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

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934 (Amendment No.)**

Filed by the Registrant

Filed by a Party other than the Registrant

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 under §240.14a-12

Invitae Corporation

(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.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) 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):

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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:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:



Invitae Corporation
1400 16th Street
San Francisco, California 94103
(415) 374-7782

April 6, 2017

Dear Stockholder:

You are cordially invited to attend the 2017 Annual Meeting of Stockholders of Invitae Corporation. The meeting will be held at 10:00 a.m., Pacific Time, on Tuesday, May 16, 2017, at the Company's headquarters located at 1400 16th Street, San Francisco, CA 94103.

The formal notice of the Annual Meeting and the Proxy Statement has been made a part of this invitation.

Whether or not you plan to attend the Annual Meeting, it is important that your shares be represented and voted at the Annual Meeting. After reading the Proxy Statement, please promptly vote. **Your shares cannot be voted unless you sign, date and return the enclosed proxy, vote by telephone or the Internet, vote as instructed by your broker, or attend the Annual Meeting in person.**

We have also enclosed a copy of our 2016 Annual Report to Stockholders.

We look forward to seeing you at the meeting.

Sincerely,

Sean E. George, Ph.D.
President and Chief Executive Officer

Invitae Corporation

**NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held on Tuesday, May 16, 2017**

To our Stockholders:

Invitae Corporation will hold its Annual Meeting of Stockholders at 10:00 a.m., Pacific Time, on Tuesday, May 16, 2017 at the Company's headquarters located at 1400 16th Street, San Francisco, CA 94103.

We are holding this Annual Meeting:

- to elect two Class I directors to serve until the 2020 Annual Meeting or until their successors are duly elected and qualified;
- to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2017; and
- to transact such other business as may properly come before the Annual Meeting and any adjournments or postponements of the Annual Meeting.

Stockholders of record at the close of business on March 27, 2017 are entitled to notice of and to vote at this meeting and any adjournments or postponements of the Annual Meeting.

It is important that your shares be represented at this meeting. Even if you plan to attend the meeting, we hope that you will vote promptly. Please review the instructions on page 1 of the attached Proxy Statement regarding your voting options.

By Order of the Board of Directors



Lee Bendekgey
Chief Financial Officer and Secretary

San Francisco, California
April 6, 2017

**Important Notice Regarding the Availability of Proxy Materials for the
Annual Meeting of Stockholders to be held on May 16, 2017.**

**The Proxy Statement and Annual Report are available at
<http://www.astproxyportal.com/ast/19938/>**

Invitae Corporation
1400 16th Street
San Francisco, California 94103

PROXY STATEMENT

Information Concerning Voting and Solicitation

This Proxy Statement is being furnished to you in connection with the solicitation by the board of directors of Invitae Corporation, a Delaware corporation (“we,” “us,” “our,” “Invitae” or the “Company”), of proxies in the accompanying form to be used at the Annual Meeting of Stockholders of the Company to be held at the Company’s headquarters located at 1400 16th Street, San Francisco, California 94103 on Tuesday, May 16, 2017, at 10:00 a.m., Pacific Time, and any postponement or adjournment thereof (the “Annual Meeting”).

This Proxy Statement and the accompanying form of proxy are being mailed to stockholders on or about April 6, 2017.

**Questions and Answers About
the Proxy Materials and the Annual Meeting**

What proposals will be voted on at the Annual Meeting?

Two proposals will be voted on at the Annual Meeting:

- The election of two Class I directors to serve until the 2020 Annual Meeting or until their successors are duly elected and qualified; and
- The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2017.

What are the Board’s recommendations?

Our board recommends that you vote:

- “FOR” election of each of the nominated Class I directors; and
- “FOR” ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2017.

Will there be any other items of business on the agenda?

We do not expect any other items of business because the deadline for stockholder proposals and nominations has already passed. Nonetheless, in case there is an unforeseen need, the accompanying proxy gives discretionary authority to the persons named on the proxy with respect to any other matters that might be properly brought before the meeting. Those persons intend to vote that proxy in accordance with their best judgment.

Who is entitled to vote?

Stockholders of record at the close of business on March 27, 2017 (the “Record Date”) may vote at the Annual Meeting. Each stockholder is entitled to one vote for each share of the Company’s common stock held as of the Record Date.

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

Stockholder of Record. If your shares are registered directly in your name with Invitae’s transfer agent, American Stock Transfer & Trust Company, LLC, you are considered, with respect to those shares, the

stockholder of record. The Proxy Statement, Annual Report and proxy card have been sent directly to you by Invitae.

Beneficial Owner. If your shares are held in a brokerage account or by a bank or other nominee, you are considered the beneficial owner of shares held in street name. The Proxy Statement, Annual Report and voting instructions have been forwarded to you by your broker, bank or nominee who is considered, with respect to those shares, the stockholder of record.

How do I vote?

You may vote using any of the following methods:

By Mail – Stockholders of record may submit proxies by completing, signing and dating each proxy card received and returning it in the prepaid envelope. Sign your name exactly as it appears on the proxy. If you return your signed proxy but do not indicate your voting preferences, your shares will be voted on your behalf “FOR” the election of the nominees for Class I director and “FOR” the ratification of the independent registered public accounting firm for 2017. Stockholders who hold shares beneficially in street name may provide voting instructions by mail by completing, signing and dating the voting instruction forms provided by their brokers, banks or other nominees.

By Telephone – Stockholders of record may submit proxies by following the telephone voting instructions on their proxy cards. Most stockholders who hold shares beneficially in street name may provide voting instructions by telephone by calling the number specified on the voting instruction form provided by their brokers, banks or nominees. Please check the voting instruction form for telephone voting availability. Please be aware that if you submit voting instructions by telephone, you may incur costs such as telephone access charges for which you will be responsible. The telephone voting facilities will close at 11:59 p.m., Eastern Daylight Time, the day before the meeting date.

By Internet – Stockholders of record may submit proxies by following the Internet voting instructions on their proxy cards. Most stockholders who hold shares beneficially in street name may provide voting instructions by accessing the website specified on the voting instruction form provided by their brokers, banks or nominees. Please check the voting instruction form for Internet voting availability. Please be aware that if you vote over the Internet, you may incur costs such as Internet access charges for which you will be responsible. The Internet voting facilities will close at 11:59 p.m., Eastern Daylight Time, the day before the meeting date.

In Person at the Annual Meeting – Shares held in your name as the stockholder of record may be voted at the Annual Meeting. Shares held beneficially in street name may be voted in person only if you obtain a legal proxy from the broker, bank or nominee that holds your shares 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 or voting instructions or vote by telephone or the Internet so that your vote will be counted if you later decide not to attend the meeting.

Can I change my vote or revoke my proxy?

You may change your vote or revoke your proxy at any time prior to the vote at the Annual Meeting. If you are a stockholder of record and submitted your proxy by mail, you must file with the Secretary of the Company a written notice of revocation or deliver, prior to the vote at the Annual Meeting, a valid, later-dated proxy. If you submitted your proxy by telephone or the Internet, you may change your vote or revoke your proxy with a later telephone or Internet proxy, as the case may be. Attendance at the Annual Meeting will not have the effect of revoking a proxy unless you give written notice of revocation to the Secretary before the proxy is exercised or you vote by written ballot at the Annual Meeting.

If you are a beneficial owner of shares held in street name and you wish to change or revoke your vote, please consult the voting instructions provided with this proxy statement or contact your broker, bank or nominee.

How are votes counted?

