

SIGNAL GENETICS, INC.
Form PRE 14A
April 25, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

INFORMATION REQUIRED IN

PROXY STATEMENT

SCHEDULE 14A INFORMATION

**Proxy Statement Pursuant To Section 14(a) of the
Securities Exchange Act of 1934**

Filed by the Registrant x

Filed by a Party other than the Registrant o

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Pursuant to § 240.14a-12

SIGNAL GENETICS, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the Appropriate Box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

Title of each class of securities to which transaction applies:

(1)

Aggregate number of securities to which transaction applies:

(2)

Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(3)

Proposed maximum aggregate value of transaction:

(4)

Total fee paid:

(5)

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

Form, Schedule or Registration Statement No.:

(2)

Filing Party:

(3)

Date Filed:

(4)

May [], 2016

Dear Stockholder:

You are cordially invited to attend the 2016 Annual Meeting of Stockholders of Signal Genetics, Inc. (“Signal” or the “Company”) on Wednesday, June 15, 2016 at 10:00 a.m. Pacific Time at 5740 Fleet Street, Carlsbad, California.

Your Board of Directors recommends a vote “FOR” the election of each of the five nominees for director, “FOR” the ratification of the appointment of our independent registered public accounting firm and “FOR” the approval of an amendment to the Company’s Certificate of Incorporation effecting a reverse stock split with respect to the Company’s issued and outstanding shares of common stock, par value \$0.01 per share (“Common Stock”), that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company’s Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding.

We hope you can join us at this meeting. As a stockholder, your participation in the affairs of Signal is important, regardless of the number of shares you hold. Therefore, whether or not you are able to personally attend, please vote your shares as soon as possible by completing and returning the enclosed proxy card, or, if you hold your shares in street name and the firm that holds your shares provides for voting online or by telephone, you may vote online or by telephone using the procedures described in the voting instruction card provided by your broker or nominee. If you decide to attend the Annual Meeting, you will be able to vote in person even if you have previously voted.

Our 2015 Annual Report and Proxy Statement for the 2016 Annual Meeting of Stockholders are enclosed. We hope you find them informative reading.

On behalf of the Board of Directors, we would like to express our appreciation for your continued interest in the affairs of Signal Genetics, Inc.

Sincerely yours,

Samuel D. Riccitelli
President and Chief Executive Officer

5740 Fleet Street, Carlsbad, California

TEL: (760) 537-4100 FAX: (760) 537-4101 <http://www.signalgenetics.com>

SIGNAL GENETICS, INC.

NOTICE OF 2016 ANNUAL MEETING OF STOCKHOLDERS

TIME 10:00 a.m. Pacific Time on Wednesday, June 15, 2016

PLACE Signal Genetics, Inc.
5740 Fleet Street
Carlsbad, California

- ITEMS OF BUSINESS**
1. To elect five members to the Board of Directors.
 2. To ratify the appointment of BDO USA, LLP, as our independent registered public accounting firm for the fiscal year ending December 31, 2016.
 3. To approve an amendment to the Company's Certificate of Incorporation effecting a reverse stock split with respect to the Company's issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company's Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding.

RECORD DATE You are entitled to vote at the Annual Meeting and any adjournment thereof if you were a stockholder at the close of business on May 2, 2016.

ANNUAL REPORT Our 2015 Annual Report is enclosed and is a part of our proxy materials being provided to you.

Pursuant to rules promulgated by the U.S. Securities and Exchange Commission, we have elected to provide access to our proxy materials by sending you this full set of proxy materials, including a proxy card, and notifying you of the availability of our proxy materials on the Internet. This Proxy Statement and our 2015 Annual Report are available at: www.proxyvote.com

By Order of the Board of Directors,

Tamara A. Seymour
Corporate Secretary

IMPORTANT

IT IS IMPORTANT THAT YOU RETURN YOUR PROXY PROMPTLY. THEREFORE, WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, PLEASE DATE, SIGN AND COMPLETE THE ENCLOSED PROXY CARD AND RETURN IT IN THE ENCLOSED ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES.

IF YOUR BROKER PROVIDES FOR VOTING ONLINE OR BY TELEPHONE, YOU MAY VOTE ONLINE OR BY TELEPHONE USING THE PROCEDURES DESCRIBED IN THE ACCOMPANYING VOTING INSTRUCTION CARD PROVIDED BY YOUR BROKER.

SUBMITTING YOUR PROXY NOW WILL NOT PREVENT YOU FROM VOTING YOUR SHARES AT THE ANNUAL MEETING IF YOU DESIRE TO DO SO, AS YOUR PROXY IS REVOCABLE AT YOUR OPTION.

Important Notice Regarding the Availability of Proxy Materials for Signal Genetics, Inc.'s

2016 Annual Meeting of Stockholders to be Held on Wednesday, June 15, 2016

This Proxy Statement and our 2015 Annual Report are available at

www.proxyvote.com

In accordance with SEC rules, this website does not use “cookies,” track the identity of anyone accessing the website to view the proxy materials, or gather any personal information.

<u>TABLE OF CONTENTS</u>	Page
Attendance and Voting Matters	
Why am I receiving these materials?	1
Who is soliciting the proxies?	1
What information is contained in these materials?	1
What proposals will be voted on at the Annual Meeting?	1
What are the Board’s voting recommendations?	2
What shares may I vote?	2
What is the difference between holding shares as a stockholder of record and as a beneficial owner?	2
How can I vote my shares in person at the Annual Meeting?	3
How can I vote my shares without attending the Annual Meeting?	3
May I change or revoke my vote?	3
How are votes counted?	4
What is the quorum requirement for the Annual Meeting?	4
What is the voting requirement to approve each of the proposals?	4
What happens if I abstain from voting?	4
What is a “broker non-vote”?	4
Will I have dissenter’s rights?	5
What does it mean if I receive more than one proxy or voting instruction card?	5
Where can I find the voting results of the Annual Meeting?	5
Ownership of the Company	6
Security Ownership of Certain Beneficial Owners and Management	6
Section 16(a) Beneficial Ownership Reporting Compliance	7
Relationship with Independent Registered Public Accounting Firm	8
Fees and Services of BDO USA, LLP	8
Board of Directors and Corporate Governance	9
The Board in General	9
Board of Directors Leadership Structure	10
Board Composition and Election of Directors	11
Board Committees	11
Meeting and Attendance during 2015	13
Risk Oversight	13
Code of Business Conduct and Ethics	13
Communications with the Board	14
Executive Officers	15
Certain Relationships and Related Party Transactions	16
Executive and Director Compensation	18
Summary Compensation Table (2015 and 2014)	18
Outstanding Equity Awards at 2015 Fiscal Year-End	19
Payments Due Upon Termination of Employment or a Change in Control	20
Director Compensation	22

Equity Compensation Plan Information	24
Report of the Audit Committee	25
Proposal 1—Election of Directors	27
Proposal 2—Ratification of the Appointment of the Company’s Independent Registered Public Accounting Firm	28

Proposal 3—Approval of Amendment to the Company’s Certificate of Incorporation effecting a Reverse Stock Split of the Company’s Common Stock

Other Matters 36

Householding of Proxy Materials 36

The Company’s Website 36

The Company’s Principal Executive Office 36

Annual Report and Other SEC Filings 36

Additional Questions and Information Regarding the Annual Meeting and Stockholder Proposals 37

What happens if additional proposals are presented at the Annual Meeting? 37

Who will bear the cost of soliciting votes for the Annual Meeting? 37

How do I propose individuals to serve as directors? 37

May I propose actions for consideration at next year’s Annual Meeting of Stockholders? 38

ANNEX A – Form of Certificate of Amendment A-1

ATTENDANCE AND VOTING MATTERS

Q: Why am I receiving these materials?

The Board of Directors (the “Board”) of Signal Genetics, Inc. (“Signal,” the “Company,” “we,” “our,” or “us,” as the context requires) is providing this proxy statement (this “Proxy Statement”) and accompanying proxy card to solicit your proxy in connection with the Company’s Annual Meeting of Stockholders (the “Annual Meeting”), which will take place on Wednesday, June 15, 2016. You are invited to attend the Annual Meeting and are requested to vote on the proposals described in this Proxy Statement. This Proxy Statement and accompanying proxy card are being distributed on or about May [], 2016.

Q: Who is soliciting the proxies?

We are soliciting proxies in the form enclosed on behalf of the Board. Our Board has selected the persons named on the enclosed proxy card (the “Named Proxies”) to vote all shares represented by proxy at the Annual Meeting. The Named Proxies will vote any properly executed proxy, if received in time and not revoked, at the Annual Meeting according to your directions. We will vote any signed proxy that fails to specify a choice on any matter to be acted upon FOR the election of each nominee for director, FOR the ratification of the appointment of BDO USA, LLP, as our independent registered public accounting firm for the fiscal year ending December 31, 2016 and FOR the approval of an amendment to the Company’s Certificate of Incorporation effecting a reverse stock split with respect to the Company’s issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company’s Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding and, in the Named Proxies’ discretion, FOR or AGAINST such other business as may properly come before the Annual Meeting or any adjournment or adjournments thereof.

Q: What information is contained in these materials?

This Proxy Statement contains information related to the proposals to be voted on at the Annual Meeting, the voting process, the compensation of directors and the Company’s most highly paid officers, and other required information. We have also enclosed for your review our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (the “2015 Annual Report”), which contains financial and other information about our business during our last fiscal year.

Q: What proposals will be voted on at the Annual Meeting?

A: There are three matters on which a vote is scheduled at the Annual Meeting:

• The election of five directors to the Board;

The ratification of the appointment of BDO USA, LLP, as Signal's independent registered public accounting firm for the fiscal year ending December 31, 2016; and

The approval of an amendment to the Company's Certificate of Incorporation effecting a reverse stock split with respect to the Company's issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company's Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding.

We will also consider and vote upon any other business properly brought before the Annual Meeting.

Q: What are the Board's voting recommendations?

A: The Board recommends that you vote your shares:

FOR the election of each of the five nominees named herein to the Board;

FOR the ratification of the appointment of BDO USA, LLP, as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2016; and

FOR the approval of an amendment to the Company's Certificate of Incorporation effecting a reverse stock split with respect to the Company's issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company's Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding.

Q: What shares may I vote?

A: You may vote all shares of the Company's Common Stock, that you owned as of the close of business on May 2, 2016 (the "Record Date"). These shares include:

1. those held directly in your name as the *stockholder of record*; and
2. those held for you as the *beneficial owner* through a stockbroker, bank, or other nominee at the close of business on the Record Date.

Each share of Common Stock is entitled to one vote.

On the Record Date, there were approximately 10,709,080 shares of Common Stock issued and outstanding.

Q: What is the difference between holding shares as a stockholder of record and as a beneficial owner?

Most of the Company's stockholders hold their shares through a stockbroker, bank, or other nominee rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and those owned beneficially.

Stockholder of Record

If your shares are registered directly in your name with the Company's transfer agent, VStock Transfer (the "Transfer Agent"), you are considered, with respect to those shares, the *stockholder of record* and we are sending these proxy materials directly to you. As the *stockholder of record*, you have the right to grant your proxy directly to the Company or to vote in person at the Annual Meeting. We have enclosed a proxy card for you to use.

Beneficial Owner

If you hold shares in a stock brokerage account or through a bank or other nominee, you are considered the *beneficial owner* of shares held *in street name* and your broker or nominee is forwarding these proxy materials to you. Your broker or nominee is considered, with respect to those shares, the *stockholder of record*. As the beneficial owner, you have the right to direct your broker on how to vote your shares, but because you are not the *stockholder of record*, you may not vote these shares in person at the Annual Meeting unless you obtain a signed proxy from the record holder giving you the right to vote the shares. As a beneficial owner, you are, however, welcome to attend the Annual Meeting. Your broker or nominee has enclosed a voting instruction card for you to use.

Q: How can I vote my shares in person at the Annual Meeting?

A: You may vote shares you hold directly in your name as the *stockholder of record* in person at the Annual Meeting. If you choose to do so, please bring the enclosed proxy card and proof of identification.

If you are the *beneficial owner* of shares held *in street name* and your broker or nominee is forwarding these proxy materials to you, you may vote the shares in person at the Annual Meeting only if you have obtained a signed proxy from your broker or nominee (*i.e.*, the *record holder*) giving you the right to vote the shares.

Even if you plan to attend the Annual Meeting, we recommend that you also submit your proxy as described below so that your vote will be counted if you later decide not to attend the Annual Meeting. Submitting your proxy now will not prevent you from voting your shares in person by written ballot at the Annual Meeting if you desire to do so, as your proxy is revocable at your option.

Q: How can I vote my shares without attending the Annual Meeting?

