

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:	
<input type="checkbox"/>	Preliminary Proxy Statement
<input type="checkbox"/>	Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
<input checked="" type="checkbox"/>	Definitive Proxy Statement
<input type="checkbox"/>	Definitive Additional Materials
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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 all boxes that apply):	
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<input type="checkbox"/>	Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11



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

April 19, 2023

To our stockholders,

2022 was transformative for Invitae, and we passed several milestones along the way. We finished the year having served over 3.6 million patients in total since our founding. Additionally, information from over 2.3 million patients has been made available for sharing, in support of our core tenets that patients own their data and that data is more valuable when shared. From a customer standpoint, we wrapped up 2022 with over 20,000 health systems, institutions, clinics, and providers actively ordering from us. We are more and more focused on how we provide value for customers who share our vision to bring accessible and affordable genetic information into healthcare. Finally, our full year 2022 revenue crossed the \$500 million threshold for the first time. These milestones are important, and come with them an acknowledgement of the privilege we have to be of service to so many. Invitaens believe in our mission, care deeply for the health outcomes of patients, and also embrace our fundamental responsibility to deliver long-term value for our stockholders.

In 2022, we also delivered a major strategic realignment, executed to reshape Invitae and set us on a path to operational excellence, profitable growth, cash preservation, and focused investment in support of our most promising opportunities. We are pleased that the major initiatives under our strategic realignment are now largely completed. These changes have unlocked improved margins and reduced cash consumption, and were done with swift execution and courage by our dedicated and committed teams.

The transformation does not end there. Already in 2023 we have taken steps to put the company on a more solid financial footing by addressing our short term debt maturities, including the repayment of our senior term loan in full.

Our mission — to bring comprehensive genetic information into mainstream medicine to improve healthcare for billions of people — has not changed. I'd like to thank our many stockholders, investors, customers, patients, and employees for their continued support of our mission, and for their belief and confidence in the important work that we are doing at Invitae. We are now moving forward, with a refined focus and strategy to deliver sustainable growth as we go about reaching our long-term goals.

And, speaking of the long-term, value is created by our ability to extend our market leadership position in comprehensive genetic testing while building a powerful platform using variant interpretation and clinical insights, followed by new products in oncology care, pharmacogenomics, and an emerging data business. By integrating and connecting our portfolio of products and services, we are evolving from a one-patient, one-test business model to one where each patient interaction provides multiple opportunities to deliver solutions — for them, their families and others in the ecosystem. This multiplying value proposition can translate directly to better patient outcomes, greater innovation, higher revenue, higher profitability, higher growth, and stronger returns. We are uniquely positioned to do this, not simply because we think it makes sense, but also because patients will demand it.

Our goals for 2023 are to continue to expand the ways we serve patients and customers, to further unlock profitable growth, to strengthen our infrastructure, to invest in our most promising future bets and clinical evidence, and to do these while managing our cash. We will balance our focus on growth with an emphasis on long-term profitability and capital management to scale our business.

Finally, I can't talk about the efforts of Invitae without highlighting the impact of the talented, versatile, and hard-working employees who are Invitaens. It's not easy going through a major realignment, and I am proud of how we finished 2022 with a determination and grit that were impressive to witness. I am honored to be a part of this group, and I am optimistic about Invitae's future. We are grateful to our customers and patients for their business and for their trust, and to our stockholders for their support. We look forward to reporting our continued success for many years to come.

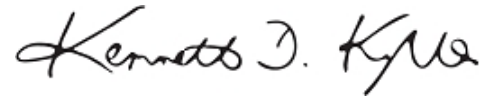
You are cordially invited to attend the 2023 Annual Meeting of Stockholders of Invitae Corporation, which will be held at 4:00 p.m., Pacific Time, on Monday, June 5, 2023. The Annual Meeting will be a completely virtual meeting of stockholders conducted via live audio webcast. You will be able to attend the Annual Meeting by visiting www.virtualshareholdermeeting.com/NVTA2023 and using the 16-digit control number included in your proxy materials.

The formal notice of the Annual Meeting and the Proxy Statement have 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 vote by Internet or telephone, vote as instructed by your broker, or vote your shares electronically at the Annual Meeting.**

We look forward to seeing you at the meeting.

Together in health,



Kenneth D. Knight

Chief Executive Officer

Invitae Corporation

Notice of Annual Meeting of Stockholders

To Be Held on Monday,
June 5, 2023

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on June 5, 2023.

The Proxy Statement and Annual Report are available at www.proxyvote.com

To our stockholders:

Invitae Corporation will hold its 2023 Annual Meeting of Stockholders at 4:00 p.m., Pacific Time, on Monday, June 5, 2023. The Annual Meeting will be a completely virtual meeting of stockholders conducted via live audio webcast. You will be able to attend the Annual Meeting by visiting www.virtualshareholdermeeting.com/NVTA2023 and using the 16-digit control number included in your proxy materials.

We are holding this Annual Meeting:

- to elect three Class I directors to serve until the 2026 annual meeting of stockholders or until their successors are duly elected and qualified;
- to approve, for purposes of complying with New York Stock Exchange (“NYSE”) listing rules, the issuance of shares of our common stock pursuant to the conversion of Notes and/or exercise of Warrants and the related change of control, as described in Proposal 2 (collectively, the “NYSE Proposal”);
- to approve, on a non-binding advisory basis, the compensation paid by us to our named executive officers as disclosed in the attached Proxy Statement;
- to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2023; 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 April 10, 2023 are entitled to notice of and to vote at the Annual Meeting and any adjournments or postponements of the Annual Meeting.

It is important that your shares be represented at the Annual Meeting. Whether or not you expect to attend the virtual Annual Meeting, please vote at your earliest convenience by following the instructions in the Notice of Internet Availability of Proxy Materials you received in the mail. Please review the detailed instructions on pages 50 to 54 regarding your voting options.

By Order of the Board of Directors,



Thomas R. Brida
General Counsel, Chief Compliance Officer and Secretary
San Francisco, California
April 19, 2023

Table of Contents

Proxy Statement	5
Information Concerning Voting and Solicitation	5
PROPOSAL 1: Election of Directors	6
Directors and Nominees	6
Director Nominations	10
Director Independence	11
Compensation Committee Interlocks and Insider Participation	11
Board Meetings	11
Board Committees	11
Corporate Governance	13
Certain Relationships and Related Transactions	17
Director Compensation	18
Officers	20
Executive Officers	20
Other Section 16 Officer	20
Executive Compensation	21
Compensation Discussion and Analysis	21
Compensation Committee Report	31
Summary Compensation Table	32
Grants of Plan-Based Awards Table	33
Outstanding Equity Awards at Fiscal Year-End Table	34
Option Exercises and Stock Vested Table	35
Potential Payments upon Termination or Change in Control	35
CEO Pay Ratio	36
Pay Versus Performance	37
Equity Compensation Plan Information	40
Security Ownership of Certain Beneficial Owners and Management	41
Report of the Audit Committee	43
PROPOSAL 2: The NYSE Proposal	44
Background	44
Proposal	45
Reasons for the Approval	45
Potential Effects of the Approval	46
Effect of Failure to Obtain Stockholder Approval	46
PROPOSAL 3: Non-Binding Advisory Vote on Executive Compensation	47
PROPOSAL 4: Ratification of Appointment of Independent Registered Public Accounting Firm	48
Principal Accountant Fees and Services	48
Pre-approval Policies and Procedures	48
Delinquent Section 16(a) Reports	49
Stockholder Proposals and Business for the 2024 Annual Meeting	49
Stockholder Proposals for Inclusion in the 2024 Proxy Statement	49
Stockholder Director Nominations for Inclusion in the 2024 Proxy Statement	49
Stockholder Director Nominations and Other Stockholder Proposals for Presentation at the 2024 Annual Meeting Not Included in the 2024 Proxy Statement	49

Other Matters	50
Questions and Answers About the Proxy Materials and the Annual Meeting	51
Note Regarding Forward-Looking Statements	56
Annex A. Reconciliation of GAAP Measures to Non-GAAP Measures	57



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 virtually on Monday, June 5, 2023 at 4:00 p.m., Pacific Time, and any adjournments or postponements thereof (the “Annual Meeting”).

We intend to mail the Notice of Internet Availability of Proxy Materials (the “Notice”) on or about April 19, 2023 to all stockholders of record entitled to vote at the Annual Meeting. We expect that this Proxy Statement and the other proxy materials will be available to stockholders on or about April 25, 2023.

Important

Please promptly vote by Internet or telephone, or by following the instructions provided by your broker, bank or nominee, so that your shares can be represented at the Annual Meeting.

YOU MAY VOTE IN ONE OF THE FOLLOWING WAYS:



INTERNET
Stockholders of record may vote online at www.proxyvote.com



TELEPHONE
Stockholders of record may call toll-free 1-800-690-6903



MAIL
Follow the instructions in your proxy materials



AT THE VIRTUAL MEETING
Visit www.virtualshareholdermeeting.com/NVTA2023 and use the 16-digit control number included in your proxy materials

PROPOSAL 1

Election of Directors

Directors and Nominees

Our amended and restated bylaws (“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 eight 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. Our board of directors is divided into three classes, each serving staggered, three-year terms:

- Our Class I directors are Geoffrey S. Crouse, Christine M. Gorjanc and Kenneth D. Knight, and their terms will expire at the Annual Meeting;
- Our Class II directors are Kimber D. Lockhart, Chitra Nayak and William H. Osborne, and their terms will expire at the 2024 annual meeting of stockholders; and
- Our Class III directors are Eric Aguiar and Randal W. Scott, and their terms will expire at 2025 annual meeting of stockholders.

Three Class I directors will be elected at the Annual Meeting to serve until the annual meeting of stockholders to be held in 2026 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 nominees receiving the highest number of affirmative votes will be elected as the Class I directors. The nominating and governance committee of the board has recommended, and our board of directors has designated, Geoffrey S. Crouse, Christine M. Gorjanc and Kenneth D. Knight as the nominees for Class I director to serve until the 2026 annual meeting of stockholders, and each has indicated to us that they will be able to serve. If any of the nominees are unable or decline 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 our board of directors, taking into account any recommendations of the nominating and governance committee, to fill such vacancy.

Certain biographical information and other information regarding the Class I nominees and the other members of our board of directors as of April 1, 2023 are set forth below:

- **Director Independence.** 7 of the 8 individuals currently serving as directors are independent within the meaning of the listing standards of the New York Stock Exchange.
- **Director Diversity.** 50% of our directors identify as a minority and 3 of 8 of our directors identify as female.
- **Director Tenure.** 50% of our directors have more than 5 years of tenure. The average tenure of our directors is approximately 5.4 years.
- **Director Age.** The average age of our directors is approximately 58 years.
- **Director Skills.** Our directors have diverse experiences and perspectives in areas that we believe are critical to the success of our business and to the creation of sustainable stockholder value, as described in the table below.

The following table presents independence, tenure, skills, diversity attributes, age and committee assignments for our directors.

	Aguiar	Crouse	Gorjanc	Knight	Lockhart	Nayak	Osborne	Scott	
Director Class	III	I	I	I	II	II	II	III	
Independence	●	●	●		●	●	●	●	88%
Tenure									
Invitae board tenure (consecutive years)	12	11	7	0	2	4	0	0	4.5
Invitae board tenure (total years)	12	11	7	0	2	4	0	7	5.4
Skills									
senior executive leadership	●	●	●	●	●	●	●	●	100%
finance and accounting expertise	●	●	●						38%
biotechnology / medical	●	●		●	●			●	63%
growth / operations	●	●	●	●	●	●	●	●	100%
sales and marketing		●				●	●		38%
technology	●	●		●	●	●		●	75%
cybersecurity / data privacy					●				13%
business development / M&A	●	●		●			●	●	63%
executive compensation and human capital management	●	●		●			●	●	63%
global expertise	●	●	●	●		●	●	●	75%
corporate governance			●				●	●	25%
risk oversight			●	●	●				38%
public company board service	●	●	●	●		●	●	●	88%
environmental sustainability						●			13%
Diversity									
Gender Diversity			●		●	●			38%
Racial/Ethnic Diversity	●			●		●	●		50%
Age	61	52	66	62	36	59	63	65	58
Committees									
✓ = Member; □ = Chair									
Audit		✓	□		✓		✓		
Compensation	✓	□	✓						
Nominating and Governance	□				✓	✓			

Class I Nominees:



Age: 52
Director
Since: 2012

INDEPENDENT

Committees:

- Audit
- Compensation (Chair)

GEOFFREY S. CROUSE

Since July 2017, Mr. Crouse has served as Chief Executive Officer of Candela Corporation, a non-surgical aesthetic device company. From December 2015 to July 2017, Mr. Crouse was a consultant for private equity evaluating investment opportunities. Mr. Crouse served as Chief Executive Officer of Cord Blood Registry, a company that stores stem cells from umbilical blood and tissues, from September 2012 to August 2015 when it was sold to AMAG Pharmaceuticals, and served as Executive Vice President of AMAG until December 2015. From April 2011 through September 2012, Mr. Crouse was a consultant for private equity evaluating investment opportunities. He previously served as Chief Operating Officer at Immucor, Inc., an in vitro diagnostics company, from August 2009 to April 2011. Prior to Immucor, he served as Vice President of the life sciences business at Millipore Corporation, a provider of technologies, tools and services for the life sciences industry, from 2006 to 2009. Prior to that, he worked at Roche, a pharmaceuticals and diagnostics company, where he held various roles from 2003 to 2006. Mr. Crouse holds a BA in English and Japanese from Boston College and an MBA 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.



Age: 66
Director
Since: 2015

INDEPENDENT

Committees:

- Audit (Chair)
- Compensation

CHRISTINE M. GORJANC

Ms. Gorjanc is an experienced financial executive with expertise gained through service as a chief financial officer as well as working in multinational public companies. Ms. Gorjanc served as the Chief Financial Officer of Arlo Technologies, Inc. (NYSE: Arlo), a home automation company, from August 2018 to June 2020. She previously served as the Chief Financial Officer of Netgear, Inc. (Nasdaq: NTGR), a provider of networking products and services, from January 2008 to August 2018, where she also 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 joined the board of Shapeways Holdings, Inc., a leader in the fast-growing digital manufacturing industry, in March 2023. Since May 2019, Ms. Gorjanc has served as a director of Juniper Networks, Inc. (NYSE: JNPR), a leader in secure AI driven networks, and from March 2021 to October 2022, Ms. Gorjanc served as a director of Zymogen Inc. (Nasdaq: ZY), a biotechnology company. Ms. Gorjanc holds a BA in accounting from the University of Texas at El Paso and an MS in taxation from Golden Gate University. In April 2022, Ms. Gorjanc achieved NACD Directorship Certified status (National Association of Corporate Directors). 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.



Age: 62
Director
Since: 2022

KENNETH D. KNIGHT

Mr. Knight has served as our Chief Executive Officer since July 2022 and as our Chief Operating Officer from June 2020 to July 2022. Prior to joining the Company, Mr. Knight most recently served as vice president of transportation services at Amazon.com, Inc. (Nasdaq: AMZN), a multinational and diversified technology company, from December 2019 to June 2020, and as Vice President of Amazon's Global Delivery Services, Fulfillment Operations and Human Resources from April 2016 to December 2019. Prior to his time at Amazon, from 2012 to March 2016, Mr. Knight served as General Manager of Material Handling and Underground Business Division at Caterpillar Inc., a manufacturer of machinery and equipment. Prior to that, Mr. Knight served in various capacities at General Motors Company (NYSE: GM), a vehicle manufacturer, for 27 years, including as Executive Director of Global Manufacturing Engineering and as Manufacturing General Manager. Since June 2021, Mr. Knight has served as a director and a member of the audit and finance committee of Simpson Manufacturing Co., Inc. (NYSE: SSD), a construction product manufacturer. Mr. Knight holds a BS in Electrical Engineering from the Georgia Institute of Technology and an MBA from the Massachusetts Institute of Technology. We believe that Mr. Knight's business experience and his understanding of our business given his current role as Chief Executive Officer qualify him to serve on our board of directors.



THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF THE CLASS I NOMINEES SET FORTH ABOVE AS DIRECTORS OF THE COMPANY.

Other Directors:



ERIC AGUIAR, MD

Since January 2016, Dr. Aguiar has been a partner at Aisling Capital, an investment firm specializing in products, technologies, and global businesses that advance health. Prior to Aisling Capital, from October 2007 to December 2015, he was a partner at Thomas, Mc Nerney & Partners, a healthcare venture capital and growth equity firm. From 2001 to 2007, Dr. Aguiar was a Managing Director of HealthCare Ventures, a healthcare focused venture capital firm. 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. Since December 2020, he has served as a director of Biomea Fusion (Nasdaq: BMEA), Inc., a preclinical-stage biopharmaceutical company. Since 2019, he has served as a director of BridgeBio Pharma, Inc. (Nasdaq: BBIO), a commercial-stage biopharmaceutical company. Dr. Aguiar previously served as a director of Eidos Therapeutics, Inc. (formerly Nasdaq: EIDX) in addition to Biohaven Pharmaceutical Holding Company Ltd. (NYSE: BHVN) and Amarin Pharmaceuticals (Nasdaq: AMRN), each a public biopharmaceutical company, as well as on the boards of directors of numerous private companies including companies in the life sciences industry. Since September 2021, Dr. Aguiar has served as a director of Garuda Therapeutics, a company focused on developing blood stem cell therapies. He is a member of the Council on Foreign Relations. Dr. Aguiar received an MD with honors from Harvard Medical School and a BA 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 in the life sciences field, his experience on various public company boards, and his management and financial experience with life sciences companies.

Age: 61
Director
Since: 2010

Lead Independent Director

INDEPENDENT

Committees:

- Compensation
- Nominating and Governance (Chair)



KIMBER D. LOCKHART

Ms. Lockhart currently serves on the boards of private and public companies, including as a director of Beam Technologies Inc., a digital-first provider of employee benefits for businesses, since July 2019. Previously, Ms. Lockhart served in various capacities at 1Life Healthcare, Inc., dba One Medical (Nasdaq: ONEM), a membership-based primary care platform, including as advisor from July 2021 to December 2021, Chief Technology Officer from March 2015 to June 2021, and Vice President of Engineering from April 2014 to March 2015. Ms. Lockhart holds a BS in Computer Science from Stanford University. We believe that Ms. Lockhart is an experienced technology leader and has scaled technology platforms to support rapid business growth and is therefore qualified to serve on our board of directors.

