



# From genetics, health

| 2024 Environmental, Social & Governance (ESG) Report



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# Introduction

Genetic information can transform the way medicine is practiced, making what once seemed impossible possible. We aim to help people make decisions about their health through the power of genetics.

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## From our CEO

### To our valued patients, clinicians, team members, investors and stakeholders,

In 2023, Invitae continued on a transformative journey that reshaped our organization and redefined our commitment to purpose-driven progress. We continued our focus on streamlining our operations, optimizing patient impact and nurturing sustainable growth. This journey necessitated tough decisions. It also reignited our collective purpose and dedication to our patients.

Over the past decade, our purpose-led strategy in genetics-based healthcare has guided our dedicated team and partners to help improve health outcomes and transform the lives of over 4.6 million patients and their families.

It fills me with pride to introduce Invitae’s 2024 Environmental, Social and Governance (ESG) report. This report shares how we create a positive impact, especially in the lives of our patients. It also highlights our environmental initiatives, social responsibility commitments and governance efforts. We firmly believe that our success is tied to our sustainability strategy and rooted in our distinctive culture—a culture committed to making healthcare better for everyone.

As we reflect on 2023, I am pleased to highlight some of our notable achievements:

- **Expanding patient access and partnerships:** We concentrated our efforts on expanded access to genetic testing, resulting in policies, programs and guidelines that now qualify more patients and their families to receive testing. Since inception, we have proudly served over 4.6 million patients and, in 2023, expanded our partnerships in rare diseases and data to advance drug discovery.
- **Advancing genetic insights:** We strengthened our industry-leading variant classification, Invitae Generation™ capabilities, through cutting-edge technologies such as machine learning and functional modeling. These tools empower us to continue to improve the accuracy of our genetic insights.

- **Standard of quality:** We obtained market authorization from the United States (US) Food and Drug Administration (FDA) for one of our hereditary germline cancer panels, a testament to our stringent standards and product quality. Our hereditary cancer panels give patients and their families vital information for informed healthcare decisions.
- **Environmental sustainability:** We made progress managing Scope 1 and 2 greenhouse gas emissions, and we assessed the relevance of the different Scope 3 categories in our value chain. We also adopted a board-level Environmental Policy. Environmental sustainability is at the core of our ESG journey.

I extend my heartfelt gratitude to our exceptional team members for their dedication, hard work and focus on our patients and on supporting our greater mission—bringing genetic information into mainstream medicine and creating a healthier future for all.

As you delve into this report, I hope you share in my excitement for better healthcare through genetic testing, for a brighter future for our planet and for the well-being of its people. Together, we will continue to profoundly impact healthcare and the world around us.

With optimism for the future—from genetics, health.

**Ken D. Knight**  
president and CEO





## About Invitae

Invitae is a leading medical genetics company trusted by millions of patients and their providers to deliver timely genetic information using digital technology. We aim to provide accurate and actionable answers to strengthen medical decision-making for individuals and their families. Invitae’s genetics experts apply a rigorous approach to data and research. The ability to identify those at risk for disease, detect and diagnose the onset earlier, use that information to guide preventive measures or targeted treatment and monitor the success of that treatment will become the standard of care for individuals throughout multiple stages of their lives.

**Headquarters:** San Francisco, CA

**1,509** global employees & experts



## Invitae’s founding principles

Invitae was founded on four principles that seek to improve access, health equity, quality and affordability of healthcare, including efforts to provide genetic testing for all who can benefit. This foundation depends on partnerships and collaborations among patients, providers, academic institutions, researchers and the medical community.



OUR MISSION

**Invitae's mission is to bring  
comprehensive genetic information  
into mainstream medicine to  
improve healthcare for  
billions of people.**

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## Invitae at a glance

Invitae has a 10-year track record of pioneering genetic testing for the benefit of individuals and scientific research.\*



**1,029,000**

billable units

**\$487 million**

unaudited revenues

**4,575+**

available gene tests

**360+**

available panel tests

**1,509**

employees and experts

**62%**

Female

**38%**

Male

## Impact of genetic testing

**4.6 million+**

patients served

**3.0 million+**

million patients trust Invitae to responsibly share their information to enable advanced research

**2 million+**

unique gene variants interpreted

**1.7 million+**

gene variants submitted to ClinVar to improve the science of genetics

**200+**

research publications authored and collaborated on

**80%+**

of National Cancer Institute (NCI) centers across the US have used Invitae's hereditary cancer genetic testing

**10-year+**

track record of pioneering genetic testing to benefit individuals and scientific research

\*All numbers listed are as of 12/31/23 unless otherwise noted



# Precision medicine

## What is it, and what is Invitae’s role?

Precision medicine (or personalized medicine) is an emerging approach that uses individuals’ genetic profiles to guide decisions related to their medical management. Precision medicine aims to provide a more precise approach to disease prevention, diagnosis and treatment. We’re focused on shaping the future of healthcare, making personalized care the standard for all.

The promise of precision medicine is supported by large volumes of patient data becoming accessible to researchers. In the long term, this can only happen if patients and communities trust those who collect, curate and aggregate their data. Each patient engagement may generate different data and insights. As a company, we make it possible for patients to choose whether to share their data for research, allowing us to pool their data with other patient data to create valuable data sets. These data sets can enable new insights into how genetics impact health and disease and can potentially lead to transformative outcomes.