In the election of directors, you may vote “FOR” each of the Class I nominees or your vote may be “WITHHELD” with respect to one or more of the nominees. For Proposal 2, the appointment of Ernst & Young LLP as our independent registered public accounting firm for 2017, you may vote “FOR,” vote “AGAINST” or “ABSTAIN.” An abstention has the same effect as a vote “AGAINST” the proposal.

If you provide specific instructions, your shares will be voted as you instruct. If you sign your proxy card or voting instruction form with no further instructions, your shares will be voted in accordance with the recommendations of the board of directors (“FOR” each of the Class I nominees to the board of directors, “FOR” the ratification of Ernst & Young LLP as our independent registered public accounting firm and in the discretion of the proxy holders on any other matters that may properly come before the meeting).

What vote is required to approve each item?

For Proposal 1, the election of directors, the two persons receiving the highest number of “FOR” votes at the Annual Meeting will be elected.

Proposal 2 requires the affirmative “FOR” vote of the holders of a majority of the shares present at the Annual Meeting in person or by proxy and entitled to vote. Abstentions have the same effect as votes “AGAINST” this proposal.

If you hold shares beneficially in street name and do not provide your broker or nominee with voting instructions, your shares may constitute “broker non-votes.” Generally, broker non-votes occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. In tabulating the voting result for any particular proposal, shares that constitute broker non-votes are not considered entitled to vote on that proposal. Thus, broker non-votes will not affect the outcome of any matter being voted on at the Annual Meeting, assuming that a quorum is obtained.

Is cumulative voting permitted for the election of directors?

Stockholders may not cumulate votes in the election of directors, which means that each stockholder may vote no more than the number of shares he or she owns for a single director candidate.

What constitutes a quorum?

The presence at the Annual Meeting, in person or by proxy, of the holders of a majority of the shares of common stock outstanding on the Record Date will constitute a quorum. As of the close of business on the Record Date, there were 42,304,799 shares of our common stock outstanding. Both abstentions and broker non-votes are counted for the purpose of determining the presence of a quorum.

How are proxies solicited?

Our employees, officers and directors may solicit proxies. We will pay the cost of printing and mailing proxy materials, and will reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy material to the owners of our common stock. At this time, we have not engaged a proxy solicitor. If we do engage a proxy solicitor, we will pay the customary costs associated with such engagement.

IMPORTANT

Please promptly vote by signing, dating and returning the enclosed proxy card in the postage-prepaid return envelope provided, voting by telephone or the Internet, or voting following the instructions provided by your bank, broker or nominee, so that your shares can be voted.

Proposal 1

Election of Directors

Directors and Nominees

Our amended and restated bylaws, provide that our board of directors shall consist of such number of directors as the board of directors may from time to time determine. Our board of directors currently consists of five directors. The authorized number of directors may be changed by resolution of our board of directors. Vacancies on our board of directors can be filled by resolution of our board of directors. Our board of directors is divided into three classes, each serving staggered, three-year terms:

- Our Class I directors are Geoffrey S. Crouse and Christine M. Gorjanc and their terms will expire at the Annual Meeting;
- Our Class II director is Randal W. Scott and his term will expire at our 2018 annual meeting of stockholders; and
- Our Class III directors are Eric Aguiar and Sean E. George and their terms will expire at our 2019 annual meeting of stockholders.

Two Class I directors will be elected at the Annual Meeting to serve until the Annual Meeting of stockholders to be held in 2020 or until their successors are duly elected and qualified, with the other classes of directors continuing to serve for the remainder of their respective terms. The two nominees receiving the highest number of affirmative votes will be elected as Class I directors. The nominating and corporate governance committee of the board of directors has recommended, and the board of directors has designated, Geoffrey S. Crouse and Christine M. Gorjanc as the nominees for Class I directors to serve until the 2020 annual meeting. If any nominee is unable or declines to serve as a director at the time of the Annual Meeting, an event that we do not currently anticipate, proxies will be voted for any nominees designated by the board of directors, taking into account any recommendations of the nominating and corporate governance committee, to fill the vacancies.

Names of the Class I nominees and the other members of the board of directors and certain biographical information as of March 31, 2017 are set forth below:

<u>Name</u>	<u>Age</u>	<u>Position with Company</u>	<u>Director Since</u>
Randal W. Scott, Ph.D.	59	Executive Chairman of the Board	2010
Sean E. George, Ph.D.	43	President, Chief Executive Officer, Director and Co-Founder	2010
Eric Aguiar, M.D.	55	Director	2010
Geoffrey S. Crouse	46	Director	2012
Christine M. Gorjanc	60	Director	2015

Randal W. Scott, Ph.D. has served as our Executive Chairman since August 2012 and as a director since 2010. From August 2012 through January 2016 he served as our Chief Executive Officer. From 2000 through August 2012, Dr. Scott held a number of positions at Genomic Health, Inc., a publicly held genomic information company which he co-founded in 2000, most recently serving as the Chief Executive Officer of a wholly-owned subsidiary of Genomic Health, and as a director. Dr. Scott also served as Executive Chairman of the Board of Genomic Health from January 2009 until March 2012 and as Chairman of the Board and Chief Executive Officer from August 2000 until December 2008. Dr. Scott was a founder of Incyte Corporation, which at the time was a genomic information company, and served in various roles from 1991 through 2000, including Chairman of the Board, President and Chief Scientific Officer. Dr. Scott holds a B.S. in Chemistry from Emporia State University and a Ph.D. in Biochemistry from the University of Kansas. We believe that Dr. Scott is qualified to serve on our board of directors due to his years of experience in the life sciences industry and his extensive executive leadership, management and board experience at public companies, and as our former Chief Executive Officer.

Sean E. George has served as our Chief Executive Officer since January 2016, a position he previously held from January 2010 through August 2012. Dr. George is one of the Company's co-founders and has served as its President and Chief Operating Officer since August 2012. He has also served as a director since January 2010. Prior to co-founding Invitae, Dr. George served as Chief Operating Officer from 2007 to November 2009 at Navigenics, Inc., a personalized medicine company. Previously, he served as Senior Vice President of Marketing and Senior Vice President, Life Science Business at Affymetrix, Inc., a provider of life science and molecular diagnostic products, as well as Vice President, Labeling and Detection Business at Invitrogen Corporation, a provider of tools to the life sciences industry, during his tenure there from 2002 to 2007. Dr. George holds a B.S. in Microbiology and Molecular Genetics from the University of California Los Angeles, an M.S. in Molecular and Cellular Biology from the University of California Santa Barbara, and a Ph.D. in Molecular Genetics from the University of California Santa Cruz. We believe that Dr. George's perspective as our founder, and his current role as Chief Executive Officer qualify him to serve on our board of directors.

Eric Aguiar, M.D. has been a member of our board of directors since September 2010. Since January 2016 he has been a partner at Aisling Capital, an investment firm specializing in products, technologies, and global businesses that advance health. He was a partner in the venture capital firm Thomas, Mc Nerney & Partners from 2007 to January 1, 2016. Prior to joining that firm, he was a Managing Director of HealthCare Ventures, a healthcare focused venture capital firm, from 2001 to 2007. Dr. Aguiar was Chief Executive Officer and a director of Genovo, Inc., a biopharmaceutical company focused on gene delivery and gene regulation, from 1998 to 2000. Dr. Aguiar previously served as a director of Amarin Pharmaceuticals, a publicly-held biopharmaceutical company, as well as on the boards of directors of numerous private companies including companies in the life sciences industry. He is a member of the Board of Overseers of the Tufts School of Medicine and a member of the Council on Foreign Relations. He received an M.D. with honors from Harvard Medical School and a B.A. in Arts and Sciences from Cornell University. Dr. Aguiar was also a Luce Fellow and is a Chartered Financial Analyst. We believe that Dr. Aguiar is qualified to serve on our board of directors due to his extensive experience with in the life science field, his experience on various boards, and his management and financial experience with life sciences companies.