Whether you hold shares directly as the stockholder of record or beneficially in street name, you may direct your vote without attending the Annual Meeting. If you hold your shares directly, you may vote by granting a proxy. If **A:** you hold your shares in street name, you may submit voting instructions to your broker or nominee. Please refer to the summary instructions below and those included on your proxy card or, for shares held in street name, the voting instruction card included by your broker or nominee.

By Mail—You may vote by mail by signing your proxy card or, for shares held in street name, the voting instruction card included by your broker or nominee, and mailing it in the enclosed, postage prepaid and addressed envelope. If you provide specific voting instructions, your shares will be voted as you instruct. If you sign but do not provide instructions, your shares will be voted as described below in “How are votes counted?”

On the Internet—If you hold your shares in street name and the firm that holds your shares offers Internet voting, your broker voting instruction card will contain instructions on how to vote online. If you vote online, you do not need to mail in your proxy card. If you hold your shares directly in your name as the *stockholder of record* you may not vote online.

By Telephone—If you hold your shares in street name and the firm that holds your shares offers voting by telephone, your broker voting instruction card will contain instructions on how to vote by telephone. If you vote by telephone, you do not need to mail in your proxy card. If you hold your shares directly in your name as the *stockholder of record* you may not vote by telephone.

Q: May I change or revoke my vote?

A: Yes, you may change or revoke your proxy instructions at any time prior to the vote at the Annual Meeting.

If you hold your shares directly and returned your proxy by mail, you must (a) file with the Transfer Agent a written notice of revocation or (b) timely deliver a valid, later-dated proxy. Your attendance at the Annual Meeting will not by itself revoke your previously granted proxy unless you give written notice of revocation to the Transfer Agent before the Annual Meeting or you vote by written ballot at the Annual Meeting. Any proxy submitted by a stockholder of record may be revoked at any time prior to its exercise at the Annual Meeting.

For shares you own beneficially, you may change your vote by submitting new voting instructions to your broker or nominee. If you voted on the Internet or by telephone, you may change your vote by following the instructions for voting by either method until the cut-off time stated in the proxy instructions.

Q: How are votes counted?

A: You may vote “FOR”, “AGAINST” or “ABSTAIN” each proposal. For abstentions, see “What happens if I abstain from voting” below.

If you are a record holder and you sign your proxy card with no further instructions, the Named Proxies will vote your shares in accordance with the recommendations of the Board.

If you are a beneficial owner and you have not provided voting instructions to your broker, your broker may exercise discretion to vote your shares only with respect to the ratification of our independent registered public accounting firm (Proposal 2). Your broker does not have discretionary authority to vote your shares in the election of directors (Proposal 1), resulting in a “broker-non-vote” with respect to this proposal. To approve an amendment to the Company’s Certificate of Incorporation effecting a reverse stock split with respect to the Company’s issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company’s Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding (Proposal 3), the affirmative vote of a majority of the Company’s outstanding Common Stock is required. Brokerage firms have authority to vote their customers’ unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes, as well as any abstentions, will be treated as votes against Proposal 3. See “What is a broker non-vote” for more information.

Q: What is the quorum requirement for the Annual Meeting?

A: The quorum requirement for holding the Annual Meeting and transacting business is the presence, in person or by proxy, of the holders of a majority of the outstanding shares of Common Stock (the “Shares”) of the Company. Abstentions and “broker non-votes” (described below) will be counted as present and entitled to vote for purposes of determining a quorum.

Q: What is the voting requirement to approve each of the proposals?

A: In the election of directors (Proposal 1), the five nominees for director who receive the highest number of votes “FOR” election will be elected as directors. This is called a plurality.

Approval of the ratification of our independent registered public accounting firm (Proposal 2) will require the affirmative vote of a majority of the shares of capital stock of the Company present in person or represented by proxy at the Annual Meeting and entitled to vote thereon.

Approval of an amendment to the Company’s Certificate of Incorporation effecting a reverse stock split with respect to the Company’s issued and outstanding shares of Common Stock, that will reduce the number of shares of

outstanding Common Stock in accordance with a ratio to be determined by the Company's Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding (Proposal 3) will require the affirmative vote of a majority of the Company's outstanding Common Stock. Brokerage firms have authority to vote their customers' unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes, as well as any abstentions, will be treated as votes against Proposal 3.

In each case, a quorum must be present at the Annual Meeting for a valid vote.

Q: What happens if I abstain from voting?

If an executed proxy card is returned and the stockholder has explicitly abstained from voting on any proposal, the Shares represented by the proxy will be considered present at the Annual Meeting for the purpose of determining a quorum. A Share voted "abstain" with respect to any proposal is considered as present and entitled to vote with respect to such proposal and therefore an abstention from voting on a matter by a stockholder present in person or represented by proxy at the meeting has the same legal effect as a vote "against" the proposal.

Q: What is a “broker non-vote”?

A “broker non-vote” occurs when a broker submits a proxy that does not indicate a vote for one or more of the proposals because the broker has not received instructions from the beneficial owner on how to vote on such proposals and does not have discretionary authority to vote in the absence of instructions. Brokers have discretionary authority to vote on matters that are deemed “routine,” such as the ratification of our independent registered public accounting firm (Proposal 2). Brokers do not have discretionary authority to vote on matters that are deemed “non-routine,” such as the election of directors (Proposal 1). Broker non-votes will be counted for the purposes of determining whether a quorum exists at the Annual Meeting, but will have no effect on the outcome of

A: Proposal 1. To approve an amendment to the Company’s Certificate of Incorporation effecting a reverse stock split with respect to the Company’s issued and outstanding shares of Common Stock, that will reduce the number of shares of outstanding Common Stock in accordance with a ratio to be determined by the Company’s Board of Directors within a range of one share of Common Stock for every two (2) to twenty (20) shares of Common Stock (or any whole number in between) currently outstanding (Proposal 3), the affirmative vote of a majority of the Company’s outstanding Common Stock is required. Brokerage firms have authority to vote their customers’ unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes, as well as any abstentions, will be treated as votes against Proposal 3.

Q: Will I have dissenters’ rights?

A: No dissenters’ rights are available under the General Corporation Law of the State of Delaware, our certificate of incorporation, or our bylaws to any stockholder with respect to any of the proposals.

Q: What does it mean if I receive more than one proxy or voting instruction card?

A: It means your shares are registered differently or are held in more than one account. Please provide voting instructions for all proxy and voting instruction cards you receive.

Q: Where can I find the voting results of the Annual Meeting?

A: We will announce preliminary voting results at the Annual Meeting and publish final results in a Current Report on Form 8-K following the Annual Meeting.

Additional Q&A information regarding the Annual Meeting and stockholder proposals may be found on page 37.

OWNERSHIP OF THE COMPANY

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information with respect to the beneficial ownership of our Common Stock as of March 15, 2016:

- each person who is known by us to be the beneficial owner of more than 5% of our outstanding Common Stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of Common Stock issuable pursuant to the exercise of stock options, warrants or other rights that are either immediately exercisable or exercisable on or before March 14, 2016, which is 60 days after the date of the information provided. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage Ownership⁽¹⁾	
5% Holders			
LeBow Alpha, LLLP ⁽²⁾	2,232,629	20.8	%
E. Jeffrey Peierls ⁽³⁾	681,100	6.4	%
Executive Officers, Directors and Director Nominees			
Bennett S. LeBow ⁽²⁾	2,253,829 ⁽⁴⁾	21.0	%

Edgar Filing: SIGNAL GENETICS, INC. - Form PRE 14A

Samuel D. Riccitelli	415,114		3.9	%
Tamara A. Seymour	14,478		0.1	%
David A. Gonyer	28,200	(5)	0.3	%
Douglas A. Schuling	28,200	(6)	0.3	%
Dr. Robin L. Smith	28,200	(7)	0.3	%
All Executive Officers & Directors, as a group (six persons)	2,768,021	(8)	25.7	%

(1) Based on 10,709,080 common shares outstanding as of March 15, 2016.

Bennett S. LeBow is the sole partner of LeBow Alpha. By virtue of his position with LeBow Alpha, he is deemed (2) to be the beneficial owner of these shares and has sole voting and dispositive power over the shares. The address of LeBow Alpha is 667 Madison Avenue, 14th Floor, New York, New York 10065.

Based solely on the Schedule 13G filed with the SEC on March 20, 2015, as of March 11, 2015, E. Jeffrey Peierls has sole voting and sole dispositive power over 85,500 shares, and shared voting and shared dispositive power over 595,600 shares. Brian E. Peierls has sole voting and sole dispositive power over 50,000 shares, and shared voting and shared dispositive power over 595,600 shares. E. Jeffrey Peierls, President and a Director of the Peierls Foundation, Inc. ("Foundation") and Brian E. Peierls, Secretary/Treasurer of the Foundation, are co-trustees of UD E.S. Peierls for E. F. Peierls; and co-managers of 75 Brian L.L.C., 75 Jeff L.L.C, Life/Brian, L.L.C., Life/Jeff (3) L.L.C., Jen/Brian, L.L.C., Jen/Jeff, L.L.C., Bypass 1, L.L.C., Unitrust1, L.L.C.; and, co-trustees of UW E.S. Peierls for Brian E. Peierls and UW E.S. Peierls for E. Jeffrey Peierls. Each of E. Jeffrey Peierls and Brian E. Peierls, as co-managers and as co-trustees may be deemed to indirectly own the securities owned by each Limited Liability Company and each Trust as well as being control persons of the Foundation. In such filing E. Jeffrey Peierls lists his address as 73 South Holman Way, Golden, Colorado, 80401 and Brian E. Peierls lists his address as 7808 Harvestman Cove, Austin, Texas, 78731.

- Includes 5,000 shares of common stock owned directly by Mr. LeBow, 2,232,629 shares owned by LeBow Alpha (4) in which Mr. LeBow has a beneficial interest, and 16,200 shares that Mr. LeBow has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 15, 2016.
- (5) Includes 10,500 shares of common stock owned directly by Mr. Gonyer and 17,700 shares that Mr. Gonyer has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 15, 2016.
- (6) Includes 10,500 shares of common stock owned directly by Mr. Schuling and 17,700 shares that Mr. Schuling has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 15, 2016.
- (7) Includes 10,500 shares of common stock owned directly by Dr. Smith and 17,700 shares that Dr. Smith has the right to acquire from us upon the exercise of outstanding stock options within 60 days after March 15, 2016.
- (8) Includes 69,300 aggregate shares of common stock that such persons have the right to acquire from us upon the exercise of outstanding options within 60 days after March 15, 2016.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the 1934 Act requires our directors and executive officers, and persons who own more than ten percent of a registered class of our equity securities, to file with the SEC initial reports of ownership within 10 days after he or she becomes a beneficial owner, director or officer and reports of changes in ownership of our Common Stock and other equity securities within two business days after the transaction is executed. Our officers, directors and greater than ten percent stockholders are required by SEC regulations to furnish us with copies of all Section 16(a) forms they file. To our knowledge, based solely on a review of the copies of such reports furnished to us and written representations that no other reports were required, during the fiscal year ended December 31, 2015, all Section 16(a) filing requirements applicable to our officers, directors and greater than ten percent beneficial owners were complied with.

RELATIONSHIP WITH INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

BDO USA, LLP (“BDO”) serves as the Company’s independent registered public accounting firm and has served in that capacity since July 15, 2013. The decision to engage BDO as the Company’s independent registered public accounting firm was approved by the Audit Committee of the Board.

The Audit Committee considered the independence of BDO and whether the audit and non-audit services BDO provides to the Company are compatible with maintaining that independence. The Audit Committee has adopted a set of policies governing the provision of non-audit services by BDO; those policies are included in the Audit Committee’s report. See “Board of Directors and Corporate Governance—Audit Committee.” The Audit Committee has adopted procedures by which the Audit Committee must approve in advance all services provided by and fees paid to the Company’s independent registered public accounting firm. The advance approval requirement was not waived in any instance during the past fiscal year.

Fees and Services of BDO USA, LLP

In connection with the audit of our 2015 consolidated financial statements the Company entered into an engagement agreement with BDO USA, LLP, which sets forth the terms by which BDO USA, LLP has performed audit services for the Company.

The aggregate fees agreed to by the Company for the annual audits for the years ended December 31, 2015 and 2014, and all other audit fees paid by the Company to BDO USA, LLP during 2015 and 2014 were \$225,000 and \$222,000, respectively. Audit fees for the years ended December 31, 2015 and 2014 were for professional services provided in connection with the annual audits of the Company’s consolidated financial statements, review of the Company’s quarterly consolidated financial statements, accounting matters directly related to the annual audits, professional services in connection with SEC registration statements, and other documents filed with the SEC or other documents issued in connection with securities offerings, and professional services provided in connection with other statutory or regulatory filings.