### From genetics, health

Delivering the promise of precision medicine



Identifying new ways to prevent disease



Developing better tests for diagnosing disease



Improving therapies and treatment options



Informing cures to eradicate disease



**“Our unwavering commitment is to ensure that all patients, regardless of their background, gain access to the vital genetic information that shapes their future health and impacts their families.”**

**Dr. Michael Korn**  
chief medical officer at Invitae



## Our ESG approach

Our ESG approach reflects our passion for reaching more patients, supporting clinicians and advancing genetics. We developed the following 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.

### Healthcare for all

We want to bring comprehensive genetic information into mainstream medicine to improve healthcare for people worldwide.

### 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.

### Environmental stewardship

We work to minimize our environmental impact and reduce our emissions footprint.

### Governance, trust and transparency

We ensure our governance structure and policies promote ethical, transparent and accountable business practices to drive corporate performance and value.





## ESG oversight

Our Board and management oversight drives accountability for a range of ESG areas designed to maximize our impacts, drive better business performance and create long-term value for our stakeholders.

### Board oversight

Invitae's Board of Directors (Board) is committed to strengthening oversight and integration of ESG within our long-term strategy and risk management practices.

While the entire Board engages in corporate ESG matters, the Nominating and Governance Committee (NGC), per its charter, has oversight responsibility for our company-wide corporate social responsibility (CSR) and ESG strategy, initiatives and policies, including climate-related issues.

### Management oversight

Our senior executive leadership team (Management team) oversees ESG performance and risk management and reports to the NGC. The chief sustainability officer (CSO) is appointed by the chief executive officer (CEO) and reports to the chief operating officer. The CSO oversees our day-to-day sustainability program and advances our multi-year effort to improve ESG capabilities in all areas of our business, including climate matters. The CSO provides the Management team and Board liaison progress updates at least quarterly, and the full Board receives ESG updates on a semi-annual basis.

Due to structural changes within Invitae in 2023, responsibilities shared by the Management-level ESG steering committee have shifted to the CSO, who drives Invitae's sustainability program and keeps leadership apprised of updates, challenges and key decisions. We increased ESG reporting to the Board in 2023 to align with our new structure.

### Employee education

We introduce ESG to all new hires during orientation and build an understanding of how ESG informs decision-making across all levels of Invitae. We instill a culture of empowerment and communicate expected action on ESG factors with all employees.



## Materiality assessment

In 2023, we conducted our inaugural ESG materiality assessment to better understand the core topics most relevant to our long-term financial sustainability. Invitae, along with a third-party ESG expert, narrowed hundreds of ESG factors across our four key ESG tenets down to the 20 most relevant factors. We then assessed the importance of each ESG factor to both external and internal stakeholders, referencing key ESG frameworks and standards, ESG rating agencies, industry norms, existing and emerging regulations, peer best practices and stakeholder surveys.

The materiality assessment identified eight factors as the most important to external and internal stakeholders:

- Access and affordability
- Quality and product safety
- Data security
- Patient privacy
- Labor practices and employee well-being
- Employee engagement, training and development
- Business ethics
- Risk management (including climate risk) and business continuity

The findings of this assessment will guide our reporting and inform our strategic decisions, ensuring that we address material ESG issues effectively and align our actions with the expectations of our stakeholders. In our ongoing commitment to ESG, we maintain transparency by communicating our performance and impacts throughout this report.

**“At Invitae, our commitment to our patients goes beyond the status quo. It’s about more than just execution; it’s about pioneering change and embracing transformation in our operations. We believe in leading by example, showing that patient care is not just about the services we provide but also about how we adapt and evolve to meet the needs of those we serve, sustainably. This dedication ensures that every step we take is a step toward a healthier, more informed world.”**

**David Sholehvar, MD**  
chief operating officer at Invitae





### Stakeholder engagement

We understand that engaging with our internal and external stakeholders is critical for 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.

#### Our stakeholders

##### Patients and healthcare professionals

#### Ways we engage

- Collaborative workshops to shape product strategy and development
- Informative programs on topics such as disease, oncology and data aggregation
- Data Use Committee to address data sharing, privacy and health research
- Patient advocacy organizations to address testing access, clinician practice policies and lab oversight legislation
- Fact sheets and email/phone outreach on policy-anchored initiatives
- Patient network with access to deep genetic research
- Town halls on the importance of genetic testing access and pharmacogenomic testing impacts

#### Key ESG topics addressed

- Underserved patient populations
- Access to genetic testing and studies
- Testing affordability
- How genetic data empowers patients to improve their health and well-being

##### Employees

- Digital communications, all-company town halls, team meetings and team member surveys
- Executive leadership emails and videos
- Volunteerism and community support
- Professional development and training

- Corporate culture and labor practices
- Compensation and benefits
- Employee engagement and retention
- Training and development
- Diversity, equity and inclusion
- Health and well-being

##### Investors

- Quarterly earnings calls
- Email, calls and in-person meetings
- Participation in conferences and forums
- Annual stockholders’ meetings