Geoffrey S. Crouse has served on our board of directors since March 2012. Mr. Crouse served as Chief Executive Officer of Cord Blood Registry from September 2012 to August 2015 when the Company was sold to AMAG Pharmaceuticals. He served as Executive Vice President of AMAG until December 2015. Cord Blood Registry stores stem cells from umbilical blood and tissues. He previously served as Chief Operating Officer at Immucor, Inc., a publicly traded in vitro diagnostics company, from August 2009 to April 2011. From April 2011 through September 2012, Mr. Crouse was a consultant. Prior to Immucor, he served as Vice President of the life sciences business at Millipore Corporation, a publicly traded provider of technologies, tools and services for the life science industry, from 2006 to 2009. Prior to joining Millipore, he worked at Roche, a pharmaceuticals and diagnostics company, where he held various roles from 2003 to 2006. Mr. Crouse holds a B.A. in English and Japanese from Boston College and an M.B.A. and Masters of Public Health from the University of California Berkeley. We believe that Mr. Crouse is qualified to serve on our board of directors due to his extensive experience in the life sciences industry and his management and financial experience with life sciences companies.

Christine M. Gorjanc has served on our board of directors since November 2015. She has served as the Chief Financial Officer of Netgear, Inc., a provider of networking products and services, since January 2008, where she previously served as Chief Accounting Officer from December 2006 to January 2008 and Vice President, Finance from November 2005 to December 2006. From September 1996 through November 2005, Ms. Gorjanc served as Vice President, Controller, Treasurer and Assistant Secretary for Aspect Communications Corporation, a provider of workforce and customer management solutions. From October 1988 through September 1996, she served as the Manager of Tax for Tandem Computers, Inc., a provider of fault-tolerant computer systems. Prior to that, Ms. Gorjanc served in management positions at Xidex Corporation, a manufacturer of storage devices, and spent eight years in public accounting with a number of public accounting firms. Ms. Gorjanc holds a B.A. in Accounting (with honors) from the University of Texas at El Paso and a M.S. in Taxation from Golden Gate University. We believe that Ms. Gorjanc is qualified to serve on our board of directors due to her extensive experience in the technology industry and her management and financial experience.

Director Nominations

The board of directors nominates directors whose term is scheduled to expire at the next Annual Meeting of stockholders and elects new directors to fill vacancies when they arise. The nominating and corporate governance committee has the responsibility to identify, evaluate, recruit and recommend qualified candidates to the board for nomination or election.

Our board strives to find directors who are experienced and dedicated individuals with diverse backgrounds, perspectives and skills. Our governance guidelines contain membership criteria that call for candidates to be selected for their character, judgment, diversity of experience, business acumen and ability to act on behalf of all stockholders. In addition, we expect each director to be committed to enhancing stockholder value and to have sufficient time to effectively carry out his or her duties as a director. Our nominating and corporate governance committee also seeks to ensure that a majority of our directors are independent under the rules of the New York Stock Exchange, or NYSE, and that one or more of our directors is an “audit committee financial expert” under the rules of the Securities and Exchange Commission, or SEC, rules.

The nominating and corporate governance committee believes it appropriate for at least one, and, preferably, multiple, members of the board of directors to meet the criteria for an “audit committee financial expert” as defined by SEC rules, and that a majority of the members of the board meet the definition of “independent director” under the NYSE rules. The nominating and corporate governance committee believes it appropriate for certain key members of our management – currently, the chief executive officer and our executive chairman of the board – to participate as members of the board of directors.

Prior to our annual meeting of stockholders, our nominating and corporate governance committee identifies director nominees first by evaluating the current directors whose terms will expire at the annual meeting and who are willing to continue in service. The candidates are evaluated based on the criteria described above, the candidate’s prior service as a director, and the needs of the board of directors for any particular talents and experience. If a director no longer wishes to continue in service, if the nominating and corporate governance committee decides not to re-nominate a director, or if a vacancy is created on the board of directors because of a resignation or an increase in the size of the board or other event, then the committee will consider whether to replace the director or to decrease the size of the board. If the decision is to replace a director, the nominating and corporate governance committee will consider various candidates for board membership, including those suggested by committee members, by other board members, a director search firm engaged by the committee or our stockholders. Prospective nominees are evaluated by the nominating and corporate governance committee based on the membership criteria described above and set forth in our governance guidelines.

A stockholder who wishes to suggest a prospective nominee for the board of directors should notify the Secretary of the Company or any member of the nominating and corporate governance committee in writing with any supporting material the stockholder considers appropriate. In addition, our Bylaws contain provisions that address the process by which a stockholder may nominate an individual to stand for election to the board of directors at our annual meeting of stockholders. In order to nominate a candidate for director, a stockholder must give timely notice in writing to the Secretary of the Company and otherwise comply with the provisions of our Bylaws. To be timely, our Bylaws provide that we must have received the stockholder’s notice not more than 120 days nor less than 90 days prior to the first anniversary of the preceding year’s annual meeting of stockholders. However, in the event that no annual meeting was held in the preceding year or the annual meeting is called for a date that is more than 30 days before or more than 60 days after the first anniversary date of the preceding year’s annual meeting of stockholders, notice by the stockholder to be timely must be so received by our Secretary not later than the close of business on the later of (1) the 90th day prior to the date of the scheduled annual meeting and (2) the 10th day following the earlier to occur of the day on which notice of the date of the scheduled annual

meeting was mailed or the day on which public announcement of the date of such scheduled annual meeting was first made. An adjournment or postponement of an annual meeting will not commence a new time period or extend any time period for the giving of the stockholder's notice described above. Information required by the Bylaws to be in the notice include the name and contact information for the candidate and the person making the nomination and other information about the nominee that must be disclosed in proxy solicitations under Section 14 of the Securities Exchange Act of 1934 and the related rules and regulations under that Section.

Each notice delivered by a stockholder who wishes to recommend a prospective nominee to our board for consideration by the nominating and corporate governance committee generally must include the following information about the prospective nominee:

- the name, age, business address and residence address of the person;
- the principal occupation of the person;
- the number of shares of our capital stock owned by the person;
- a description of all compensation and other relationships during the past three years between the stockholder and the person;
- any other information relating to the person required to be disclosed pursuant to Section 14 of the Securities Exchange Act of 1934, or Exchange Act; and
- the person's written consent to serve as a director if elected.

The nominating and corporate governance committee may require any prospective nominee recommended by a stockholder to furnish such other information as the committee reasonably may require to determine the person's eligibility to serve as an independent director or that could be material to a stockholder's understanding of the person's independence or lack thereof.

Stockholder nominations must be made in accordance with the procedures outlined in, and include the information required by, our Bylaws and must be addressed to: Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103. You may obtain a copy of the full text of this provision of the Bylaws by writing to our Secretary at the above address.

Director Independence

Our board of directors determined that Eric Aguiar, Geoffrey S. Crouse and Christine M. Gorjanc are "independent directors" as defined under the rules of the NYSE. There are no family relationships among any of our directors or executive officers.

Board Meetings

The board of directors held 11 meetings during 2016. Each director attended at least 75% of the aggregate meetings held by the board of directors. The independent directors meet in executive sessions at regularly scheduled meetings of the board of directors without the participation of the President and Chief Executive Officer, Executive Chairman, or other members of management. We do not have a policy that requires the attendance of directors at the Annual Meeting.

