

**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): September 19, 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.

5740 Fleet Street

Carlsbad, California

(Address of principal executive offices)

92008

(Zip Code)

Registrant's telephone number, including area code: **(760) 537-4100**

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 1.01 Entry into a Material Definitive Agreement.

On September 19, 2014, Signal Genetics, Inc. (the “Company”) entered into a Reference Laboratory Services Agreement (the “Agreement”), dated as of September 20, 2014, with The Board of Trustees of the University of Arkansas acting for and on behalf of the University of Arkansas for Medical Sciences (“UAMS”).

Pursuant to the Agreement, the parties agreed that the Company will be the exclusive provider of gene array clinical genetic testing services for UAMS until September 19, 2017 (the “Agreement Initial Term”). Following the Agreement Initial Term, the Agreement may be renewed by the parties each year for additional twelve month terms.

On September 19, 2014, the Company entered into a Reference Laboratory Services Agreement for Research Specimens (the “Agreement for Research Specimens”), dated as of September 20, 2014, with The Board of Trustees of the University of Arkansas acting for and on behalf of UAMS.

Pursuant to the Agreement for Research Specimens, the parties agreed that the Company will be the exclusive provider of gene array clinical genetic testing services for research purposes for UAMS until September 19, 2017 (the “Agreement for Research Specimens Initial Term”). Following the Agreement for Research Specimens Initial Term, the Agreement for Research Specimens may be renewed by the parties each year for additional twelve month terms.

The Agreement and the Agreement for Research Specimens serve to renew and extend the Company’s current Reference Laboratory Services Agreement, dated March 21, 2011, and Reference Laboratory Services Agreement for Research Specimens, dated March 21, 2011, with UAMS.

The foregoing is only a brief description of the material terms of the Agreement and the Agreement for Research Specimens and 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 Agreement and the Agreement for Research Specimens that will be filed as exhibits to the Company’s Quarterly Report on Form 10-Q for the period ending September 30, 2014.

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/ Tamara A. Seymour

Tamara A. Seymour
Chief Financial Officer

Date: September 24, 2014