All audit fees relating to the audit for the year ended December 31, 2015, were approved in advance by the Audit Committee. All audit and non-audit services to be provided by BDO USA, LLP were and will continue to be, pre-approved by the Audit Committee.

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

The Board in General

Our business and affairs are organized under the direction of our board of directors, which currently consists of five members, each of whose current term of office as a director expires at the Annual Meeting. Set forth below are our directors and their respective ages and positions as of March 31, 2016:

Directors	Age	Position(s) Held
Bennett S. LeBow	78	Chairman of the Board
Samuel D. Riccitelli	57	President, Chief Executive Officer and Director
David A. Gonyer, R. Ph.	52	Director
Douglas A. Schuling	55	Director
Robin L. Smith, M.D.	51	Director

There are no family relationships among any of our directors or executive officers. Set forth below is a summary of the business experience of each of our director nominees.

Bennett S. LeBow. Mr. LeBow has served as the Chairman of our board of directors since our inception in January 2010 and was our founding member and the sole manager of Signal Genetics LLC, converted from a Delaware limited liability company to a Delaware corporation (the “Corporate Conversion”). Mr. LeBow is the sole partner and has sole voting and dispositive power, of our principal stockholder, LeBow Alpha. Mr. LeBow is a private investor and currently serves as the Chairman and Chief Executive Officer of BSL Capital, Inc. Mr. LeBow also serves as the Chairman of the board of directors of Vector Group, Ltd., where he has been a director since 1986 and where he served as Executive Chairman from January 2006 until his retirement in December 2008. Mr. LeBow served as the Chairman of the board of directors of Borders Group Inc. from May 2010 until January 2012 and Chief Executive Officer from June 2010 until January 2012. In February 2011, Borders Group Inc. filed a petition for protection under Chapter 11 of Title 11 of the United States Bankruptcy Code. Mr. LeBow received a B.A. in electrical engineering from Drexel University.

We selected Mr. LeBow to serve on our board of directors as Chairman due to the perspective and extensive experience he brings as our founder. Mr. LeBow brings to the board of directors significant executive leadership and operational experience in both the private and public sector.

Samuel D. Riccitelli. Mr. Riccitelli has served as our President and Chief Executive Officer since October 2012. He was elected to our board of directors immediately prior to our initial public offering in June 2014. From July 2011 to October 2012, Mr. Riccitelli was an independent consultant. From October 2001 to June 2011, Mr. Riccitelli served as the Executive Vice President and Chief Operating Officer of Genoptix, Inc., a publicly traded diagnostic services company focused on the needs of community hematologists and oncologists. From 1995 to 2001, Mr. Riccitelli served in a number of positions for Becton, Dickinson and Company, including most recently as a vice president and general manager and as a board member for BD Ventures, L.L.C., a venture capital fund. From 1989 to 1994, he served in a number of positions at Puritan-Bennett Corporation, including most recently as general manager. Mr. Riccitelli also served on the board of directors of Exagen Diagnostics, Inc., from October 2011 through September 2014. Mr. Riccitelli received a B.A. in Biology from Washington and Jefferson College and a M.S. Eng. degree from The University of Texas in Mechanical & Biomedical Engineering.

We selected Mr. Riccitelli to serve on our board of directors because he brings to the board of directors extensive knowledge of the life sciences and biotechnology industries. He has served in senior corporate positions of companies in the biotechnology and diagnostic industries. Mr. Riccitelli has led the successful development and commercialization of a broad range of diagnostic services, medical devices, and information based product and services and is a named inventor on eight patents. His business experience provides him with a broad understanding of the operational, financial and strategic issues facing public companies.

David A. Gonyer, R. Ph. Mr. Gonyer became a member of our board of directors immediately prior to the listing of our Common Stock on The NASDAQ Capital Market in June 2014. Mr. Gonyer is a co-founder of Evoke Pharma, Inc., a specialty pharmaceutical company focused primarily on the development of drugs to treat gastrointestinal diseases, and has served as its President and Chief Executive Officer and a member of its board of directors since March 2007. From January 2004 to June 2007, Mr. Gonyer served as Vice President, Strategic and Product Development of Medgenex, Inc., a subsidiary of Victory Pharma, Inc., a biopharmaceutical company focused on acquiring, developing and marketing products to treat pain and related conditions. From April 2000 to December 2004, Mr. Gonyer was a founder and Vice President of Sales and Marketing at Xcel Pharmaceuticals, Inc., a specialty pharmaceutical company focused on neurological disorders. From December 1996 to April 2000, Mr. Gonyer served as Director of Marketing at Elan/Dura Pharmaceuticals, Inc. From 1987 to 1996, Mr. Gonyer held a broad range of management positions in commercial operations, alliance/partnership management, and regional sales at Eli Lilly & Company, a global pharmaceutical company. From 2010 to 2015, Mr. Gonyer served as a member of the board of directors of Neurelis, Inc., a privately held neurological specialty pharmaceutical company. Mr. Gonyer is a Registered Pharmacist and holds a B.Sc. in Pharmacy from Ferris State University School of Pharmacy.

We selected Mr. Gonyer to serve on our board of directors because of his significant management experience, his extensive experience in the pharmaceutical industry and his substantial knowledge with respect to developing and marketing pharmaceutical products.

Douglas A. Schuling. Mr. Schuling became a member of our board of directors immediately prior to the listing of our Common Stock on The NASDAQ Capital Market in June 2014. From April 1999 through May 2011, when he retired, Mr. Schuling held the position of Executive Vice President and Chief Financial Officer for Genoptix, Inc., a publicly traded specialized laboratory service provider focused on delivering diagnostic services to hematologists and oncologists. Since May 2011, Mr. Schuling has acted as an independent consultant. From 1997 to March 1999, Mr. Schuling held the position of Chief Financial and Operating Officer for Point-of-Care Systems, a venture capital backed clinical information systems company. From 1985 to 1997, Mr. Schuling held various positions at Nellcor Puritan Bennett, a research, development and manufacturing company, specializing in medical equipment and supplies, most recently as Hospital Group Controller. Mr. Schuling received his B.S. degree in accounting from Drake University.

We selected Mr. Schuling to serve on our board of directors because of his extensive knowledge of the life sciences and biotechnology industries and his substantial financial and accounting background, having served as the chief financial officer of two other companies and controller of a third company.

Dr. Robin L. Smith. Dr. Robin Smith became a member of our board of directors immediately prior to the listing of our common stock on The NASDAQ Capital Market in June 2014. From July 2007 to December 2014, Dr. Smith served as Chief Executive Officer of Caladrius Biosciences, Inc. (formerly NeoStem, Inc.). She also served as Chairman of the Board of Caladrius Biosciences, Inc. during that tenure and until December 2015. During her transition for the first 6 months of 2015, she served as Executive Chairman of the Board of Caladrius Biosciences, Inc. Dr. Smith currently serves on the board of directors of MYnd Analytics, Inc. and BioXcel Corporation. Dr. Smith is also the president and chairman of the board of The Stem for Life Foundation. She was also appointed to the board of

directors, Science and Faith STOQ Foundation in Rome and the Capital Formation Committee of the Alliance for Regenerative Medicine, and Chief Executive Officer from July 2007 to December 2014. Dr. Smith also serves on the board of directors of the Palm Beach Country Club from April 2015 to the present. Dr. Smith earned her M.D. from Yale University and her M.B.A. from the Wharton School of Business.

We selected Dr. Smith to serve on our board of directors because of her expertise in business development and medicine, which includes her extensive and diversified experience serving in executive and board level capacities for various medical enterprises and health care-based entities. Dr. Smith has acted as a senior advisor to, and investor in, companies where she has played a significant role in restructuring and/or growth.

Board of Directors Leadership Structure

Mr. LeBow serves as the Chairman of our board of directors. Our board of directors does not have a lead independent director. Our board of directors has determined its leadership structure is appropriate and effective for us, given our stage of development.

Board Composition and Election of Directors

Our board of directors consists of five members: Messrs. LeBow, Riccitelli, Gonyer and Schuling and Dr. Smith. Our board of directors has undertaken a review of its composition and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of Messrs. Gonyer and Schuling and Dr. Smith is “independent” under the applicable rules of the SEC and NASDAQ and that neither Messrs. LeBow nor Riccitelli is “independent” as defined under such rules. In making such determination, our board of directors considered the relationship that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his independence, including the beneficial ownership of our capital stock by each non-employee director. Mr. Riccitelli is not an independent director under these rules because he is our President and Chief Executive Officer and Mr. LeBow is not an independent director under these rules because of the payments that have been made by us to LeBow Alpha and because of his control over LeBow Alpha, our largest stockholder.

Board Committees

Our board of directors has established an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee.

Audit Committee

The members of our Audit Committee are Mr. Gonyer, Mr. Schuling and Dr. Smith, each of whom has been determined by our board of directors to be independent under applicable NASDAQ and SEC rules and regulations. Mr. Schuling is the chair of the Audit Committee. Our Audit Committee’s responsibilities include, among others:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;

- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;

- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;

- monitoring our internal control over financial reporting, disclosure controls and procedures;
- overseeing our internal audit function; and
- discussing our risk management policies.

The Audit Committee held four meetings in 2015.

Compensation Committee

The members of our Compensation Committee are Mr. Gonyer, Mr. Schuling and Dr. Smith, each of whom has been determined by our board of directors to be independent under current NASDAQ and SEC rules and regulations. Dr. Smith is the chair of the Compensation Committee. Our Compensation Committee's responsibilities include, among others:

- reviewing and approving annually the corporate goals and objectives applicable to the compensation of the Chief Executive Officer, evaluating at least annually the Chief Executive Officer's performance in light of those goals and objectives, and determining and approving the Chief Executive Officer's compensation level based on this evaluation;
- reviewing and approving the compensation of the directors and all other executive officers;
- reviewing and approving and, when appropriate, recommending to the board of directors for approval, incentive compensation plans and equity-based plans, and where appropriate or required, recommending for approval by the stockholders of the Company, the adoption, amendment or termination of such plans; and administering such plans;

reviewing and approving the executive compensation information included in the Company's annual report on Form 10-K and proxy statement;

reviewing and approving or providing recommendations with respect to any employment agreements or severance arrangements or plans; and

- reviewing director compensation and recommending any changes to the board of directors.

The Compensation Committee held three meetings in 2015. All compensation-related matters were approved at the Board level.

Nominating and Corporate Governance Committee

The members of our Nominating and Corporate Governance Committee are Mr. Gonyer, Mr. Schuling and Dr. Smith, each of whom has been determined by our board of directors to be independent under current NASDAQ rules. Mr. Gonyer is the chair of the Nominating and Corporate Governance Committee. Our Nominating and Corporate Governance Committee's responsibilities include, among others:

identifying and recommending candidates to fill vacancies on the board of directors and for election by the stockholders;

- recommending committee and chairperson assignments for directors to the board of directors;

developing, subject to the board of directors' approval, a process for an annual evaluation of the board of directors and its committees and to oversee the conduct of this annual evaluation;

overseeing the Company's corporate governance practices, including reviewing and recommending to the board of directors for approval any changes to the documents and policies in the Company's corporate governance framework, including its certificate of incorporation and bylaws; and

monitoring compliance with the Company's Code of Business Conduct and Ethics, investigating alleged breaches or violations thereof and enforcing its provisions.

The Nominating and Corporate Governance Committee held one meeting in 2015. All governance matters were approved at the Board level.

Director Nominations

Board candidates are considered by the Nominating and Corporate Governance Committee on a case-by-case basis. A candidate for election to the Board must possess the ability to apply good business judgment and must be in a position to properly exercise his or her duties of loyalty and care in his or her representation of the interests of stockholders. Candidates should also exhibit proven leadership capabilities, high integrity and experience with a high level of responsibilities within their chosen fields, and have the ability to quickly grasp complex principles of business, finance, and transactions regarding the Company's industry. In general, preferred candidates will currently hold, or have recently held, an established executive level position and have extensive experience in business, finance, law, science, research, or government. The Nominating and Corporate Governance Committee will consider these criteria for nominees identified by the Committee, by stockholders, or through other sources. When current Board members are considered for nomination for reelection, the Nominating and Corporate Governance Committee will take into consideration their prior Board contributions and performance as well as the composition of the Board as a whole, including whether the Board reflects the appropriate balance of independence, sound judgment, business specialization, technical skills, diversity, and other desired qualities. The Nominating and Corporate Governance Committee will make a preliminary assessment of each proposed nominee based upon the résumé and biographical information, an indication of the individual's willingness to serve, and other relevant information. This information will be evaluated against the criteria set forth above and the specific needs of the Company at that time. Based upon a preliminary assessment of the candidate(s), those who appear best suited to meet the needs of the Company may be invited to participate in a series of interviews, which are used as a further means of evaluating potential candidates. On the basis of information learned during this process, the Nominating and Corporate Governance Committee will determine which nominee(s) to submit for election. The Nominating Committee will use the same process for evaluating all nominees, regardless of the original source of the nomination.