Meeting of Non-Management and Independent Directors and Communications with Directors

During meetings of our board of directors, our independent directors meet in an executive session without management or management directors present. The purpose of these executive sessions is to promote open and candid discussion among the non-management directors. Christine M. Gorjanc, our lead independent director, presides over the executive sessions of the independent directors. Our board of directors welcomes questions or comments about our company and our operations. If a stockholder or interested party wishes to communicate with our board of directors, including our independent directors, they may send their communication in writing to: Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103. You must include your

name and address in the written communication and indicate whether you are a stockholder. The Secretary will review any communication received from a stockholder or interested party, and all material communications will be forwarded to the appropriate director or directors or committee of the board of directors based on the subject matter.

Board Committees

We have established an audit committee, compensation committee and nominating and corporate governance committee, each of which operate under a charter that has been approved by our board of directors. Copies of each charter are posted on the corporate governance section of our website at www.invitae.com. We believe that the composition of these committees meets the criteria for independence under, and the functioning of these committees complies with the applicable requirements of, the Sarbanes-Oxley Act of 2002, and the current rules and regulations of the SEC and the NYSE. We intend to comply with future requirements as they become applicable to us. Each committee has the composition and responsibilities described below.

Audit Committee

Current Members:

Christine M. Gorjanc (Chair)
Eric Aguiar, M.D.
Geoffrey S. Crouse

Number of Meetings in 2016:

5 (does not include actions by written consent)

Functions:

Our audit committee assists our board of directors in fulfilling its legal and fiduciary obligations in matters involving our accounting, auditing, financial reporting, internal control and legal compliance functions, and is directly responsible for the approval of the services performed by our independent registered public accounting firm and reviewing of their reports regarding our accounting practices and systems of internal accounting control. Our audit committee also oversees the audit efforts of our independent registered public accounting firm and takes actions as it deems necessary to satisfy itself that such firm is independent of management. Our audit committee is also responsible for monitoring the integrity of our consolidated financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters. Our board of directors has determined that each of Dr. Aguiar, Mr. Crouse and Ms. Gorjanc is an audit committee financial expert, as defined by the rules promulgated by the SEC, and each of the members of our audit committee has the requisite financial sophistication as defined under the applicable rules and regulations of the NYSE.

Compensation Committee

Current Members:

Geoffrey S. Crouse (Chair)
Eric Aguiar, M.D.

Number of Meetings in 2016:

0 (does not include actions by written consent)

Functions:

Our compensation committee assists our board of directors in meeting its responsibilities with regard to oversight and determination of executive compensation and assesses whether our compensation structure establishes appropriate incentives for officers and employees. Our compensation committee reviews and makes recommendations to our

board of directors with respect to our major compensation plans, policies and programs. In addition, our compensation committee reviews and makes recommendations for approval by the independent members of our board of directors regarding the compensation for our Executive Chairman of the Board and executive officers, establishes and modifies the terms and conditions of employment of our Executive Chairman of the Board and executive officers and administers our stock option plans.

The board of directors has established a Special Stock Incentive Plan Committee, the members of which are our President and Chief Executive Officer, Sean E. George, and our Executive Chairman, Randal W. Scott. The Committee has been delegated the authority to make awards or grants under our Stock Incentive Plan (including shares, options, restricted stock, or restricted stock units) up to a maximum number of shares of common stock, in the aggregate, to employees (including new employees), other than to any member of our board of directors and individuals designated by our board of directors as “Section 16 officers.” The Committee’s authority expires, unless renewed, after June 30, 2017.

Nominating and Corporate Governance Committee

Current Members:

Eric Aguiar, M.D. (Chair)
Geoffrey S. Crouse

Number of Meetings in 2016:

1 (does not include actions by written consent)

Functions:

Our nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and the size and composition of the board of directors. In addition, our nominating and corporate governance committee is responsible for overseeing our corporate governance guidelines, and reporting and making recommendations to the board of directors concerning corporate governance matters.

Corporate Governance

Board Leadership Structure

The board of directors has chosen to separate the roles of chief executive officer and chairman of the board of directors and to have two executive officers serve in those roles. This situation enables our founder and Chief Executive Officer, Dr. George, to focus on the day-to-day operation of our business while allowing Dr. Scott, our Executive Chairman, and former Chief Executive Officer, to focus on leadership of the board of directors and on strategic matters, in addition to providing direction on issues such as stockholder relationships. While the board believes it is important to retain the organizational flexibility to determine whether the roles of chairman of the board and chief executive officer should be separated or combined in one individual, or whether to elect an independent non-executive chairman, the board currently believes that the interests of the Company and its stockholders are better served with an executive officer serving in each role.

The board believes this structure promotes better alignment of strategic development and execution, more effective implementation of strategic initiatives, and clearer accountability for their success or failure. Moreover, the board believes that having an executive officer serve in each position does not impede independent oversight. The independent directors have chosen to appoint a lead independent director, currently the chair of the audit committee, Christine M. Gorjanc, to run executive sessions of the board. The independent directors meet in an

executive session after each regular board meeting, at which the independent directors have the opportunity to discuss management performance.

Role in Risk Oversight

Our board of directors is responsible for overseeing the overall risk management process at the company. The responsibility for managing risk rests with executive management while the committees of our board of directors and our board of directors as a whole participate in the oversight process. Our board of directors' risk oversight process builds upon management's risk assessment and mitigation processes, which include reviews of long-term strategic and operational planning, executive development and evaluation, regulatory and legal compliance, and financial reporting and internal controls.

Certain Relationships and Related Transactions

It is our policy that all employees, officers and directors must avoid any activity that is or has the appearance of conflicting with the interests of the Company. This policy is included in our code of business conduct and ethics discussed below. We conduct a review of all related party transactions for potential conflict of interest situations on an ongoing basis and all such transactions relating to executive officers and directors must be approved by the independent and disinterested members of our board of directors or an independent and disinterested committee of the board.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is or has in the past served as one of our officers or employees. None of our executive officers currently serves, or in the past year has served, as a member of a board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Corporate Governance Guidelines

Our board has adopted written corporate governance guidelines, or Corporate Governance Guidelines, to ensure that the board will have the necessary authority and practices in place to review and evaluate our business operations as needed and to make decisions that are independent of our management. The guidelines are also intended to align the interests of directors and management with those of our stockholders. The Corporate Governance Guidelines set forth the practices the board intends to follow with respect to board composition and selection, board meetings and involvement of senior management, Chief Executive Officer performance evaluations and succession planning, and board committees and compensation. The Nominating and Corporate Governance Committee assists the board in implementing and adhering to the Corporate Governance Guidelines. The Corporate Governance Guidelines are reviewed at least annually by the Nominating and Corporate Governance Committee, and changes are recommended to our board of directors with respect to changes as warranted.

Code of Business Conduct and Ethics

We believe that our corporate governance initiatives comply with the Sarbanes-Oxley Act of 2002 and the rules and regulations of the SEC adopted thereunder. In addition, we believe our corporate governance initiatives comply with the rules of the NYSE. Our board of directors will continue to evaluate our corporate governance principles and policies.

Our board of directors has adopted a code of business conduct and ethics that applies to each of our directors, officers and employees. The code addresses various topics, including:

- compliance with laws, rules and regulations;
- confidentiality;
- conflicts of interest;

-
- corporate opportunities;
 - competition and fair dealing;
 - payments or gifts from others;
 - health and safety;
 - insider trading;
 - protection and proper use of company assets;
 - record keeping; and
 - giving and accepting gifts.