- Financial performance and business model
- Board composition and governance
- Environmental strategy
- Diversity, equity and inclusion

##### Government agencies and policymakers

- Direct engagement with government officials
- Lobbying and advocacy
- Congressional briefings
- Formal comments and requests for information

- Healthcare regulations and policy issues
- Patient advocacy
- Genetic testing regulations, privacy considerations and patents

##### Suppliers

- Direct engagement with our suppliers
- Supplier code of conduct
- Supplier questionnaires and assessments
- Circular lifecycle and waste reduction efforts upstream and downstream

- Ethical and transparent business operations
- Treatment of workers and workers’ rights
- Environmental stewardship and carbon emissions reduction efforts



### About this report

Invitae’s annual ESG report reflects our commitment to giving investors and other stakeholders a transparent and holistic view of our ESG approach, performance and progress. This report covers the progress of our ESG program during the 2023 fiscal year (FY2023), with data and metrics reflecting the period from January 1, 2023, through December 31, 2023, unless otherwise noted. In some instances, we include information on initiatives continued into 2024, which we’ve noted. We also provide additional sources for convenience.

To ensure we address the ESG factors most relevant to our business, we align our disclosures with Sustainability Accounting Standards Board (SASB) standards (now part of the International Financial Reporting Standards [IFRS] Foundation) related to health care delivery and relevant topics from healthcare biotechnology and pharmaceuticals. We have identified four United Nations Sustainable Development Goals (SDGs) that offer the greatest opportunity for impact given their relevance to our business activities and key priority areas.

Finally, this report also includes a summary of climate-related disclosures aligned to the Task Force on Climate-Related Financial Disclosures (TCFD) recommendations, which provides an overview of our governance, strategy, risk management and key metrics related to climate change. Please refer to the [Appendix](#) at the end of this report for more information.

<p><b>3</b> GOOD HEALTH AND WELL-BEING</p> 	<p>Ensure healthy lives and promote well-being for all at all ages</p>	<p><b>10</b> REDUCED INEQUALITIES</p> 	<p>Reduce inequality within and among countries</p>
<p><b>5</b> GENDER EQUALITY</p> 	<p>Achieve gender equality and empower women and girls</p>	<p><b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>Ensure sustainable consumption and production pattern</p>



**“At Invitae, sustainability isn’t just a function; it’s woven into the very fabric of our DNA. We’ve embraced sustainability and ESG as catalysts for transformative change. Throughout this journey, our unwavering commitment to our patients and customers remains paramount, ensuring that our actions positively impact on healthcare, the environment and society.”**

**Erik Kaiser**  
chief sustainability officer at Invitae



## 2023 ESG highlights

Invitae’s purpose and values guide our aim to provide healthcare for all, uphold our social responsibilities, exercise environmental stewardship and govern with trust and transparency throughout our business. These highlights reflect our progress during FY2023.

### Healthcare for all

- **Invested** in state-of-the-art, artificial intelligence-based sophisticated computational methods to better inform clinical variant classification in genetic testing results in underrepresented populations
- **Leveraged** Invitae’s vast genetic testing experience to highlight the need for improved methods to deliver definitive results at a higher rate for underrepresented populations
- **Obtained** FDA market authorization for one of our hereditary germline cancer panels, a testament to our stringent standards and product quality; hereditary cancer panels empower patients and their families with vital information for informed healthcare decisions
- **Advocated** for expanded access to genetic testing, resulting in policies and guidelines that now qualify more patients and their families for genetic testing

### Social responsibility

- **Launched** a company-wide belonging survey and identified key wins related to the inclusive ecosystem within our organization
  - *Strong relationships within teams:* Employees reported effective working relationships and feeling accepted and valued by their direct teammates
  - *An open and inclusive environment:* Rather than brushing diversity away, Invitae largely embrace it and accept one another for their differences
  - *Employee favorability by identity factors:* We examined the survey data to assess significant disparities in employee favorability by race, ethnicity and gender and none were identified
- **77%** of our Board and 44% of our Management team reflect diversity by race, ethnicity and gender
- **100%** of our direct suppliers adopted our Supplier Code of Conduct or provided internal requirements or codes equal to or exceeding our requirements representing \$116.5 million
- **\$4.47** million of our direct spending is with certified minority or women-owned suppliers



## 2023 ESG highlights (continued)



### Environmental stewardship

- **Developed** an Environmental Policy, which was adopted by the Board of Directors, to outline our commitments and approach to environmental stewardship
- **Submitted** our first customer data platform (CDP) questionnaire
- **Measured** and disclosed our Scope 1 and Scope 2 greenhouse gas emissions for the third year and completed Scope 3 materiality screening to identify the most relevant Scope 3 categories

### Governance, trust and transparency

- **Expanded** our Code of Business Conduct and Ethics to include sustainability, human rights and DEI considerations
- **Conducted** third-party due diligence to detect and mitigate corruption risks in our value chain
- **Developed** generative AI processes and procedures to address the use of external or third-party generative AI products, tools and services



**“Healthcare is steadily transforming, and at its heart lies the power of genetics. It’s not just about treating diseases any more; it’s about understanding individual genetic profiles to prevent illness and enhance lives. The future is personalized, predictive and remarkably promising.”**

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**KEN KNIGHT  
PRESIDENT AND CEO**



# Healthcare for all

We provide affordable testing, data services, integrated health information and digital solutions to shape genomic medicine and support patients through all stages of life. Genomic information allows healthcare to rely less on trial and error and more on fact-based analysis of biology and medical risks.