Age 36
Director
Since: 2020

INDEPENDENT

Committees:

- Audit
- Nominating and Governance



CHITRA NAYAK

Ms. Nayak serves as the ESG lead of our board of directors and is a public and private company board director for several businesses and an advisor to technology startups and venture firms 1414 Ventures & Plum Alley. From January 2019 to May 2021, she served as an adjunct faculty member at California State University's MBA program. Ms. Nayak served as the Chief Operating Officer of Comfy, Inc., a real-estate technology company in the machine learning and IoT space, from February 2017 to June 2018, when it was acquired by Siemens, and prior to that, the Chief Operating Officer of Funding Circle Ltd., an online peer-to-peer lending marketplace, from February 2015 to May 2016. Prior to joining Funding Circle, Ms. Nayak worked at Salesforce, Inc., a cloud computing company, for eight years, serving in a variety of roles including Chief Operating Officer of Platform from February 2013 to January 2015, Senior Vice President of Global Sales Development from February 2008 to January 2013 and Vice President of Marketing Strategy & Operations from February 2007 to January 2008. From 2004 to 2006, Ms. Nayak served as Vice President, Membership Products for California State Automobile Association, a provider of automobile insurance. From 1999 to 2003, Ms. Nayak served as Vice President, Strategy & Operations of Charles Schwab Corporation, an investment and brokerage firm. Prior to that, Ms. Nayak spent six years with the Boston Consulting Group and four years with a number of environmental engineering consulting firms. Since March 2021, Ms. Nayak has served as a director of Infosys Limited (NYSE: INFY), an information technology company, and as a director of Forward Air Corporation (Nasdaq: FWRD). From November 2020 until its acquisition by TELUS Corporation in September 2022, she served as a director of LifeWorks Inc. (XTSE: LWRK). Ms. Nayak has served on the boards of directors of Intercom, a messaging platform company, since January 2020, and UrbanFootprint, a social impact data platform company, since March 2021. Ms. Nayak holds a BS in Engineering from the Indian Institute of Technology, an MS in Environmental Engineering from Cornell University, and an MBA from Harvard Business School (with honors). We believe that Ms. Nayak is qualified to serve on our board of directors due to her substantial experience scaling companies through high-growth phases as well as her background in operations and go-to-market strategies for complex businesses.

Age 59
Director
Since: 2018

INDEPENDENT

Committees:

- Nominating and Governance



Age: 63
Director
Since 2023

INDEPENDENT

Committees:

- Audit

WILLIAM H. OSBORNE

Mr. Osborne most recently served as Senior Vice President of Operations and Total Quality for Boeing Defense, Space & Security (BDS) at The Boeing Company (NYSE: BA), an aerospace company, from May 2020 to October 2022, and as Boeing's Senior Vice President, Enterprise Operations, from May 2018 until April 2020. Prior to that, Mr. Osborne served in various capacities at Navistar, Inc., a producer of commercial and military trucks, including as Senior Vice President of Global Manufacturing and Quality from August 2013 to August 2018, as Senior Vice President of Custom Products from May 2011 to August 2013, and as Corporate Director from September 2009 to April 2012. Prior to his time at Navistar, from September 2008 to October 2010, Mr. Osborne served as President and Chief Executive Officer of Federal Signal Corporation (NYSE: FSS), a manufacturer of emergency vehicle equipment. Mr. Osborne has served on the board of directors at Quaker Chemical Corporation (NYSE: KWR), a chemical company, since December 2016. Mr. Osborne also serves on the board of directors of Armstrong World Industries, Inc. (NYSE: AWI), a designer and manufacturer of walls and ceilings, since July 2022. Mr. Osborne holds a BS in Mechanical Engineering from Kettering University, an MS in Engineering from Wayne State University, and an MBA from University of Chicago. We believe that Mr. Osborne is qualified to serve on our board of directors due to his considerable track record of operational leadership.



Age: 65
Director
2012-2019 and
since 2022

Chair of the Board

INDEPENDENT

RANDAL W. SCOTT, PHD

Dr. Scott is a Co-Founder of the Company and served as Chair of the Board and Chief Executive Officer from 2012 to 2017 and Executive Chairman from 2017 to 2019. Prior to Invitae, Dr. Scott cofounded Genomic Health, Inc. (Nasdaq: GHDX), a genomic-based diagnostic testing company, where he served as the chairman and chief executive officer from 2000 to 2009 and the executive chairman from 2009 to 2012. Dr. Scott serves as a director and as a member of the audit committee of BridgeBio Pharma, Inc. (Nasdaq: BBIO), a commercial-stage biopharmaceutical company, and as a director, chair of the audit committee and member of the nominating and corporate governance committee of Talis Biomedical Corporation (Nasdaq: TLIS), a molecular diagnostic company. He also serves on the boards of directors of and/or as an advisor to several private companies in the life sciences/biotech industry. Dr. Scott holds a BS in Chemistry from Emporia State University and a PhD 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.

Director Nominations

Our 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. Our nominating and governance committee has the responsibility to identify, evaluate, recruit and recommend qualified candidates to the board for nomination or election.

Our board of directors strives to find directors who are experienced and dedicated individuals with diverse backgrounds, perspectives and skills. Our Corporate Governance Guidelines contain membership criteria that call for candidates to be selected for their character, judgment, diversity of backgrounds, age, gender, ethnicity and professional 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 governance committee also seeks to ensure that a majority of our directors are independent under the rules of the New York Stock Exchange (the "NYSE") and that one or more of our directors is an "audit committee financial expert" under the rules of the Securities and Exchange Commission (the "SEC").

The nominating and governance committee believes it appropriate for our Chief Executive Officer ("CEO") to participate as a member of our board of directors.

Prior to our annual meeting of stockholders, our nominating and 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 governance committee decides not to renominate 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

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 governance committee based on the membership criteria described above and set forth in our Corporate Governance Guidelines. The nominating and governance committee will consider candidates recommended by stockholders. A stockholder who wishes to suggest a prospective nominee for our board of directors should notify the Secretary of the Company or any member of the nominating and governance committee in writing with any supporting material the stockholder considers appropriate.

Director Independence

Our board of directors determined that Eric Aguiar, Geoffrey S. Crouse, Christine M. Gorjanc, Kimber D. Lockhart, Chitra Nayak, William H. Osborne and Randal W. Scott are “independent directors” as defined under the rules of the NYSE. There are no family relationships among any of our directors or executive officers.

Compensation Committee Interlocks and Insider Participation

The members of our compensation committee during 2022 were Geoffrey S. Crouse, Eric Aguiar and Christine M. Gorjanc. No member of our compensation committee in 2022 was at any time during 2022 or at any other time an officer or employee of ours. None of our executive officers currently serve, or has served during the last completed fiscal year, on the compensation committee or board of directors of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Board Meetings

Our board of directors held twenty meetings during 2022. Each director attended at least 75% of the aggregate meetings held by our board of directors and the committees on which such director served. We do not have a policy that requires the attendance of directors at our annual meetings of stockholders. Five of our directors attended the 2022 annual meeting of stockholders.

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. Our board of directors welcomes questions or comments about our Company and our operations. If you wish to communicate with our board of directors, including our independent directors, you may send your 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 or interested party. 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 our board of directors based on the subject matter.

Board Committees

We have established an audit committee, compensation committee and nominating and governance committee, each of which operate under a charter that has been approved by our board of directors. 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, 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

MEMBERS:

- Christine M. Gorjanc (Chair)
- Geoffrey S. Crouse
- Kimber D. Lockhart
- William H. Osborne

NUMBER OF MEETINGS IN 2022: 7

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, internal audit, risk and cybersecurity oversight 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 Ms. Gorjanc and Mr. Crouse is an audit committee financial expert, as defined by the rules promulgated by the SEC, and has the requisite financial sophistication as defined under the applicable rules and regulations of the NYSE.

Compensation Committee

MEMBERS:

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

NUMBER OF MEETINGS IN 2022: 9

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 officers, establishes and modifies the terms and conditions of employment of our executive officers and administers our stock option plans. The compensation committee has the authority, in its sole discretion, to select, retain, or obtain the advice of, any adviser to assist in the performance of its duties, but only after taking into consideration all factors relevant to the adviser's independence from management.

Our board of directors has established a Special Stock Incentive Plan Committee, the members of which are our Chief Executive Officer, our Chief Financial Officer or Chief Accounting Officer, and our Chief Talent Officer. The Special Stock Incentive Plan Committee has been delegated the authority to make awards or grants under our 2015 Stock Incentive Plan (the "2015 Stock Plan") (including shares, options, or restricted stock units) 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."

Nominating and Governance Committee

MEMBERS:

- Eric Aguiar, MD (Chair)
- Kimber D. Lockhart
- Chitra Nayak

NUMBER OF MEETINGS IN 2022: 5

FUNCTIONS:

Our nominating and 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 governance committee is responsible for overseeing our Corporate Governance Guidelines, and reporting and making recommendations to the board of directors concerning corporate governance matters. Our nominating and governance committee also reviews the overall adequacy of our Corporate Social Responsibility and Environmental, Social and Governance strategy, initiatives and policies, including communications with employees, investors and other stakeholders. For ESG matters, Ms. Nayak serves as the liaison between our nominating and governance committee and our management team.

Corporate Governance

Board Leadership Structure

Our board of directors continuously evaluates its leadership structure, taking into account the evolving needs of the business and the interests of our stockholders. Our board of directors currently believes that it is in the best interests of the Company and its stockholders to separate the Chair of the Board and Chief Executive Officer roles and for our Chair to be independent. Since July 2022, Dr. Scott has served as our independent Chair of the Board. Our board of directors believes that our current structure, with an independent Chair, gives our board of directors a strong leadership and corporate governance structure that best serves the needs of the Company and its stockholders.

The Chair of the Board:

- presides at all meetings of our board of directors, and has the authority to call non-employee director sessions and independent director sessions;
- approves board meeting agenda items and schedules;
- helps facilitate communication between senior management and the independent directors;
- works with committee chairs to oversee coordinated coverage of board responsibilities;
- serves as an advisor to the Chief Executive Officer;
- presides over all meetings of stockholders; and
- participates and provides leadership on Chief Executive Officer performance evaluation and succession planning.

Our lead independent director works with the Chair of the Board and our Chief Executive Officer on the board meeting agenda items and schedules, and serves in place of the Chair of the Board in the Chair's absence.

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 audit committees 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, environmental, social and governance initiatives, cybersecurity, COVID-19, financial reporting, internal risk management and internal controls.

Form of Majority Voting for Uncontested Director Elections

Our Bylaws provide that if a majority of the votes cast for a director are marked "against" or "withheld" in an uncontested election, the director must promptly tender his or her irrevocable resignation for our board of directors' consideration. In addition, our Corporate Governance Guidelines provide that the board shall nominate or elect as a director only persons who agree to tender, promptly following his or her election or re-election to the board, an irrevocable resignation that will be effective upon (i) the failure of the candidate to receive the required vote at the next annual meeting at which he or she faces re-election and (ii) the acceptance by the board of such resignation.

Proxy Access

Our Bylaws provide a proxy access provision stating that stockholders who meet the requirements set forth in our Bylaws may under certain circumstances include a specified number of director nominees in our proxy materials. Under the provision, eligible stockholders, or a group of up to 20 stockholders, owning at least 3% of our outstanding shares of common stock continuously for at least three years, may nominate and include in our annual meeting proxy materials a limited number of director nominees constituting up to the greater of (i) two directors or (ii) 20% of the board (rounded down to the nearest whole number), subject to certain limitations and provided that the stockholders and nominees satisfy the requirements specified in our Bylaws.

Environmental, Social and Governance Oversight and Activities

Our purpose and values guide our aim to improve healthcare for all, uphold our social responsibility, exercise environmental stewardship and govern with trust and transparency throughout our business.

Our board of directors, as a whole and through its standing committees, works with our senior executive leadership team to oversee ESG issues. Our business functions drive management accountability for a range of ESG areas designed to maximize our impacts, drive better business performance and create long-term value for our stakeholders. While the entire board engages in corporate ESG matters, the nominating and governance committee, per its charter, has oversight responsibility for our company-wide corporate social responsibility (“CSR”) and ESG strategy, initiatives and policies. Chitra Nayak serves on the nominating and governance committee and acts as the liaison between our board and management on these matters.

Our CEO appointed our chief sustainability officer to oversee our day-to-day sustainability program and lead our ESG efforts including the ESG steering committee. This committee is composed of senior cross-functional leaders from medical affairs, human resources, finance, legal, facilities and others to champion our ESG program and guide our multiyear efforts to improve ESG capabilities across our business.

Additional information about our ESG activities is in our ESG Report. Although not incorporated by reference into this Proxy Statement, our ESG Report is available at our website at www.invitae.com/social-responsibility.

ESG Overview

Our ESG approach reflects the passion in our work to reach more patients, support our clinicians, and lead in the advancement of the science of genetics. We developed core tenets to represent the principles that direct our actions, guide our decision-making across all levels of the organization, and form the foundation of our sustainability efforts.

1. **Healthcare for all:** We spearhead the mission to bring comprehensive genetic information into mainstream medicine to improve healthcare for people worldwide.
2. **Social Responsibility:** We implement programs that instill ethical practices and increase diversity, equity and inclusion among employees, patients, suppliers and partners throughout our value chain.
3. **Environmental Stewardship:** We work to minimize our environmental impact and reduce our emissions footprint.
4. **Governance:** We ensure that our governance structure and policies implement ethical, transparent and accountable business practices to ensure corporate performance and value.

We understand that engaging with our internal and external stakeholders is critical for our long-term business success. We proactively engage them in continuous dialogue regarding our business and sustainability efforts through open discussion, collaboration and transparent disclosure. We apply stakeholders’ valued perspectives to inform, prioritize and continually improve our ESG strategy and advance our social and environmental initiatives.

Healthcare for All

We provide affordable testing, integrated health information, digital solutions and data services to shape genomic medicine and support patients through all stages of life. As a result, we believe healthcare relies less on trial and error and more on fact-based analysis of biology and medical risks using genomic information.

- Our 2022 efforts included a focus on improving patient outcomes and the science of genetics, broadening access through affordability, expanding to underserved populations, and driving access through patient advocacy.
- We released a Data Use Transparency and Impact Report which detailed how Invitae uses de-identified patient data to help advance precision medicine research. Invitae is leading the industry by publishing this report about using de-identified data for secondary research. We believe we provide a transparent view into how we manage de-identified patient data responsibly and how we use it to promote patient advocacy, further scientific research, and advance patient outcomes to produce positive healthcare impacts for individuals and society.
- We tirelessly advocate for expanded access to genetic testing. We believe our efforts resulted in policies and professional clinical guidelines that qualify more patients and their families for genetic testing. We joined other clinical experts pushing for the advancement of universal germline testing.

Social Responsibility

Our commitment to our people and communities is intrinsically linked to our overall mission to improve people’s healthcare. We are dedicated to fostering a culture of diversity, equity and inclusion to positively impact our people and business.

Our relationships with our employees and the stakeholders in our value chain fall within our social responsibility. For our employees, we strive to create an innovative and supportive workplace. We also aim to uphold the value of our core ESG tenets via our safety protocols, quality management systems and vendor compliance requirements.

In 2022, we strengthened our programs in an effort to ensure equitable representation, engagement and advancement of all employees.

- Our diversity, equity, and inclusion mission is to engage, develop and retain talent by fostering community, providing education and support and advancing inclusive research and health equity globally. We have a dedicated team focused on driving this effort.
- As of December 31, 2022, approximately 56.3% of our U.S. workforce is White, 20.5% Asian, 9.3% Hispanic or Latino, 5.2% Black or African American, 4.0% two or more races, 0.2% Native Hawaiian or Pacific Islander, 0.1% American Indian or Alaska Native and 4.4% not known based on our payroll system and individual self-identification. On our management team, 21% are people who identify as a minority.
- Our workforce is approximately 61% female, and our management team is 29% female.

- Invitae believes that employee engagement is directly connected to purpose, and through our employee resource groups, or ERGs, we foster those connections and meaningful work relationships. Our ERGs are committed to community, learning, and service. In 2022, we launched a new group “Differently Abled” focused on supporting people with different abilities. Our eight previously established groups include: InvitASIANS, BlackGenX, LatinX, Genetic Counseling at Invitae, Peer Soul Support Team, Rainbow Connection, Vets-in-Genetics, Women in HealthCare.
- We maintained ongoing employee engagement through quarterly team surveys and monthly pulse surveys.
- We strengthened our governance framework with the adoption of a Supplier Code of Conduct and Human Rights Policy.

Environmental Stewardship

Sustainability is part of our DNA, and our environmental stewardship is a serious endeavor. We recognize climate change has a direct impact on human health and well-being. We work to examine and minimize our environmental impact and decrease our emissions footprint. Our efforts include integrating energy-efficient technologies and advancing eco-friendly products.

- Since 2019, our team has tracked energy use, water consumption and waste data to eventually achieve carbon neutrality. We continue to operationalize data collection for Scope 1 and Scope 2 emissions and ready ourselves for forthcoming regulatory reporting requirements inclusive of Scope 3.
- Since the establishment of our Green Ambassadors Program (GAP) in 2021, we have continued to operationalize our environmental sustainability-related practices. The role of GAP is to advance our environmental sustainability programs (including carbon tracking) and encourage the use of best practices across sites.
- We realize our effectiveness in executing our objectives begins with understanding our environmental impact and carbon footprint. As a result, we engaged a third-party expert to complete an in-depth analysis of our 2020, 2021 and 2022 emissions, water use and waste data. We continue to build on an established baseline to facilitate ongoing measurement, management and reporting. This foundation better positions us to improve internal tracking systems, launch eco-friendly initiatives, and set science-based targets to reduce our environmental footprint over time.

Governance

Governance plays a critical role in driving our ESG goals. Our board leadership — combined with how we manage risk, implement ethics compliance, and ensure privacy and data security — is crucial for our long-term success. Our board continuously evaluates its leadership structure and considers the evolving needs of the business and interests of our stockholders.