The Nominating and Corporate Governance Committee and the Board believe that diversity along multiple dimensions, including opinions, skills, perspectives, personal and professional experiences and other differentiating characteristics, is an important element of its nomination recommendations. The Board considers each nominee in the context of the Board as a whole, with the objective of assembling a Board that can best maintain the success of the Company's business. Although the Board does not have a formal diversity policy, the Nominating and Corporate Governance Committee and the Board periodically review the Board's membership in light of the Company's business and strategic objectives, consider whether the directors possess the requisite skills, experience and perspectives to oversee the Company in achieving those goals, and may seek additional directors from time to time as a result of its considerations.

Meetings and Attendance During 2015

The Board held six meetings in 2015. Each director who served as a director during 2015 participated in 75% or more of the meetings of the Board and of the committees on which he or she served during the year ended December 31, 2015 (during the period that such director served). We have encouraged all of our Board members to attend the Annual Meeting of Stockholders. At each regular meeting of the Board, the independent directors meet in private without members of management.

Risk Oversight

Our board of directors monitors our exposure to a variety of risks through our Audit Committee. Our Audit Committee charter gives the Audit Committee responsibilities and duties that include discussing with management, the internal audit department and the independent auditors our major financial risk exposures and the steps management has taken to monitor and control such exposures, including our risk assessment and risk management policies.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics that applies to all of our employees, officers (including our principal executive, financial and accounting officers), and directors, including those officers responsible for financial reporting. These standards are designed to deter wrongdoing and to promote honest and ethical conduct. The code of business conduct and ethics and the written charter for the audit committee is available on our website. The information that appears on our website is not part of, and is not incorporated into, this report.

None of our directors or executive officers, nor any associate of such individual, is involved in a legal proceeding adverse to us or any of our subsidiaries.

The Code of Business Conduct and Ethics is available on our website at <http://www.signalgenetics.com>. Stockholders may request a free copy of our Code of Business Conduct and Ethics from:

Signal Genetics, Inc.

Attention: Investor Relations

5740 Fleet Street

Carlsbad, California 92008

(760) 537-4100

If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the code to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on our website. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver.

Communications with the Board

The Board has implemented a process by which the Company's stockholders can communicate directly with independent directors of the Board. The Company's stockholders who want to communicate with the Board or any individual director may write to:

Corporate Secretary

Signal Genetics, Inc.

5740 Fleet Street

Carlsbad, California 92008

- or -

<http://investors.signalgenetics.com/contactboard.cfm>

The letter should include a statement indicating that the sender is a stockholder of the Company. The Company's Corporate Secretary will review all stockholder letters to the Board and depending on the subject matter will:

• Promptly forward any letter that deals with the function of the Board or committees of the Board (or is otherwise appropriate for Board attention) to the director or directors to whom it is addressed;

• Attempt to handle the inquiry directly if it relates to routine or ministerial matters, including requests for information about the Company and stock-related matters; or

• Not forward the letter if it relates to an improper or irrelevant topic.

The Corporate Secretary or another member of management will, at each meeting of the Board, present a summary of all letters received since the last meeting that were not forwarded to the Board and will make those letters available to the Board upon request.

Executive Officers

Our Executive Officers as of the date of this proxy statement are as follows:

Executive Officers Age Position(s) Held

Samuel D. Riccitelli 57 President, Chief Executive Officer and Director

Tamara A. Seymour 57 Chief Financial Officer

Set forth below is a summary of the business experience of our Chief Financial Officer, Tamara A. Seymour. Our Chief Executive Officer's biography has been provided above.

Tamara A. Seymour. Ms. Seymour has served as our Chief Financial Officer since August 4, 2014. Prior to joining the Company, Ms. Seymour served as Chief Financial Officer of HemaQuest Pharmaceuticals, Inc., a biotechnology company, beginning in November 2010. From July 2009 through November 2010, Ms. Seymour served as a financial consultant for various life sciences companies. From 2001 to 2009, Ms. Seymour served as Chief Financial Officer and Secretary for Favrilite, Inc. (now MMRGlobal, Inc.), a publicly traded biotechnology company focused on developing immunotherapies for hematological malignancies. While at Favrilite, she was responsible for various private and public equity and debt financings, including the initial public offering. From 1991 to 2001, Ms. Seymour served as consulting chief financial officer for a number of biotechnology companies. From 1988 through 1991, Ms. Seymour was Director of Finance and Controller with Agouron Pharmaceuticals, Inc. From 1980 through 1988, she worked with Deloitte & Touche LLP and PricewaterhouseCoopers LLP in various positions including audit manager from 1985 – 1988. Ms. Seymour is a Certified Public Accountant. Ms. Seymour received an M.B.A. with an emphasis in Finance from Georgia State University and a bachelor's degree in Business Administration with an emphasis in Accounting from Valdosta State University.

Officers serve at the discretion of the Board. There is no family relationship between any of the executive officers or between any of the executive officers and the Company's directors. There is no arrangement or understanding between any executive officer and any other person pursuant to which the executive officer was selected.

Certain Relationships and Related Party Transactions

The following is a summary of transactions since January 1, 2015 to which we have been a party in which the amount involved exceeded the lesser of \$120,000 or one percent of the average of our total assets at the end of the last two recent fiscal years and in which any of our executive officers, directors, director nominees or beneficial holders of more than five percent of our capital stock had or will have a direct or indirect material interest, other than compensation arrangements which are described under the section of this report entitled “Executive and Director Compensation.”

Note Payable - Related Party

We and our subsidiaries, as borrowers, entered into a Secured Demand Promissory Note (the “Original Promissory Note”), in the amount of \$20,000,000 with LeBow Alpha, as lender, dated November 3, 2011. Any unpaid principal under the Original Promissory Note bore interest at a rate of 8% per annum, compounded quarterly. In addition, interest was payable on any overdue installment of principal for the period overdue, on demand, at a rate equal to 11% per annum, compounded quarterly as of the last day of each calendar quarter. The Chairman of our board of directors, Bennett LeBow, is the sole member and manager of LeBow Holdings LLC, the general partner of LeBow Alpha, our principal stockholder, and has sole voting and dispositive power over this entity.

The Original Promissory Note was amended from time to time to increase the principal amount of the borrowings thereunder and to include additional amounts owed to other LeBow-controlled entities as lenders, namely LeBow Gamma Limited Partnership (“LeBow Gamma”), and BSL Capital, Inc. (collectively, the “LeBow Entities”), from whom we have also borrowed money, from time to time.

On December 31, 2013, we entered into an Amended and Restated Secured Demand Promissory Note (the “New Promissory Note”), in the amount of \$25,000,000 with LeBow Alpha to include all of the principal and interest then owed to LeBow Alpha and the other LeBow-controlled entities under the Original Promissory Note, as amended from time to time and to include certain loans that were made to the Company through December of 2013 by LeBow Alpha, LeBow Gamma and BSL Capital, Inc. Unpaid principal under the New Promissory Note bore interest at a rate of 8% per annum, compounded quarterly. In addition, interest was payable on any overdue installment of principal for the period overdue, on demand, at a rate equal to 11% per annum, compounded quarterly as of the last day of each calendar quarter.

The New Promissory Note (like the Old Promissory Note) contained customary representations and warranties and events of default, and includes a cross-default provision to any loan documents, as such term was defined in the Promissory Note, and included a Security Agreement (defined below).

At the time of our initial public offering in June 2014, \$28,326,287 in principal and interest was outstanding under the New Promissory Note. In connection with our initial public offering and pursuant to the Exchange Agreement, on June 17, 2014, \$27,326,287 was converted into 2,732,629 Class C units of Signal Genetics LLC (2,032,629 of which were issued to LeBow Alpha and 700,000 of which were issued to unaffiliated trusts). We refer to this conversion as the Debt Conversion. These Class C units were then converted into an aggregate of 2,732,629 shares of Common Stock of Signal Genetics, Inc. in the Corporate Conversion which preceded our initial public offering.

From January 1, 2011 until the New Promissory Note was converted in the Debt Conversion, the largest aggregate amount of principal outstanding under the note was \$24,433,380, \$17,433,380 of which was owed to certain entities controlled by Mr. LeBow. From January 1, 2011 to our initial public offering, we repaid approximately \$9,279,000 in principal and \$1,182,000 in interest under the Original Promissory Note and the New Promissory Note.

An additional \$1,000,000 was advanced to us by Mr. LeBow prior to our initial public offering to pay for certain offering expenses. Following the offering, this amount, along with an additional \$45,000, which was advanced to pay for certain additional offering expenses, was reclassified as amounts due to related party on our consolidated balance sheet. This aggregate amount was non-interest bearing and due on demand.

On March 6, 2015, our amounts due to related party, aggregating \$1,045,000, were converted into an unsecured note payable – related party bearing interest at 8% per annum and due on demand. The principal amount of the note was increased by \$60,000 over the amounts due to related party to \$1,105,000 to provide the equivalent of 8% per annum interest for the period of time the amounts due to related party were held as a payable in exchange for a provision that the related party would not call the note prior to June 30, 2015. The increase in the principal amount of the note was deferred and amortized to interest expense over the initial term of the note to June 30, 2015. Interest expense related to this note during the year ended December 31, 2015 was \$132,000. The note balance and accrued interest payable at December 31, 2015 were \$1,105,000 and \$73,000, respectively. No interest was paid during 2015 and as of March 15, 2016, the note has not been called.

EXECUTIVE AND DIRECTOR COMPENSATION**Summary Compensation Table (2015 and 2014)**

The following table sets forth the information as to compensation paid to or earned by our President and Chief Executive Officer and our only other executive officer during the fiscal years noted below whose total compensation exceeded \$100,000. The persons listed in the following table are referred to herein as the “named executive officers.”

Name and Principal Position	Fiscal Year	Salary	Bonus	Stock Award(s) (1)	Option Award(s) (1)	All Other Compensation	Total
Samuel D. Riccitelli <i>Chief Executive Officer and President</i>	2015	\$ 450,000	\$ 33,750 ⁽²⁾	\$-	\$-	\$ -	\$483,750
	2014	\$ 450,000	\$ 90,000 ⁽²⁾	\$7,455,110	\$-	\$ 24,164	\$8,019,274
Tamara A. Seymour ⁽³⁾ <i>Chief Financial Officer</i>	2015	\$ 350,000	\$ 26,250	\$-	\$ 53,070	\$ -	\$429,320
	2014	\$ 144,712	\$ 43,414	\$468,280	\$-	\$ 1,398	\$657,804

(1) Represents the aggregate grant date fair value of stock awards or options for common stock computed in accordance with FASB ASC Topic 718.

(2) Discretionary bonus granted in March 2016 and 2015, respectively, not made pursuant to any contractual arrangement.

(3) Ms. Seymour has served as Chief Financial Officer since August 4, 2014.

Riccitelli Employment Agreement

We entered into an amended and restated employment agreement (the “CEO Agreement”), with Samuel D. Riccitelli, on June 17, 2014 (the effective date of the CEO Agreement) in connection with our initial public offering. The CEO Agreement was subsequently amended on July 23, 2014, 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 CEO Agreement prohibits Mr. Riccitelli from engaging in any competitive activity, as described in the CEO Agreement, during his employment with us and for a period of one year following termination of his employment for any reason.

The CEO Agreement continues in effect until October 31, 2015, and automatically renews for additional one-year terms on each anniversary of the effective date of the CEO Agreement after October 31, 2015. The CEO Agreement provides for, among other things, an annual base salary of \$450,000, payable on a semi-monthly basis. It also provides that Mr. Riccitelli will be reimbursed for all reasonable business expenses, including travel and entertainment expenses incurred in the performance of his duties. During the term of his employment, Mr. Riccitelli is entitled to

participate in any annual performance-based incentive compensation programs and any long-term incentive compensation programs that are established by the Company, on the terms established from time to time by the Compensation Committee or the board of directors of the Company. Mr. Riccitelli is also entitled to four weeks of paid vacation time and is eligible to receive the same employee benefits as are provided by the Company to other executive employees.

The CEO Agreement also provides for certain post-termination benefits. See “Payments Due Upon Termination of Employment or a Change in Control — Riccitelli Employment Agreement” below for more information.

Seymour Employment Agreement

We entered into an employment agreement (the “CFO Agreement”), with Tamara A. Seymour, on August 4, 2014 (the effective date of the CFO Agreement). The CFO Agreement prohibits Ms. Seymour from engaging in any competitive activity, as described in the CFO Agreement, during her employment with us.