## 2023 highlights

Published studies based on Invitae’s genetic testing data, analysis and insights to highlight the need for improved methods to deliver definitive results at a higher rate for underrepresented populations

Invested in developing state-of-the-art machine learning (artificial intelligence-based) methods that can better inform clinical variant classification in genetic testing results in underrepresented populations


Worked with patient advocacy groups to prepare the latest updates on clinical management information for certain genetic disorders

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## Our work contributes to the following SDGs:



A photograph of two men sitting on a couch, looking at a tablet together. The man on the left is older, with grey hair and glasses, wearing a light-colored button-down shirt. The man on the right is younger, with dark hair, wearing a white t-shirt. They are both focused on the tablet held by the older man. The background is a simple indoor setting with a plant and a lamp. The entire image is overlaid with a semi-transparent red filter.

**Invitae aims to broaden access to genomic information through ethical data sharing, research studies, expanded guidelines and affordability.**

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2023 SPOTLIGHT

Received first-of-its-kind authorization from the FDA for a version of our Common Hereditary Cancers Panel; we have been active in the regulatory community in helping shape regulatory pathways that support both patient access and test quality

Released the second **Data Use Transparency and Impact Report** describing how Invitae protects the privacy of our patients while using patient-shared data to drive scientific advancements

Submitted information more than 500,000 variants into the public NIH ClinVar database, which brings our total submission as the top submitter to more than 1.7 million variants

We've actively championed the successful transformation of outdated medical guidelines that govern an individual's ability to access genetic testing and expanded testing pathways for family members



## Improving outcomes and scientific advancements

Patients who opt to share their data for research through Invitae contribute to scientific advancements by furthering our understanding and application of medical genetics.

In 2023, Invitae worked on several research projects and publications that emphasized expanding access to better genetic information for everyone, including underserved populations. Our data formed the basis of research published in top research and medical journals, including:

- 7** Invitae-led publications
- 34** collaborative publications with research institutions
- 16** publications related to advancing healthcare for all
- 9** publications related to diversity, equity and inclusion in genetics
- 63** abstracts at 21 conferences

In September 2023, Invitae received first-of-its-kind authorization from the FDA for a version of our Common Hereditary Cancers Panel. This represents the first broad panel to gain market authorization that is used to identify germline variants associated with hereditary cancer.



**“Invitae has always vigorously pursued scientific research to advance medical genetics for the public good. In addition to generating evidence to improve clinical guidelines for genetic testing and publishing more than 200 scientific articles, Invitae has sustained its unwavering commitment since its inception to data-sharing. Our efforts push the science forward in clinical laboratory genetics and aid clinicians, researchers and genetics laboratories around the world.”**

**Swaroop Aradhya, PhD**  
chief of global medical affairs at Invitae



## AI at Invitae

### Using AI to increase access

As part of Invitae’s business strategy and commitment to make genetic testing equitable across global populations, we invested in developing state-of-the-art machine learning (artificial intelligence-based) methods to better inform clinical variant classification in genetic testing results in underrepresented populations.

Invitae has demonstrated leadership in clinical variant classification over the last decade. We continue to further advance this science and reduce uncertainties so that more patients can receive conclusive results.

Invitae’s innovative and state-of-the-art machine learning methods had already produced reliable evidence for variant classification and contributed to reducing uncertainty in results for more than 300,000 individuals, particularly for historically underrepresented populations.

### Publication of second Data Use Transparency and Impact Report

Since the founding of Invitae more than decade ago, our commitment to get data right has been based on establishing core principles regarding data ownership and use. We embedded those principles in Invitae’s corporate DNA, culture and activities. Patient-directed data drives positive healthcare change. To build on our commitment to data transparency, we published our second industry-leading Invitae data use transparency and impact report in December 2023. The report details how we obtain consent and de-identify (anonymize) patient data. We then use those data to help advance precision medicine research, promote patient advocacy and enhance patient outcomes, improving healthcare for individuals and society.

In 2023 we also revised our informed consent forms in response to new privacy laws enacted in several US states.



### Generative artificial intelligence (AI) policy

Invitae established a standard operating procedure and policy in 2023 to address the use of external or third-party generative AI products, tools and services and ensure compliance with applicable laws, regulations and policies governing Invitae’s products, services and employee use.



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## Landmark study shows Invitae's sophisticated computational methods better inform clinical variant classification in genetic testing results for diverse populations

A recent study published in *JAMA Network Open* evaluated data from more than 1.6 million people who underwent multi-gene panel testing for hereditary diseases. The study delved into the prevalence and characteristics of uncertain DNA variants and methods to reclassify them for definitive results. Uncertainty in genetic testing is frustrating for patients, clinicians and labs, because results are not actionable.