- Our board of directors reflects diversity in experience, skills, race, ethnicity, age and gender. As of January 26, 2023 with the addition of a new board member, 37.5% of our board members identify as female and 50% as a minority. 88% of our directors are independent under the rules of the NYSE.
- We have ethics and compliance policies and programs, including a Code of Business Conduct and Ethics that applies to each of our directors, officers and employees, and training on these policies, with compliance tracked and overseen by our Chief Compliance Officer.
- In January 2022, we adopted a Supplier Code of Conduct, which details our expectations for our suppliers and their subcontractors to comply with applicable laws and to operate their businesses in an ethical and sustainable manner.
- We concurrently instituted a Human Rights Policy, which outlines the fundamental rights, freedoms and standards of treatment to which we believe all people are entitled. These rights include respect for labor rights, treating all people with dignity and respect, enabling a healthy and safe work environment, promoting ethical behavior and respecting privacy. We recognize that we are part of the communities in which we operate, and as part of our mission, we believe respect for human rights is integral to our business.
- Four Invitae core laboratories (San Francisco, Irvine, Metropark and Sydney, Australia) achieved accreditation by the International Organization for Standardization (ISO) for Clinical Laboratories ISO 15189. This distinction validates our dedication to continuous quality improvement for patients and ability to operate a resilient laboratory organization.
- Invitae has a robust privacy and data security program. Invitae's Data Use Committee focuses on data usage and sharing activities with a lens on privacy and regulatory compliance based on the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Clinical Laboratory Improvement Amendments of 1988 (CLIA), the General Data Protection Regulation (GDPR), the Common Rule and other such domestic and foreign rules. As part of risk oversight, our board oversees patient privacy and data security and receives a quarterly update from our security team and our general counsel.
- Ensuring that people own and control their genetic data has been one of our core principles from inception. We are committed to the privacy and security of all protected health information (PHI) we create, receive, use, disclose and transmit. We allow users to access, rectify and delete certain of their data on our platform.
- Our privacy practices are explained within our HIPAA Notice of Privacy Practices and Privacy Policy on our privacy website available at www.invitae.com/privacy. As a provider of clinical genetic testing services, we are a covered entity subject to the HIPAA Privacy Rule, Security Rule and Breach Notification Rule. Our privacy and security compliance program is subject to inspection by the secretary of Health & Human Services and the Office for Civil Rights for complaint investigation and monitoring of our compliance with these three rules. Our privacy and security compliance program is regularly reviewed and updated to respond to emerging risks.
- We have instituted business continuity planning and risk management processes to understand and manage risks related to our operations, both physical and those related to IT. These efforts are led by our IT and operations teams. We have developed a formal Invitae business continuity plan based on an enterprise-wide assessment to identify critical business areas and processes that have the potential, if disrupted, to significantly impact overall business operations, reputation and quality. This plan was finalized in 2022 and will be reviewed annually to ensure that all risks are identified and mitigated effectively.

Certain Relationships and Related Party 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 as discussed below. Additionally, 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 our audit committee, as discussed below.

Corporate Governance Guidelines

Our board of directors has adopted written 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 governance committee assists our board of directors in implementing and adhering to the Corporate Governance Guidelines. The Corporate Governance Guidelines are reviewed at least annually by the nominating and governance committee, and changes are recommended to our board of directors as warranted.

Code of Business Conduct and Ethics

We believe that our corporate governance initiatives comply with the Sarbanes-Oxley Act 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;
- interacting with healthcare professionals;
- quality of products and services;
- privacy and data security;
- prohibiting bribery and corrupt payments;
- transfers of value;
- fair dealing;
- environmental stewardship;
- safe and healthy workplace;
- open and respectful workplace;
- policy against retaliation;
- confidentiality;
- insider trading;
- communicating on behalf of the Company;
- conflicts of interest;
- corporate opportunities;
- protection and proper use of company assets; and
- record keeping.

Our board of directors has also 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 behavior, compliance with law and reporting of material information. The Code of Business Conduct and Ethics and the Code of Ethics for Senior Financial Officers can only be amended by the approval of a majority of our board of directors. Any waiver to the Code of Business Conduct and Ethics for an executive officer or director or any waiver of the Code of Ethics for Senior Financial Officers may only be granted by our board of directors or a committee thereof 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.

To date, there have been no waivers under our Code of Business Conduct and Ethics or Code of Ethics for Senior Financial Officers. We intend to disclose future amendments to certain provisions of these codes 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 Documents

Our Corporate Governance Guidelines, Code of Business Conduct and Ethics, Code of Ethics for Senior Financial Officers, charters for each of the audit, compensation and nominating and governance committees and other corporate governance documents, are posted on the investor relations section of our website at ir.invitae.com under the heading “Leadership —Governance documents.” In addition, stockholders may obtain a printed copy of these documents 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 or disclosed below, there were no transactions since January 1, 2022 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.

In 2021, the Company invested \$1,000,000 in Series B Preferred Stock of Genomic Life, Inc., a company focused on accelerating access to affordable and engaging genomics-based, proactive health solutions, for which Dr. Scott serves on the board of directors (including as executive co-chair) and is a significant stockholder.

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 review and approval of our audit committee in accordance with such policy. 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 be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee will approve only those transactions it determines are fair to and in the best interests of the Company, after considering 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.

Director Compensation

Our director compensation is based on the recommendation of our independent compensation consultant as to what is market competitive and did not change for 2022. The following table shows certain information with respect to the compensation of our non-employee directors during the fiscal year ended December 31, 2022, including the compensation paid to Dr. George in the role of a non-employee director:

Name	Fees earned or paid in cash (\$)	Stock awards (\$)	Option awards (\$) ⁽¹⁾	All other compensation (\$)	Total (\$)
Eric Aguiar, MD	106,019	226,548	76,030	—	408,597
Geoffrey S. Crouse	75,000	167,562	56,150	—	298,712
Christine M. Gorjanc	77,500	167,562	56,150	—	301,212
Kimber D. Lockhart	65,000	167,562	56,150	—	288,712
Chitra Nayak	55,000	167,562	56,150	—	278,712
Randal W. Scott, PhD	50,000	153,330	53,005	—	256,335
Sean E. George, PhD⁽²⁾	22,690	45,743	8,462	—	76,895

- (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 ("ASC") Topic 718 ("ASC 718") for financial reporting purposes, rather than amounts paid to or realized by the named individual. See the notes to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022 for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options. 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.

The following table sets forth the aggregate number of shares of common stock underlying stock and option awards outstanding on December 31, 2022:

Name	Number of shares
Eric Aguiar, MD	91,100
Geoffrey S. Crouse	125,100
Christine M. Gorjanc	127,600
Kimber D. Lockhart	70,600
Chitra Nayak	100,100
Randal W. Scott, PhD	80,805
Sean E. George, PhD	52,784

- (2) For his service on the Board following his transition from the CEO role through December 31, 2022, Dr. George received the following: (i) an RSU grant for 16,050 shares of common stock which vested in full on December 15, 2022, (ii) a nonqualified stock option for 8,050 shares of common stock, with an exercise price of \$2.85 per share, the closing stock price of our common stock on July 15, 2022, which also vested in full on December 15, 2022 and will remain exercisable until June 15, 2023 or, if earlier, any noncompliance by Dr. George with his obligations under the Transition and Separation Agreement, which was executed by Dr. George and the Company on July 17, 2022; and (iii) cash compensation of \$12,500 per calendar quarter. The stock options are valued at \$1.0512 per share, reflecting a grant date stock price of \$2.85 and a Black-Scholes value of 36.88%.

Standard Compensation Arrangements

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. Employee directors do not receive any compensation for service as a member of our board of directors.

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 was \$50,000.

Initial Equity Grants

Each non-employee director who joins our board of directors receives a fixed dollar value of \$400,000 of stock, 75% of which is in the form of restricted stock units ("RSUs"), with one quarter of the RSUs vesting on each of the first four anniversaries of the director's appointment, subject to the director's continuous service as a member of our board of directors, and 25% of which is in the form of stock options using the Black-Scholes option-pricing model, 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 the options will be the fair market value on the date of grant. If still vesting, the RSUs and 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 receive an annual award of a fixed dollar value of \$200,000 of stock, 75% of which is in the form of RSUs vesting the following year and 25% of which is in the form of stock options using the Black-Scholes option-pricing model, vesting on a monthly basis over the following year. Directors with less than 12 months of continuous service as of such annual meeting are also entitled to receive such an award, but with the dollar value pro-rated to reflect their applicable portion of a full year of service. The exercise price of the options will be the fair market value on the date of grant. If still vesting, the RSUs and the options will accelerate in full upon a change in control of our Company.

Committee Compensation

The Chair of the Board receives an annual fee of \$50,000 in cash and an annual equity grant with a fixed dollar value of \$150,000, which is in the form of stock options using the Black-Scholes option-pricing model, vesting on a monthly basis over the following year. If still vesting, the options will accelerate in full upon a change in control of our Company. The lead independent director receives an annual fee of \$25,000 in cash. In addition, Dr. Aguiar's unvested equity granted with respect to his service as Chair of the Board continues to vest so long as he remains the lead independent director. The chair of the audit committee receives an annual fee of \$20,000 and the non-chair members of the audit committee receive an annual fee of \$10,000. The chair of the compensation committee receives an annual fee of \$15,000 and the non-chair members of the compensation committee receive an annual fee of \$7,500. The chair of the nominating and governance committee receives an annual fee of \$10,000 and the non-chair members of the nominating and governance committee receive an annual fee of \$5,000.

Officers

Executive Officers

The names of our executive officers and their ages as of April 1, 2023 are as follows:

Name	Age	Position
Kenneth D. Knight	62	Chief Executive Officer
Yafei (Roxi) Wen	50	Chief Financial Officer
Thomas R. Brida	52	General Counsel, Chief Compliance Officer and Secretary
Robert L. Nussbaum, MD	73	Chief Medical Officer

Certain biographical information of our executive officers, excluding that of Mr. Knight, are set forth below:

Yafei (Roxi) Wen has served as our Chief Financial Officer since June 2021. Prior to joining Invitae, from February 2019 to June 2021, she served as the Chief Financial Officer at Mozilla Corporation, an open-source software company, overseeing finance and accounting, mergers and acquisitions, business development, data and analytics, information technology and engineering operations, workplace resources and sustainability. Prior to that, Ms. Wen served as the Chief Financial Officer at Elo Touch Solutions, a touch screen systems and components company, from April 2014 to February 2019, and General Electric Critical Power, an electronics power technology company, from 2008 to 2013, following experience driving capital market and business finance efforts as finance manager at Medtronic, a leading medical technology company, from 2002 to 2008. Ms. Wen holds a Bachelor of Economics from Xiamen University, is a CFA charterholder and has an MBA from the University of Minnesota.

Thomas R. Brida has served as our General Counsel since January 2017, our Chief Compliance Officer since February 2019, and our Secretary since May 2019. Mr. Brida also served as our Deputy General Counsel from January 2016 to January 2017.

Prior to joining Invitae, he was Associate General Counsel at Bio-Rad Laboratories, a life science research and clinical diagnostics manufacturer, from January 2004 to January 2016. Mr. Brida holds a BA from Stanford University and a JD from the University of California, Berkeley School of Law.

Robert L. Nussbaum, MD has served as our Chief Medical Officer since August 2015. From April 2006 to August 2015, he was chief of the Division of Genomic Medicine at UCSF Health where he also held leadership roles in the Cancer Genetics and Prevention Program beginning in January 2009 and the Program in Cardiovascular Genetics beginning in July 2007. From April 2006 to August 2015, he served as a member of the UCSF Institute for Human Genetics. Prior to joining UCSF Health, Dr. Nussbaum was chief of the Genetic Disease Research Branch of the National Human Genome Research Institute, one of the National Institutes of Health, from 1994 to 2006. He is a member of the National Academy of Medicine and a fellow at the American Academy of Arts and Sciences. Dr. Nussbaum is a board-certified internist and medical geneticist who holds a BS in Applied Mathematics from Harvard College and an MD from Harvard Medical School in the Harvard-MIT joint program in Health Sciences and Technology. He completed his residency in internal medicine at Barnes-Jewish Hospital and a fellowship in medical genetics at the Baylor College of Medicine.

Other Section 16 Officer

Robert F. Werner has served as our Chief Accounting and Principal Accounting Officer since May 2020. Prior to that, Mr. Werner served as our Corporate Controller from September 2017 to May 2020. Prior to joining Invitae, from February 2015 to September 2017, Mr. Werner served as Vice President of Finance and Corporate Controller of Proteus Digital Health, Inc., a digital medicine pharmaceuticals company. Prior to that, Mr. Werner served as Corporate Controller and Principal Accounting Officer of CardioDx, Inc., a molecular diagnostics company, from March 2012 to February 2015. Mr. Werner is a Certified Public Accountant in California and started his career at Ernst & Young LLP. Mr. Werner holds a BS in Accounting and a Master of Accountancy in Professional Accounting from Brigham Young University's Marriott School of Management.

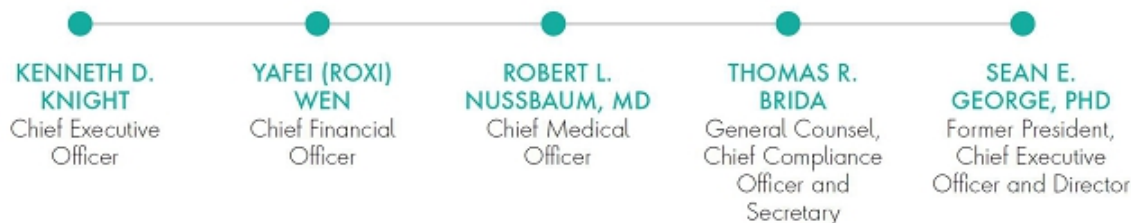
Executive Compensation

Table of Contents

Compensation Discussion and Analysis	21
Executive Summary	22
Performance Highlights	22
Key Business Drivers and Financial Metrics in 2022	23
Our Compensation Program Benefits Our Stockholders	24
Compensation Philosophy	25
Compensation Components	25
Fiscal 2022 Compensation	26
Compensation Governance Components	29
Compensation Process	29
Compensation Committee Report	31

Compensation Discussion and Analysis

This section explains how our executive compensation program is designed and operates with respect to our named executive officers listed in the Summary Compensation Table below. Our named executive officers consist of individuals who served, during 2022, as our principal executive officer, our principal financial officer and the two most highly compensated executive officers (other than the principal executive officer and principal financial officer) who were serving as executive officers at the end of 2022. The named executive officers in 2022 were:



Executive Summary

We believe we can build long-term stockholder value by executing on our mission to bring comprehensive genetic information into mainstream medicine to improve healthcare for billions of people. Our strategy for long-term, profitable growth centers on seven key drivers of our business, which we believe work in conjunction to create a flywheel effect extending our leadership position in the new market we are building. Our executive compensation program takes into account the dynamic growth of our business and our focused execution on our core business model. Our executive compensation philosophy is focused on real pay delivery through the achievement of performance targets, which ultimately drives total stockholder return (“TSR”) and aligns our named executive officers with long-term stockholders.



Financial Summary and Compensation Highlights

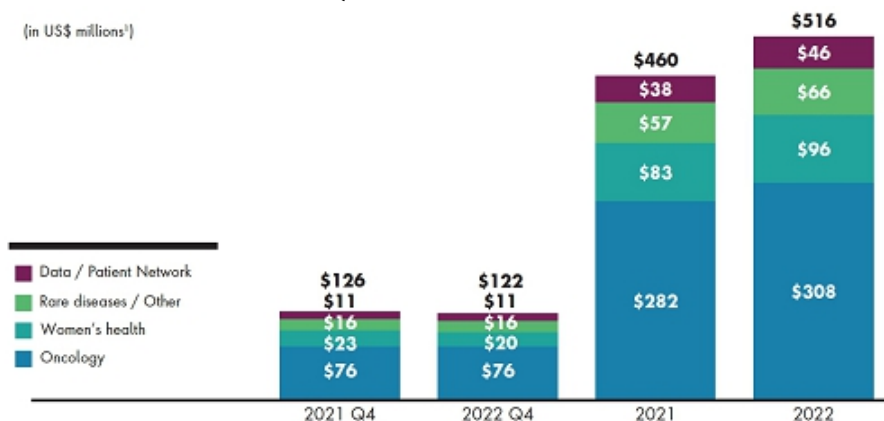
In 2022, we announced a strategic realignment plan to stabilize our portfolio, focus on profitable growth and reduce cash burn. Our results in 2022 reflect the execution of these priorities. Looking into 2023, we will continue to work towards enabling an integrated, connected portfolio, generating profitable growth, and investing in our most promising future bets and clinical evidence. We will balance our focus on growth with an emphasis on long-term profitability and capital management to scale our business.

Performance Highlights

The following presents certain non-GAAP financial measures. A reconciliation to GAAP is presented in Annex A.

Revenue breakdown – Q4 and FY’22

(in US\$ millions¹)



Note:

* May not sum due to rounding Drawings not to scale.

Key Business Drivers and Financial Metrics in 2022

Cash burn¹ trend²

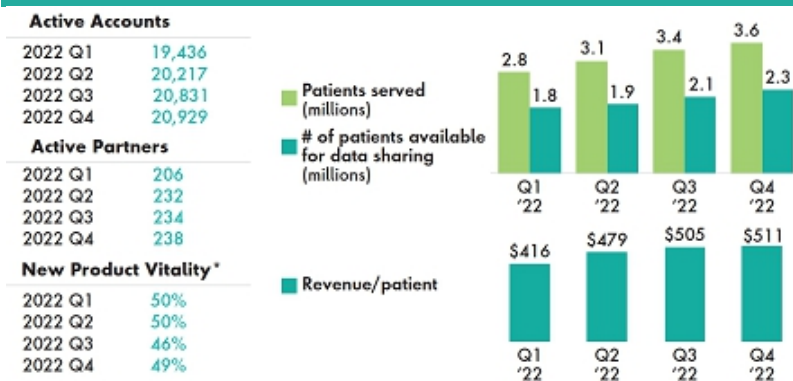


- \$557 million in cash, cash equivalents, marketable securities, and restricted cash as of Dec 31, 2022

- 4Q'22 ongoing cash burn was \$77 million, representing a continued improving trend since the fourth quarter of 2021

1. Ongoing cash burn includes cash, cash equivalents, marketable securities, and restricted cash and excludes certain items.
 2. Non-GAAP measures. See reconciliation for GAAP to non-GAAP in Annex A.
 3. Cash items in Q3 '22 outflow of \$43.2 million related to restructuring-related cash payments and acquisition-related payments.
 4. Cash items in Q4 '22 outflow of \$9.3 million related to realignment, \$0.1 million acquisition-related payments, and an inflow of \$44.5 million related to the selected assets sale of the RUO kitted solutions.
- * May not sum due to rounding. Drawings not to scale.

Portfolio growth



* New Product Vitality is revenue from products launched or acquired in the previous three years divided by total revenue.

2022 CEO Pay

On July 16, 2022, Mr. Knight succeeded Dr. George as CEO and Dr. George entered into a Transition and Separation Agreement summarized in the “Transition and Separation Agreement” section below. Dr. George did not receive an equity grant for 2022. He received cash severance and a COBRA payment pursuant to his Change in Control Agreement and, subject to satisfaction of certain restrictive covenants, a pro rata, 69.9% of target cash bonus payment of \$582,637. Mr. Knight’s compensation as CEO for 2022 is summarized in the below table and, demonstrating the pay for performance nature of our program, his year-end value is significantly less than the grant value. See our Pay for Performance Table below.

	2022		2021	
CEO Total Direct Compensation				
Base Salary		\$750,000		\$500,000
Reported Earned Bonus		\$786,875		–
Option	As of 12/31/2022	As of grant date		
Number of Options	1,000,000	1,000,000		69,500
Value	\$1,490,000 ⁽¹⁾	\$1,962,800 ⁽²⁾		\$1,560,991 ⁽³⁾
RSU	As of 12/31/2022	As of grant date		
Number of RSUs	225,000	225,000		134,200
Value	\$418,500 ⁽¹⁾	\$1,588,500 ⁽²⁾		\$4,683,580 ⁽³⁾
PRSU		–	As of date earned	As of grant date
Number of PRSUs		–	44,117	59,700
Value		–	\$320,289 ⁽⁴⁾	\$2,083,530 ⁽³⁾
	As of 12/31/2022	As of grant date	As of date earned	As of grant date
TOTAL VALUE	\$3,445,375⁽⁵⁾	\$5,088,175	\$7,064,860⁽⁶⁾	\$8,828,101

(1) The options are valued using a Black-Scholes valuation model as of December 31, 2022. The RSUs are valued using a stock price of \$1.86 as of December 31, 2022.