The CFO Agreement continues in effect until the one year anniversary of the effective date of the CFO Agreement, and automatically renews for additional one-year terms on each anniversary of such effective date. The CFO Agreement provides for, among other things, an annual base salary of \$350,000, payable on a semi-monthly basis. It also provides that Ms. Seymour will be reimbursed for all reasonable business expenses, including travel and entertainment expenses incurred in the performance of her duties. The CFO Agreement also provides that at the end of each fiscal year of the Company, in addition to Ms. Seymour’s base salary then in effect, she will be eligible to receive a bonus payment of up to 30% of her base salary then in effect, which bonus payment will be awarded in the sole discretion of 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 Chief Executive Officer. Pursuant to the terms of the CFO Agreement, Ms. Seymour received an initial restricted stock unit award for 92,000 shares as of the Effective Date. Ms. Seymour is also entitled to four weeks of paid vacation time and is eligible to receive the same employee benefits as are provided by the Company to other executive employees.

The CFO Agreement also provides for certain post-termination benefits. See “Payments Due Upon Termination of Employment or a Change in Control” below for more information.

Outstanding Equity Awards at Fiscal Year-End 2015

The following table provides information about the number of outstanding equity awards held by our named executive officers at December 31, 2015.

Name	Option Awards			Option exercise price (\$)	Stock Awards		
	Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercisable options (#)	Equity incentive plan awards: number of securities underlying unexercised		Market Value of Awards or That Have Not Vested	Equity Incentive Awards: Number of Unearned Shares,	Equity Incentive Awards: Market or Payout Value of Unearned

	unearned options (#)			of (\$) Unearned Shares, Units Or Other Rights That Have Not Vested (\$)	Units Or Other Rights That Have Not Vested (#)	Shares, Units Or Other Rights That Have Not Vested (\$)
Samuel D. Riccitelli	-	-	-	-	\$93,188 ⁽²⁾	-
Tamara A Seymour	60,000 ⁽¹⁾	-	-	\$ 1.57	51,750 ⁽³⁾	-

- (1) The options underlying this award vest as follows: (1) 15,000 options vest on August 12, 2016; and the remaining 45,000 options vest in 36 equal monthly installments beginning on September 12, 2016.
- 124,251 shares underlying this award vest on June 17, 2016. The remaining shares underlying this June 17, 2014 award previously vested as follows: (1) 248,504 shares vested on June 17, 2014; (2) 124,252 shares vested on January 1, 2015; (3) 124,252 shares vested on June 17, 2015; and (4) 124,252 shares vested on December 17, 2015. Settlement of 372,756 of the vested shares was made on April 8, 2015, with \$249,269 paid in cash to Mr. Riccitelli in exchange for 119,842 of the shares to satisfy tax withholding requirements. Settlement of 124,252 of (2) the vested shares was made on June 19, 2015, with \$69,513 paid in cash to Mr. Riccitelli in exchange for 46,036 of the shares to satisfy tax withholding requirements. Settlement of 124,252 vested shares was made on February 12, 2016, with \$24,963 paid in cash to Mr. Riccitelli in exchange for 54,268 of the shares to satisfy tax withholding requirements. Settlement of the remaining 124,251 shares that vest in 2016 will be made on or after the vesting date, as determined by the Company, in a manner intended to comply with the terms of the award agreement and applicable law.

23,000 shares underlying this award vest on August 4th in each of 2016, 2017 and 2018. Settlement of 23,000 of the vested shares was made on August 4, 2015, with \$13,294 paid in cash to Ms. Seymour in exchange for 8,522 (3) of the shares to satisfy tax withholding requirements. Settlement of the remaining shares that vest after 2015 will be made on or after the vesting date, as determined by the Company, in a manner intended to comply with the terms of the award agreement and applicable law.

Payments Due Upon Termination of Employment or a Change in Control

Employment Agreements

Mr. Riccitelli's CEO Agreement and Ms. Seymour's CFO Agreement entitle each of them (each referred to herein as the "Executive") to receive certain payments upon the termination of such person's employment under certain circumstance as described below.

Termination for Cause — In the event Executive's employment is terminated for "Cause," Executive's sole remedy will be to collect all unpaid base salary, all accrued personal time off and all unreimbursed expenses payable for all periods through the effective date of termination, as well as any amount arising from his participation in, or benefits under, any employee benefit plan, program or arrangement, payable in accordance with the terms of such plan, program or arrangement.

"Cause" means (1) expiration of the term of the CEO Agreement or CFO Agreement (as applicable), (2) a material breach by Executive of his or her fiduciary duty to the Company that results in material harm to the Company; (3) a material breach by Executive of the terms of the CEO Agreement or CFO Agreement (as applicable) or any other agreement between Executive and the Company, which remains uncured for a period of 30 days following the receipt of written notice specifying the nature of the breach; (4) the willful commission by Executive of any act of embezzlement, fraud, larceny or theft on or from the Company; (5) substantial and continuing willful neglect or inattention by Executive of the duties of such person's employment, refusal to perform the lawful and reasonable directions of 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 the receipt of written notice specifying the nature of the breach; (6) the willful commission by Executive of any crime involving moral turpitude or a felony; and (7) Executive's performance or omission of any act which, in the judgment of the board of directors, if known to the customers, clients, stockholders or any regulators of the Company, would have a material adverse impact on the business of the Company.

Termination Without Cause — In the event Mr. Riccitelli's employment is terminated without "Cause," he will be entitled to receive all unpaid base salary, accrued annual bonus or incentive compensation (including any unpaid, accrued annual bonus or incentive compensation from the immediately preceding year), accrued personal time off, and all unreimbursed expenses payable for all periods through the effective date of termination (with such amounts to be paid on the date of termination).

In addition, Mr. Riccitelli will be entitled to receive a severance payment, calculated as follows:

should the termination occur after June 23, 2015, Mr. Riccitelli will be entitled to continue to receive his then-current base salary for a period of twelve months.

In the event Ms. Seymour's employment is terminated without Cause, Ms. Seymour will be entitled to receive a severance payment calculated as follows:

should the termination occur anytime during the employment period after the initial one-year term, Ms. Seymour will be entitled to continue to receive her then-current base salary for twelve months.

Neither Executive will be required to mitigate the amount of any severance payments received by seeking other employment during the term of the severance period. However, should the Executive obtain other employment during the term of the severance period, the Company will pay such person, for the remaining length of the severance period, only the difference between such person's new salary and base salary (as in effect at the time of termination), if the new salary is less than such person's base salary (i.e., the Company will not be obligated to make any severance payments to Executive if such person's new salary is greater than such person's applicable base salary). The severance payment (less all applicable withholdings) will be paid in equal monthly installments over the applicable period immediately following the termination of Executive's employment. The Company will also reimburse Executive for premiums for COBRA coverage for Executive (and to the extent he or she has family coverage, his family), provided that Executive elects such coverage, during the applicable period when such person is receiving severance payments, until such time as Executive obtains other employment and is entitled to comparable health coverage from such employer.

Termination After Disability or Death — In the event that Executive's employment is terminated due to disability (as described in the CEO Agreement or CFO Agreement (as applicable)) or on account of such person's death, then Executive (or such person's estate or personal representative, as applicable) will be entitled to receive all unpaid base salary, accrued annual bonus or incentive compensation (including any unpaid, accrued annual bonus or incentive compensation from the immediately preceding year), accrued personal time off, and all unreimbursed expenses payable for all periods through the effective date of termination. In the case of disability only, Executive will be entitled to receive, in addition to the amounts specified above, for a period of six months, a series of monthly payments equal to such person's then-current monthly base salary payments such person received during his or her employment if and only if Executive does not receive any payments as a result of the short-term and long-term disability insurance benefits that the Company obtains on such person's behalf pursuant to the CEO Agreement or CFO Agreement (as applicable), which payments will be paid in equal installments over the applicable period. If Executive is provided with such insurance payments, then such person will only be entitled to receive the difference between the insurance payments and such person's base salary, if the payments are less than such person's base salary.

Termination by Executive for Good Reason — In the event that Executive's employment is terminated by such person for "Good Reason," then Executive will be entitled to receive all unpaid base salary, accrued annual bonus or incentive compensation (including any such unpaid, accrued compensation from the immediately preceding year), accrued personal time off and all unreimbursed expenses payable for all periods through the effective date of such person's termination. In addition, Executive will be entitled to receive the same severance payment such person would be entitled to receive if his or her employment were terminated by the Company without Cause

"Good Reason" means (1) the Company has materially breached the CEO Agreement or CFO Agreement (as applicable) and the Company has failed to cure or remedy such breach after 30-days written notice from Executive (provided that

Executive must resign within 30 days after expiration of the 30-day period following written notice without cure or remedy by the Company), (2) there has occurred any material and substantial diminution or reduction in duties, base salary, title, health care coverage (but only if such diminution is disproportionate to a diminution in health care coverage applicable to other employees of the Company), authority or responsibilities of Executive, whether is scope or nature, and the Company has failed to cure or remedy such breach after 30-days written notice from Executive; or (3) the Company has required that Executive perform any act or refrain from performing any act that would be in violation of applicable law.

Termination by Executive without Good Reason — In the event Executive terminates his or her employment without Good Reason, such person will only be entitled to receive all unpaid base salary, all accrued personal time off and all unreimbursed expenses payable for all periods through the effective date of termination and Executive will not be entitled to any compensation or other amounts from the Company following the effective date of termination.

Director Compensation

Prior to our Corporate Conversion and our initial public offering, we did not pay compensation to our managers for their service on our board of managers. In connection with our initial public offering, our board of directors adopted the following compensation arrangement for our non-employee independent directors, which was in effect until August 6, 2015.

Annual Compensation

• Board retainer/meeting fees — \$25,000 plus \$1,000 per meeting

• Audit Committee Member Meeting Fees — \$500 per meeting

• Audit Committee Chairman Retainer — \$10,000

• Compensation Committee Member Meetings Fees — \$500 per meeting

• Compensation Committee Chairman Retainer — \$5,000

• Nominating and Corporate Governance Committee Member Meeting Fees — \$500 per meeting

• Nominating and Corporate Governance Committee Chairman Retainer — \$5,000

Equity Awards granted upon appointment to the Board of Directors

- Restricted Stock Unit Award — 5,500 shares

• Stock Option Award — 6,000 shares

Our Compensation Committee established the following fees for payment to members of our Board of Directors or committees, as the case may be, effective as of August 6, 2015:

Annual Compensation

• Board Member Retainer — \$40,000

• Board Chairman Retainer — \$30,000

• Audit Committee Member Retainer — \$10,000

• Audit Committee Chairman Retainer — \$20,000

• Compensation Committee Member Retainer — \$7,500

• Compensation Committee Chairman Retainer — \$15,000

• Nominating and Corporate Governance Committee Member Retainer — \$5,000

• Nominating and Corporate Governance Committee Chairman Retainer — \$10,000

Equity Awards granted upon appointment to the Board of Directors

• Stock Option Award — 25,000 shares

In August 2015, the Compensation Committee and the Board granted the acceleration of the vesting of 4,125 remaining unvested restricted stock units previously granted to each non-employee director and granted 5,000 restricted stock units, which restricted stock units fully vested on grant. Beginning in 2016, the Chairman and each current non-employee director shall receive, subject to Board approval, an annual option grant as of the date of the Company's annual meeting to purchase 18,000 shares of the Company's Common Stock, which grant shall vest monthly over a one-year period beginning on the date of grant and shall have an exercise price equal to the fair market value of a share of the Company's Common Stock as of the date of grant and shall be subject to such other terms and conditions as set forth in the Company's form of stock option grant agreement.

2015 Director Compensation

The table below sets forth the compensation of our non-employee directors for fiscal year 2015.

Name⁽¹⁾	Fees Earned or Paid in Cash (\$)	Stock Awards⁽²⁾ (\$)	Option Awards⁽³⁾ (\$)	Total (\$)
David A. Gonyer, R. Ph.	52,750	8,100	16,043	76,893
Bennett S. LeBow	35,000	8,100	16,043	59,143
Douglas A. Schuling	57,750	8,100	16,043	81,893
Robin L. Smith, M.D.	54,000	8,100	16,043	78,143

Mr. Riccitelli, our President and Chief Executive Officer, is also a director on our board of directors. Mr.

(1) Riccitelli's compensation for serving as our President and Chief Executive Officer is reported in the Summary Compensation Table and other compensation tables set forth under "Executive Compensation." Mr. Riccitelli does not receive any additional compensation for his service on our Board.

(2) Each of the non-employee directors was granted a restricted stock unit award for 5,000 shares of common stock on August 6, 2015. Each restricted stock unit vested immediately upon the date of grant. The values set forth in this column are based on the aggregate grant date fair value of the awards computed in accordance with FASB ASC Topic 718.