Our board of directors has adopted a code of ethics for senior financial officers applicable to our Chief Executive Officer and Chief Financial Officer as well as other key management employees addressing ethical issues. The code of business conduct and the code of ethics are each posted on our website ir.invitae.com. The code of business conduct and the code of ethics can only be amended by the approval of a majority of our board of directors. Any waiver to the code of business conduct for an executive officer or director or any waiver of the code of ethics may only be granted by our board of directors or our nominating and corporate governance committee and must be timely disclosed as required by applicable law. We have implemented whistleblower procedures that establish formal protocols for receiving and handling complaints from employees. Any concerns regarding accounting or auditing matters reported under these procedures will be communicated promptly to our audit committee. Stockholders may request a free copy of our code of business conduct and code of ethics by contacting Invitae Corporation, Attention: Secretary, 1400 16th Street, San Francisco, California 94103.

To date, there have been no waivers under our code of business conduct or code of ethics. We intend to disclose future amendments to certain provisions of our code of business conduct or code of ethics or waivers of such codes granted to executive officers and directors on our website at ir.invitae.com within four business days following the date of such amendment or waiver.

Corporate Governance Materials

Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, charters for each of the Audit, Compensation and Corporate Governance Committees and other corporate governance documents, are posted on the investor relations section of our website at ir.invitae.com under the heading “Governance—Corporate documents.” In addition, stockholders may obtain a print copy of our Corporate Governance Guidelines and Code of Business Conduct and Ethics as well as the charters of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee by writing to Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103.

Certain Relationships and Related Transactions

In addition to the compensation arrangements of our directors and named executive officers discussed elsewhere in this Proxy Statement, the following is a description of transactions since January 1, 2016, to which we have been or will be a party, and in which the amount involved exceeded or will exceed \$120,000 and in which any of our directors, executive officers, beneficial holders of more than 5% of our capital stock, or entities affiliated with, or immediate family members of, any of the foregoing, had or will have a direct or indirect material interest.

Indemnification Agreements

We have entered into indemnification agreements with our directors and executive officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against

liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

Related Party Transaction Approval

We have adopted a written policy that our executive officers, directors, holders of more than 5% of any class of our voting securities, and any member of the immediate family of and any entity affiliated with any of the foregoing persons, are not permitted to enter into a related party transaction with us without the prior consent of our audit committee, or other independent members of our board of directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. Any request for us to enter into a transaction with an executive officer, director, principal stockholder, or any of their immediate family members or affiliates, in which the amount involved exceeds \$120,000 must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee will consider the relevant facts and circumstances available and deemed relevant to our audit committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related party's interest in the transaction.

2016 Director Compensation

The following table shows certain information with respect to the compensation of our non-employee directors during the fiscal year ended December 31, 2016:

<u>Name</u>	<u>Fees earned or paid in cash (\$)</u>	<u>Option awards (\$)⁽¹⁾</u>	<u>Total (\$)</u>
Eric Aguiar, M.D.	50,000	57,951 ⁽²⁾	107,951
Geoffrey S. Crouse	50,000	57,951 ⁽²⁾	107,951
Christine M. Gorjanc	45,000	28,976 ⁽³⁾	73,976

- (1) Amounts represent the aggregate fair value of the option awards computed as of the grant date of each award in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC 718) for financial reporting purposes, rather than amounts paid to or realized by the named individual. Our assumptions with respect to the calculation of these values are set forth in Note 8 to Consolidated Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2016. There can be no assurance that option awards will be exercised (in which case no value will be realized by the individual) or that the value on exercise will approximate the fair value as computed in accordance with ASC 718.
- (2) On May 5, 2016, we granted to each of Dr. Aguiar and Mr. Crouse an option to purchase 10,000 shares of our common stock, vesting in equal monthly installments over one year, commencing on the grant date. The option grants have an exercise price of \$9.18 per share.
- (3) On May 5, 2016, we granted Ms. Gorjanc an option to purchase 5,000 shares of our common stock, vesting in equal monthly installments over one year, commencing on the grant date. The option has an exercise price of \$9.18 per share.

The following table sets forth the aggregate number of shares of common stock underlying option awards outstanding at December 31, 2016:

<u>Name</u>	<u>Number of Shares</u>
Eric Aguiar, M.D.	20,000
Geoffrey S. Crouse	22,500
Christine M. Gorjanc	25,000

Employee directors do not receive any compensation for service as a member of our board of directors, although we anticipate including our Executive Chairman in the annual equity grants noted below commencing in 2017. We reimburse our non-employee directors for their reasonable out-of-pocket costs and travel expenses in connection with their attendance at board and committee meetings.

Initial Equity Grants. Each non-employee director who joins our board of directors will receive an option to purchase 20,000 shares of our common stock, with one quarter of the shares subject to the option vesting on the first anniversary of the director's appointment or election to our board of directors and 1/48th of the shares subject to the option vesting on a monthly basis over the following three years, subject to the director's continuous service as a member of our board of directors. The exercise price of these options will be the fair market value on the date of grant. If still vesting, the options will accelerate in full upon a change in control of our company.

Annual Equity Grants. Each non-employee director with at least 12 months of continuous service as of the date of each annual meeting of our stockholders is entitled to an annual award of an option to purchase 10,000 shares of our common stock. Non-employee directors with less than 12 months of continuous service as of such annual meeting are also entitled to such an option, but with the amount of shares pro-rated to reflect their applicable portion of a full year of service. The exercise price of annual equity awards will be the fair market value on the date of grant. If still vesting, the annual equity awards will accelerate in full upon a change in control of our company.

Cash Compensation. Each non-employee director is entitled to receive annual cash compensation for their service on our board of directors, payable quarterly in arrears. Annual compensation is pro-rated for non-employee directors with less than 12 months of service. Unpaid retainers are payable in full for the current fiscal year in the event of a change in control of our company during that fiscal year. The annual retainer for service on our board of directors is \$30,000. Directors, other than committee chairs, receive an annual fee of \$5,000 for service on each of the committees of our board of directors on which they serve. The chairperson of the Audit Committee receives an annual fee of \$15,000 and the chairpersons of the Compensation Committee and the Nominating and Corporate Governance Committee each receive an annual fee of \$10,000.

Executive Compensation

The following table sets forth information concerning the total compensation our president and chief executive officer and two other highest paid executive officers, who we refer to as our named executive officers, earned for services rendered to us in all capacities during the year ended December 31, 2016.

2016 Summary Compensation Table

Name and principal position	Fiscal year	Salary (\$)	Option awards (\$) ⁽¹⁾	Total(\$)
Randal W. Scott, Ph.D. ⁽²⁾ <i>Executive Chairman</i>	2016	250,000	—	250,000
	2015	251,000	—	251,000
Sean E. George, Ph.D. ⁽³⁾ <i>President and Chief Executive Officer</i>	2016	330,000	452,739 ⁽⁶⁾	782,739
	2015	331,000	1,111,051 ⁽⁵⁾	1,442,051
Robert L. Nussbaum, M.D. ⁽⁴⁾ <i>Chief Medical Officer</i>	2016	350,000	452,739 ⁽⁶⁾	802,739
	2015	134,615	617,251 ⁽⁷⁾	751,866

- (1) The amounts in this column represent the aggregate fair value of the option awards computed as of the grant dates in accordance with FASB ASC Topic 718, rather than amounts paid to or realized by the individual. See the notes to our consolidated financial statements for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options.
- (2) Dr. Scott also served as our chief executive officer until January 9, 2017.
- (3) Dr. George became our chief executive officer on January 9, 2017.
- (4) Dr. Nussbaum became our chief medical officer on August 1, 2015.
- (5) On August 4, 2015, we granted Dr. George an option to purchase 180,000 shares of our common stock at an exercise price of \$9.90 per share. The option vests as to 25% of the shares on the one-year anniversary of the grant date and 1/48th of the shares vest each month thereafter over the remaining three years.
- (6) On March 31, 2016, we granted to each of Dr. George and Dr. Nussbaum an option to purchase 70,000 shares of our common stock at an exercise price of \$10.23 per share. The options vest as to 25% of the shares on the one-year anniversary of the grant date and 1/48th of the shares vest each month thereafter over the remaining three years.
- (7) On August 4, 2015, we granted Dr. Nussbaum an option to purchase 100,000 shares of our common stock at an exercise price of \$9.90 per share. The option vests as to 25% of the shares on the one-year anniversary of the grant date and 1/48th of the shares vest each month thereafter over the remaining three years.

