any other information relating to the Company's business which is treated as confidential or proprietary by the Company in accordance with its policies. Notwithstanding the immediately preceding sentence, the provisions of this Paragraph 4.9(a) shall not apply to any information that: (1) is in the public domain; (2) is or becomes available to the public other than as a result of a disclosure by Executive in violation of this Paragraph 4.9(a); (3) was available to Executive on a non-confidential basis prior to the date of this Agreement; or (4) becomes available to Executive on a non-confidential basis from a source other than the Company (other than through a known breach of a confidentiality obligation). This obligation shall continue until such Confidential Information becomes publicly available, other than pursuant to a breach of this Paragraph 4.9(a) by Executive, regardless of whether Executive continues to be employed by the Company.

(b) It is further agreed and understood by and between the Parties to this Agreement that all “Company Materials,” which include, but are not limited to, computers, computer software, computer disks, tapes, printouts, source, HTML and other codes, flowcharts, schematics, designs, graphics, drawings, photographs, charts, graphs, notebooks, patient lists, customer lists, sound recordings, other tangible or intangible manifestation of content, and all other documents whether printed, typewritten, handwritten, electronic, or stored on computer disks, tapes, hard drives, or any other tangible medium, as well as samples, prototypes, models, products and the like shall be the exclusive property of the Company and, upon termination of Executive’s employment with the Company, and/or upon the written request of the Company, all Company Materials, including copies thereof, as well as all other property of the Company then in Executive’s possession or control, shall be returned to and left with the Company.

(c) Notwithstanding the foregoing, nothing in this Agreement shall be construed as, or shall interfere with, abridge, limit, restrain, or restrict Executive’s right: (i) to engage in any activity or conduct protected by Section 7 or any other provision of the National Labor Relations Act; or (ii) to communicate with any federal, state, or local government agency charged with the enforcement and/or investigation of claims of discrimination, harassment, retaliation, improper wage payments, or any other unlawful employment practices under federal, state, or local law, or to file a charge, claim, or complaint with, or participate in or cooperate with any investigation or proceeding conducted by, any such agency.

4.10 Intellectual Property: “Intellectual Property” means any of the following that are conceived of, developed, reduced to practice, created, modified, or improved by Executive, either solely or with others, in whole or in part, in the course of, or as a result of, Executive’s employment by the Company in any capacity, whether at the Company’s place of business or otherwise, and whether on the Company’s time or on Executive’s own time: (i) writings (including notes, reports, manuals and instructions), software, source code, algorithms, works and copyrightable subject matter and rights, title and interest in copyrights and copyright registrations, (ii) rights, title and interest in know-how, technical information, processes, practices and systems, whether or not protectable by patent, copyright or trade secret law, (iii) trademarks, trade names, service marks, emblems, logos, symbols and insignia and rights with respect thereto, including registrations and registration rights, (iv) all developments, including trade secrets of any kind, discoveries, improvements, and ideas directly relating to or useable in the Company business, and (v) licenses granted by third parties of rights to use any of the foregoing.

(a) Intellectual Property shall be the exclusive property of the Company, and Executive shall have no right, title, or interest in, or to, the Intellectual Property. The Company shall have the sole and exclusive right, title, and interest in, and to, the Intellectual Property, which right shall continue notwithstanding the cessation of Executive’s employment. Executive also hereby irrevocably waives any “moral rights” that Executive may have in the Intellectual Property, and confirms that the Company shall have the right, in addition to the other rights granted hereunder and notwithstanding the termination of Executive’s employment for any reason, to make or have made, and own, enhancements, derivative works, and other modifications to any part of the Intellectual Property.

(b) Executive hereby assigns to the Company any right, title, and interest that Executive may have in, and to, the Intellectual Property in any patent, copyright, industrial design, trademark registration, and any other similar right pertaining to the Intellectual Property which Executive may have.

(c) Executive acknowledges that the assignments in Section 4.10(b) above are undertaken in part as a contingency against the possibility that any Intellectual Property, by operation of law, may not be considered a work made for hire by Executive for the Company. The Company and its successors and assigns, shall have the right to obtain and hold in their own name all copyright registrations, patents, and other evidence of rights that may be available for the Intellectual Property and/or any portion thereof. Executive further acknowledges that all United States copyrights and all other intellectual property rights in the Intellectual Property (including any and all patents that may issue with respect thereto) shall be exclusively owned by the Company and shall be considered “works made for hire,” as such term is defined in the United States Copyright Act, by Executive for the Company.