A notable finding in this study was that the prevalence of uncertain variants differs based on race, ethnicity and ancestry (REA), as well as by age group and clinical area. For example, Ashkenazi Jewish and White individuals had the lowest number of observed uncertain variants per individual, while Pacific Islander and Asian individuals had the highest. Therefore, expansion of the data used for variant classification to populations across the globe is needed to reduce uncertain results for historically underrepresented populations and make genetic testing equitable.

[Find more information here.](#)



## Broadening access through affordability

Invitae works to broaden patient access to genetic testing so individuals can collaborate more effectively with their providers to shape personalized, informed care with the goal of improving outcomes. Over the last decade, we've offered a growing number of affordable options to remove cost barriers and make genetic healthcare more available.

### Transparent pricing, insurance coverage and lower costs

With Invitae, patients can access affordable and flexible billing options through a simplified process. Our pricing practices are transparent, and we offer patient pricing on request. Invitae is proud to be in-network with all national payers, covering more than 300 million patients in the United States, which typically helps limit out-of-pocket costs.

Through the Invitae Billing Assurance Program, our dedicated billing specialists work with each patient to get a comprehensive view of their individual situation and help identify cost-effective and affordable payment options. We provide patients with proactive information about our broad insurance coverage, payment options and billing cost estimates. Our team is also on-hand to provide patients with necessary information on insurance coverage and claims processing. In addition, we accept Medicare and Medicaid.

### Patient assistance programs

We may offer testing at little or no charge if the patient qualifies for our patient assistance program whereby United States-based patients who meet certain income criteria may be eligible for financial help.

**“Putting patients first and expanding access to genetic information are the cornerstones of revolutionizing mainstream medicine. Our mission goes beyond innovation; we ensure every individual can benefit from the groundbreaking possibilities in genetic medicine.”**

**Robert Guigley**  
chief commercial officer at Invitae





### Family variant testing

We strive to facilitate a better understanding of a patient's results and their associated implications for family members, recognizing the impact of genetics on family health.

All blood relatives of patients found to have a pathogenic (disease-causing) or likely pathogenic variant on an Invitae diagnostic or proactive test are eligible for family variant testing (FVT). Our family variant testing reports on the variant(s) identified in the original family member, as well as any other pathogenic variant(s) found in the full gene.

Family variant testing is part of our commitment to lowering barriers to genetic testing. We believe that all people should have access to their genetic information so they can make informed health decisions, such as early action to prevent the onset of disease, more frequent or earlier screenings or alternate reproductive choices. By offering FVT, we enable more people to access crucial genetic information at no cost—a significant initiative for Invitae.

### Variants of uncertain significance (VUS) testing

In some cases, Invitae may offer family testing to help resolve a variant of uncertain significance (VUS). When an Invitae panel's test results aren't definitive and further testing may clarify the relationship between the variant and the patient's genetic condition, we offer follow-up testing at no additional charge to family members.

### Sponsored testing programs remove barriers to patient access

To help improve access to genetic testing, we offer sponsored programs at no charge to eligible patients. These testing programs are primarily sponsored and paid for by biopharma companies with targeted treatments for diseases caused by specific genes. Sponsored programs aim to remove barriers to genetic testing and speed diagnosis. These programs may also help bring patients closer to better clinical management of their diseases, as well as raise awareness of clinical trials and research opportunities.

### By the numbers: Invitae-offered sponsored testing



In 2023, Invitae continued to partner with biopharma organizations to offer sponsored testing programs to:

- improve patient access to genetic testing
- help speed diagnosis
- raise awareness of clinical trials and research opportunities



## Expanding access to underserved populations

We're working to ensure that genetic testing improves the care and health outcomes of historically underserved populations. We're building digital workflow solutions to help scale genetic testing in the community healthcare setting where the vast majority of underserved populations have access. We also actively reach out to physicians and the public to target populations with specific genes and diseases of concern that the scientific community has not historically addressed. We've made progress, but data from specific underserved populations are still scarce due to a historical lack of inclusion and focus in the medical literature.

We regularly publish research studies alongside leading institutions on the impact of genetics on patients from underserved populations, illustrating its clinical utility and underscoring the importance of universal genetic testing to help improve health outcomes for all patients.

Reinforcing equitable processes for patients is of the utmost importance, and we continue to actively voice our opinions about regulations through our Policy team. This includes raising our concerns regarding the FDA's proposed laboratory developed test (LDT) rule and its potential to restrict access to underserved communities. See additional detail in section [2.4 Driving access through patient advocacy and public policy](#).

Many case studies demonstrate Invitae's strong commitment to making genetic testing more equitable through investing in medical and scientific communities, conducting research and ensuring genetic testing's position at the forefront of scientific advancement.

**"Expanding access to genetic testing for traditionally underserved populations has been core to our values since day one. This is evident from our family variant testing, sponsored testing, and other programs that allow access to genetic testing for many patients who would have been unable to participate in these initiatives through traditional routes."**

**Britt Johnson, PhD, FACMG**  
clinical molecular and biochemical geneticist at Invitae





## Clinical benefits of implementing universal hereditary cancer testing in rural breast cancer patients

In collaboration with The Outer Banks Hospital (TOBH) in North Carolina, from 2019 to 2022, Invitae conducted a study that showcased how to implement universal hereditary cancer genetic testing for rural breast cancer patients. The results revealed significant enhancements to patient care, including alterations in treatment plans and surgical decisions. Genetic testing proved particularly beneficial for rural populations who face disparities in care accessibility, because it helps optimize clinical practices, reduce unnecessary surgical procedures and minimize unnecessary healthcare resource utilization.