Salary

In February 2017, the independent members of the board of directors, on the recommendation of the compensation committee, approved increases in the base salaries of the named executive officers to the following amounts: Dr. George, \$500,000 and Dr. Nussbaum, \$375,000.

Equity Incentive Awards

In February 2017, the independent members of the board of directors, on the recommendation of the compensation committee, approved equity awards for certain of our named executive officers under our 2015 Stock Incentive Plan (the "2015 Stock Plan"), in the following types and amounts: Dr. George, an option to purchase 252,648 shares of common stock at an exercise price of \$9.06 per share, the fair market value on the date of grant, and a restricted stock unit ("RSU") award for 176,470 shares of common stock; and Dr. Nussbaum, an RSU award of 58,823 shares. The option vests over a four-year period, becoming exercisable as to 25% of the shares on the first anniversary of the grant date with the remaining shares vesting as to 1/48th of the shares each full month thereafter over the following 36 months. The option has a term of ten years, subject to earlier

termination in specified events related to termination of employment. The RSU awards vest in three equal installments, with 1/3rd of the total award vesting on each of May 15, 2018, 2019 and 2020, subject to continued employment.

In February 2016, the board of directors approved the grant of performance-based restricted stock unit (“PRSU”) awards under the 2015 Stock Plan to certain employees, which included Dr. George and Dr. Nussbaum. The PRSUs could be earned based on the achievement of certain performance conditions measured over a period of approximately 12 months. In February 2017, fully vested restricted stock units were awarded upon the Audit Committee’s determination of the level of achievement. Dr. George and Dr. Nussbaum received 5,000 and 4,000 shares of common stock, respectively, in connection with the immediate vesting of these restricted stock units.

From time to time, our executive officers and directors may enter into written trading plans pursuant to Rule 10b5-1 of the Securities and Exchange Act of 1934.

2016 Outstanding Equity Awards at Fiscal Year-End

The following table presents information regarding outstanding equity awards held by our named executive officers as of December 31, 2016:

Name	Grant date	Option awards				Stock awards	
		Number of securities underlying unexercised options (exercisable) (#)	Number of securities underlying unexercised options (unexercisable) (#)	Option exercise price (\$/share)	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$)
Randal W. Scott, Ph.D.	—	—	—	—	—	—	—
Sean E. George, Ph.D.	11-16-12	33,333	—	1.26	11-16-22 (1)	—	—
	2-28-14	35,416	14,584	3.42	2-28-24 (2)	—	—
	10-15-14	27,083	22,917	8.70	10-15-24 (2)	—	—
	8-4-15	60,000	120,000	9.90	8-4-25 (2)	—	—
	3-31-16	—	70,000	10.23	3-31-26 (2)	—	—
Robert L. Nussbaum, M.D.	11-16-12	1,666	— (2)	1.26	11-16-22	—	—
	8-4-15	33,333	66,667 (2)	9.90	8-4-25	—	—
	3-31-16	—	70,000 (2)	10.23	3-31-26	—	—

- (1) The options vest as to 25% of the shares on the one-year anniversary of the vesting start date of August 31, 2012 and 1/48th of the shares vest each month thereafter over the remaining three years.
- (2) The options vest as to 25% of the shares on the one-year anniversary of the grant date and 1/48th of the shares vest each month thereafter over the remaining three years.

Equity Compensation Plan Information

The following table summarizes the number of outstanding options granted to our employees, consultants and directors, as well as the number of shares of common stock remaining available for future issuance under our equity compensation plans as of December 31, 2016.

	Number of Securities to be Issued upon Exercise of Outstanding Options and Rights (a)	Weighted Average Exercise Price of Outstanding Options and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))
Equity compensation plans approved by security holders	4,490,662 (1)	\$ 8.21	1,375,766 (2)
Equity compensation plans not approved by security holders	—	—	—
Total	4,490,662	\$ 8.21	1,375,766

- (1) Includes 1,371,523 shares issuable upon exercise of options outstanding under our 2010 Stock Incentive Plan (the “2010 Stock Plan”) and 3,119,139 shares issuable upon exercise of options outstanding under our 2015 Stock Plan, which became effective in connection with our initial public offering in February 2015. Shares subject to outstanding awards under our 2010 Stock Plan that are subsequently forfeited or terminated for any reason before being exercised or settled, including shares subject to vesting restrictions that are subsequently forfeited, will become available for awards under our 2015 Stock Plan.
- (2) Represents shares available for future issuance under our 2015 Stock Plan as of December 31, 2015. No shares of common stock are available for future issuance under our 2010 Stock Plan other than to satisfy the exercise of stock options granted under that plan prior to its termination upon the closing of our initial public offering in February 2015.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information as of the Record Date as to shares of our common stock beneficially owned by: (1) each person who is known by us to own beneficially more than 5% of our common stock, (2) each of our named executive officers listed in the summary compensation table, (3) each of our directors and (4) all of our current directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock that they beneficially own, subject to applicable community property laws.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options held by that person that are currently exercisable or exercisable within 60 days after March 27, 2017, the Record Date for the Annual Meeting. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person.

Except as otherwise set forth in footnotes to the table below, the address of each of the persons listed below is c/o Invitae Corporation, 1400 16th Street, San Francisco, California 94103.

<i>Name and address of beneficial owner</i>	Number of shares beneficially owned	Percentage of shares beneficially owned
Named Executive Officers and Directors:		
Randal W. Scott, Ph.D.	3,506,225	8.2%
Sean E. George, Ph.D. (1)	438,323	1.0%
Robert L. Nussbaum, M.D. (2)	62,708	*
Eric Aguiar, M.D. (3)	30,000	*
Geoffrey S. Crouse (4)	56,759	*
Christine M. Gorjanc (5)	12,500	*
All current executive officers and directors as a group (7 persons) (6)	4,228,110	9.9%
5% Stockholders:		
Entities Affiliated with Baker Brothers Advisors, L.P. (7)	7,288,300	17.0%
Entities Affiliated with BlackRock, Inc. (8)	4,528,535	10.6%
Entities Affiliated with Wellington Management Group LLP. (9)	3,949,127	9.2%
Entities Affiliated with Thomas, McNerney & Partners II, L.P. (10)	3,732,460	8.7%
Entities Affiliated with Camber Capital Management LLC (11)	2,398,123	5.6%

* Represents beneficial ownership of less than 1%.

(1) Includes options to purchase 202,915 shares of common stock exercisable within 60 days of March 27, 2017.

(2) Includes options to purchase 62,708 shares of common stock exercisable within 60 days of March 27, 2017.

(3) Includes options to purchase 20,000 shares of common stock exercisable within 60 days of March 27, 2017.

(4) Includes options to purchase 22,500 shares of common stock exercisable within 60 days of March 27, 2017.

(5) Includes options to purchase 12,500 shares of common stock exercisable within 60 days of March 27, 2017.

(6) Includes options to purchase an aggregate of 442,218 shares of common stock exercisable within 60 days of March 27, 2017.