(d) Executive hereby covenants and binds Executive and Executive’s successors, assigns and legal representatives to cooperate fully and promptly with the Company and its designees, successors, and assigns, at the Company’s reasonable expense, and to do all acts necessary or requested by the Company and its designee, successors, and assigns, to secure, maintain, enforce, and defend the Company’s rights in the Intellectual Property. Without limitation to the foregoing, Executive shall execute on demand, and bind Executive and Executive’s successors, assigns and legal representatives, whether during Executive’s employment or at any time following the cessation of Executive’s employment, to any applications, transfers, assignments, and other documents as the Company may consider necessary for the purpose of: (i) vesting in, or assigning to, the Company absolute title to, (ii) applying for, prosecuting, obtaining, maintaining, or protecting, or (iii) maintaining, enforcing, and/or defending the Company’s rights in, any patent, copyright, industrial design, trademark registration, or any other right pertaining to the Intellectual Property in any countries in the world. Executive further agrees, and binds Executive and Executive’s successors, assigns and legal representatives, to cooperate fully and assist the Company in every way possible in the application for, or prosecution of, such rights pertaining to the Intellectual Property and not developed during Executive’s employment with the Company.

(e) Executive shall promptly disclose to the Company any patent application filed within one (1) year after termination of Executive’s employment with the Company. Executive shall have the burden of proving that any invention that relates, or pertains, to the Company’s business, and which is conceived less than one (1) year after the effective date of the termination of Executive’s employment relationship, was in fact made after such termination and not developed during Executive’s employment with the Company. Executive agrees that, during her employment with the Company, she will disclose to the Company all ideas, proposals, and plans, invented or developed by her, which relate to the business of the Company and its subsidiaries.

4.11 Non-Solicitation. Executive acknowledges that the Company has invested substantial time, money and resources in the development and retention of its Confidential Information (including trade secrets), customers, patients, accounts and business partners, and further acknowledges that, during the course of Executive's employment with the Company, Executive will have access to the Company's Confidential Information (including trade secrets), and will be introduced to existing and prospective customers and patients that are being targeted, vendors, accounts and business partners of the Company. Executive acknowledges and agrees that any and all "goodwill" associated with any existing or prospective customer or patient that is being targeted, vendor, account or business partner belongs exclusively to the Company, including, but not limited to, any goodwill created as a result of direct or indirect contacts or relationships between Executive and any existing or prospective customers or patients that are being targeted, vendors, accounts or business partners. Additionally, the Parties acknowledge and agree that Executive possesses skills that are special, unique or extraordinary and that the value of the Company depends upon her use of such skills on its behalf. Executive acknowledges that as a result of the foregoing the restrictions contained herein and elsewhere in this Agreement are reasonably necessary to protect the Company from unfair competition by Executive.

In recognition of this, Executive covenants and agrees that:

(a) During Executive's employment with the Company and for one year thereafter, Executive may not directly or indirectly induce, attempt to induce, solicit, attempt to solicit or encourage any employee, consultant, or contractor to leave the employment or engagement with the Company or any affiliate of the Company.

(b) During Executive's employment with the Company, Executive may not divert or take advantage of any actual or potential business opportunities of the Company in which it has a current interest or is actively pursuing.

4.12 Non-Disparagement; Non-Disclosure. Executive and the Company hereby agree that during the Employment Period and at all times thereafter, neither Executive nor the Company will make any public statement, or engage in any conduct, that is disparaging, derogatory, or otherwise is a negative or false statement about the other Party or, with respect to the Company, about any of its executives, officers, directors, or shareholders, including, but not limited to, any statement that disparages the products, services, finances, financial condition, capabilities or any other aspect of the business of the Company and the capabilities of Executive. Notwithstanding any term to the contrary herein, neither Executive nor the Company shall be in breach of this Paragraph 4.12 for the making of any truthful statements under oath or in a judicial or other proceeding.