Find more information [here](#).

## Broadening genetic testing of all prostate cancer patients, particularly Black men

Invitae's research, featured in *European Urology Oncology*, highlights that restrictive genetic testing criteria overlook a considerable number of prostate cancer patients, particularly Black men with potentially actionable inherited variants linked to more aggressive disease. The results suggest expanding guidelines by recommending universal germline genetic testing for all prostate cancer patients. This shift has the potential to redefine medical care standards and reduce healthcare disparities (especially for historically underrepresented groups); broadening access to precision therapies, clinical trial treatments and enhanced screening.

Find more information [here](#).

## Implementing hereditary cancer testing and digital tools for underserved and tribal communities

Invitae collaborated with the New Mexico Cancer Center (NMCC) to develop a playbook for implementing hereditary cancer testing and digital tools (such as the GIA® chatbot) in community settings for underserved and tribal communities. In September 2023, we presented the playbook at the National Cancer Care Alliance (NCCA) conference to share recommendations on how to scale these best practices in a community setting. Our collaboration with NMCC improved the Navajo Nation's access to genetic testing, more accurate individual and family health records and education on the importance of genetics in healthcare.



## Driving access through advocacy and public policy

As thought leaders in the genomics industry, Invitae uses alliances, research and advocacy to push healthcare forward and improve the rules and policies that limit access to genetic testing and data.

We are committed to strong relationships with patient insights networks (PINs). As we work to expand access to information that helps people with genetic disorders, we collaborate directly with patient advocacy groups to ensure their perspectives are included in our work. We continue to work with the Electronic Medical Records and Genomics (eMERGE) Network. This NIH-funded effort supports genomic discovery and genomic medicine implementation research that includes underrepresented populations.

### Advancing policies and guidelines on genetic testing

Medical associations and governmental bodies establish guidelines, create educational campaigns and outline policies that impact who can receive genetic testing and when, if that testing is covered by insurance and the type of test. We champion efforts to advance the policies and guidelines that remove barriers to accessing genetic healthcare and improving outcomes.

Our research studies on the clinical utility of genetic testing in health outcomes have contributed (along with our policy and advocacy efforts) to updating professional practice guidelines for the testing and care of patients. These guidelines direct physician behaviors, including cancer prevention and treatment standards, as well as insurance and payer coverage of testing protocols.

Through this multifaceted research approach, we focus on ensuring that patients have more access to genetic information, that screening and testing are more affordable and that protocols support the best life outcomes for people managing risks, conditions and diseases.

## Invitae sponsors the Heart of Genetic Counseling Award

Invitae joined the National Society of Genetic Counselors (NSGC) in presenting the Heart of Genetic Counseling Award, which honors excellence in genetic counseling and patient care as recognized by patients. The nominations included patient stories that highlight the significant clinical and personal impact their genetic counselor had on their lives and the lives of their families.

In research presentations at the NSGC conference, Invitae also highlighted the importance of genetics-informed patient care, demonstrated how using digital tools can increase hereditary cancer screening access and discussed other topics related to the field of medical genomics.

[Find more information here.](#)



### Championing public policy to expand genetics utility within healthcare

We have built strong relationships and created alliances with organizations including the American Cancer Society, Healthy African American Families, the Personalized Medicine Coalition, California Clinical Laboratory Association and rare disease patient groups to collaborate with stakeholders and amplify our voices. We also continue to focus on federal and California state legislative efforts.

Invitae does not have a political action committee. We rely on diplomacy and high-quality policy proposals to support expanding access to genetic testing.

Remaining diligent in the changing environment is a priority for Invitae. In 2023, our Policy team continued to take actions in alignment with Invitae’s mission to increase access to high quality healthcare for all. Access to genetic testing intersects with many important issues, so the Policy team engaged in approximately 128 meetings and 41 comment opportunities.

### Public policy efforts by the numbers

**\$0**

spent on contributions to campaigns, politicians, parties or committees, or to influence ballot measures

**\$433,000**

spent on retaining lobbyists for consultative and legislative support

**\$360,000**

spent on engaging with trade associations and patient advocacy groups

**120+**

meetings between Invitae representatives and congressional and California state offices to discuss legislative priorities

**40+**

comment letters submitted to the state of California, United States and international governments

**“As we forge ahead, our commitment to shaping a healthcare landscape that welcomes genetics into standard care remains unwavering. This journey is not just integral to our growth strategy; more important, it is a vital conduit for clinicians and patients to access genetic insights and elevate healthcare standards for all.”**

Chantelle Schenning, PhD, MHA  
head of public policy at Invitae





## Medi-Cal coverage of pharmacogenomic testing in California

Invitae was the lead sponsor for a first-of-its-kind policy in California to add Medi-Cal coverage of pharmacogenomic testing. Pharmacogenomics is the science of how an individual's genes impact the way the body processes medications. There are differences in medication response across race, ethnicity and sex.