(7) According to Amendment No. 1 to Schedule 13D filed jointly on November 18, 2016, by Baker Bros. Advisors LP (“Adviser”), Baker Bros. Advisors (GP) LLC, Julian C. Baker and Felix J. Baker. Adviser has sole voting and dispositive power with respect to 7,288,300 shares held by the following limited partnerships and funds: Baker Brothers Life Sciences, L.P. (“Life Sciences”); 667, L.P. (“667”); and 14159, L.P. (“14159”). Of the 7,288,300 shares, 6,480,668 shares are held by Life Sciences; 734,261 shares are held by 667; and 73,371 shares are held by 14159, L.P. (“14159”). Adviser is the investment advisor of Life Sciences, 667, and 14159. Julian C. Baker and Felix J. Baker are managing members of Baker Bros. Advisors (GP) LLC, the general partner of the Adviser and, as such, share voting and dispositive power with respect to the shares owned by the limited partnership and the funds. Baker Bros. Advisors (GP) LLC, Adviser, Julian C. Baker and Felix J. Baker disclaim beneficial ownership of the securities. The principal address for the entities affiliated with Adviser is 667 Madison Avenue, 21st Floor, New York, NY 10065.

(8) According to Amendment No. 2 to Schedule 13G filed by BlackRock, Inc. (“BlackRock”) on January 12, 2017, BlackRock has sole voting power with respect to 4,499,870 shares and sole dispositive power with respect to 4,528,535 shares as the parent holding company of BlackRock (Luxembourg) S.A., BlackRock Advisors, LLC, BlackRock Asset Management Canada Limited, BlackRock Fund Advisors, BlackRock Institutional Trust Company, N.A., BlackRock International Limited, BlackRock Investment Management (Australia) Limited, BlackRock Investment Management, LLC, and BlackRock Japan Co Ltd. The principal address for BlackRock is 55 East 52nd Street, New York, NY 10055.

(9) According to Amendment No. 2 to Schedule 13G filed jointly on February 9, 2017 by Wellington Management Group LLP (“Wellington”), Wellington Group Holdings LLP, Wellington Investment Advisors LLP, Wellington Management Global Holdings, Ltd. and Wellington Management Company LLP, Wellington has shared voting power with respect to 3,378,688 shares and shared dispositive power with respect to 3,949,127 shares as the parent of Wellington Group Holdings LLP, Wellington Management Global Holdings, Ltd., and Wellington

Investment Advisors LLP. Wellington Investment Advisors Holdings LLP controls directly, or indirectly through Wellington Management Global Holdings, Ltd.: Wellington Management Company LLP, Wellington Management Canada LLC, Wellington Management Singapore Pte Ltd. Wellington Management Hong Kong Ltd, Wellington Management International Ltd, Wellington Management Japan Pte Ltd and Wellington Management Australia Pty Ltd. (the “Wellington Investment Advisers”). The shares are owned of record by clients of the Wellington Investment Advisers. Wellington Investment Advisors Holdings LLP is owned by Wellington Group Holdings LLP. Wellington Group Holdings LLP is owned by Wellington. The address of Wellington 280 Congress Street, Boston, MA 02210.

- (10) According to Schedule 13G filed jointly on February 16, 2016, by Thomas, McNerney & Partners II, L.P. (“TMP II”), TMP Associates II, L.P. (“TMPA II”), TMP Nominee II, LLC (“TMPN II”), Thomas, McNerney & Partners II, LLC (“TMP II LLC”), James E. Thomas, and Peter McNerney (collectively, “TMP Entities”), TMP II LLC, the general partner of TMP II and TMPA II, has voting and dispositive power over 3,732,460 shares (the “Total TMP II Shares”). Of the 3,732,460 shares: 3,682,968 shares are held by TMP II; 13,256 shares are held by TMPA II; and 36,236 shares held by TMPN II. TMPN II has entered into an agreement with TMP II LLC that directs TMPN II to vote and dispose of securities in the same manner as directed by TMP II LLC with respect to the shares held by TMP II and TMPA II. Consequently, TMP II LLC may be deemed to own beneficially the Total TMP II Shares. James E. Thomas and Peter McNerney are the managers of TMPN II and have shared voting and dispositive power over such securities, provided that they are obligated to exercise such power in the same manner as TMP II LLC votes and disposes of the shares over which TMP II LLC exercises voting and dispositive power. James E. Thomas is the sole manager of TMP II LLC and may be deemed to beneficially own the Total TMP II Shares. By virtue of their relationship as affiliated entities ultimately controlled by TMP II LLC and its individual manager, each of the TMP Entities, other than Peter McNerney, may be deemed to share the power to direct the disposition and vote of the Total TMP II Shares. Peter McNerney may be deemed to share the power to direct the disposition and vote of the shares held by TMPN II. Associates. The principal address of TMP II and its affiliates is 60 South Sixth Street, Suite 3620, Minneapolis, MN 55402.
- (11) According to Amendment No. 2 to Schedule 13G filed jointly on February 14, 2017 by Camber Capital Management LLC and Stephen Dubois, Camber Capital Management LLC and Stephen DuBois share voting and dispositive power with respect to the 2,398,123 shares. The address of Camber Capital Management LLC and Stephen DuBois is 101 Huntington Avenue, Suite 2550, Boston, MA 02199.

Report of the Audit Committee

The Audit Committee operates under a written charter adopted by the board of directors. A link to the Audit Committee Charter is available on our website at www.invitae.com. All members of the Audit Committee meet the independence standards established by the NYSE.

In performing its functions, the Audit Committee acts in an oversight capacity and necessarily relies on the work and assurances of the Company's management, which has the primary responsibility for financial statements and reports, and of the independent registered public accounting firm, who, in their report, express an opinion on the conformity of the Company's annual financial statements with accounting principles generally accepted in the United States. It is not the duty of the Audit Committee to plan or conduct audits, to determine that the Company's financial statements are complete and accurate and are in accordance with generally accepted accounting principles, or to assess or determine the effectiveness of the Company's internal control over financial reporting.

In fulfilling its oversight responsibilities, the Audit Committee reviewed and discussed Invitae's audited financial statements for the fiscal year ended December 31, 2016 with management and Ernst & Young LLP, Invitae's independent registered public accounting firm. The Audit Committee also discussed with Ernst & Young LLP the matters required to be discussed by Public Company Accounting Oversight Board AS 1301 "Communications with Audit Committees." This included a discussion of the independent registered public accounting firm's judgments as to the quality, not just the acceptability, of Invitae's accounting principles and such other matters that generally accepted auditing standards require to be discussed with the Audit Committee. The Audit Committee also received the written disclosures and the letter from Ernst & Young LLP required by the Public Company Accounting Oversight Board Ethics and Independence Rule 3526, "Communication with Audit Committees Concerning Independence", and the Audit Committee discussed the independence of Ernst & Young LLP with that firm.

Based upon these reviews and discussions, the Audit Committee recommended to the Board of Directors that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Audit Committee

Christine M. Gorjanc

Eric Aguiar, M.D.

Geoffrey S. Crouse

PROPOSAL 2

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee has appointed Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2017. Ernst & Young LLP has audited our financial statements since 2014. Representatives of Ernst & Young LLP are expected to be present at the Annual Meeting. They will have an opportunity to make a statement, if they desire to do so, and will be available to respond to appropriate questions.

Principal Accountant Fees and Services

The following table sets forth the fees billed by Ernst & Young LLP for audit and other services rendered:

	Year Ended December 31,	
	2016	2015
	(In thousands)	(In thousands)
Audit Fees (1)	\$ 911	\$ 1,237
Audit-related Fees	—	—
Tax Fees	—	—
All Other Fees (2)	2	—
	<u>\$ 913</u>	<u>\$ 1,237</u>

- (1) Audit fees include fees and out-of-pocket expenses, whether or not yet invoiced, for professional services provided in connection with the audit of our annual financial statements and review of our quarterly financial statements.
- (2) All other fees consist of the cost of our subscription to an accounting research tool provided by Ernst & Young LLP.