(3) Each of the non-employee directors was granted a stock option to purchase 18,000 shares of common stock on August 6, 2015. The stock options vest in ten equal monthly installments beginning on August 31, 2015. The values set forth in this column are based on the aggregate grant date fair value of the awards computed in accordance with FASB ASC Topic 718.

Equity Compensation Plan Information**Securities Authorized for Issuance Under Equity Compensation Plans**

As of December 31, 2015, we had one equity compensation plan in place under which shares of our Common Stock were authorized for issuance:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column)
Equity compensation plans approved by stockholders	983,325 ⁽¹⁾	\$ 2.28 ⁽²⁾	695,260
Equity compensation plans not approved by stockholders	-	\$ -	-
Total	983,325	\$ 2.28	695,260

(1) Total includes options to purchase 631,567 of common stock and 351,758 shares that may be issued under outstanding restricted stock units.

(2) The weighted-average exercise price does not take into account the restricted stock units.

A description of our equity compensation plan is described in our 2015 Annual Report on Form 10-K under “Executive Compensation—2014 Stock Incentive Plan.”

Report of the Audit Committee

The following is the report of the Audit Committee with respect to the Company's audited financial statements for the fiscal year ended December 31, 2015. The Audit Committee oversees the Company's financial reporting process on behalf of the Board.

The Audit Committee is composed of three non-employee directors and operates under a written charter adopted and approved by the Board. The Board, in its business judgment, has determined that each Audit Committee member is "independent" as such term is defined under the applicable Nasdaq Marketplace Rules and under Section 10A(m)(3) of the Exchange Act of 1934, as amended (the "Exchange Act"). The Board of Directors has identified Douglas A. Schuling as an "audit committee financial expert" as such term is defined in Item 407(d)(5) of SEC Regulation S-K. The Audit Committee has sole authority to retain, oversee, and terminate the Company's independent registered public accounting firm, to approve fees and other terms of the engagement, and to approve any permitted non-audit engagements with the independent registered public accounting firm.

The Company's management has the primary responsibility for the preparation, presentation, and integrity of the Company's financial statements and the accounting and reporting process, including the systems of internal controls, and procedures to assure compliance with applicable accounting standards and applicable laws and regulations.

The Company's independent registered public accounting firm is responsible for auditing those financial statements and expressing an opinion as to their conformity with generally accepted accounting principles. The Audit Committee's responsibility is to independently monitor and review these processes. However, the Audit Committee members are not professionals engaged in the practice of accounting or auditing, including, without limitation, with respect to auditor independence. The Audit Committee members must rely, without independent verification, on the information provided to them and on the representations made by management and the independent registered public accounting firm. Accordingly, although the Audit Committee members consult with and discuss these matters and their questions and concerns with management and the Company's independent registered public accounting firm, the Audit Committee's oversight cannot provide an independent basis to assure that management has maintained appropriate accounting and financial reporting principles or appropriate internal controls and procedures consistent with accounting standards and applicable laws and regulations. Furthermore, the Audit Committee's considerations and discussions cannot assure that the audit of the Company's financial statements has been carried out in accordance with generally accepted auditing standards; that the financial statements are presented in accordance with generally accepted accounting principles; or, that the Company's independent registered public accounting firm is in fact "independent."

In this context, the Audit Committee held four meetings during the year ended December 31, 2015. The meetings were designed, among other things, to facilitate and encourage communication among the Audit Committee,

management, and the Company's independent registered public accounting firm. The Audit Committee discussed with the Company's independent registered public accounting firm, with and without management present, the results of their examinations and their evaluations of the Company's financial statements.

In fulfilling the Committee's oversight responsibilities, Committee members have reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2015, with Signal's management and the independent registered public accounting firm, who are responsible for expressing an opinion on the conformity of the Company's audited financial statements with accounting principles generally accepted in the United States, including a discussion of their judgments as to the quality, not just the acceptability, of the Company's accounting principles, the reasonableness of significant judgments, the clarity of disclosures in the financial statements, and such other matters as are required to be discussed with the Audit Committee under auditing standards generally accepted in the United States.

The Audit Committee also discussed with the Company's independent registered public accounting firm matters related to the conduct of the audit of the Company's financial statements and all matters required to be discussed by the Public Company Accounting Oversight Board (the "PCAOB"). The Audit Committee's discussions included a discussion of the background and experience of the independent auditor's audit team assigned to Signal and the quality control procedures established by the independent registered public accounting firm. The Audit Committee has received the written disclosures and the letter from the Company's independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and the Audit Committee has discussed with the independent registered public accounting firm its independence from the Company and its management. The Audit Committee met with the independent registered public accounting firm with and without management present to discuss the results of their examinations, their evaluations of the Company's internal controls, and the overall quality of the Company's financial reporting.

Based on the review and the aforementioned meetings, discussions and reports, and subject to the limitations on our role and responsibilities referred to above and in the Audit Committee Charter, the Audit Committee recommended to the Company's Board that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, for filing with the SEC, and selected BDO USA, LLP, as the Company's independent registered public accounting firm for fiscal year 2016.

AUDIT COMMITTEE:

Douglas A. Schuling, Chair

David A. Gonyer, R. Ph.

Dr. Robin L. Smith

The information contained in the foregoing report shall not be deemed to be "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange, except to the extent that the Company specifically incorporates it by reference in such filing.

PROPOSAL 1

ELECTION OF DIRECTORS

At the Annual Meeting, five directors will be elected by the stockholders to serve until the next Annual Meeting of Stockholders or until their successors are elected and qualified. The accompanying form of proxy, when properly executed and returned to the Company, will be voted “FOR” the election as directors of the five persons named below, unless the proxy contains instructions to the contrary. Proxies cannot be voted for a greater number of persons than the number of nominees named in this Proxy Statement. Management has no reason to believe that any of the nominees is unable or unwilling to serve, if elected. However, in the event that any of the nominees should become unable or unwilling to serve as a director, the proxy will be voted for the election of such person or persons as shall be designated by the Board.

Nominees for the Board of Directors

The Board has nominated directors Bennett S. LeBow, Samuel D. Riccitelli, David A. Gonyer, R. Ph., Douglas A. Schuling and Robin L. Smith, M.D. for election as directors. Information regarding the business experience of each nominee and his or her service on boards of directors of other public companies is provided in “Board of Directors and Corporate Governance”.

Except for Messrs. LeBow and Riccitelli, the Board has determined that each director qualifies as an “independent” director under the applicable Nasdaq Marketplace Rules. The Board based this determination primarily on a review of the responses of the directors to questions regarding their employment, affiliations and family and other relationships.

Vote Required

The five nominees for director who receive the highest number of votes “FOR” election by holders of our Common Stock who are entitled to vote at the Annual Meeting on the election of a director will be elected as directors, provided that a quorum is present. Unless otherwise instructed, the Named Proxies will vote properly executed proxies received by them “FOR” each of the director nominees.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE ELECTION OF MESSRS. LEBOW, RICCITELLI, GONYER, SCHULING AND DR. SMITH.

PROPOSAL 2

RATIFICATION OF THE APPOINTMENT OF THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Overview

BDO USA, LLP, currently serves as the Company's independent registered public accounting firm, and that firm conducted the audit of the Company's accounts for fiscal year 2015. The Audit Committee has selected BDO USA, LLP, as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2016, and the Board is asking stockholders to ratify that selection. Selection of the Company's independent registered public accounting firm is not required to be submitted to a vote of the stockholders of the Company for ratification. Although the Sarbanes-Oxley Act of 2002, as well as the charter of the Audit Committee, require the Audit Committee to engage, retain, and supervise the Company's independent registered public accounting firm, the Board considers the selection of the independent registered public accounting firm to be an important matter of stockholder concern and is submitting the selection of BDO USA, LLP, for ratification by stockholders as a matter of good corporate practice.

If a majority of votes cast on this matter are not cast in favor of the selection of BDO USA, LLP, the Audit Committee and the Board will reconsider the selection of such firm as the Company's independent registered public accounting firm. Even if stockholders vote on an advisory basis in favor of the selection, the Audit Committee may, in its discretion, direct the selection of different independent auditors at any time during the year if it determines that such a change would be in the best interests of the Company and the stockholders.

The Company expects that representatives of BDO USA, LLP, will be present at the Annual Meeting, will have an opportunity to make a statement, and will be available to respond to appropriate questions.

Vote Required

The affirmative vote of a majority of the shares of our Common Stock present in person or represented by proxy at the annual meeting is required to approve the ratification of the selection of BDO USA, LLP, as the Company's independent registered public accounting firm for the current fiscal year. Unless otherwise instructed, the Named Proxies will vote properly executed proxies received by them "FOR" the proposal.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR”

THE RATIFICATION OF THE SELECTION OF BDO USA, LLP, AS

THE COMPANY’S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2016.

PROPOSAL 3

APPROVAL OF AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION EFFECTING A REVERSE STOCK SPLIT OF THE COMPANY'S COMMON STOCK

Introduction

The Board has adopted a resolution approving, and recommending to the Company's stockholders for their approval, a proposed certificate of amendment to the Company's Certificate of Incorporation (as amended, the "Certificate of Incorporation") to effect a reverse split of the shares of the Company's Common Stock at a ratio ranging from 1:2 to 1:20 (the "Reverse Stock Split"). The text of the form of the proposed certificate of amendment to the Certificate of Incorporation is annexed to this proxy statement as Annex A-1. Assuming the stockholders approve the proposal, the Board will have the sole discretion under Section 242(c) of the General Corporation Law of the State of Delaware (the "DGCL"), as it determines to be in the best interest of the Company and its stockholders, both to select the specific exchange ratio within the designated range of 1:2 to 1:20 and also to decide whether or not to proceed to effect a Reverse Stock Split or instead to abandon the proposed certificate of amendment altogether. If a certificate of amendment is filed with the Secretary of State of the State of Delaware, the certificate of amendment to the Certificate of Incorporation will effect the Reverse Stock Split by reducing the outstanding number of shares of the Company's Common Stock by the ratio to be determined by the Board, but will not increase the par value of the Company's Common Stock, and will not change the number of authorized shares of the Company's Common Stock. If the Board does not implement an approved Reverse Stock Split prior to the one-year anniversary of this meeting, the Board will seek stockholder approval before implementing any Reverse Stock Split after that time.

By approving Proposal No. 3 and the Reverse Stock Split, stockholders will approve the form of certificate of amendment to the Certificate of Incorporation pursuant to which any whole number of outstanding shares, between and including two and twenty, would be combined into one share of the Company's Common Stock, and authorize the Board to file such certificate of amendment, as determined by the Board in the manner described herein. If approved, the Board may also elect not to effect any Reverse Stock Split and consequently not to file any certificate of amendment to the Certificate of Incorporation. The Board believes that stockholder approval of the certificate of amendment granting the Board this discretion, rather than approval of a specified exchange ratio, provides the Board with maximum flexibility to react to then-current market conditions and, therefore, is in the best interests of the Company and its stockholders.

The Company's Nasdaq Listing Compliance

The Company's Common Stock is listed on the Nasdaq Capital Market under the symbol "SGNL." To maintain a listing on the Nasdaq Capital Market, the Company must satisfy the applicable listing maintenance standards established by

Nasdaq. Among other things, the Company is required to comply with the continued listing requirements of the Nasdaq Capital Market (the “Nasdaq Capital Requirements”). To comply with such requirements, the Company must substantially meet each of the following requirements:

- a minimum bid price of at least \$1.00 per share;
- stockholders’ equity of at least \$2.5 million, or a total market value of listed securities of at least \$35 million;
- publicly held shares of at least 500,000;
- market value of publicly held securities of \$1 million; and
- at least 300 beneficial holders and holders of record of its common stock.

Currently, the Company meets the Nasdaq Capital Requirements, except the \$1.00 minimum bid price. Assuming the stockholders approve Proposal No. 3, the Board will determine whether to effect a Reverse Stock Split in the range of 1:2 to 1:20, at the ratio determined by the Board to be most likely sufficient to allow the Company to meet and maintain the \$1.00 minimum bid price requirement.

Reasons for the Reverse Stock Split

On November 24, 2015, Nasdaq notified us that the bid price of our Common Stock had closed below the required \$1.00 per share for 30 consecutive trading days, and, accordingly, that we did not comply with the applicable Nasdaq minimum bid price requirement. We have been provided 180 calendar days by Nasdaq to regain compliance with this requirement. The Company may be eligible for an additional 180 day extension from Nasdaq.

The Board has considered the potential harm to us of a delisting of the Company's Common Stock and has determined that, if the Company's Common Stock continues to trade below \$1.00 per share, the consummation of the Reverse Stock Split is the best way to maintain liquidity by achieving compliance with the Nasdaq Capital Requirements. Approval of Proposal No. 3 will permit us to file a certificate of amendment to the Certificate of Incorporation and the certificate of amendment filed thereby will contain the number of shares selected by the Board within the limits set forth in Proposal No. 3 to be combined into one share of Common Stock.