In support of Assembly Bill 425, designed to increase access to genetic testing to make medication decisions, Invitae's Policy team conducted nearly 80 meetings with California legislators, staffers, agencies and government officials; convened a sign-on letter; and submitted six letters of support. Invitae's Policy team effectively worked with legislators and patient advocates to get this legislation enacted into law. Effective July 1, 2024, more than 14 million Californians will have access to a previously unattainable, potentially lifesaving test.

## Additional state-level efforts

Invitae participated in several other efforts to improve access and equity in individual states. We engaged in a collaborative workgroup of supporters for the American Cancer Society Cancer Action Network's (ACS CAN) effort to increase access to genetic testing throughout the US with their state coverage mandates. This advocacy led to 14 states enacting legislation requiring coverage for genetic testing. At the state level, we also supported Assembly Bill 85 in California, which addresses social determinants of health data, and Senate Bill 570, which maintains reproductive choice for patients seeking non-invasive prenatal screening. Through Invitae's advocacy, we helped provide education on issues facing Californians—and propose solutions to fix them.





## Federal efforts

Invitae's Policy team was also active on a federal level, engaging more than 50 meetings and submitting more than 20 letters and public comments across issues.

Two initiatives Invitae helped lead were the reintroductions of the 2022 H.R. 5989 Precision Medicine Answers for Kids Today Act and the 2022 H.R. 6875 Right Drug Dose Now Act. These bills will increase access to diagnostic and pharmacogenomic testing for children suspected of having a rare condition. To promote the Right Act, we hosted a congressional briefing in March 2023 and met with Capitol Hill staff.

We also promoted access and equity by writing comment letters that address racial and ethnic disparities in healthcare, enhancing care for dual-eligible individuals, increasing patient access to at-home medical technologies and improving technology and workforce capacity to increase patient access.

We also supported legislation that would remove barriers to telehealth services (S 2016/HR 4189), improve access to hereditary cancer testing (S 765/HR 1526), increase coverage of genetic counseling services (S 2323/HR 3876) and improve coverage of diagnostic tests for cancer patients (S 642/HR 1780).

## Engagement with industry associations

Our research helped us advocate alongside clinicians and advocacy organizations to request changes to the NCCN Clinical Practice Guidelines In Oncology (NCCN Guidelines®) to increase genetic testing eligibility. This would make it an option for more individuals and their families facing hereditary breast, ovarian, pancreatic, uterine and colorectal cancer and fluorouracil (5FU) toxicity. Through research, we were able to demonstrate that a significant number of colorectal cancer patients with actionable variants have been missed under previous genetic testing guidelines. As a result, we were able to bring about changes to the NCCN Guidelines® for genetic testing access in colorectal cancer, and we are optimistic about their application to future guidelines.

Working with other associations, Invitae advocated for the development of a quality measure to encourage germline genetic testing in individuals with a personal history of cancer. The goal is to align the quality measures, and the reimbursement models attached to them, with the new NCCN Guidelines®.

Invitae also submitted a letter to the American Urological Association (AUA) Practice Guidelines Committee with a recommendation that clinicians should offer all patients with prostate cancer the opportunity to receive comprehensive germline genetic testing.



### Opposing policies and regulations limiting patient access

While most of our advocacy includes supporting policies and regulations that would increase access, we do not shy away from expressing opposition to policies and regulations that would decrease patient access. Invitae has been a longtime opponent of patents for naturally occurring genetic material and other products of nature. When the Patent Eligibility Restoration Act (S 2140) was reintroduced, our team jumped into action to share why the legislation, if passed, would invariably hinder patient access and drive up the costs of tests.

Another major effort was sharing our experience with the medical device regulatory review pathway to inform the FDA's rulemaking on laboratory-developed tests (LDTs). We collaborated with other industry stakeholders to submit thoughtful responses about the impacts of the proposed rule. If this rule is adopted, it will lead to market consolidation and reduced testing choices that will affect all patients. People with rare diseases, in particular, stand to bear the brunt if their access to diagnostic testing services significantly diminishes.

### Protection of patient health data

Data privacy and sharing are important to promote access and equity in healthcare. Patients' lack of trust in how healthcare providers will handle their sensitive health data can be a barrier to healthcare access. Invitae believes that patients own their data and control how that data is used and shared. We adhere to this belief through internal company policies and via policy advocacy on behalf of patients.

On the patient privacy side, we commented extensively about protecting reproductive data, ensuring appropriate identity proofing when data are requested, and promoting general privacy and protection of patient health data. To find more about our commitment to privacy and data transparency, see the [Invitae Data Use Transparency and Impact Report: 2022 Data](#) (latest reporting year).

On the sharing side, we offered insights on how the Ciitizen platform enables patients to more easily view their longitudinal data and to share that data to advance research into the development of treatments for complex medical conditions, including rare diseases. In addition to leveraging technology to reduce burdens imposed by prior authorization—as we explained in our comments to the Centers for Medicare and Medicaid Services—we also educated legislators extensively on the utility of real-world evidence and testing-generated data that may enable better clinical trials. In two letters to the FDA, we recommended using real-world data to support innovative clinical trial designs, including those using external data sets.