4.13 Representation. Executive represents and warrants to the Company that (i) Executive is able to enter into this Agreement with the Company, and Executive's ability to enter into this Agreement and to fully perform Executive's anticipated duties for the Company is not limited or restricted by any agreements, understandings, instruments, orders, judgments or decrees to which Executive is a party or by which Executive is bound and (ii) Executive's performance of such duties for the Company will not directly or indirectly violate any contractual or common law obligations she has or had to other employers or entities. Executive agrees that she will not improperly use, disclose, or induce the Company to use any proprietary information or trade secrets of any former or concurrent employer or other person or entity. Executive agrees that she will not bring onto the premises of the Company or transfer onto the Company's technology systems any unpublished document, proprietary information or trade secrets belonging to any such employer, person or entity unless consented to in writing by both the Company and such employer, person or entity.

4.14 Applicable Law. This Agreement shall be governed by, and construed and enforced in accordance with, the substantive and procedural laws of the State of California. Each Party hereto hereby irrevocably submits to the jurisdiction of the state and federal courts located in San Diego County, California and waives any claim based upon *forum non-conveniens* or lack of jurisdiction.

4.15 Survival. Upon the termination or expiration of this Agreement, Article IV hereof shall survive such termination or expiration, and shall continue, with full force and effect, in accordance with its respective terms and conditions.

4.16 Legal Representation. Executive acknowledges that she was advised to consult with, and has had ample opportunity to receive the advice of, independent legal counsel before executing this Agreement – and the Company hereby advises Executive to do so – and that Executive has fully exercised that opportunity to the extent she desired. Executive acknowledges that she had ample opportunity to consider this Agreement and to receive an explanation from such legal counsel of the legal nature, effect, ramifications, and consequences of this Agreement. Executive warrants that she has carefully read this Agreement, that she understands completely its contents, that she understands the significance, nature, effect, and consequences of signing it, and that she has agreed to and signed this Agreement knowingly and voluntarily of her own free will, act, and deed, and for full and sufficient consideration.

4.17 Section 409A of the Code.

4.17.1 It is intended that the provisions of this Agreement qualify for exemption from, or comply with, Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations thereunder as in effect from time to time (collectively, hereinafter, “Section 409A”), and all provisions of this Agreement shall be construed and interpreted in a manner consistent with such intent. For purposes of Section 409A, each payment made pursuant to this Agreement will be deemed to be a “separate payment” as permitted under Treasury Regulation Section 1.409A-2(b)(2)(iii). In addition, to the extent any payment under this Agreement is nonqualified deferred compensation (within the meaning of Section 409A) and subject to Section 409A, and the period measured from the effective date of Executive’s termination through the first regular payroll date following the 54-day Release consideration period commences in one taxable year and ends in another, then no such payment shall be made until the second taxable year.

4.17.2 Neither Executive nor any of Executive's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement or under any other plan, policy, arrangement or agreement of or with the Company or any of its affiliates (this Agreement and such other plans, policies, arrangements and agreements, the "Employer Plans") to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to Executive or for Executive's benefit under any Employer Plan may not be reduced by, or offset against, any amount owing by Executive to the Company or any of its affiliates.

4.17.3 To the extent required by Section 409A, any payment or benefit that would be considered deferred compensation subject to, and not exempt from, Section 409A, payable or provided upon a termination of Executive's employment, shall only be paid or provided to Executive upon her "separation from service" (within the meaning of Section 409A) and, for purposes of any such provision of this Agreement, references to a "resignation," "termination," "termination of employment" or like terms shall mean "separation from service". If, at the time of Executive's "separation from service" (within the meaning of Section 409A), (i) Executive is a "specified employee" (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (ii) the Company shall make a good faith determination that an amount payable under this Agreement or under any Employer Plans constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid any accelerated or additional taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise-scheduled payment date, but shall instead accumulate such amount and pay it, without interest, on the first business day after such six-month period (or, if earlier, upon the Executive's death).

4.17.4 Except as specifically permitted by Section 409A or as otherwise specifically set forth in this Agreement, the reimbursements and in-kind benefits provided to Executive under this Agreement and any Employer Plan during any calendar year shall not affect the reimbursements or in-kind benefits to be provided to Executive under the relevant section of this Agreement or any Employer Plan in any other calendar year, and the right to such reimbursements and in-kind benefits cannot be liquidated or exchanged for any other benefit and shall be provided in accordance with Treas. Reg. Section 1.409A-3(i)(1)(iv) or any successor thereto. Further, in the case of reimbursement payments, such payments shall be made to Executive on or before the last day of the calendar year following the calendar year in which the underlying fee, cost or expense is incurred.