Pre-approval Policies and Procedures

In connection with our initial public offering, our audit committee established a policy to pre-approve all audit and permissible non-audit services provided by our independent registered public accounting firm. All of the services provided were pre-approved to the extent required. During the approval process, the audit committee considers the impact of the types of services and the related fees on the independence of the independent registered public accounting firm. The services and fees must be deemed compatible with the maintenance of that firm's independence, including compliance with rules and regulations of the SEC. Throughout the year, the audit committee will review any revisions to the estimates of audit and non-audit fees initially approved.

Required Vote

Ratification will require the affirmative vote of a majority of the shares present and entitled to vote at the Annual Meeting. Stockholder ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm is not required by our Bylaws or otherwise. However, the board of directors is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of corporate practice. If the stockholders fail to ratify the selection, the audit committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if the audit committee determines that such a change would be in the best interests of our company and our stockholders.

The Board of Directors Recommends a Vote "FOR" Ratification of Ernst & Young LLP as our Independent Registered Public Accounting Firm.

Section 16(A) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934 requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities, to file reports of ownership on Forms 3, 4 and 5 with the SEC. Officers, directors and greater than 10% stockholders are required to furnish us with copies of all Forms 3, 4 and 5 they file. Based solely on our review of the copies of such forms we have received and written representations from certain reporting persons that they filed all required reports, we believe that all of our officers, directors and greater than 10% stockholders complied on a timely basis with all Section 16(a) filing requirements applicable to them with respect to transactions during 2016.

Householding of Proxy Materials

To reduce the expense of delivering duplicate proxy materials to stockholders who may have more than one account holding our stock but who share the same address, we have adopted a procedure approved by the SEC called “householding.” Under this procedure, certain stockholders of record who have the same address and last name will receive only one copy of our proxy materials until such time as one or more of these stockholders notifies us that they want to receive separate copies. This procedure reduces duplicate mailings and saves printing costs and postage fees, as well as natural resources. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If you receive a single set of proxy materials as a result of householding, and you would like to have separate copies of our annual report or proxy statement mailed to you, please submit a request to: Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103, or call (415) 374-7782, and we will promptly send you what you have requested. You can also contact our Secretary at the above address or telephone number if you received multiple copies of the annual meeting materials and would prefer to receive a single copy in the future, or if you would like to opt out of householding for future mailings.

Stockholder Proposals for the 2018 Annual Meeting

If a stockholder wishes to present a proposal to be considered for inclusion in our proxy statement for the 2018 Annual Meeting of Stockholders, the proponent and the proposal must comply with the proxy proposal submission rules of the SEC. One of the requirements is that the proposal be received by our Secretary no later than December 7, 2017. Proposals we receive after that date will not be included in the proxy statement. We urge stockholders to submit proposals by Certified Mail — Return Receipt Requested.

A stockholder proposal not included in our proxy statement for the 2018 Annual Meeting will not be eligible for presentation at the meeting unless the stockholder gives timely notice of the proposal in writing to our Secretary at our principal executive offices and otherwise complies with the provisions of our Bylaws. To be timely, our Bylaws provide that we must have received the stockholder’s notice not more than 120 days nor less than 90 days prior to the first anniversary date of the preceding year’s annual meeting; however, if we have not held an annual meeting in the previous year or the date of the annual meeting is called for a date that is more than 30 days before or more than 60 days after the first anniversary date of the preceding year’s annual meeting, we must have received the stockholder’s notice not later than the close of business on the later of the 90th day prior to the date of the scheduled annual meeting or the 10th day following the earlier of the day on which notice of the annual meeting date was mailed or the day of the first public announcement of the annual meeting date. An adjournment or postponement of an annual meeting will not commence a new time period or extend any time period for the giving of the stockholder’s notice described above. The stockholder’s notice must set forth, as to each proposed matter, the information required by our Bylaws. The presiding officer of the meeting may refuse to acknowledge any matter not made in compliance with the foregoing procedure.

Other Matters

Your board of directors does not know of any other business that will be presented at the Annual Meeting. If any other business is properly brought before the Annual Meeting, the proxy holders will vote in accordance with their judgment unless you direct them otherwise. Whether or not you intend to attend the Annual Meeting, we urge you to vote by telephone, the Internet, or by signing and mailing the proxy or voting instruction form promptly.

By Order of the Board of Directors

A handwritten signature in black ink, appearing to read "Lee Bendekgey". The signature is fluid and cursive, with the first name "Lee" written in a larger, more prominent script than the last name "Bendekgey".

Lee Bendekgey
Chief Financial Officer and Secretary

San Francisco, California
April 6, 2017

Our Annual Report on Form 10-K for the year ended December 31, 2016 has been mailed with this Proxy Statement. We will provide copies of exhibits to our Annual Report on Form 10-K, but will charge a reasonable fee per page to any requesting stockholder. Stockholders may make such requests in writing to Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103. The request must include a representation by the stockholder that, as of March 27, 2017, the stockholder was entitled to vote at the Annual Meeting. Our Annual Report on Form 10-K and exhibits are also available at www.invitae.com.

ANNUAL MEETING OF STOCKHOLDERS OF
INVITAE CORPORATION

May 16, 2017

GO GREEN

e-Consent makes it easy to go paperless. With e-Consent, you can quickly access your proxy material, statements and other eligible documents online, while reducing costs, clutter and paper waste. Enroll today via www.astfinancial.com to enjoy online access.

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The Notice of Meeting, proxy statement and proxy card are available at <http://www.astproxyportal.com/ast/19938>

Please sign, date and mail
your proxy card in the
envelope provided as soon
as possible.

↓ Please detach along perforated line and mail in the envelope provided. ↓

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THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF DIRECTORS AND "FOR" PROPOSAL 2.
PLEASE SIGN, DATE AND RETURN PROMPTLY IN THE ENCLOSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE

1. The election as Class I director of the nominees listed below (except as marked to the contrary below).

FOR ALL NOMINEES

WITHHOLD AUTHORITY FOR ALL NOMINEES

FOR ALL EXCEPT (See instructions below)

NOMINEES:

Geoffrey S. Crouse

Christine M. Gorjanc

2. The ratification of Ernst & Young LLP as the independent registered public accounting firm for the fiscal year ending December 31, 2017.

FOR AGAINST ABSTAIN

In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned shareholder. If no direction is made, this proxy will be voted FOR ALL NOMINEES in Proposal 1 and FOR Proposal 2.

INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALL EXCEPT" and fill in the circle next to each nominee you wish to withhold, as shown here: ●

To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.

Signature of Stockholder _____

Date _____

Signature of Stockholder _____

Date _____

Note: Please sign exactly as your name or names appear on this Proxy. When shares are held jointly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name by duly authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.

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INVITAE CORPORATION

1400 16th Street

San Francisco, CA 94103

Proxy for Annual Meeting of Stockholders on May 16, 2017

Solicited on Behalf of the Board of Directors

The undersigned hereby appoints Lee Bendekgey and Thomas Brida, and each of them, with full power of substitution and power to act alone, as proxies to vote all the shares of Common Stock which the undersigned would be entitled to vote if personally present and acting at the Annual Meeting of Stockholders of Invitae Corporation, to be held at 10:00 a.m., Pacific Time, on May 16, 2017, at the Company's headquarters located at 1400 16th Street, San Francisco, CA 94103, and at any adjournments or postponements thereof, as follows:

(Continued and to be signed on the reverse side.)

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