The Board also believes that the current low per share market price of the Company's Common Stock has a negative effect on the marketability of the Company's existing shares. The Board believes there are several reasons for this effect. First, certain institutional investors have internal policies preventing the purchase of low-priced stocks. Second, a variety of policies and practices of broker-dealers discourage individual brokers within those firms from dealing in low-priced stocks. Third, because the brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher priced stocks, the current share price of the Company's Common Stock can result in individual stockholders paying transaction costs (commissions, markups or markdowns) that are a higher percentage of their total share value than would be the case if the share price of the Common Stock were substantially higher. This factor is also believed to limit the willingness of some institutions to purchase the Common Stock. The Board anticipates that a Reverse Stock Split will result in a higher bid price for the Company's Common Stock, which may help to alleviate some of these problems.

If Proposal No. 3 is approved by the holders of the Company's Common Stock and the Board decides to implement the Reverse Stock Split, the Board will determine the ratio of the Reverse Stock Split, in the range of 1:2 to 1:20, as determined in the judgment of the Board to be most likely sufficient to allow us to achieve and maintain compliance with the minimum \$1.00 per share requirement for listing on the Nasdaq Capital Market for the longest period of time while retaining sufficient number of outstanding, tradeable shares to facilitate an adequate market. By way of illustration, assuming a per share price of \$[] immediately prior to the filing of the appropriate certificate of amendment to the Certificate of Incorporation, the Board may determine that we should effect a [1:2 – 1:20] reverse stock split, with the goal of achieving a bid price of \$[] per share. Please refer to the section entitled "Effects of the Reverse Stock Split" below for more detailed examples of the effects of the range of ratios.

We believe that maintaining listing on the Nasdaq Capital Market will provide us with a market for the Common Stock that is more accessible than if the Company's Common Stock were traded on the OTC Bulletin Board or in the "pink sheets" maintained by the OTC Markets Group, Inc. Such alternative markets are generally considered to be less

efficient than, and not as broad as, the Nasdaq Capital Market. Among other factors, trading on the Nasdaq Capital Market increases liquidity and may potentially minimize the spread between the “bid” and “asked” prices quoted by market makers. Further, a Nasdaq Capital Market listing may enhance our access to capital, increase our flexibility in responding to anticipated capital requirements and facilitate the use of our Common Stock in any strategic or financing transactions that it may undertake. We believe that prospective investors will view an investment in the Company more favorably if our shares qualify for listing on the Nasdaq Capital Market as compared with the OTC markets.

We expect that a Reverse Stock Split of our Common Stock will increase the market price of the Common Stock so that we are able to maintain compliance with the Nasdaq minimum bid price listing standard. However, the effect of a Reverse Stock Split on the market price of the Common Stock cannot be predicted with any certainty, and the history of similar stock split combinations for companies in like circumstances is varied. It is possible that the per share price of the Common Stock after the Reverse Stock Split will not rise in proportion to the reduction in the number of shares of the Common Stock outstanding resulting from the Reverse Stock Split, effectively reducing our market capitalization, and there can be no assurance that the market price per post-reverse split share will either exceed or remain in excess of the \$1.00 minimum bid price for a sustained period of time. The market price of the Company’s Common Stock may vary based on other factors that are unrelated to the number of shares outstanding, including the Company’s future performance.

In order to maintain the listing on the Nasdaq Capital Market, the Company must maintain a minimum market value of Publicly Held Shares of \$1 million. The Company, in addition to other listing requirements, must also maintain a minimum Stockholders' Equity value of at least \$2.5 million. As of December 31, 2015, the Company's market value of Publicly Held Shares was approximately \$6.0 million and our Stockholders' Equity was approximately \$10.4 million. Even if we meet the bid price requirement, if we are unable to comply with the other Nasdaq Capital Requirements, Nasdaq may determine to delist the Company's Common Stock from the Nasdaq Capital Market.

The Board does not intend for this transaction to be the first step in a series of plans or proposals of a "going private transaction" within the meaning of Rule 13e-3 of the Exchange Act.

Board Discretion to Implement the Reverse Stock Split

If the Board determines to effect the Reverse Stock Split, it will consider certain factors in selecting the specific exchange ratio, including prevailing market conditions, the trading price of the Common Stock and the steps that we will need to take in order to achieve compliance with the bid price requirement and other listing regulations of the Nasdaq Capital Market. Based in part on the price of the Common Stock on the days leading up to the filing of the certificate of amendment to the Certificate of Incorporation effecting the Reverse Stock Split, the Board will determine the ratio of the Reverse Stock Split, in the range of 1:2 to 1:20, that, in the judgment of the Board, is the reverse split ratio most likely to allow us to achieve and maintain compliance with the minimum \$1.00 per share requirement for listing on the Nasdaq Capital Market for the longest period of time, while retaining a sufficient number of outstanding, tradeable shares to facilitate an adequate market.

Notwithstanding approval of the Reverse Stock Split by the stockholders, the Board may, in its sole discretion, abandon the proposed certificate of amendment and determine prior to the effectiveness of any filing with the Secretary of State of the State of Delaware not to effect the Reverse Stock Split prior to the one year anniversary of this Special Meeting of stockholders, as permitted under Section 242(c) of the DGCL. If the Board fails to implement the certificate of amendment prior to the one-year anniversary of this meeting of stockholders, stockholder approval would again be required prior to implementing any Reverse Stock Split.

Consequences if Stockholder Approval for Proposal Is Not Obtained

If stockholder approval for Proposal No. 3 is not obtained, we will not be able to file a certificate of amendment to the Certificate of Incorporation to effect the Reverse Stock Split. Unless the bid price for the Common Stock increases to greater than \$1.00 for ten consecutive business days prior to May 23, 2016, then we will not meet the listing requirements for the Nasdaq Capital Market. If compliance is not achieved by May 23, 2016, and Nasdaq does not grant the Company an additional 180-day extension, then our stock would be delisted from the Nasdaq Capital Market. If we were unable to qualify for the additional compliance period, or if we were unable to regain compliance

during any such period, the Common Stock would likely be transferred to the OTC Bulletin Board or OTC Market.

If we fail to meet all applicable Nasdaq Capital Requirements and Nasdaq determines to delist the Common Stock, the delisting could adversely affect the market liquidity of the Common Stock and the market price of the Common Stock could decrease. Delisting could also adversely affect our ability to obtain financing for the continuation of our operations and/or result in the loss of confidence by investors, suppliers, commercial partners and employees. In addition, the limited number of authorized shares of the Common Stock that are neither outstanding nor reserved for issuance could adversely affect our ability to raise capital through equity financings.

Effects of the Reverse Stock Split

The following table sets forth the number of shares of the Company's Common Stock that would be outstanding immediately after the Reverse Stock Split at various exchange ratios, based on the 10,635,454 shares of Common Stock outstanding as of December 31, 2015. The table does not account for fractional shares that will be paid in cash.

Ratio of Reverse Stock Split	Approximate Shares of Common Stock Outstanding After Reverse Stock Split
None	10,635,454
1:2	5,317,727
1:3	3,545,151
1:4	2,658,863
1:5	2,127,090
1:6	1,772,575
1:7	1,519,350
1:8	1,329,431
1:9	1,181,717
1:10	1,063,545
1:11	966,859
1:12	886,287
1:13	818,111
1:14	759,675
1:15	709,030
1:16	664,715
1:17	625,614
1:18	590,858
1:19	559,760
1:20	531,772

If a stockholder owns 10,000 shares of Common Stock prior to the Reverse Stock Split, after the Reverse Stock Split that same stockholder would own 500 shares in the case of a Reverse Stock Split at the ratio of 1:20.

The lasting effect of the proposed Reverse Stock Split upon the market price for the Company's Common Stock cannot be predicted, and the history of similar reverse stock splits for companies in like circumstances is varied. We cannot assure you that the market price per new share of the Company's Common Stock after the Reverse Stock Split (which we refer to as "New Shares") will rise in proportion to the reduction in the number of old shares of the Company's

Common Stock outstanding (which we refer to as “Old Shares”) as a result of the Reverse Stock Split. We also cannot assure you that the market price per New Share will either exceed or remain in excess of the \$1.00 minimum bid price as required by the Nasdaq Capital Requirements, or that we will otherwise meet the requirements of Nasdaq for inclusion for trading on the Nasdaq Capital Market, including, for example, the applicable minimum market value requirements of the Nasdaq Capital Requirements. We cannot assure you that another reverse split of our Common Stock will not be necessary in the future. The market price of the Company’s Common Stock is dependent on our financial condition, performance, prospects and a number of other factors, many of which are unrelated to the number of shares outstanding. If our efforts to meet the Nasdaq Capital Requirements are unsuccessful, the Company’s Common Stock would remain subject to delisting.

The liquidity of the Company’s Common Stock could be adversely affected by the reduced number of shares that would be outstanding after the Reverse Stock Split, and the reduced number of shares may make it more difficult to trade shares of the Common Stock. In addition, the Reverse Stock Split will increase the number of the Company’s stockholders who own odd lots (less than 100 shares). Stockholders who hold odd lots typically will experience an increase in the cost of selling their shares, as well as possible greater difficulty in effecting those sales.

The Reverse Stock Split will affect all of the Company’s holders of Common Stock uniformly and will not affect any stockholder’s percentage ownership interests in the Company or proportionate voting power, except to the extent that the Reverse Stock Split results in any of the Company’s stockholders owning a fractional share, in which case such stockholders will receive a cash payment in lieu of such fractional share. The Company’s issued Common Stock will remain fully paid and non-assessable.

The Reverse Stock Split will not affect the par value of the Company's Common Stock. As a result, upon the effectiveness of the Reverse Stock Split, the stated capital on the Company's balance sheet attributable to our Common Stock will be reduced proportionately based on the exchange ratio selected by the Board for the Reverse Stock Split, and the additional paid-in capital account will be credited with the amount by which the stated capital is reduced. The per share net loss and net book value of the Company's Common Stock will be increased because there will be fewer shares of the Company's Common Stock outstanding. In addition, proportionate adjustments will be made to the per share exercise price and the number of shares issuable upon the exercise or settlement of all outstanding options, restricted stock units and warrants to purchase or acquire, as applicable, shares of Common Stock of the Company, and the number of shares reserved for issuance pursuant to our existing equity incentive plan will be reduced proportionately based on the exchange ratio selected by the Board for the Reverse Stock Split.

The Reverse Stock Split will have no effect on the total number of shares of Common Stock the Company is authorized to issue under the Certificate of Incorporation. Therefore, upon effectiveness of the Reverse Stock Split, the number of shares of Common Stock that are authorized and unissued will increase relative to the number of issued and outstanding shares. We may use the additional authorized and unissued shares of the Company's Common Stock resulting from the Reverse Stock Split to issue additional shares of the Company's Common Stock from time to time in equity financings, under our equity compensation plans or in connection with other matters. The Board currently has no plans, arrangements or understandings regarding the issuance of such additional authorized and unissued shares of the Company's Common Stock.

The Company's Common Stock is currently registered under Section 12(b) of the Exchange Act, and we are subject to the periodic reporting and other requirements of the Exchange Act. The proposed Reverse Stock Split will not affect the registration of the Common Stock under the Exchange Act. If the proposed Reverse Stock Split is implemented, the Common Stock will continue to be reported on the Nasdaq Capital Market under the symbol "SGNL" (although Nasdaq would likely add the letter "D" to the end of the trading symbol for a period of approximately 20 trading days to indicate that the Reverse Stock Split has occurred).

Potential Anti-Takeover Effect of the Reverse Stock Split

Upon effectiveness of the Reverse Stock Split, the number of authorized shares of Common Stock that are not issued or outstanding will increase relative to the number of shares of Common Stock that are issued and outstanding prior to the Reverse Stock Split. Although this increase could, under certain circumstances, have an anti-takeover effect (for example, by permitting issuances that would dilute the stock ownership of a person seeking to effect a change in the composition of the Board or contemplating a tender offer or other transaction for the combination of the Company with another company), Proposal No. 3 is not being proposed in response to any effort of which we are aware to accumulate shares of the Company's Common Stock or to obtain control of the Company.

Effective Date

The Reverse Stock Split will be effected at 5:01 p.m. Eastern time, on the date that the certificate of amendment to the Certificate of Incorporation is filed with the Secretary of State of the State of Delaware. Beginning at the effective time of the Reverse Stock Split, each certificate representing Old Shares will be deemed for all corporate purposes to represent New Shares. The text of the proposed certificate of amendment to the Certificate of Incorporation is in the form annexed to this proxy statement as Annex A-1.