4.17.5 Notwithstanding any provision of this Agreement or any Employer Plan to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to any Employer Plan as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, except as specifically provided in this Agreement, Executive shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on Executive or for her account in connection with any Employer Plan or this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its subsidiaries and affiliates shall have any obligation to indemnify or otherwise hold Executive harmless from any or all of such taxes or penalties. The Company makes no representations concerning the tax consequences of Executive's participation in the Employer Plans or this Agreement under Section 409A of the Code or any other Federal, state or local tax law. Executive's tax consequences shall depend, in part, upon the application of relevant tax law, including Section 409A, to the relevant facts and circumstances.

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the Parties have executed this Employment Agreement effective as of the date first written above.

EXECUTIVE:

Tamara A. Seymour

/s/ Tamara A. Seymour

7/18/2014

Date

EMPLOYER

Signal Genetics, Inc.

By: /s/ Samuel D. Riccitelli

Name: Samuel D. Riccitelli

Title: Chief Executive Officer and President

July 21, 2014

Date

AMENDMENT TO AMENDED AND RESTATED EMPLOYMENT AGREEMENT

This Amendment (this "Amendment") to Amended and Restated Employment Agreement is entered into as of July 23, 2014 between Signal Genetics, Inc., a Delaware corporation (the "Company"), and Samuel D. Riccitelli (the "Executive").

WHEREAS, the Company and the Executive previously entered into that certain Amended and Restated Employment Agreement, dated as of June 17, 2014 (the "Agreement") (capitalized terms not otherwise defined in this Amendment have the meanings set forth in the Agreement); and

WHEREAS, the Parties desire to amend the Agreement to clarify certain legal compliance provisions under Section 409A of the Internal Revenue Code of 1986 (the "Code");

NOW, THEREFORE, in consideration of the above recitals and the mutual premises contained in this Amendment, the Parties amend the Agreement as follows:

1. A new Section 4.15 is hereby added to the Agreement to read as follows.

4.15 Section 409A of the Code.

- (a) It is intended that the provisions of this Agreement qualify for exemption from, or comply with, Section 409A of the Internal Revenue Code of 1986, as amended, and the regulations thereunder as in effect from time to time (collectively, hereinafter, "Section 409A"), and all provisions of this Agreement shall be construed and interpreted in a manner consistent with such intent. For purposes of Section 409A, each payment made pursuant to this Agreement will be deemed to be a "separate payment" as permitted under Treasury Regulation Section 1.409A-2(b)(2)(iii).
- (b) Neither Executive nor any of Executive's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement or under any other plan, policy, arrangement or agreement of or with the Company or any of its affiliates (this Agreement and such other plans, policies, arrangements and agreements, the "Employer Plans") to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to Executive or for Executive's benefit under any Employer Plan may not be reduced by, or offset against, any amount owing by Executive to the Company or any of its affiliates.
- (c) To the extent required by Section 409A, any payment or benefit that would be considered deferred compensation subject to, and not exempt from, Section 409A, payable or provided upon a termination of Executive's employment, shall only be paid or provided to Executive upon his "separation from service" (within the meaning of Section 409A) and, for purposes of any such provision of this Agreement, references to a "resignation," "termination," "termination of employment" or like terms shall mean "separation from service". If, at the time of Executive's "separation from service" (within the meaning of Section 409A), (i) Executive is a "specified employee" (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (ii) the Company makes a good faith determination that an amount payable under this Agreement or under any Employer Plans constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid any accelerated or additional taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise-scheduled payment date, but shall instead accumulate such amount and pay it, without interest, on the first business day after such six-month period (or, if earlier, upon the Executive's death).
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- (d) Except as specifically permitted by Section 409A or as otherwise specifically set forth in this Agreement, the reimbursements and in-kind benefits provided to Executive under this Agreement and any Employer Plan during any calendar year shall not affect the reimbursements or in-kind benefits to be provided to Executive under the relevant section of this Agreement or any Employer Plan in any other calendar year, and the right to such reimbursements and in-kind benefits cannot be liquidated or exchanged for any other benefit and shall be provided in accordance with Treas. Reg. Section 1.409A-3(i)(1)(iv) or any successor thereto. Further, in the case of reimbursement payments, such payments shall be made to Executive on or before the last day of the calendar year following the calendar year in which the underlying fee, cost or expense is incurred.
- (e) Notwithstanding any provision of this Agreement or any Employer Plan to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to any Employer Plan as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, except as specifically provided in this Agreement, Executive shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on Executive or for his account in connection with any Employer Plan or this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its subsidiaries and affiliates shall have any obligation to indemnify or otherwise hold Executive harmless from any or all of such taxes or penalties. The Company makes no representations concerning the tax consequences of Executive's participation in the Employer Plans or this Agreement under Section 409A of the Code or any other Federal, state or local tax law. Executive's tax consequences shall depend, in part, upon the application of relevant tax law, including Section 409A, to the relevant facts and circumstances.