(2) The options are valued using a Black-Scholes valuation model as of the date of grant. The RSUs are valued using a stock price of \$7.06 as of the date of grant.

(3) The options are valued using a Black-Scholes valuation model as of the date of grant. The RSUs and PRSUs are valued using a stock price of \$34.90 as of the date of grant.

(4) The value of the PRSUs earned for 2021 based on the closing stock price of \$7.26 on March 12, 2022, the effective date of the compensation committee’s certification of the number of 2021 PRSUs that were earned.

(5) The equity award values reported in the Summary Compensation Table are different than the total as of December 31, 2022 because they are based on the grant date value of the annual equity awards.

(6) The equity award values reported in the Summary Compensation Table are different than the total earned because they are based on the grant date value of the annual equity awards and the target values of the PRSUs.

Our Compensation Program Benefits Our Stockholders

We are committed to sound executive compensation policies and practices, as highlighted in the following table.

What We Do	What We Do Not Do
<input checked="" type="checkbox"/> Rigorous, objective performance goals	<input checked="" type="checkbox"/> No “golden parachute” gross-ups
<input checked="" type="checkbox"/> Limited perquisites	<input checked="" type="checkbox"/> No dividends paid on unvested shares
<input checked="" type="checkbox"/> Clawback policy covering cash incentives and stock awards	<input checked="" type="checkbox"/> No options/SARs granted below fair market value
<input checked="" type="checkbox"/> Independent compensation consultant and compensation committee	<input checked="" type="checkbox"/> No repricing of options without stockholder approval
<input checked="" type="checkbox"/> Annual risk assessment of compensation policies and programs	<input checked="" type="checkbox"/> No excessive severance
	<input checked="" type="checkbox"/> No guaranteed salary increases, bonuses, or long-term incentive awards

Listening to Our Stockholders

Invitae relies on stockholder outreach as well as more formal channels to communicate with stockholders, including the opportunity for stockholders to cast a non-binding advisory vote regarding executive compensation at Invitae's annual meeting of stockholders. In evaluating our compensation practices in fiscal 2022, the compensation committee was mindful of the support our stockholders expressed for Invitae's philosophy and practice of linking compensation to operational objectives and the enhancement of stockholder value.



Our Say-on-Pay approval rating was 95.5% of the votes cast in 2022. The compensation committee took this vote into account in designing and implementing the 2022 program.

During 2022, the compensation committee continued to monitor our executive compensation programs to ensure compensation is aligned with company performance. The compensation committee will continue to seek out and consider stockholder feedback in the future and administer the pay for performance program in the interests of stockholders.

Compensation Philosophy

Real Pay Delivery

We compensate our named executive officers for achievement of short and long-term financial and operating goals and have competitive base salaries with limited perks, excessive severance, or deferred compensation.

Attract, Develop and Retain Key Talent

Our compensation program is designed to attract executives with appropriate expertise and experience and is flexible enough to adapt to economic, social and regulatory changes while considering the compensation programs of our peer companies.

Stakeholder Alignment

Our compensation program is aligned not only with stockholder interests but also with the interests of our customers and our employees.

Compensation Components

Pay Mix

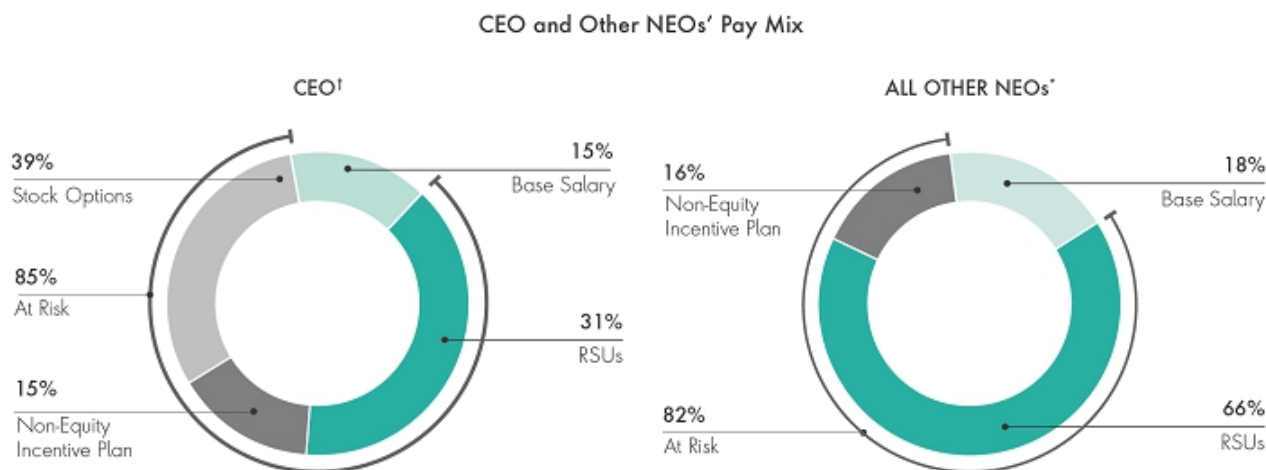
We establish total direct compensation for our named executive officers consisting of the following components:

- **Base Salary:** A market salary at competitive levels that sufficiently covers a fixed income component the employee can rely on. The fixed salary is set at a level that provides the ability to attract talent and promote long-term retention.
- **Annual Incentive:** During 2022, we changed the mix of our CEO pay by replacing the annual performance-based restricted stock unit award with an annual cash bonus. Annual incentive cash awards are earned based on achieving goals set annually by management and the compensation committee. In 2022, our named executive officers were eligible for payments based on achievement of certain operating targets.
- **Time-Based Restricted Stock Unit Awards:** Long-term equity incentive earned based on continued employment over a period of three years.
- **Option Awards:** Option awards reward our named executive officers with stock price appreciation and are intended to ensure retention of our named executive officers by using longer vesting periods.

Fiscal 2022 Compensation

The main elements of our executive compensation program include: (1) base salary, (2) annual incentive cash awards, (3) time-based RSU awards, and (4) for our CEO, time-based option awards. We describe each of these elements below and explain what we paid in 2022 and why.

The compensation committee's independent compensation consultant, Compensia, reviewed our named executive officers' 2022 compensation and noted the base salary and short- and long-term equity incentives are competitive with the amounts paid by peers and are reflective of market practice by having the majority of total compensation based on short- and long-term incentives.



† Includes only compensation of Mr. Knight, our CEO as of December 31, 2022. The base salary used represents an annualized base salary following Mr. Knight's appointment as our CEO. Stock Options, Non-Equity Incentive Plan and RSU compensation are as reported in the Summary Compensation Table of this Proxy Statement.

* Does not include Ms. Wen's signing bonus because it is not a component of the main elements of our regular executive compensation program.

Base Salary

In connection with his appointment as Chief Executive Officer, a base salary of \$750,000 was approved for Mr. Knight. The following base salaries were approved for our other named executive officers for 2022: Ms. Wen: \$475,000 (no change from 2021); Mr. Brida \$425,000 (no change from 2021); Dr. Nussbaum: \$400,000 (\$25,000 increase as a result of the 2021 annual salary review process); and Dr. George: \$500,000 (no change from 2021) up until his transition from the CEO role.

Annual Incentive Awards

Under our 2022 Executive Management Incentive Compensation Plan (the "Incentive Plan"), effective as of January 1, 2022, our named executive officers were eligible to receive incentive compensation in the form of cash based on achievement of three performance measures, which were cash burn, revenue and non-GAAP gross margin. For 2022, target amounts for our named executive officers were as follows:

Name	<u>2022 Target Incentive Amounts</u> (\$)
Kenneth D. Knight	1,125,000
Yafei (Roxi) Wen	600,000
Thomas R. Brida	500,000
Robert L. Nussbaum, MD	500,000
Sean E. George, PhD	833,000

The Company's performance goals measured for our named executive officers were:

Annual Incentive Program Performance Goal	% of 2022 Target
Cash Burn (as defined below)	33.4
Revenue (as defined below)	33.3
Non-GAAP Gross Margin (as defined below)	33.3

The Incentive Plan bases payouts upon relative achievement of a target, with ranges of payout calculations from 0% to 200% for each Target) based upon approved models for each target.

The Incentive Plan provides the following definitions for performance goals:

- “Cash Burn” is the net decrease in cash, cash equivalents, restricted cash and marketable securities, adjusted to remove acquisition related payments, restructuring-related cash payments and cash received from asset sales. A reconciliation of this non-GAAP financial metric to the closest GAAP equivalent is presented in Annex A.
- “Revenue” is GAAP revenue recorded in the Company's filings with the SEC, excluding any deferred revenue from the Company's base business or acquired businesses.
- “Non-GAAP Gross Margin” is Revenue less the non-GAAP cost of revenue, divided by Revenue, where the non-GAAP cost of revenue is defined as the GAAP cost of revenue recorded in the Company's filings with the SEC, excluding the following acquisition-related expenses: (1) amortization of intangible assets; (2) stock-based compensation; (3) post-combination expenses; and (4) fair value adjustments to assets and liabilities. A reconciliation of these non-GAAP financial metrics to the closest GAAP equivalent is presented in Annex A.

The Revenue performance target was established prior to our strategic realignment when our Revenue guidance was significantly decreased. We did not reset the Revenue targets in light of this updated Revenue guidance and the Revenue performance threshold was not achieved.

As determined by the compensation committee, the Cash Burn threshold, target, maximum and the actual results for 2022 were as follows:

	Cash Burn (\$ in millions)	Payout
2022 Threshold	670	0%
2022 Target	595	100%
2022 Maximum	395	200%
2022 Actual	500.8	147.6%

As determined by the compensation committee, the non-GAAP Gross Margin threshold, target and maximum and the results for 2022 were as follows:

	Non-GAAP Gross Margin	Payout
2022 Threshold	41%	0%
2022 Target	48%	100%
2022 Maximum	50%	200%
2022 Actual	43%*	62%

* Non-GAAP Gross Margin was rounded to 43%.

Based on the 2022 audited financial results, our compensation committee determined the incentive awards earned at approximately 69.9%. On January 26, 2023, the compensation committee approved the following payments, with one half paid shortly after such date and the remaining paid on the first anniversary thereof, subject to continued employment (except for Dr. George, who received his full payment in early 2023 pursuant to the Transition Agreement described below):

Name	2022 Incentive Plan Payouts (\$)
Kenneth D. Knight	786,875
Yafei (Roxi) Wen	419,666
Thomas R. Brida	349,722
Robert L. Nussbaum, MD	349,722
Sean E. George, PhD	582,637

Restricted Stock Units

On April 9, 2022, our named executive officers, other than Dr. George, were granted retention RSUs that vest in three equal annual installments beginning on May 15, 2023, subject to such named executive officer's continued service.

Name	RSU (#)
Kenneth D. Knight	225,000
Yafei (Roxi) Wen	225,000
Thomas R. Brida	168,511
Robert L. Nussbaum, MD	168,511

On August 22, 2022, our named executive officers, other than Mr. Knight and Dr. George, were granted additional retention RSUs that vest in full on August 15, 2023, subject to such named executive officer's continued service.

Name	RSU (#)
Yafei (Roxi) Wen	102,000
Thomas R. Brida	54,000
Robert L. Nussbaum, MD	54,000

Option Awards

On July 16, 2022, in connection with his transition from Chief Operating Officer to Chief Executive Officer, Mr. Knight was granted an option to purchase 1,000,000 shares of common stock with an exercise price of \$2.85 per share, the closing stock price of our common stock on July 15, 2022. The option award vests over a four-year period, subject to continued service, with 25% of the shares vesting on the first anniversary of the grant date and the remaining 75% vesting monthly over the following three years. The stock options are valued at \$1.9628 per share, reflecting a grant date stock price of \$2.85 and a Black-Scholes value of 68.87%.

In connection with his service on the board of directors following his transition from the Chief Executive Officer role through December 31, 2022, Dr. George was granted an option to purchase 8,050 shares of common stock with an exercise price of \$2.85 per share, the closing stock price of our common stock on July 15, 2022. This option vested in full on December 15, 2022. The stock options are valued at \$1.0512 per share, reflecting a grant date stock price of \$2.85 and a Black-Scholes value of 36.88%.

Other Perquisites and Benefits

We provide limited perquisites to our named executive officers that do not exceed the disclosure threshold. We have a 401(k) plan but no deferred compensation plan for executives. In April 2021, our board of directors approved change in control and severance agreements for our named executive officers, which provide for customary severance and change of control benefits as recommended by the compensation committee's independent compensation consultant and competitive with our peer group. The severance and change in control agreements are further described in the "Potential Payments upon Termination or Change in Control" section below.

Transition and Separation Agreement

On July 16, 2022, Mr. Knight succeeded Dr. George as CEO and Dr. George entered into a Transition and Separation Agreement (the "Transition Agreement") with the Company on July 17, 2022. Dr. George did not receive an equity grant for 2022. Pursuant to his preexisting Change of Control and Severance Agreement dated April 23, 2021, he received (x) a lump sum cash severance payment equal to 150% of his annual base salary of \$500,000 for a payment of \$750,000, (y) a lump sum cash payment equal to 18 months of COBRA premiums, and (z) 70% of his target cash bonus amount of \$833,000 for a payment of \$582,637, in each case subject to execution and delivery of an effective release of claims and satisfaction of certain restrictive covenants.

Pursuant to the Transition Agreement, Dr. George will serve in an on-call consulting role with the Company (including non-compete covenants) with the following compensation arrangements (assuming continued performance under and compliance with the Transition Agreement): (i) the existing RSUs and performance stock units held by Dr. George that would otherwise vest within 12 months following Dr. George's transition from the CEO role (for a total of 108,975 shares) will vest on December 15, 2022; (ii) the existing RSUs held by Dr. George that would otherwise vest within the period of 13- to 24-months following Dr. George's transition from the CEO role (for a total of 44,734 shares) will vest on June 15, 2023; and (iii) Dr. George agreed that all of his options to acquire shares of common stock will stop vesting as of his transition from the CEO role and the exercise period for such options will terminate 90 days thereafter.

Compensation Governance Components

Compensation Governance Provisions

The following policies and the chart below align management and stockholder interests, and mitigate any potential incentive for management to take inappropriate risks:

- **Insider Trading Policy:** This policy is distributed to all employees, directors and contractors. All employees, directors and contractors are prohibited from buying or selling during predetermined closed window periods. In addition, executive officers and directors are required to obtain pre-clearance from our General Counsel or Chief Financial Officer prior to making any trades or entering into any 10b5-1 trading plans. All directors and executive officers are required to enter into 10b5-1 plans.
- **Hedging and Pledging:** All executive officers, directors, and employees are prohibited from hedging or pledging stock under our Insider Trading and Communications Policy. We made exceptions to our no-pledging policy for our former Chief Executive Officer for real property purchase and construction costs, and for an employee.
- **Clawbacks:** In April 2020, we adopted a policy pursuant to which compensation paid based on performance, including annual equity compensation, is subject to a “clawback” policy. This policy enables the compensation committee, if it determines appropriate and subject to applicable laws, to seek reimbursement from executive officers of:
 - the incremental portion of cash incentive awards paid to executive officers in excess of the awards that would have been paid based on the restated financial results; and
 - the incremental share of our common stock settled for PRSUs in excess of the shares of our common stock that would have been settled for such PRSUs based on the restated financial results, or the value of such incremental shares to the extent an executive officer sells any incremental shares.
- **Severance and Change of Control Agreement:** In April 2021, our board of directors approved change in control and severance agreements for our named executive officers. These agreements provide for customary change in control and severance benefits which were recommended by the compensation committee’s independent compensation consultant and are competitive with our peer group. See the section entitled “Potential Payments upon Termination or Change in Control” for a more complete description of these payments.

Compensation Program Risk Management

Our board of directors and the compensation committee are required to assess whether our compensation policies and practices and, in particular, our performance-based compensation practices, encourage executive officers or other employees to take unnecessary or unreasonable risks that could threaten the long-term value of the Company or that are reasonably likely to have a material adverse effect on the Company. Management believes that our practices adequately manage this risk because:

- our executive compensation is benchmarked by our independent compensation consultant to our peers;
- bonuses are capped;
- our bonus plan preserves discretion to permit the compensation committee to elect not to pay otherwise achieved bonus amounts for any reason;
- a meaningful component of compensation is equity grants with extended vesting periods designed to ensure that our executives value and focus on our long-term performance; and
- executive compensation is subject to our “clawback” policy.

Our “clawback” policy will be amended to comply with the NYSE listing rules when such rules are effective.

Compensation Process

The compensation committee begins its process of deciding how to compensate our named executive officers by considering the competitive market data provided by our People & Culture team and Compensia. The compensation committee engaged Compensia to provide prospective advice and recommendations on competitive market practices and compensation decisions.

Peer Selection Methodology, Rationale and Comparison

Beginning in 2020, Compensia began reviewing our peer group using a defined methodology that identifies companies with attributes reasonably and objectively like ours in terms of industry, industry profile, size, and market capitalization to revenue ratio and profit margins. Below is the list of the peer companies used for 2022 compensation decisions:

10x Genomics	CareDx	Natera
ACADIA Pharmaceuticals	Exact Sciences	Neogen
Adaptive Biotechnologies	Guardant Health	Nevro
Amylam Pharmaceuticals	iRhythm Technologies	QuidelOrtho
Arrowhead Pharmaceuticals	Maravai LifeSciences*	Sarepta Therapeutics
BioMarin Pharmaceutical	Myriad Genetics*	Vir Biotechnology

* New peer group companies.

In December 2022, we revised our peer group to better align peers to our current market capitalization.

Below is the list of the peer companies used for 2023 compensation decisions:

23andMe*	Cue Health*	NeoGenomics*
Adaptive Biotechnologies	Dynavax Technologies*	Nevro
AngioDynamics*	Guardant Health	OraSure Technologies*
ANI Pharmaceuticals*	Inotiv*	Orthofix Medical*
Cardiovascular Systems*	iTeos Therapeutics*	Sema4 Holdings (now GeneDX Holdings)*
CareDx	Myriad Genetics	Varex Imaging*
Codexis*	Natera	Veracyte*

* New peer group companies.

How We Use Our Peer Group

The positions of our named executive officers are compared to their counterpart positions in our peer group, and the compensation levels for comparable positions in that peer group are examined for guidance in determining:

- base salaries;
- performance bonuses; and
- the amount and mix of long-term, equity-based incentive awards.