Exchange of Stock Certificates

The transfer agent for the Company will act as the “exchange agent” for purposes of implementing the exchange of stock certificates. Holders of Old Shares will be asked to surrender to the exchange agent certificates representing Old Shares in exchange for certificates representing New Shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by the exchange agent. No new certificates will be issued to a stockholder until the stockholder has surrendered the stockholder’s outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent. Stockholders should not destroy any stock certificates and should not submit any certificates until requested to do so.

Fractional Shares

No fractional shares of Common Stock will be issued as a result of the proposed Reverse Stock Split. Instead, stockholders who otherwise would be entitled to receive fractional shares will, upon surrender to the exchange agent of certificates representing their fractional shares, be entitled to receive cash in an amount equal to the product obtained by multiplying (i) the closing sales price of the Company's Common Stock as reported on the Nasdaq Capital Market on the effective date of the certificate of amendment to the Certificate of Incorporation by (ii) the number of shares of the Company's Common Stock held by such stockholder before the Reverse Stock Split that would otherwise have been exchanged for such fractional share interest. Holders of as many as 19 shares (if we were to implement a 1:20 Reverse Stock Split) of the Company's Common Stock would be eliminated as a result of the cash payment in lieu of any issuance of fractional shares or interests in connection with the Reverse Stock Split. The exact number by which the number of holders of the Company's Common Stock would be reduced will depend on the Reverse Stock Split ratio adopted and the number of stockholders that hold less than the Reverse Stock Split ratio as of the effective date of the Reverse Stock Split. As of May 2, 2016, there were approximately [] holders of record of the Company's Common Stock, of which [] were holders of less than 20 shares of the Company's Common Stock. As a result of the Reverse Stock Split, assuming the maximum Reverse Stock Split ratio of 1:20 were selected, we estimate that cashing out fractional stockholders would potentially reduce that number of stockholders of record to [].

Federal Income Tax Consequences of the Reverse Stock Split

The following is a summary of certain material federal income tax consequences of the Reverse Stock Split to certain holders of Old Shares, but does not purport to be a complete discussion of all of the potential tax considerations relating thereto. This summary is based on the provisions of the United States federal income tax law (including the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations promulgated thereunder, and judicial and administrative interpretations thereof) as of the date hereof, all of which are subject to change retroactively as well as prospectively. Our view regarding the tax consequences of the Reverse Stock Split are not binding upon the Internal Revenue Service or the courts, and there can be no assurance that the Internal Revenue Service or the courts will accept the positions expressed below. This summary assumes that the Old Shares were, and the New Shares will be, held as a "capital asset," as defined in the Code (i.e., generally, property held for investment). Further, it does not discuss any state, local, foreign or other tax consequences. In addition, this summary does not address the tax consequences applicable to a holder's particular circumstances or to holders that are subject to special tax rules, including without limitation banks, insurance companies, regulated investment companies, personal holding companies, foreign entities, nonresident alien individuals, broker-dealers, traders, tax-exempt entities and persons who hold Old Shares as a position in a hedging transaction, "straddle," "conversion transaction" or other risk reduction transaction. THIS SUMMARY OF CERTAIN MATERIAL U.S. FEDERAL TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. EACH STOCKHOLDER IS URGED TO CONSULT WITH SUCH STOCKHOLDER'S OWN TAX ADVISOR WITH RESPECT TO THE TAX CONSEQUENCES OF THE REVERSE STOCK SPLIT.

Other than the cash payments, if any, received by a stockholder in lieu of fractional shares as discussed below, no gain or loss should be recognized by a stockholder upon such stockholder's exchange of Old Shares for New Shares

pursuant to the Reverse Stock Split. The aggregate tax basis of the New Shares received pursuant to the Reverse Stock Split will be the same as the stockholder's aggregate tax basis in the Old Shares exchanged therefor, less any basis attributable to fractional share interests. Stockholders who receive cash in lieu of fractional share interests in the New Shares as a result of the Reverse Stock Split will be treated as having received the fractional shares pursuant to the Reverse Stock Split and then as having exchanged the fractional shares for cash in a redemption by the Company, and will generally recognize gain or loss equal to the difference between the amount of cash received in lieu of a fractional share and their adjusted basis allocable to the fractional share interests redeemed. Such gain or loss will be long term capital gain or loss if the Old Shares were held for more than one year. The stockholder's holding period for the New Shares will include the period during which the stockholder held the Old Shares surrendered in the Reverse Stock Split.

No gain or loss will be recognized by us as a result of the Reverse Stock Split.

No Dissenters' Rights

Under applicable Delaware law, the Company's stockholders are not entitled to dissenters' or appraisal rights with respect to the proposed amendment to the Certificate of Incorporation to effect the Reverse Stock Split. We will not independently provide our stockholders with any such right.

Vote Required

The affirmative vote of the holders of a majority of all outstanding shares of the Company's Common Stock on the record date is required for approval of the proposed certificate of amendment to the Certificate of Incorporation set forth in Proposal No. 3 and included as Annex A-1. Broker non-votes with respect to Proposal No. 3 will be treated as votes "against" the proposal because they represent shares entitled to vote that have not been voted in the affirmative. Abstentions will also have the same effect as votes "against" the proposal because they represent shares entitled to vote that have not been voted in the affirmative.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR"

THE AMENDMENT TO THE COMPANY'S CERTIFICATE OF INCORPORATION EFFECTING A REVERSE STOCK SPLIT OF THE COMPANY'S COMMON STOCK

OTHER MATTERS

The Board knows of no other matters other than those stated in this Proxy Statement that are to be presented for action at the Annual Meeting. If any other matters should properly come before the Annual Meeting, it is intended that proxies in the accompanying form will be voted on any such matter in accordance with the judgment of the persons voting such proxies. Discretionary authority to vote on such matters is conferred by such proxies upon the persons voting them.

HOUSEHOLDING OF PROXY MATERIALS

Some brokers and other nominee record holders may be participating in the practice of “householding” proxy statements. This means that only one copy of this Proxy Statement may have been sent to multiple stockholders in a stockholder’s household. The Company will promptly deliver a separate copy of the Proxy Statement to any stockholder who contacts the Company’s Chief Financial Officer by writing to Signal Genetics, Inc., 5740 Fleet Street, Carlsbad, California 92008, or by calling (760) 537-4100. If a stockholder is receiving multiple copies of this Proxy Statement at the stockholder’s household and would like to receive a single copy of the Proxy Statement for a stockholder’s household in the future, the stockholder should contact his or her broker, other nominee record holder, or the Company’s Chief Financial Officer to request mailing of a single copy of this Proxy Statement.

THE COMPANY’S WEBSITE

In addition to the information about the Company contained in this Proxy Statement, extensive information about the Company can be found on its website located at www.signalgenetics.com including information about its management team, products and services and its corporate governance practices. The content on the Company’s website is available for information purposes only, and should not be relied upon for investment purposes, and is not deemed to be incorporated by reference into this Proxy Statement.

THE COMPANY’S PRINCIPAL EXECUTIVE OFFICE

The Company’s principal executive office is located at 5740 Fleet Street, Carlsbad, California 92008.

ANNUAL REPORT AND OTHER SEC FILINGS

Our 2015 Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K are available on our corporate website www.signalgenetics.com under the “Investor” tab. These and other SEC filings, including this Proxy Statement, are also available on the SEC’s website at www.sec.gov. The Company will provide, without charge, to each person being solicited by this Proxy Statement, on the written request or telephone call of any such person, a copy of the Annual Report of the Company on Form 10-K for the year ended December 31, 2015 (as filed with the SEC), including the financial statements and schedules thereto. All such requests should be directed to our Chief Financial Officer, Signal Genetics, Inc., 5740 Fleet Street, Carlsbad, California 92008, or by calling (760) 537-4100.

**ADDITIONAL QUESTIONS AND INFORMATION REGARDING
THE ANNUAL MEETING AND STOCKHOLDER PROPOSALS**

Q: What happens if additional proposals are presented at the Annual Meeting?

Other than the three proposals described in this Proxy Statement, we do not expect any matters to be presented for a vote at the Annual Meeting. If you grant a proxy, the persons named as proxy holders will have the discretion to **A:** vote your shares on any additional matters properly presented for a vote at the Annual Meeting. If for any unforeseen reason any of our nominees is not available as a candidate for director, the persons named as proxy holders will vote your proxy for such other candidate or candidates as may be nominated by the Board.

Q: Who will bear the cost of soliciting votes for the Annual Meeting?

Signal will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials. However, if you choose to vote over the Internet, you will bear the expenses for your Internet access. In addition to the mailing of these proxy materials, the solicitation of proxies or votes may be made in person, by telephone or **A:** by electronic communication by our directors, officers, and employees, who will not receive any additional compensation for such solicitation activities. We will also reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation materials to stockholders.

Q: How do I propose individuals to serve as directors?

Stockholders wishing to submit to the Nominating and Corporate Governance Committee qualified candidates for possible nomination to the Board may do so by sending the following information to the Nominating and Corporate Governance Committee, c/o Corporate Secretary, Signal Genetics, Inc., 5740 Fleet Street, Carlsbad, **A:** California 92008, not later than the close of business on the sixtieth (60th) day, nor earlier than the close of business on the ninetieth (90th) day in advance of the first anniversary of the preceding year's annual meeting of stockholders:

- (i) Name of the candidate and a brief biographical sketch and resume;
- (ii) Contact information for the candidate and a document evidencing the candidate's willingness to serve as a director if elected;
- (iii) A signed statement as to the submitting stockholder's current status as a stockholder and the number of shares currently held; and

(iv) Other information as described in our bylaws.

To be eligible for consideration at the 2017 annual meeting, notices must be received by us between March 20, 2017 and April 19, 2017.

37

Q: May I propose actions for consideration at next year's Annual Meeting of Stockholders?

Yes, you may submit proposals for consideration at next year's annual meeting of stockholders; provided it is based on a proper subject for stockholder action. In order for a stockholder proposal to be considered for inclusion in the proxy statement in reliance on Rule 14a-8 of the Exchange Act and presented at the 2017 annual meeting of stockholders, it must be received by us not less than 120 calendar days before [], 2017 (or by [], 2017), in such form as is required by the rules and regulations promulgated by the SEC. A proposal submitted by a stockholder outside of the process of Rule 14a-8 for the 2017 Annual Meeting of Stockholders will not be considered timely unless such proposal is received by us no later than April 19, 2017 and no earlier than March 20, 2017. The proxy to be solicited on behalf of our Board for the 2017 annual meeting of stockholders may confer discretionary authority to vote on any such proposal considered to have been received on a non-timely basis that nonetheless properly comes before the 2017 Annual Meeting of Stockholders.

By Order of the Board of Directors,

Tamara A. Seymour
Corporate Secretary
May [], 2016

Annex A-1

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

OF

SIGNAL GENETICS, INC.

Signal Genetics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify:

First: The name of the corporation is Signal Genetics, Inc. (the “**Corporation**”).

Second: The date of filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware was June 17, 2014.

Third: The Board of Directors (the “**Board**”) of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the DGCL, adopted resolutions amending its Certificate of Incorporation as follows:

1. Article IV of the Certificate of Incorporation of the Corporation is hereby amended to add the following provisions in their entirety to the existing provisions of Article IV:

“Effective at 5:01 p.m. Eastern time, on the date of the filing of this Certificate of Amendment to the Certificate of Incorporation with the Secretary of State of the State of Delaware (the “Effective Time”), the shares of the Corporation’s Common Stock, par value \$0.01 per share, issued and outstanding immediately prior to the Effective Time and the

shares of Common Stock issued and held in the treasury of the Corporation immediately prior to the Effective Time shall be combined into a smaller number of shares such that each [2 to 20, as determined by the Board] shares of issued and outstanding Common Stock immediately prior to the Effective Time are combined into one validly issued, fully paid and nonassessable share of Common Stock, par value \$0.01 per share. Notwithstanding the immediately preceding sentence, no fractional shares shall be issued and, in lieu thereof, upon surrender after the Effective Time of a certificate which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the combination, following the Effective Time (after taking into account all fractional shares of Common Stock otherwise issuable to such holder), shall be entitled to receive a cash payment equal to the fraction to which such holder would otherwise be entitled multiplied by the fair value of the Common Stock on the date of the Effective Time, as determined by the Board of Directors.

A-1

Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding

immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been combined (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time), provided however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been combined.”

Fourth: Thereafter, pursuant to a resolution by the Board, this Certificate of Amendment was submitted to the stockholders of the Corporation for their approval in accordance with the provisions of Section 211 and 242 of the DGCL. Accordingly, said proposed amendment has been adopted in accordance with Section 242 of the DGCL.

In Witness Whereof, Signal Genetics, Inc. has caused this Certificate of Amendment to be signed by its duly authorized officer this _____ day of _____, 2016.

Signal
Genetics, Inc.

By:
Samuel
D.
Riccitelli