2. Except as specifically modified herein, the Agreement shall remain in full force and effect. The Agreement, as modified by this Amendment, contains the entire agreement and understanding among and between the Parties with respect to the subject matter hereof, and supersedes any prior agreement and understanding among them with respect to the subject matter of this Agreement.

3. This Amendment may be executed in any number of counterparts, including facsimile or an e-mail of a PDF file containing a copy of the signature page of the person executing this document, each of which shall be an original, but all of which together shall constitute one in the same instrument.

* * * * *

IN WITNESS WHEREOF, the Parties have executed this Amendment effective as of the date first written above.

EXECUTIVE:

Samuel D. Riccitelli

/s/ Samuel D. Riccitelli

July 22, 2014

Date

EMPLOYER:

Signal Genetics, Inc.

By: /s/ Bennett S. LeBow

Name: Bennett S. LeBow

Title: Chairman of the Board of Directors

7/23/14

Date

Signal Genetics Appoints Tamara A. Seymour New Chief Financial Officer

NEW YORK, July 22, 2014 (GLOBE NEWSWIRE) -- Signal Genetics, Inc. (Nasdaq: SGNL) (Signal), a commercial stage, molecular diagnostic company focused on providing innovative diagnostic services that help physicians make better-informed decisions concerning the care of their patients suffering from cancer, today announced the appointment of Tamara A. Seymour as Chief Financial Officer. Ms. Seymour will replace Robert Johnson, who has tendered his resignation as Chief Financial Officer, effective August 4, 2014. Ms. Seymour will report directly to Samuel D. Riccitelli, Signal's President and Chief Executive Officer.

"We are excited to have Ms. Seymour join Signal, as she brings to the Company a strong financial background with significant biotech industry knowledge," said Mr. Riccitelli. "Her depth of experience helping life sciences companies manage their capital needs will be a great asset for Signal as we work to advance the Company to the next stages of diagnostic development and commercialization."

Ms. Seymour brings to Signal more than 34 years of experience in corporate finance and planning, including 25 years in senior financial functions in the biotechnology industry. Ms. Seymour joins Signal from HemaQuest Pharmaceuticals, Inc., a developer of small molecules for hemoglobin disorders, where she oversaw all financial, accounting and administrative functions of the company as Chief Financial Officer. Prior to that, Ms. Seymour was Chief Financial Officer for Favrilite, Inc., a developer of therapeutic cancer vaccines for patients with lymphoma. At Favrilite, she was instrumental in raising over \$200 million in multiple private and public equity and debt financings including an IPO in February 2005. In addition, Ms. Seymour has held several senior financial roles including the Director of Finance and Controller with Agouron Pharmaceuticals, Inc. and various positions, including audit manager, at Deloitte & Touche and PricewaterhouseCoopers.

"This is an exciting opportunity to become part of a dynamic and innovative team that is working to improve the standard of care for cancer patients," Ms. Seymour said. "I believe Signal has the opportunity to play a significant role in the diagnosis of cancer and how patients are treated and look forward to contributing to the Company's long-term success."

Ms. Seymour holds a B.B.A. in Accounting from Valdosta State University and an M.B.A. in Finance from Georgia State University. She also attended the Executive Management Program at the Kellogg Graduate School of Management at Northwestern University and is a Certified Public Accountant.

About Signal Genetics, Inc.

Signal Genetics, Inc., headquartered in New York, N.Y., is a commercial stage, molecular diagnostic company focused on providing innovative diagnostic services that help physicians make better-informed decisions concerning the care of their patients suffering from cancer. The Company's mission is to develop, validate and deliver innovative diagnostic services that enable better patient-care decisions. Signal was founded in January 2010 and became the exclusive licensee in its licensed field to the renowned research on multiple myeloma performed at the University of Arkansas for Medical Sciences, or UAMS, in April 2010.

CONTACT: INVESTOR CONTACT:
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