The compensation committee establishes base salaries, variable cash incentive awards, and long-term, equity-based incentive awards on a case-by-case basis for each named executive officer taking into account, among other things, individual and company performance, role expertise and experience and the competitive market, advancement potential, recruiting needs, internal equity, retention requirements, unrealized equity gains, succession planning and best compensation governance practices. The compensation committee does not tie individual compensation to specific target percentiles.

Making Decisions and Policies

The compensation committee seeks input and recommendations from our Chief Executive Officer and our People & Culture team, but makes all executive compensation and benefits determinations without delegation. Our Chief Executive Officer also does not participate in determinations with respect to his own compensation. Compensia provides the compensation committee assistance in satisfying its duties, but Compensia will not undertake a project for management except at the request of the compensation committee chair, in the capacity of the compensation committee's agent, and where such a project is in direct support of the compensation committee's charter. The compensation committee assessed the independence of Compensia in 2021, taking into consideration applicable SEC rules and regulations, and NYSE independence factors regarding advisor independence, and believes that there are no conflicts of interest. The major topics covered at each compensation committee meeting are reported to the board of directors.

Tax Implications

The Company considers the effects of Section 162(m) of the Internal Revenue Code, which generally disallows the tax deduction for compensation in excess of \$1 million for certain covered individuals. The compensation committee believes that stockholder interests are best served if its discretion and flexibility in awarding compensation is not restricted, even though some compensation awards may result in non-deductible compensation expenses. Therefore, the compensation committee has approved salaries and other awards for executive officers that were not fully deductible because of Section 162(m) and, in light of the repeal of the performance-based compensation exception to Section 162(m), expects in the future to approve additional compensation that is not deductible for income tax purposes.

Compensation Committee Report

The following report of the compensation committee shall not be deemed to be "soliciting material" or "filed" with the SEC or to be incorporated by reference into any other filing by Invitae Corporation under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that we specifically incorporate it by reference into a document filed under those Acts.

The compensation committee has reviewed and discussed the Compensation Discussion and Analysis set forth above with our management. Based on its review and those discussions, the compensation committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this Proxy Statement and incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2022.

Compensation Committee

Geoffrey S. Crouse, Chair
Eric Aguiar, MD
Christine M. Gorjanc

Summary Compensation Table

The following table sets forth information concerning the total compensation of the following persons, whom we refer to as our named executive officers: our current and former Chief Executive Officer, our Chief Financial Officer and our two other most highly compensated individuals who were serving as executive officers of the Company on December 31, 2022.

Name and principal position	Fiscal Year	Salary (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾	Option Awards (\$) ⁽³⁾	Non-Equity Incentive Plan Compensation (\$) ⁽⁴⁾	All Other Compensation (\$) ⁽⁵⁾	Total (\$)
Kenneth D. Knight	2022	610,577 ⁽⁶⁾	1,588,500	1,962,800	786,875	2,000	4,950,752
Chief Executive Officer	2021	500,000	2,254,540	521,079	—	501,566	3,777,185
	2020	250,000	10,760,750	—	—	1,500	11,012,250
Yafei (Roxi) Wen	2022	475,000	1,928,160	—	419,666	502,000 ⁽⁷⁾	3,324,826
Chief Financial Officer	2021	246,635	4,830,966	—	—	1,500	5,079,101
Thomas R. Brida	2022	425,000	1,369,508	—	349,722	2,000	2,146,230
General Counsel,	2021	425,000	2,254,540	521,079	—	1,500	3,202,119
Chief Compliance Officer and Secretary	2020	348,752	1,424,071	196,700	—	1,500	1,971,023
Robert L. Nussbaum, MD	2022	400,000	1,369,508	—	349,722	2,229	2,121,459
Chief Medical Officer	2021	391,346	2,254,540	521,079	—	1,500	3,168,465
	2020	338,510	1,418,887	196,700	—	1,500	1,955,597
Sean E. George, PhD	2022	282,692	—	—	582,637	791,074 ⁽⁸⁾	1,656,403
Former President and	2021	500,000	6,767,110	1,560,991	—	153	8,828,254
Chief Executive Officer	2020	451,346	3,006,513	423,507	—	—	3,881,365

(1) The salary amounts reflect the actual base salary payments earned by our named executive officers in the applicable fiscal year.

(2) The amounts in this column represent the aggregate fair value of the stock awards computed as of the grant date of each award in accordance with ASC 718, which was determined using the closing price of our common stock on the date of grant. With respect to fiscal 2022, we did not grant PRSUs as part of the Incentive Plan.

(3) The amounts in this column represent the aggregate fair value of the option awards computed as of the grant date of each award in accordance with ASC 718 for financial reporting purposes, rather than amounts paid to or realized by the individual. See the notes to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022 for a discussion of assumptions made in determining the grant date fair value and compensation expense of our stock options. 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.

(4) Represents the bonus payment under the Incentive Plan which was determined on February 3, 2023 at 69.9% of target based on achievement of fiscal 2022 performance goals. One half of the award was paid shortly after February 3, 2023 and the remaining will be paid on the first anniversary thereof, subject to continued employment (except for Dr. George, who received his full payment in early 2023 pursuant to the Transition Agreement described above).

(5) All Other Compensation includes matching contributions under the 401(k) plan made by the Company for each fiscal year in the amount of \$1,500 for each of Mr. Knight, Ms. Wen, Mr. Brida, and Dr. Nussbaum, respectively, and \$0 for Dr. George.

(6) Salary reflects an increase in Mr. Knight's annual base salary to \$750,000 effective July 16, 2022.

(7) All Other Compensation includes a signing bonus paid in 2021 and subject to repayment if Ms. Wen resigned within a year of her date of hire.

(8) Represent a lump sum cash severance payment equal to 150% of his annual base salary of \$500,000 for a payment of \$750,000 and a lump sum cash payment equal to 18 months of COBRA premiums.

Grants of Plan-Based Awards Table

The following table presents information regarding grants of plan-based awards to each of our named executive officers during the fiscal year ended December 31, 2022:

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards ⁽¹⁾			All Other Stock Awards: Number of Shares of Stock or Units (#)	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards (\$/Share)	Grant Date Fair Value of Stock and Option Awards (\$)
		Threshold (\$)	Target (\$)	Maximum (\$)				
Kenneth D. Knight	4/9/2022 ⁽²⁾	–	1,125,000	2,225,000	225,000	–	–	1,588,500
	7/16/2022 ⁽³⁾	–	–	–	–	1,000,000	2.85	1,962,800
Yafei (Roxi) Wen	4/9/2022 ⁽²⁾	–	600,000	1,200,000	225,000	–	–	1,588,500
	8/22/2022 ⁽⁴⁾	–	–	–	102,000	–	–	339,660
Thomas R. Brida	4/9/2022 ⁽²⁾	–	500,000	1,000,000	168,511	–	–	1,189,688
	8/22/2022 ⁽⁴⁾	–	–	–	54,000	–	–	179,820
Robert L. Nussbaum, MD	4/9/2022 ⁽²⁾	–	500,000	1,000,000	168,511	–	–	1,189,688
	8/22/2022 ⁽⁴⁾	–	–	–	54,000	–	–	179,820
Sean E. George, PhD	4/9/2022	–	833,000	1,666,000	–	–	–	–

(1) These bonus thresholds, targets and maximums were approved by the board of directors on April 9, 2022 as part of the Incentive Plan and actual payouts were determined on February 3, 2023 at 69.9% of target based on achievement of fiscal 2022 performance goals. One half of the award was paid shortly after February 3, 2023 and the remaining will be paid on the first anniversary thereof, subject to continued employment (except for Dr. George, who received his full payment in early 2023 pursuant to the Transition Agreement described above).

(2) RSUs were approved by the board of directors on the grant date indicated pursuant to the 2015 Stock Plan. The awards granted on April 9, 2022 vest annually over 3 years in equal installments on each of May 15, 2023, 2024 and 2025, subject to continued service, unless otherwise indicated. The fair value of the RSUs is based on the closing price of our common stock on the grant date.

(3) These options were granted pursuant to the 2015 Stock Plan. The options have a 10-year term in which 25% of the shares vest on the first anniversary of the grant date and 1/48th of the shares pursuant to the grant vest monthly thereafter for 36 months, subject to continued service, unless otherwise indicated.

(4) RSUs were approved by the board of directors on the grant date indicated pursuant to the 2015 Stock Plan. The awards vest in full on August 15, 2023, subject to continued service. The fair value of the RSUs is based on the closing price of our common stock on the grant date.

Outstanding Equity Awards at Fiscal Year-End Table

The following table sets forth information regarding outstanding equity awards for each of our named executive officers as of December 31, 2022:

Name	Date Granted	Option Awards				Stock Awards	
		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$)	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 (\$) ⁽¹⁾
Kenneth D. Knight	4/9/2022	—	—	—	—	225,000 ⁽²⁾	418,500
	7/16/2022	—	1,000,000	2.85	7/16/2032 ⁽³⁾	—	—
	4/30/2021	—	—	—	—	7,352 ⁽⁴⁾	13,675
	4/30/2021	9,666	13,534	34.90	4/30/2031 ⁽³⁾	29,800 ⁽⁵⁾	55,428
	8/4/2020	—	—	—	—	83,334 ⁽⁶⁾	155,001
Yafei (Roxi) Wen	4/9/2022	—	—	—	—	225,000 ⁽²⁾	418,500
	8/22/2022	—	—	—	—	102,000 ⁽⁷⁾	189,720
	6/21/2021	—	—	—	—	7,352 ⁽⁴⁾	13,675
	6/21/2021	—	—	—	—	83,334 ⁽⁵⁾	155,001
Thomas R. Brida	4/9/2022	—	—	—	—	168,511 ⁽²⁾	313,430
	8/22/2022	—	—	—	—	54,000 ⁽⁷⁾	100,440
	4/30/2021	—	—	—	—	7,352 ⁽⁴⁾	13,675
	4/30/2021	9,666	13,534	34.90	4/30/2031 ⁽³⁾	29,800 ⁽⁵⁾	55,428
	6/12/2020	12,250	7,350	16.17	6/12/2030 ⁽³⁾	19,717 ⁽⁸⁾	36,674
	3/31/2016	2,100	—	10.23	3/31/2026 ⁽⁹⁾	—	—
	2/1/2016	9,000	—	7.01	2/1/2026 ⁽⁹⁾	—	—
Robert L. Nussbaum, MD	4/9/2022	—	—	—	—	168,511 ⁽²⁾	313,430
	8/22/2022	—	—	—	—	54,000 ⁽⁷⁾	100,440
	4/30/2021	—	—	—	—	7,352 ⁽⁴⁾	13,675
	4/30/2021	9,666	13,534	34.90	4/30/2031 ⁽³⁾	29,800 ⁽⁵⁾	55,428
	6/12/2020	12,250	7,350	16.17	6/12/2030 ⁽³⁾	19,717 ⁽⁸⁾	36,674
	3/31/2016	53,594	—	10.23	3/31/2026 ⁽⁹⁾	—	—
	8/4/2015	40,080	—	9.90	8/4/2025 ⁽⁹⁾	—	—
Sean E. George, PhD	4/30/2021	—	—	—	—	44,734 ⁽¹⁰⁾	83,205

(1) The aggregate dollar value is calculated using the closing price of our common stock on December 30, 2022, the last trading day of fiscal 2022, of \$1.86.

(2) The RSUs vest in three equal installments, with one third of the total award vesting on each of May 15, 2023, 2024 and 2025, subject to continued service.

(3) The option vests as to 25% of the shares on the first anniversary of the grant date and 1/48th of the shares vest each month thereafter over the remaining three years, subject to continued service.

(4) Represents the actual performance-based restricted stock unit payouts based on fiscal 2021 performance. One half of the awards vested on March 12, 2022, and the remainder vested on the first anniversary thereof.

(5) The RSUs vest in three equal installments, with one third of the total award vesting on each of May 15, 2022, 2023 and 2024, subject to continued service.

(6) The RSUs vest in three equal installments, with one third of the total award vesting on each of May 15, 2021, 2022 and 2023, subject to continued service.

(7) The RSUs vest in full on August 15, 2023, subject to continued service.

(8) The RSUs vest in three equal installments, with one third of the total award vesting on each of June 12, 2021, 2022 and 2023, subject to continued service.

(9) The option is fully vested.

(10) The RSU vests on June 15, 2023, subject to Dr. George's continued service as a consultant.

Option Exercises and Stock Vested Table

The following table sets forth the dollar amounts realized pursuant to the vesting or exercise of equity-based awards by each of our named executive officers for the fiscal year ended December 31, 2022:

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$) ⁽¹⁾
Kenneth D. Knight	—	—	105,586	477,749
Yafei (Roxi) Wen	—	—	49,019	233,380
Thomas R. Brida	—	—	80,846	498,773
Robert L. Nussbaum, MD	—	—	85,016	529,047
Sean E. George, PhD	—	—	294,075	1,262,178

(1) Value realized upon vesting of RSUs is computed by multiplying the number of shares of common stock underlying RSUs that vested by the closing price of our common stock on the vesting date.

Potential Payments upon Termination or Change in Control

In April 2021, our board of directors approved change in control and severance agreements for our named executive officers. These agreements provide for customary change in control and severance benefits which were recommended by the compensation committee's independent compensation consultant and are competitive with our peer group.

Each agreement provides that, upon a change in control, performance-based equity awards will be deemed achieved at target for any unfinished performance period, will convert to time-vesting at target, and will continue to vest in accordance with any service-based vesting condition specified in the award agreement, subject to acceleration upon an involuntary termination within three months prior to or 12 months following the change in control.

In addition, each agreement provides that if the named executive officer is terminated by us without cause or is otherwise involuntarily terminated, as such terms are defined in the agreement, within three months prior to or 12 months following a change in control, the named executive officer will be entitled to receive (i) a lump sum cash severance payment equal to 100% (150% for our CEO) of the named executive officer's annual base salary, (ii) any earned but unpaid annual bonus, (iii) a lump sum cash payment equal to 12 months (18 months for our CEO) of COBRA premiums, and (iv) acceleration of vesting as to 100% of the executive's then outstanding unvested equity awards subject to time-based vesting.

Under the change in control and severance agreements, each named executive officer is also entitled to severance if the named executive officer is terminated without cause or otherwise involuntarily terminated other than in connection with a change in control. Specifically, each named executive officer is entitled to (i) a lump sum cash payment equal to 100% (150% for our CEO) of the named executive officer's annual base salary, (ii) any earned but unpaid annual bonus, and (iii) a lump sum payment equal to 12 months (18 months for our CEO) of COBRA premiums. Payment of such severance benefits is subject to the named executive officer's execution and delivery of an effective release of claims.

Should any portion of a named executive officer's severance or other benefits constitute a "parachute payment" under Section 280G of the Internal Revenue Code, and therefore become subject to an excise tax under Section 4999 of the Internal Revenue Code, then such named executive officer shall receive the better of (i) the full amount of the severance and other benefits under the severance and change in control agreement or (ii) a lesser amount of the severance and other benefits such that no portion of such benefits is subject to an excise tax, in each case on an after-tax basis. We do not "gross up" our named executive officers for any 280G related excise taxes.

The following table sets forth potential payments payable to our current executive officers upon termination of employment or a change in control if the associated triggering event were to have occurred on December 31, 2022 under the change in control and severance agreements and provisions that existed on such date. For accelerated equity awards, the amounts reflect the difference between the per share exercise price as of fiscal year end and the closing market price per share as of fiscal year end, \$1.86. The amounts listed in the table below are in addition to benefits generally available to our employees upon termination of employment, such as distributions from the 401(k) plan. The compensation committee may in its discretion revise, amend or add to the benefits if it deems advisable.

Name	Termination Without Cause or Involuntary Termination; No Change in Control (\$)	Termination Without Cause or Involuntary Termination with Change in Control (\$)	Change in Control
Kenneth D. Knight			
Salary	750,000	750,000	–
Bonus	–	–	–
Equity Acceleration	–	624,604	–
Benefits Continuation	25,115	25,115	–
Yafei (Roxi) Wen			
Salary	475,000	475,000	–
Bonus	–	–	–
Equity Acceleration	–	776,896	–
Benefits Continuation	24,717	24,717	–
Thomas R. Brida			
Salary	425,000	425,000	–
Bonus	–	–	–
Equity Acceleration	–	519,647	–
Benefits Continuation	7,996	7,996	–
Robert L. Nussbaum, MD			
Salary	400,000	400,000	–
Bonus	–	–	–
Equity Acceleration	–	519,647	–
Benefits Continuation	9,333	9,333	–

See “– Compensation Discussion and Analysis – Fiscal 2022 Compensation – Transition and Separation Agreement” for a discussion of payments to Dr. George upon his transition in July 2022.

CEO Pay Ratio

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(u) of Regulation S-K, we are providing the following information about the relationship of the annual total compensation of our employees and the total compensation of Kenneth D. Knight, our Chief Executive Officer as of December 31, 2022. The pay ratio included in this information is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K.

The SEC’s rules for identifying the median compensated employee and calculating the pay ratio based on that employee’s annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions and to make reasonable estimates and assumptions that reflect their employee populations and compensation practices. As a result, the pay ratio reported by other companies may not be comparable to the pay ratio reported below, as other companies have different employee populations and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios.

We identified our median compensated employee from 1,644 full-time and part-time workers who were included as employees on our payroll records as of December 31, 2022 based on year-to-date base salary, bonus, commissions and equity as included in their W-2 forms, with conforming adjustments for employees who were hired during that period but did not work the full 12 months. We excluded the following number of employees from our foreign subsidiaries: Canada (18), EMEA (3) and APAC (21).

The 2022 annual total compensation as determined under Item 402 of Regulation S-K for our CEO was \$4,949,252, as reported in the Summary Compensation Table of this Proxy Statement. On an annualized basis, the 2022 total compensation for our CEO is \$5,088,675. The 2022 annual total compensation as determined under Item 402 of Regulation S-K for our median employee was \$133,919. The ratio of our CEO’s annual total compensation to our median employee’s total annual compensation for fiscal year 2022 is 38 to 1.

The price of our common stock experienced significant volatility in 2022 which impacts the CEO pay ratio. In the calculations above, restricted stock units were valued at \$7.06 and option awards at \$1.9628, based on the closing price of our common stock on the date of grant.

Pay Versus Performance

As required by Section 953(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 402(v) of Regulation S-K, the table below includes information to demonstrate the relationship between NEO compensation and certain financial performance measures for fiscal years 2020, 2021 and 2022. In the tables and charts below, we have selected the S&P 500 Healthcare Index as our peer group comparison for total shareholder return. This is the index we use for purposes of Rule 201(e)(1)(ii) of Regulation S-K.

For additional information about our performance-based pay philosophy and how we align executive compensation with our performance, refer to the Compensation Discussion and Analysis beginning on page 21.

Year	Summary Compensation Table Total for PEO (\$) ^(a)		Compensation Actually Paid to PEO (\$) ^(b)		Average Summary Compensation Table Total for non-PEO Named Executive Officers (\$) ^{(a)(c)}	Average Compensation Actually Paid to non-PEO Named Executive Officers (\$) ^(b)	Value of Initial Fixed \$100 Investment Based On:		Net Loss (\$ in millions)	Cash Burn (\$ in millions) ^(e)
	George:	Knight:	George:	Knight:			Company Total Shareholder Return (\$)	S&P 500 Healthcare Index Total Shareholder Return (\$) ^(d)		
2022	1,656,403	4,949,252	(4,658,333)	314,557	2,529,338	(378,752)	11.53	133.44	602.2	509.6
2021	8,828,254		(3,925,307)		3,494,722	(1,336,005)	94.67	138.35	379	849.2
2020	3,881,365		17,612,219		3,798,621	8,812,173	259.21	111.43	3100	693.7

(a) The dollar amounts reported are the total compensation reported for each fiscal year in the "Total" column of the Summary Compensation Table.

(b) The dollar amounts reported in column (b) represent the amount of "compensation actually paid" in accordance with Item 402(v) of Regulation S-K. The dollar amounts do not reflect the actual amount of compensation earned by or paid during the applicable year. In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to our CEO's total compensation for each year to determine the compensation actually paid:

Year	Reported Summary Compensation Table Total for PEO (\$)	Reported Value of Equity Awards ⁽¹⁾ (\$)	Equity Award Adjustments ⁽²⁾ (\$)	Compensation Actually Paid to PEO (\$)
2022 (George)	1,656,403	—	(6,314,736)	(4,658,333)
2022 (Knight)	4,949,252	(3,551,300)	(1,083,395)	314,557
2021	8,828,254	(8,328,101)	(4,425,460)	(3,925,307)
2020	3,881,365	(3,430,020)	17,160,874	17,612,219

(1) The grant date fair value of equity awards represents the total of the amounts reported in the "Stock Awards" and "Option Awards" columns in the Summary Compensation Table for the applicable year.

(2) The amounts deducted or added in calculating the total average equity award adjustments for our PEOs are as follows:

Year	Year End Fair Value of Outstanding and Unvested Equity Awards Granted in the Year (\$)	Year over Year Change in Fair Value of Outstanding and Unvested Equity Awards Granted in Prior Years (\$)	Fair Value as of Vesting Date of Equity Awards Granted and Vested in the Year (\$)	Year over Year Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year (\$)	Fair Value at the End of the Prior Year of Equity Awards that Failed to Meet Vesting Conditions in the Year (\$)	Value of Dividends or other Earnings Paid on Stock or Option Awards not Otherwise Reflected in Fair Value or Total Compensation (\$)	Total Equity Award Adjustments (\$)
2022 (George)	–	(599,883)	40,690	(3,419,670)	(2,335,874)	–	(6,314,736)
2022 (Knight)	1,908,313	(1,716,363)	–	(1,196,017)	(79,328)	–	(1,083,395)
2021	3,546,295	(6,130,366)	–	(1,723,736)	(117,653)	–	(4,425,460)
2020	9,012,711	6,294,391	47,908	2,127,303	(321,439)	–	17,160,874

The amounts in the following table represent the average of the amounts deducted and added to our NEOs' total compensation as a group (excluding the CEO) for the applicable year for purposes of computing the "compensation actually paid" amounts appearing in the pay versus performance table:

Year	NEO Names	Average Reported Summary Compensation Table Total for Non-PEO NEOs (\$)	Average Reported Value of Equity Awards (\$)	Average Equity Award Adjustments ⁽¹⁾ (\$)	Average Compensation Actually Paid to Non-PEO NEOs (\$)
2022	See footnote (c)	2,529,338	(1,555,725)	(1,352,365)	(378,752)
2021	See footnote (c)	3,494,722	(2,996,024)	(1,834,703)	(1,336,005)
2020	See footnote (c)	3,798,621	(3,448,684)	8,462,236	8,812,173

(1) The amounts deducted or added in calculating the total average equity award adjustments are as follows:

Year	NEO Names	Year End Fair Value of Outstanding and Unvested Equity Awards Granted in the Year (\$)	Year over Year Change in Fair Value of Outstanding and Unvested Equity Awards Granted in Prior Years (\$)	Fair Value as of Vesting Date of Equity Awards Granted and Vested in the Year (\$)	Year over Year Change in Fair Value of Equity Awards Granted in Prior Years that Vested in the Year (\$)	Fair Value at the End of the Prior Year of Equity Awards that Failed to Meet Vesting Conditions in the Year (\$)	Value of Dividends or other Earnings Paid on Stock or Option Awards not Otherwise Reflected in Fair Value or Total Compensation (\$)	Total Equity Award Adjustments (\$)
2022	See footnote (c)	478,654	(1,018,532)	–	(733,159)	(79,328)	–	(1,352,365)
2021	See footnote (c)	1,317,326	(2,349,964)	38,236	(807,338)	(32,963)	–	(1,834,703)
2020	See footnote (c)	5,769,519	2,095,557	412,384	412,458	(227,681)	–	8,462,236

(c) The names of each of the NEOs included for purposes of calculating the average amounts in each applicable year are as follows: (i) for 2022, Thomas R. Brida, Robert L. Nussbaum, MD, and Yafei (Roxi) Wen; (ii) for 2021, Thomas R. Brida, Shelly D. Guyer, Kenneth D. Knight, Robert L. Nussbaum, MD, and Yafei (Roxi) Wen; and (iii) for 2020, Lee Bendekgey, Thomas R. Brida, Shelly D. Guyer, Kenneth D. Knight and Katherine A. Stueland.

(d) The peer group used for this purpose is the S&P 500 Healthcare Index, our peer group used for purposes of Item 201(e) of Regulation S-K.

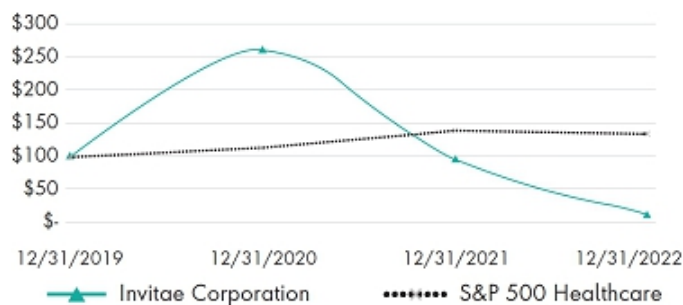
(e) As required by Item 402(v) of Regulation S-K, we have determined that Cash Burn is the Company Selected Measure, as it is the most important financial performance measure (that is not otherwise required to be disclosed in the table) used to link compensation actually paid to our NEOs to company performance for the most recently completed fiscal year.

Comparative Analysis of the Pay versus Performance Table

Invitae's compensation program is designed to attract and retain executives whose talents and contributions sustain long-term growth by aligning their interests with the drivers of stockholder returns and supporting their achievement of Invitae's primary business goals. Invitae considers several performance measures to ensure executives are incentivized to accomplish these objectives, many of which are not presented in the pay versus performance table. The charts and descriptions below explain the relationship between the columns presented in the pay versus performance table.

Invitae TSR versus Peer Group TSR

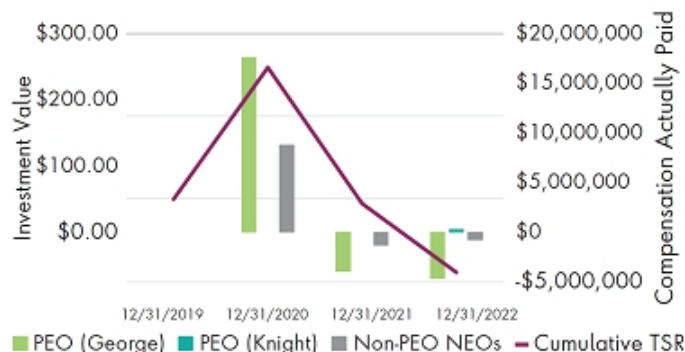
The graph below shows our cumulative TSR over the three-year period ending with December 31, 2022 as compared to the S&P 500 Healthcare index which is the index used for purposes of our performance graph in our Annual Report on Form 10-K for the year ended December 31, 2022.



Comparison of “Compensation Actually Paid” to TSR

The chart below demonstrates that the “compensation actually paid” amounts shown for Dr. George and Mr. Knight and average “compensation actually paid” to the other NEOs is aligned with our cumulative TSR over the three years presented in the pay versus performance table. The alignment of compensation actually paid with our cumulative TSR over the period presented reflects that a significant portion of the compensation actually paid to Dr. George and Mr. Knight and to the other NEOs is comprised of equity awards. Moreover, our executive compensation philosophy and design is fundamentally based on a commitment to align pay and performance.

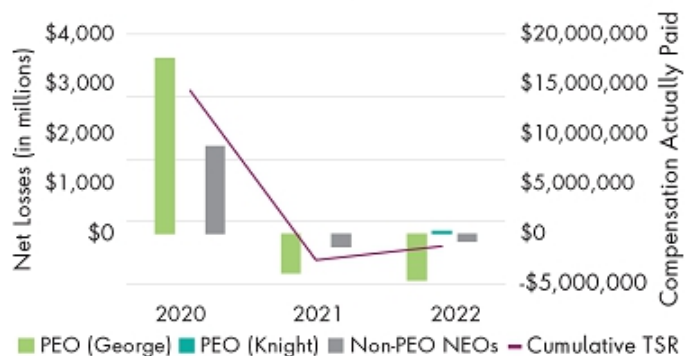
Compensation Actually Paid and Cumulative TSR



Comparison of “Compensation Actually Paid” to Net Loss

The chart below compares the “compensation actually paid” to our net losses over the three years presented in the pay versus performance table.

Compensation Actually Paid and Net Losses



Comparison of “Compensation Actually Paid” to Company-Selected Measure (Cash Burn)

Our cash burn was \$693.7 million in 2020, \$849.2 million in 2021 and \$509.6 million in 2022. Dr. George’s “compensation actually paid” was approximately \$17.6 million, (\$3.9 million) and (\$4.7 million) in the corresponding years (and Mr. Knight’s was approximately \$0.3 million in 2022) and the average “compensation actually paid” to our other NEOs was approximately \$8.8 million, (\$1.3 million) and (\$0.8 million) in each of those years, respectively. While we use numerous financial and non-financial performance measures for the purpose of evaluating performance for our compensation programs, we have determined that cash burn is the financial performance measure that, in our assessment, represents the most important performance measure (that is not otherwise required to be disclosed in the table) used to link compensation actually paid to NEOs, for the most recently completed fiscal year, to our performance. We place significant emphasis on decreasing cash burn because it reflects strong performance and operating efficiency in the underlying business, which is imperative for sustained long-term growth. A reconciliation of this non-GAAP financial metric to the closest GAAP equivalent is presented in Annex A.



Most Important Performance Measures

The performance measures that we use in our executive compensation program are selected based on the objective of incentivizing NEOs to achieve long-term, sustainable growth in stockholder value. As required by Item 402(v) of Regulation S-K, we have identified the following financial performance measures as being the most important in linking actual compensation paid to executives to our performance.

Revenue
Cash Burn
Non-GAAP Gross Margin

Equity Compensation Plan Information

The following table summarizes the number of shares of common stock to be issued upon the exercise of outstanding options, warrants and rights 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, 2022.

Name	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants 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	14,436,920 ⁽¹⁾	\$8.49	14,774,629 ⁽²⁾
Equity compensation plans not approved by security holders	–	–	–
Total	14,436,920	\$8.49	14,774,629

(1) Excludes 8,791,334 shares issuable pursuant to acquisitions. The weighted average exercise price in column (b) does not take into account these RSUs and PRSUs.

(2) Represents 12,625,563 shares available for future issuance under the 2015 Stock Plan and 2,149,066 shares available for future issuance under our Employee Stock Purchase Plan (the "ESPP") as of December 31, 2022. 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.

The 2015 Stock Plan contains an "evergreen" provision, pursuant to which the number of shares of common stock reserved for issuance pursuant to awards under such plan shall be increased on the first day of each year beginning in 2016, equal to the lesser of (x) 4% of the number of shares of common stock outstanding on the last day of the immediately preceding fiscal year or (y) if our board of directors acts prior to the first day of the fiscal year, such lesser amount that our board of directors determines for purposes of the annual increase for that fiscal year. As of January 1, 2023, the 2015 Stock Plan was increased by 9,822,484 shares pursuant to such evergreen provision.

The ESPP contains an "evergreen" provision, pursuant to which the number of shares of common stock available for purchase under such plan shall be increased on the first day of each year beginning in 2016, equal to the lesser of (x) 1% of the number of shares of common stock outstanding on such date or (y) a lesser amount determined by our board of directors. As of January 1, 2023, the ESPP was increased by 2,455,621 shares pursuant to such evergreen provision.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information as of April 10, 2023, which is the record date for the Annual Meeting (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 director nominees 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.

The percentage of our common stock beneficially owned is based on 260,674,728 shares of common stock outstanding as of April 10, 2023, the Record Date for the Annual Meeting. 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, or RSUs that vest, in each case, within 60 days of April 10, 2023. 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.

Name and address of beneficial owner	Number of shares beneficially owned	Percentage of shares beneficially owned
Named Executive Officers and Directors:		
Kenneth D. Knight ⁽¹⁾	364,225	*
Yafei (Roxi) Wen ⁽²⁾	150,082	*
Thomas R. Brida ⁽³⁾	274,158	*
Robert L. Nussbaum, MD ⁽⁴⁾	366,997	*
Sean E. George, PhD ⁽⁵⁾	695,993	*
Eric Aguiar, MD ⁽⁶⁾	102,600	*
Geoffrey S. Crouse ⁽⁷⁾	152,859	*
Christine M. Gorjanc ⁽⁸⁾	136,100	*
Kimber D. Lockhart ⁽⁹⁾	73,100	*
Chitra Nayak ⁽¹⁰⁾	108,600	*
William H. Osborne	—	—
Randal W. Scott, PhD ⁽¹¹⁾	190,750	*
All current executive officers and directors as a group (11 persons) ⁽¹²⁾	1,919,471	*
5% Stockholders:		
ARK Investment Management LLC ⁽¹³⁾	27,072,844	10.4%
The Vanguard Group ⁽¹⁴⁾	22,587,955	8.7%
BlackRock, Inc. and affiliated entities ⁽¹⁵⁾	21,768,046	8.4%
Sumitomo Mitsui Trust Holdings, Inc. and affiliated entities ⁽¹⁶⁾	17,256,161	6.6%

* Represents beneficial ownership of less than 1%.

(1) Includes options to purchase 12,083 shares of common stock that are exercisable and 173,234 RSUs vesting within 60 days of April 10, 2023.

(2) Includes 116,667 RSUs vesting within 60 days of April 10, 2023.

(3) Includes options to purchase 37,474 shares of common stock that are exercisable and 71,070 RSUs vesting within 60 days of April 10, 2023.

(4) Includes options to purchase 120,048 shares of common stock that are exercisable and 71,070 RSUs vesting within 60 days of April 10, 2023.

(5) Includes options to purchase 8,050 shares of common stock that are exercisable within 60 days of April 10, 2023.

- (6) Includes options to purchase 47,700 shares of common stock that are exercisable and 43,400 RSUs vesting within 60 days of April 10, 2023.
- (7) Includes options to purchase 93,000 shares of common stock that are exercisable and 32,100 RSUs vesting within 60 days of April 10, 2023.
- (8) Includes options to purchase 95,500 shares of common stock that are exercisable and 32,100 RSUs vesting within 60 days of April 10, 2023.
- (9) Includes options to purchase 32,500 shares of common stock that are exercisable and 32,100 RSUs vesting within 60 days of April 10, 2023.
- (10) Includes options to purchase 68,000 shares of common stock that are exercisable and 32,100 RSUs vesting within 60 days of April 10, 2023.
- (11) Includes (i) options to purchase 85,275 shares of common stock that are exercisable and 8,475 RSUs vesting within 60 days of April 10, 2023 and (ii) 60,000 shares of common stock held by OG Family Trust, over which Dr. Scott as trustee has shared voting and dispositive power and may be deemed to have indirect beneficial ownership.
- (12) Includes options to purchase 510,580 shares of common stock that are exercisable and 612,316 RSUs vesting within 60 days of April 10, 2023.
- (13) According to Amendment No. 8 to Schedule 13G filed on February 10, 2023 by ARK Investment Management LLC (“ARK”), ARK, in its capacity as investment adviser, may be deemed to beneficially own 27,072,844 shares, and has sole voting power with respect to 23,097,202 of the shares, shared voting power with respect to 2,809,194 of the shares and sole dispositive power with respect to 27,072,844 of the shares. The principal address for ARK is 200 Central Avenue, St. Petersburg, FL 33701.
- (14) According to Amendment No. 3 to Schedule 13G filed on February 9, 2023 by The Vanguard Group (“Vanguard”), Vanguard, in its capacity as investment adviser, may be deemed to beneficially own 22,587,955 shares, and has shared voting power with respect to 161,935 of the shares, sole dispositive power with respect to 22,254,394 of the shares, and shared dispositive power with respect to 333,561 of the shares. The principal address for Vanguard is 100 Vanguard Blvd., Malvern, PA 19355.
- (15) According to Schedule 13G filed on January 25, 2023 by BlackRock, Inc. (“BlackRock”), BlackRock has sole voting power with respect to 20,839,649 of the shares and sole dispositive power with respect to 21,768,046 of the shares on behalf of itself and the following subsidiaries: BlackRock Advisors, LLC, Aperio Group, LLC, BlackRock (Netherlands) B.V., BlackRock Institutional Trust Company, National Association, BlackRock Asset Management Ireland Limited, BlackRock Financial Management, Inc., BlackRock Asset Management Schweiz AG, BlackRock Investment Management, LLC, BlackRock Investment Management (UK) Limited, BlackRock Asset Management Canada Limited, BlackRock Investment Management (Australia) Limited, BlackRock Fund Advisors, and BlackRock Fund Managers Ltd. The principal address for BlackRock is 55 East 52nd Street, New York, NY 10055.
- (16) According to Amendment No. 3 to Schedule 13G filed jointly on February 3, 2023 by Sumitomo Mitsui Trust Holdings, Inc. (“SMTH”) and Nikko Asset Management Co., Ltd. (“NAM”), and Amendment No. 3 to Schedule 13G filed on February 10, 2023 by Nikko Asset Management Americas, Inc. (“Nikko”), SMTH and NAM have shared voting and dispositive power with respect to 17,256,161 of the shares and Nikko has shared voting power with respect to 15,802,064 of the shares and shared dispositive power with respect to 17,256,161 of the shares. The shares reported by each of SMTH and NAM, as parent holding companies, are owned, or may be deemed to be beneficially owned by their subsidiary Nikko, which is classified as an investment adviser. The shares reported by Nikko, as subsidiary to SMTH and NAM, are owned, or may be deemed to be beneficially owned, by SMTH and NAM. The principal address for SMTH is 1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan. The principal address for NAM is Midtown Tower, 9-7-1 Akasaka, Minato-ku, Tokyo 107-6242, Japan. The principal address for Nikko is 605 Third Avenue, 38th Floor, New York, NY 10158.

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 ir.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.

Within this framework, the audit committee has reviewed and discussed with management the Company's audited financial statements as of and for the year ended December 31, 2022. The audit committee has also discussed with the independent registered public accounting firm, Ernst & Young LLP, the matters required to be discussed by Auditing Standard No. 1301, *Communications with Audit Committees*, issued by the Public Company Accounting Oversight Board and the SEC. In addition, the audit committee has received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered public accounting firm's communications with the audit committee concerning independence, and has discussed with the independent registered public accounting firm the independent registered public accounting firm's independence.

Based upon these reviews and discussions, the audit committee recommended to the board of directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Audit Committee

Christine M. Gorjanc, Chair
Geoffrey S. Crouse
Kimber D. Lockhart
William H. Osborne

PROPOSAL 2

The NYSE Proposal

Background

On February 28, 2023, we entered into separate, privately negotiated purchase and exchange agreements (collectively, the “Exchange Agreements”) with respect to (a) the issuance of approximately \$275.3 million aggregate principal amount of our 4.5% Series A Convertible Senior Secured Notes due 2028 (the “Series A Notes”) and 14,219,859 shares (the “New Shares”) of our common stock, in exchange for approximately \$305.7 million aggregate principal amount of our currently outstanding 2.0% Convertible Senior Notes due 2024 (the “Old Notes”) and (b) \$30.0 million aggregate principal amount of our new 4.5% Series B Convertible Senior Secured Notes due 2028 (the “Series B Notes”) and, together with the Series A Notes, the “Notes”) for cash. The Notes were issued pursuant to, and are governed by, an indenture (the “Indenture”), dated as of March 7, 2023 (the “Closing Date”), among Invitae, the guarantors parties thereto and U.S. Bank Trust Company, National Association, as trustee and collateral agent. Based on the initial conversion price of \$2.58, the Notes will be initially convertible into an aggregate of 118,316,667 shares of common stock, and after taking into account the maximum number of additional shares issuable in certain circumstances as described in the Indenture, an aggregate of 141,979,975 shares of common stock.

The Indenture also provides for the issuance of warrants to purchase shares of common stock (the “Warrants”) in connection with (i) redemption of the Notes or (ii) acceleration of the Notes following the occurrence of an event of default under the Indenture as a result of the failure by us to settle any conversion. Any Warrants issued will cover the same number of shares of common stock underlying, and at an exercise price equal to the conversion price of, the redeemed or prepaid Notes.

Conversion of Series A Notes, or exercise of any Warrants issued in respect of the Series A Notes, into shares of common stock, however, could result in the issuance of shares of common stock in excess of the limitations imposed by Section 312.03(c) of the NYSE Listed Company Manual (the “NYSE Limitations”). The number of shares of common stock issuable upon such conversion or exercise is subject to further increase pursuant to the anti-dilution adjustment provisions under the Indenture in respect of certain specified dilutive issuances within two years following the issuance of the Series A Notes or any Warrants issued in respect of the Series A Notes. Because NYSE rules state that, in certain circumstances, an issuer is required to obtain stockholder approval prior to the issuance of common stock in any transaction or series of transactions if (i) the shares of common stock will have upon issuance voting power equal to 20% or more of the voting power outstanding before the issuance of common stock or (ii) the number of shares of common stock to be issued will upon issuance equal 20% or more of the number of shares of common stock outstanding before the issuance of common stock, the Series A Notes and any Warrants issued in respect of the Series A Notes currently limit the issuance of common stock to the number of shares equal to (a) 19.9% of our common stock outstanding as of the Closing Date, minus (b) the number of the New Shares, plus (c) the number of shares of common stock that would have been issuable under the Old Notes at a maximum conversion rate thereunder, which is equal to 49,396,519 shares of our common stock (the “NYSE Share Cap”).

Issuance of shares of common stock in excess of the applicable NYSE Limitations upon conversion of Series B Notes, or exercise of any Warrants issued in respect of the Series B Notes, into shares of common stock is exempted from the stockholder approval requirement, so long as the conversion price of the Series B Notes exceeds the “Minimum Price” (as defined in Section 312.04 of the NYSE Listed Company Manual). The Indenture has anti-dilution adjustment provisions in respect of certain specified dilutive issuances within two years following the issuance of the Series B Notes which could have the effect of reducing the conversion price of the Series B Notes or the exercise price of any Warrants issued in respect of the Series B Notes below the “Minimum Price”. In order to ensure compliance with the “Minimum Price” requirement during such two year period for purposes of the applicable NYSE Limitations, the Indenture and the Warrants prohibit, until such time that we obtain stockholder approval, us from entering into any transaction that would cause an adjustment to the number of shares of common stock issuable upon conversion of the Series B Notes or upon exercise of any Warrants issued in respect of the Series B Notes to exceed the applicable NYSE Limitations.

The Indenture also contains a conversion blocker that prohibits the conversion of any Notes or exercise of any Warrants into shares of common stock, if upon such conversion or exercise, such holder would beneficially own in excess of 4.9% of the total number of shares of common stock then issued and outstanding (the “Beneficial Ownership Blocker”). However, the largest holder of the Notes, as of the Closing Date, owned Notes that, on an as-converted basis based on the initial conversion price of the Notes and disregarding the Beneficial Ownership Blocker, would be convertible into more than 20% of the total number of shares of common stock then issued and outstanding. Therefore, the conversion of the Notes or exercise of the Warrants issued in respect of the Notes into shares of common stock by such noteholder or any other purchaser or holder of the Notes with sufficient amount of the Notes and/or Warrants could potentially constitute a “change of control”, which is subject to stockholder approval under Section 312.03(d) of the NYSE Listed Company

Manual. For the avoidance of doubt, the Beneficial Ownership Blocker shall remain in place until the maturity date of the Notes.

The preceding description is a summary of certain principal terms of the Notes and Warrants. While we believe that the summary above describes the material terms of the Notes and Warrants necessary for you to make a voting decision for the purposes of this Proposal 2, it may not contain all of the information that is important to you and is qualified in its entirety by reference to our Current Reports on Form 8-K filed with the SEC on March 1, 2023 and March 8, 2023, which are incorporated herein by reference, and to the Indenture, the Notes, the form of Warrant, and the form of Exchange Agreements, which are included as exhibits to such Current Reports on Form 8-K. We encourage you to read the Indenture, the Notes, the form of Warrant, and the form of Exchange Agreements in their entirety.

Proposal

We are asking our stockholders to consider and vote on a proposal to approve the issuance of shares of common stock pursuant to the conversion of the Notes and/or exercise of any Warrants issued in respect of the Notes in excess of the limitation imposed by the NYSE Share Cap, and related change of control. Approval of Proposal 2 will allow us to issue and deliver the number of shares of common stock upon conversion of the Notes and/or exercise of any Warrants issued in respect of the Notes in excess of the respective limitations under Section 312.03 of the NYSE Listed Company Manual.

Reasons for the Approval

Our common stock is listed on the NYSE and, as a result, we are subject to certain NYSE listing rules and regulations. Pursuant to Section 312.03(c) of the NYSE Listed Company Manual, subject to certain exceptions, stockholder approval is required prior to the issuance of common stock, or of securities convertible into or exercisable for common stock, in any transaction or series of related transactions if: (1) the common stock has, or will have upon issuance, voting power equal to or in excess of 20% of the voting power outstanding before the issuance of such stock or of securities convertible into or exercisable for common stock or (2) the number of shares of common stock to be issued is, or will be upon issuance, equal to or in excess of 20% of the number of shares of common stock outstanding before the issuance of the common stock or of securities convertible into or exercisable for common stock. In addition, pursuant to Section 312.03(d) of the NYSE Listed Company Manual, stockholder approval is required for any issuance that will result in a change of control of the issuer. We are seeking stockholder approval of the issuance of shares of common stock in excess of the applicable NYSE Limitations, and related change of control.

We are seeking stockholder approval of the issuance of shares of common stock pursuant to the conversion of the Notes and/or exercise of any Warrants issued in respect of the Notes, and related change of control, under Section 312.03(c) and Section 312.03(d) of the NYSE Listed Company Manual. We are seeking stockholder approval to make such issuances because we would like the ability to settle conversions of the Notes and exercises of the Warrants in shares of our common stock and to avoid additional financial obligations we will face if we do not receive stockholder approval. We believe this settlement method will be in our best interests and the best interests of our stockholders at the time of conversion or exercise. Because the issuance by us of a number of shares exceeding the applicable NYSE Limitations or the issuance of shares that may result in a change of control upon the conversion of the Notes and/or exercise of the Warrants without stockholder approval may result in a violation of Section 312.03(c) and Section 312.03(d) of the NYSE Listed Company Manual, we are seeking stockholder approval pursuant to Section 312.03(c) and Section 312.03(d) of the NYSE Listed Company Manual.

Potential Effects of the Approval

While our board of directors believes that the NYSE Proposal is advisable and in the best interest of Invitae and our stockholders, you should consider the following factors, together with the other information included in this Proxy Statement, in evaluating this proposal.

Dilution. The issuance of the shares of common stock which are the subject of this proposal will result in an increase in the number of shares of common stock outstanding. This means that our existing stockholders will own a smaller ownership interest in Invitae as a result of such issuance and therefore have less ability to influence significant corporate decisions requiring stockholder approval.

Market Effects. Holders of the Notes who receive common stock upon conversion of the Notes and/or exercise of any Warrants issued in respect of the Notes may be able to sell these shares of common stock pursuant to a registration statement or any applicable exemption under the Securities Act of 1933, as amended, or the rules promulgated thereunder, including Rule 144, if applicable. If significant quantities of common stock are sold, or if it is perceived that they may be sold, the trading price of our common stock could be adversely affected.

Effect of Failure to Obtain Stockholder Approval

If stockholder approval is not obtained at the Annual Meeting, we will seek stockholder approval at a special meeting held as soon as possible after the Annual Meeting. If stockholder approval is not obtained prior to September 30, 2023, the Notes that would be issuable upon conversion into shares of common stock representing more than NYSE Share Cap will be convertible into cash. If we do not have cash to satisfy these requirements, we may be in default under the Notes.

 **THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE APPROVAL OF, FOR PURPOSES OF COMPLYING WITH NYSE LISTING RULES, THE ISSUANCE OF SHARES OF OUR COMMON STOCK PURSUANT TO THE CONVERSION OF NOTES AND/OR EXERCISE OF WARRANTS AND THE RELATED CHANGE OF CONTROL.**

PROPOSAL 3

Non-Binding Advisory Vote on Executive Compensation

Section 14A of the Securities Exchange Act of 1934 (the “Exchange Act”) requires U.S. public companies to provide stockholders with the opportunity to vote to approve, on a non-binding, advisory basis, the compensation of our named executive officers as disclosed in this Proxy Statement in accordance with the compensation disclosure rules of the SEC. At the Company’s 2020 annual meeting of stockholders, a majority of our stockholders voted in favor of holding an advisory vote to approve the compensation of the Company’s named executive officers every year. Our board of directors considered this voting result and decided to hold the vote every year, until the next non-binding advisory vote on the frequency of future advisory votes on the compensation of the Company’s named executive officers, which is expected to be at the 2026 annual meeting of stockholders.

As described in detail under the heading “Executive Compensation — Compensation Discussion and Analysis,” our executive compensation programs are designed to attract and retain our named executive officers, who are critical to our success. Under these programs, our named executive officers are rewarded for the achievement of annual and long-term corporate objectives, and the creation of increased stockholder value. Please read the Compensation Discussion and Analysis for additional details about our executive compensation programs, including information about the 2022 compensation of our named executive officers.

Each year since 2020, we sought, and received, approval for our executive compensation program. Accordingly, we are again asking our stockholders to indicate their support for our named executive officer compensation as described in this Proxy Statement. This proposal gives our stockholders the opportunity to express their views on our named executive officers’ compensation. This vote is advisory, which means that the vote on executive compensation is not binding on us, our board of directors or the compensation committee of the board. This vote is not intended to address any specific item of compensation, but rather the vote relates to the compensation of our named executive officers as a whole, as described in this Proxy Statement in accordance with the compensation disclosure rules of the SEC. Accordingly, we will ask our stockholders to vote for the following resolution at the Annual Meeting:

“RESOLVED, that the Company’s stockholders approve, on a non-binding advisory basis, the compensation of the named executive officers, as disclosed in the Company’s Proxy Statement for the 2023 Annual Meeting of Stockholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the Summary Compensation Table and the other related tables and disclosure.”

 **THE BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE APPROVAL, ON A NON-BINDING ADVISORY BASIS, OF THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.**

PROPOSAL 4

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, 2023. Ernst & Young LLP has audited our financial statements since 2013. Representatives of Ernst & Young LLP are expected to attend the virtual 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:

(In thousands)	Year ended December 31,	
	2022 (\$ in millions)	2021 (\$ in millions)
Audit Fees ⁽¹⁾	3,637	3,249
Audit-related Fees ⁽²⁾	795	1,696
Tax Fees	—	—
All Other Fees ⁽³⁾	—	—
	4,432	4,945

(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, as well as services in connection with regulatory filings or engagements.

(2) Audit-related fees consist of fees incurred for procedures in connection with acquisitions and consultation regarding financial accounting and reporting matters.

(3) 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.

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, our board of directors is submitting the selection of Ernst & Young LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the audit committee will reconsider whether or not to retain Ernst & Young LLP. 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" THE RATIFICATION OF ERNST & YOUNG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.**

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act 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. These persons 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 executive 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 2022 except as follows: Ms. Wen, Mr. Brida, Dr. George and Dr. Nussbaum each filed a Form 4 on March 16, 2022 that was required to be filed by March 15, 2022, and Mr. Knight filed a Form 4 on March 21, 2022 that was required to be filed by March 15, 2022.

Stockholder Proposals and Business for the 2024 Annual Meeting

Stockholder Proposals for Inclusion in the 2024 Proxy Statement

To be considered for inclusion in the Company's proxy statement for the 2024 annual meeting of stockholders, stockholder proposals must be received by the Secretary of the Company no later than December 27, 2023. Proposals should be sent to our Secretary at Invitae Corporation, 1400 16th Street, San Francisco, California 94103. These proposals also must comply with the stockholder proxy proposal submission rules of the SEC under Rule 14a-8 of the Exchange Act. Proposals we receive after that date will not be included in the proxy statement.

Stockholder Director Nominations for Inclusion in the 2024 Proxy Statement

Our Bylaws provide a proxy access provision stating that stockholders who meet the requirements set forth in our Bylaws may under certain circumstances include a specified number of director nominees in our proxy materials. Under the provision, eligible stockholders, or a group of up to 20 stockholders, owning at least 3% of our outstanding shares of common stock continuously for at least three years, may nominate and include in our annual meeting proxy materials a limited number of director nominees constituting up to the greater of (i) two directors or (ii) 20% of the board of directors (rounded down to the nearest whole number), subject to certain limitations and provided that the stockholders and nominees satisfy the requirements specified in our Bylaws. To be timely, our Bylaws provide that we must have received any proxy access nominations not more than 150 days nor less than 120 days prior to the anniversary of the date the proxy statement was provided to the stockholders in connection with preceding year's annual meeting of stockholders. For the 2024 annual meeting of stockholders, notice of any proxy access director nominations must be received by our Secretary at the above address between November 27, 2023 and December 27, 2023. Please refer to our Bylaws for a complete description of the proxy access requirements.

Stockholder Director Nominations and Other Stockholder Proposals for Presentation at the 2024 Annual Meeting Not Included in the 2024 Proxy Statement

Our Bylaws also establish advance notice procedures for stockholders who wish to nominate an individual for election as a director or to present a proposal at the 2024 annual meeting of stockholders but do not intend for the nomination or the proposal to be included in our proxy statement. A director nomination or stockholder proposal not included in the proxy statement for the 2024 annual meeting of stockholders will not be eligible for presentation at the meeting unless the stockholder gives timely notice of the nomination or proposal in writing to our Secretary at the above address. 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 anniversary of the date the proxy statement was provided to the stockholders in connection with preceding year's annual meeting of stockholders. For the 2024 annual meeting of stockholders, notice must be received between December 27, 2023 and January 26, 2024. Any such notice must contain the information and conform to the requirements specified in our Bylaws and must be a proper subject for stockholder action under applicable law. In addition to satisfying the applicable advance notice procedures in our Bylaws, stockholders who intend to solicit proxies in support of director nominees other than our nominees for the 2024 annual meeting of stockholders must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act. Notice must be delivered in writing to our Secretary at the above address no later than April 6, 2024.

Other Matters

Our 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 Internet or telephone.

By Order of the Board of Directors



Thomas R. Brida
General Counsel, Chief Compliance Officer and Secretary
San Francisco, California
April 19, 2023

Stockholders may make a request for our Annual Report on Form 10-K for the year ended December 31, 2022 in writing to our Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103. We will also provide copies of exhibits to our Annual Report on Form 10-K, but will charge a reasonable fee per page to any requesting stockholder. The request must include a representation by the stockholder that, as of April 10, 2023, the stockholder was entitled to vote at the Annual Meeting. Our Annual Report on Form 10-K and exhibits are also available at ir.invitae.com.

Questions and Answers About the Proxy Materials and the Annual Meeting

Why am I receiving these materials?

Our board of directors is soliciting your proxy to vote at the Annual Meeting, including at any adjournments or postponements of the meeting. This year's Annual Meeting will be held virtually. You are invited to attend the Annual Meeting via live audio webcast to vote electronically on the proposals described in this Proxy Statement. However, you do not need to attend the meeting to vote your shares. Instead, you may follow the instructions below to submit your proxy by Internet or telephone.

In accordance with the rules of the SEC, we have opted to furnish proxy materials, including this Proxy Statement and our Annual Report, to our stockholders by providing access to such documents on the Internet instead of mailing printed copies. Accordingly, we are sending the Notice to our stockholders of record and beneficial stockholders as of April 10, 2023, the Record Date. **Stockholders are encouraged to vote and submit proxies in advance of the Annual Meeting by Internet or telephone as early as possible to avoid processing delays.**

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 the proxy in accordance with their best judgment.

Who is entitled to vote?

Stockholders of record at the close of business on the Record Date, April 10, 2023, 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.

A list of stockholders of record entitled to vote at the Annual Meeting will be available for examination by any stockholder, for any purpose related to the Annual Meeting, for ten days prior to the Annual Meeting at our offices located at 1400 16th Street, San Francisco, California 94103. Please contact our Secretary by telephone at (415) 374-7782 if you wish to inspect the list of stockholders prior to the Annual Meeting. This list will also be available for examination by stockholders during the Annual Meeting using the 16-digit control number included in your proxy materials.

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 our transfer agent, American Stock Transfer & Trust Company, LLC ("AST"), you are considered, with respect to those shares, a stockholder of record. The Notice has been sent directly to you by us.

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 Notice has 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 Internet — Stockholders of record may submit proxies by following the Internet voting instructions on their proxy materials prior to the Annual Meeting. 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 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 Time, the day before the meeting date.





By Telephone — Stockholders of record may submit proxies by following the telephone voting instructions on their proxy materials prior to the Annual Meeting. 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 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 Time, the day before the meeting date.

By Mail — If you would like to receive a paper copy of the proxy card, you must request one. Stockholders of record may submit paper proxies by completing, signing and dating the proxy card and returning it in the prepaid envelope enclosed with the proxy card. 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” each nominee in Proposal 1, “FOR” Proposal 2, “FOR” Proposal 3, and “FOR” Proposal 4. 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.

At the Virtual Meeting — Shares held in your name as the stockholder of record may be voted electronically at the Annual Meeting by visiting www.virtualshareholdermeeting.com/NVTA2023 and using the 16-digit control number included in your proxy materials. If you have already voted previously by Internet or telephone, there is no need to vote again at the Annual Meeting unless you wish to revoke and change your vote. Shares held beneficially in street name may be voted electronically at the Annual Meeting 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 via live audio webcast, we recommend that you also submit your proxy or voting instructions or vote by Internet, telephone or mail prior to the meeting so that your vote will be counted if you later decide not to attend the meeting.

 INTERNET Stockholders of record may vote online at www.proxyvote.com	 TELEPHONE Stockholders of record may call toll-free 1-800-690-6903	 MAIL Follow the instructions in your proxy materials	 AT THE VIRTUAL MEETING Visit www.virtualshareholdermeeting.com/NVTA2023 and use the 16-digit control number included in your proxy materials
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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 submitted your proxy by Internet or telephone, you may change your vote or revoke your proxy with a later Internet or telephone proxy, as the case may be. 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. 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 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, you must obtain a legal proxy through your broker and present it to AST at least two weeks in advance of the Annual Meeting. Please consult the voting instructions or contact your broker, bank or nominee.

How are votes counted?

For Proposal 1, the election of directors, you may vote “FOR,” “AGAINST” or “ABSTAIN” with respect to each of the nominees. Abstentions and broker non-votes will have no effect on the outcome of director elections.

For each of Proposals 2, 3 and 4, you may vote “FOR,” “AGAINST” or “ABSTAIN.” An abstention has the same effect as a vote “AGAINST” any of these proposals. To the extent broker-non votes exist with respect to such proposals, they will have no effect.

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 our board of directors (i.e., “FOR” each nominee in Proposal 1, “FOR” each of Proposals 2, 3 and 4 on any other matters that may properly come before the meeting, in the discretion of the proxy holders).





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 or nominee does not have discretionary voting authority to vote on that matter without instructions from the beneficial owner and instructions are not given. Discretionary items are proposals considered “routine” under the rules of the NYSE, such as the ratification of the appointment of our independent auditors, and therefore, broker non-votes are not expected to exist with respect to this proposal. Except for Proposal 4, ratification of the appointment of Ernst & Young LLP as our independent

registered public accounting firm for the year ending December 31, 2023, all other proposals to be voted on at the Annual Meeting are considered a “non-routine” item for which brokers and nominees do not have discretionary voting power and, therefore, broker non-votes may exist with respect to these proposals. 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.

What vote is required to approve each item? How does the board recommend that I vote and what is the voting requirement for each of the proposals?

We have a form of majority voting standard for the election of directors in an uncontested election, which is generally defined as an election in which the number of nominees does not exceed the number of directors to be elected at the meeting. Cumulative voting is not permitted, which means that each stockholder may vote no more than the number of shares he or she owns for a single director candidate. The nominees receiving the highest number of “FOR” votes at the Annual Meeting will be elected. If any nominee for director receives a greater number of votes “AGAINST” than votes “FOR” such election, our Bylaws require that such person must promptly tender his or her irrevocable resignation to our board of directors for the board’s consideration. If such director’s resignation is accepted by the board, then our board of directors, in its sole discretion, may fill the resulting vacancy or may decrease the size of the board in accordance with the provisions of our Bylaws.

The table below describes the proposals to be considered at the Annual Meeting and the vote required for each proposal:

Proposal	Board Recommendation	Vote Required	Effect of Abstentions ⁽¹⁾	Broker Discretionary Voting Allowed? ⁽²⁾
1 Election of Directors	 FOR each nominee	The nominees receiving the highest number of “FOR” votes at the Annual Meeting will be elected.	No effect Not considered votes cast on this proposal	No Brokers without voting instructions will not be able to vote on this proposal.
2 Proposal to Approve the NYSE Proposal	 FOR	The affirmative “FOR” vote of a majority of the voting power present in person or represented by proxy at the Annual Meeting and entitled to vote.	Counted as vote Same effect as vote against	No Brokers without voting instructions will not be able to vote on this proposal.
3 Advisory Vote to Approve Executive Compensation	 FOR	Non-binding, advisory proposal. We will consider the matter approved if it receives the affirmative “FOR” vote of a majority of the voting power present in person or represented by proxy at the Annual Meeting and entitled to vote.	Counted as vote Same effect as vote against	No Brokers without voting instructions will not be able to vote on this proposal.
4 Ratification of the Appointment of Ernst & Young LLP	 FOR	The affirmative “FOR” vote of a majority of the voting power present in person or represented by proxy at the Annual Meeting and entitled to vote.	Counted as vote Same effect as vote against	Yes Brokers without voting instructions will have discretionary authority to vote on this proposal.

(1) As noted below, abstentions will be counted as present for purposes of establishing a quorum at the Annual Meeting.

(2) Only relevant if you are the beneficial owner of shares held in street name. If you are a stockholder of record and you do not cast your vote, no votes will be cast on your behalf on any of the items of business at the Annual Meeting.

What constitutes a quorum?

The presence online at the Annual Meeting or represented by proxy, of the holders of a majority of the voting power of common stock issued and outstanding and entitled to vote on the Record Date, will constitute a quorum. As of the close of business on the Record Date, 260,674,728 shares of our common stock were outstanding. Both abstentions and broker non-votes are counted for the purpose of determining the presence of a quorum.

What is “householding” and how does it affect me?

We have adopted a process for mailing our proxy materials called “householding” which has been approved by the SEC. Householding means that stockholders who share the same last name and address will receive only one copy of our proxy materials, unless we receive contrary instructions from any stockholder at that address.

If you prefer to receive multiple copies of our proxy materials at the same address, additional copies will be provided to you upon request. If you are a stockholder of record, you may contact us by writing to Secretary, Invitae Corporation, 1400 16th Street, San Francisco, California 94103, or by calling (415) 374-7782. Eligible stockholders of record receiving multiple copies of our proxy materials can request householding by contacting us in the same manner. We have undertaken householding to reduce printing costs and postage fees, and we encourage you to participate.

If you are a beneficial owner, you may request additional copies of our proxy materials or you may request householding by notifying your broker, bank or other nominee.

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. We have engaged Alliance Advisors, LLC, to assist us with the solicitation of proxies for a fee of \$17,000 plus out-of-pocket expenses.

Why is Invitae proposing the NYSE Proposal?

We are proposing the NYSE Proposal because our common stock is listed on the NYSE and, as a result, we are subject to certain NYSE listing rules and regulations. Pursuant to Section 312.03(c) of the NYSE Listed Company Manual, subject to certain exceptions, stockholder approval is required prior to the issuance of common stock, or of securities convertible into or exercisable for common stock, in any transaction or series of related transactions if: (1) the common stock has, or will have upon issuance, voting power equal to or in excess of 20% of the voting power outstanding before the issuance of such stock or of securities convertible into or exercisable for common stock or (2) the number of shares of common stock to be issued is, or will be upon issuance, equal to or in excess of 20% of the number of shares of common stock outstanding before the issuance of the common stock or of securities convertible into or exercisable for common stock. In addition, pursuant to Section 312.03(d) of the NYSE Listed Company Manual, stockholder approval is required for any issuance that will result in a change of control of the issuer. We are seeking stockholder approval of the issuance of the number of shares of common stock upon conversion of the Notes and/or exercise of any Warrants issued in respect of the Notes under Section 312.03(c) and Section 312.03(d) of the NYSE Listed Company Manual. For additional information, please see the section entitled “Proposal No. 2 — The NYSE Proposal.”

How many shares of common stock are potentially issuable if the NYSE Proposal is approved?

If the NYSE Proposal is approved, the maximum number of shares of common stock potentially issuable in respect of the Notes and/ or any Warrants issued in respect of the Notes is 141,979,975 shares of common stock.

How can I attend the virtual Annual Meeting?

The Annual Meeting will be a completely virtual meeting of stockholders conducted exclusively via live audio webcast. You will be able to attend the Annual Meeting via live audio webcast by visiting www.virtualshareholdermeeting.com/NVTA2023. To participate in, vote or ask questions at the Annual Meeting, you will also need the 16-digit control number, which is included in your proxy materials. If you have any questions about your control number, please contact the broker, bank or nominee that holds your shares. The Annual Meeting will begin promptly at 4:00 p.m., Pacific Time, on Monday, June 5, 2023. We encourage you to access the virtual meeting website prior to the start time. You may begin to log into the virtual meeting platform beginning at approximately 3:30 p.m., Pacific Time, on Monday, June 5, 2023.

What if I have technical difficulties accessing or participating in the virtual Annual Meeting?

We will have technicians ready to assist you with technical difficulties you may have accessing, voting at or submitting questions at the Annual Meeting. Please refer to the technical support telephone number posted on the virtual meeting website login page.

Note Regarding Forward-Looking Statements

Except for the historical information set forth herein, the matters set forth in this Proxy Statement contain predictions, estimates and other forward-looking statements, including without limitation statements regarding: our mission and our business plan; expected changes in the healthcare and medical genetics industry; the impact of information from our tests; objectives of our compensation program; our business and financial goals and milestones, including our path to operational excellence; and our plans and expectations regarding our CSR and ESG programs, strategy, initiatives and objectives, including our environmental sustainability programs and our efforts to seek diversity on our board of directors.

These forward-looking statements are based on our current expectations and are subject to risks and uncertainties that may cause actual results to differ materially, including: our ability to execute our business model; changes in applicable laws or regulations; the effect of the COVID-19 pandemic on our business; our ability to compete; the possibility that we may be adversely affected by other political or economic factors; and other risks detailed from time to time in our reports filed with the SEC, including our Annual Report on Form 10-K for the year ended December 31, 2022. We disclaim any intent or obligation to update these forward-looking statements.

ANNEX A

Reconciliation of GAAP Measures to Non-GAAP Measures

In this Proxy Statement, Invitae discloses the following non-GAAP measures: non-GAAP gross margin and non-GAAP cash burn. These non-GAAP financial measures are not based on any standardized methodology prescribed by GAAP and are not necessarily comparable to similarly-titled measures presented by other companies. Management believes these non-GAAP financial measures are useful to investors in evaluating the Company's ongoing operating results and trends. These non-GAAP financial measures are limited in value because they exclude certain items that may have a material impact on the Company's reported financial results. We account for this limitation by analyzing results on a GAAP basis as well as a non-GAAP basis and also by providing GAAP measures in the Company's public disclosures.

Cash burn excludes net changes in investments. We believe cash burn is a liquidity measure that provides useful information to management and investors about the amount of cash consumed by the operations of the business. A limitation of using this non-GAAP measure is that cash burn does not represent the total change in cash, cash equivalents and restricted cash for the period because it excludes cash provided by or used for other operating, investing or financing activities. We account for this limitation by providing information about the Company's operating, investing and financing activities in the statements of cash flows in the consolidated financial statements in the Company's most recent Annual Report on Form 10-K and by presenting net cash provided by (used in) operating, investing and financing activities as well as the net increase or decrease in cash, cash equivalents and restricted cash in its reconciliation of cash burn.

This Proxy Statement discloses the Company's non-GAAP gross margin, a non-GAAP measure used to describe the Company's performance. We defined non-GAAP gross margin as revenue less the non-GAAP cost of revenue, divided by revenue, where the non-GAAP cost of revenue is defined as the GAAP cost of revenue recorded in the Company's filings with the SEC, excluding non-acquisition related items related to restructuring and the following acquisition-related expenses: (1) amortization of intangible assets; (2) stock-based compensation; (3) post-combination expenses; and (4) fair value adjustments to assets and liabilities.

In addition, other companies, including companies in the same industry, may not use the same non-GAAP measures or may calculate these metrics in a different manner than management or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of these non-GAAP measures as comparative measures. Because of these limitations, the Company's non-GAAP financial measures should not be considered in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Investors are encouraged to review the non-GAAP reconciliations provided in the tables presented.

Reconciliation of Net (Decrease) Increase in Cash, Cash Equivalents and Restricted Cash to Cash Burn

(in thousands) (unaudited)	Three Months Ended					Year ended December 31,		
	December 31, 2021	March 31, 2022	June 30, 2022	September 30, 2022	December 31, 2022	2022	2021	2020
Net cash used in operating activities	\$ (175,918)	\$(147,543)	\$(134,689)	\$(128,702)	\$ (82,027)	\$(492,961)	\$ (559,815)	\$(298,502)
Net cash provided by (used in) investing activities	170,503	(449,456)	108,965	43,797	121,891	(174,803)	(204,080)	(400,583)
Net cash provided by (used in) financing activities	7,031	(920)	3,770	(1,691)	599	1,758	1,565,940	672,993
Net increase(decrease) in cash, cash equivalents and restricted cash	1,616	(597,919)	(21,954)	(86,596)	40,463	(666,006)	802,045	(26,092)
Adjustments:								
Net changes in investments	(197,250)	428,608	(125,087)	(55,212)	(82,261)	166,048	(99,336)	(10,061)
Proceeds from public offering of common stock, net of issuance costs	—	—	—	(9,658)	—	(9,658)	(434,263)	(263,688)
Proceeds from issuance of convertible senior notes, net	—	—	—	—	—	—	(1,116,427)	—
Proceeds from common stock issued in private placement, net	—	—	—	—	—	—	—	(263,628)
Proceeds from issuance of debt, net	—	—	—	—	—	—	—	(129,214)
Proceeds from exercises of warrants	—	—	—	—	—	—	(1,242)	(974)
Cash burn	\$ (195,634)	\$(169,311)	\$(147,041)	\$(151,466)	\$ (41,798)	\$(509,616)	\$ (849,223)	\$(693,657)

- Cash burn for the year ended December 31, 2022 includes \$44.5 million of proceeds from the sale of RUO kit assets, \$38.4 million of restructuring-related cash payments and \$14.9 million of acquisition-related payments.
- Cash burn for the year ended December 31, 2021 includes \$281.9 million of cash paid for acquisitions and \$3.3 million in acquisition-related transaction costs.
- Cash burn for the year ended December 31, 2020 includes \$410.4 million of cash paid for acquisitions and \$13.6 million in acquisition-related transaction costs.
- Cash burn for the three months ended December 31, 2021 includes \$9.5 million cash paid for acquisitions.
- Cash burn for the three months ended June 30, 2022 includes \$0.7 million of acquisition-related payments.
- Cash burn for the three months ended September 30, 2022 includes \$29.1 million of restructuring-related cash payments and \$14.1 million of acquisition-related payments.
- Cash burn for the three months ended December 31, 2022 includes \$44.5 million of proceeds from the sale of RUO kit assets, \$9.3 million of restructuring-related cash payments and \$0.1 million of acquisition-related payments.

Reconciliation of GAAP to Non-GAAP Gross Profit

(in thousands) (unaudited)	Three Months Ended				Year ended
	March 31, 2022	June 30, 2022	September 30, 2022	December 31, 2022	December 31, 2022
Revenue	\$123,691	\$136,622	\$133,536	\$122,454	\$ 516,303
Cost of revenue	97,116	110,340	116,956	92,844	417,256
Gross profit	26,575	26,282	16,580	29,610	99,047
Amortization of acquired intangible assets	18,000	27,907	27,711	26,950	100,568
Acquisition-related stock-based compensation	132	147	146	156	581
Acquisition-related post-combination expense	504	387	162	–	1,053
Restructuring-related retention bonuses	–	–	170	82	252
Inventory and prepaid write-offs	–	–	16,467	1,712	18,179
Non-GAAP gross profit	\$45,211	\$54,723	\$61,236	\$58,510	\$ 219,680

INVITAE CORPORATION
1400 16TH STREET
SAN FRANCISCO, CA 94103



**SCAN TO
VIEW MATERIALS & VOTE**



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 11:59 p.m. Eastern Time on June 4, 2023. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/NVTA2023

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 11:59 p.m. Eastern Time on June 4, 2023. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

V08585-P87234

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

INVITAE CORPORATION

The Board of Directors recommends you vote FOR the following three nominees:

1. Election of Class I directors:	For	Against	Abstain
1a. Geoffrey S. Crouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1b. Christine M. Gorjanc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1c. Kenneth D. Knight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Board of Directors recommends you vote FOR the following proposals:

	For	Against	Abstain
2. Approval of, for purposes of complying with New York Stock Exchange listing rules, the issuance of shares of our common stock pursuant to the conversion of Notes and/or exercise of Warrants and the related change of control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Approval of, on a non-binding advisory basis, the compensation paid by us to our named executive officers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending December 31, 2023.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE: In their discretion, the proxies are authorized to vote upon and transact such other business as may properly come before the Annual Meeting of Stockholders and any adjournments or postponements thereof.

This proxy, when properly executed, will be voted as directed herein by the undersigned stockholder. **If no direction is made, this proxy will be voted FOR each director in Proposal 1, and FOR Proposals 2, 3, and 4.**

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.

--	--

Signature [PLEASE SIGN WITHIN BOX]

Date

--	--

Signature (Joint Owners)

Date



Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on June 5, 2023:

The Proxy Statement and the Annual Report on Form 10-K are available at www.proxyvote.com.

V08586-P87234

INVITAE CORPORATION
Proxy for Annual Meeting of Stockholders on June 5, 2023
Solicited on Behalf of the Board of Directors

The undersigned hereby appoints Yafei (Roxi) Wen and Thomas R. Brida, each of them, with full power of substitution and power to act alone, as proxies to vote all the shares of Invitae common stock which the undersigned would be entitled to vote if present and acting at the Annual Meeting of Stockholders to be held at 4:00 p.m., Pacific Time on June 5, 2023, held virtually at www.virtualshareholdermeeting.com/NVTA2023, and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED. IF NO SUCH DIRECTIONS ARE MADE, THIS PROXY WILL BE VOTED FOR EACH DIRECTOR IN PROPOSAL 1, AND FOR PROPOSALS 2, 3, AND 4.

In their discretion, the proxies are authorized to vote upon and transact such other business as may properly come before the Annual Meeting of Stockholders and any adjournment or postponement thereof.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.

CONTINUED AND TO BE SIGNED ON REVERSE SIDE