With our continuous advocacy for access, affordability, technology, data protection and responsible sharing, Invitae continues to help shape thoughts on improving healthcare to truly serve everyone.

**We are committed to the privacy and security of all protected health information (PHI) we create, receive, use, disclose and transmit.**



# Social responsibility

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

## 2023 highlights

- Hired a new DEI leader
- Launched a company-wide belonging survey administered by an external consultant

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## Our work contributes to the following SDGs:



A photograph of a diverse group of people in a meeting, overlaid with a semi-transparent purple filter. The text is centered over the image.

**Invitae is responsible for ensuring its people thrive through a diverse, equitable, inclusive and supportive company culture.**

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## Our people and culture

Our team is driven to make a difference for patients. We aim to be high-functioning and collaborative, well-equipped to attract, develop and retain diverse talent while driving culture, engagement and change management in support of business objectives.

2023

Total headcount

1,509

Total headcount (US)

1,489

Total headcount (non-US)

20

### Strategic realignment

In 2023, Invitae reshaped our organization to focus on streamlining our operations, optimizing our impact in genetics-based healthcare and nurturing sustainable growth. This journey necessitated tough decisions such as the discontinuation of certain workstreams, but it ignited a collective sense of purpose.

*“At Invitae, our people are our greatest asset, and their success is our success. Our commitment is to ensure that our employees have the support, resources and opportunities they need to thrive in their roles. Together, we build a stronger, more empowered workforce that drives our mission forward.”*

**Desarie French**  
chief talent officer at Invitae





## Supporting our purpose-driven culture

Our Employee Experience and Diversity, Equity and Inclusion (DEI) team works closely to build a collaborative, supportive and inclusive culture through engagement initiatives.

We host employee forums to bring employees together with senior management to learn the current status of our business operations, build a collective purpose-driven culture and discuss areas of employee concern. Teammates throughout the company, including our management and extended leadership teams, attend these bi-weekly sessions. The consistency and transparency of this process help ensure employees feel seen, heard and connected to senior company leaders.

## Employee engagement

As part of our commitment to data-driven decision-making, we conduct a monthly pulse survey that asks our teammates three questions: 1) How do you feel about the company's direction? 2) What's going well? 3) What's not going well? We've asked these questions consistently for several years so we can quickly identify trends as they emerge and inform management decision-making.

We also continued our team surveys to gauge how employees feel about the effectiveness of their teams and the identification of helpers and blockers to cross-functional success. Our leadership teams get feedback regarding manager effectiveness and annual updates about the health of our culture to support continuous improvement. Our surveys allow employees to escalate their comments to our People & Culture committee, which will address concerns and follow up.

We distribute a weekly newsletter to all teammates to call their attention to important company announcements, details on new product offerings, benefits updates, reminders about upcoming events, links to resources and team recognition.

**We're committed to drive our mission and advance the transformative healthcare that is core to Invitae-led by our energized and passionate team of professionals.**



## Benefits and wellness

We aim to create a culture where our employees thrive and innovate. We encourage an environment where they're empowered to speak up, try new things and make decisions that push us forward.

### Health and well-being

We offer mental health benefits to support employee well-being, including including confidential behavioral health screenings, decision guidance, case management assistance and telehealth care for behavioral health. We provide resources from our employee assistance program (EAP) to support our employees' and their families' health and well-being. Our wellness strategy also offers personal health activities such as guided meditation sessions.

### Compensation and benefits

We offer a competitive total rewards package, which includes base compensation, incentive compensation, equity, access to a 401(k) plan (with a partial match), an employee stock purchase plan and a broad range of other benefits, such as:

- health, dental, vision, short- and long-term disability, critical illness and basic life insurance coverage
- flexible paid time off and holiday pay
- fully paid public transit commute expenses for on-site employees

We offer family leave benefits, including parental leave for new parents. Our health vendor provides fertility and adoption benefits for our US population and most global employees. Invitae has an employer-sponsored genetic testing program, which gives employees and their covered dependents access to Invitae genetic testing at no cost.

For employees who do not work on-site in our laboratories, we consider ourselves a remote-first company and provide flexible, hybrid working arrangements with the option to work remotely, in-office or through a mix of the two options.





## Diversity, equity and inclusion

Addressing inequality is essential to our mission. We're committed to ensuring equitable representation, engagement and advancement of all employees, especially those from historically underserved and disenfranchised communities.

### Our DEI mission and strategy

Our commitment to diversity, equity and inclusion at Invitae starts with building a culture that fosters belonging for all our employees, particularly those with historically marginalized identities and lived experiences. We define diversity as the collective ways we differ from each other, and we strive to create a fulfilling and rewarding workplace that welcomes those differences.

Invitaens are connected by a culture grounded in clear feedback and communication, care for the growth of our employees and a deep sense of community that connects us all. We lead by example. Through our collective impact, we foster greater inclusion and belonging.

As we build a diverse workforce, we aim to cultivate a place where we all belong. Our DEI 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.

Our strategy is to weave rich DEI programs, tools and resources into the fabric of Invitae. Objectivity, data integrity and accountability drive these initiatives and inspire more representative, fair and empathetic decision-making.





### Oversight

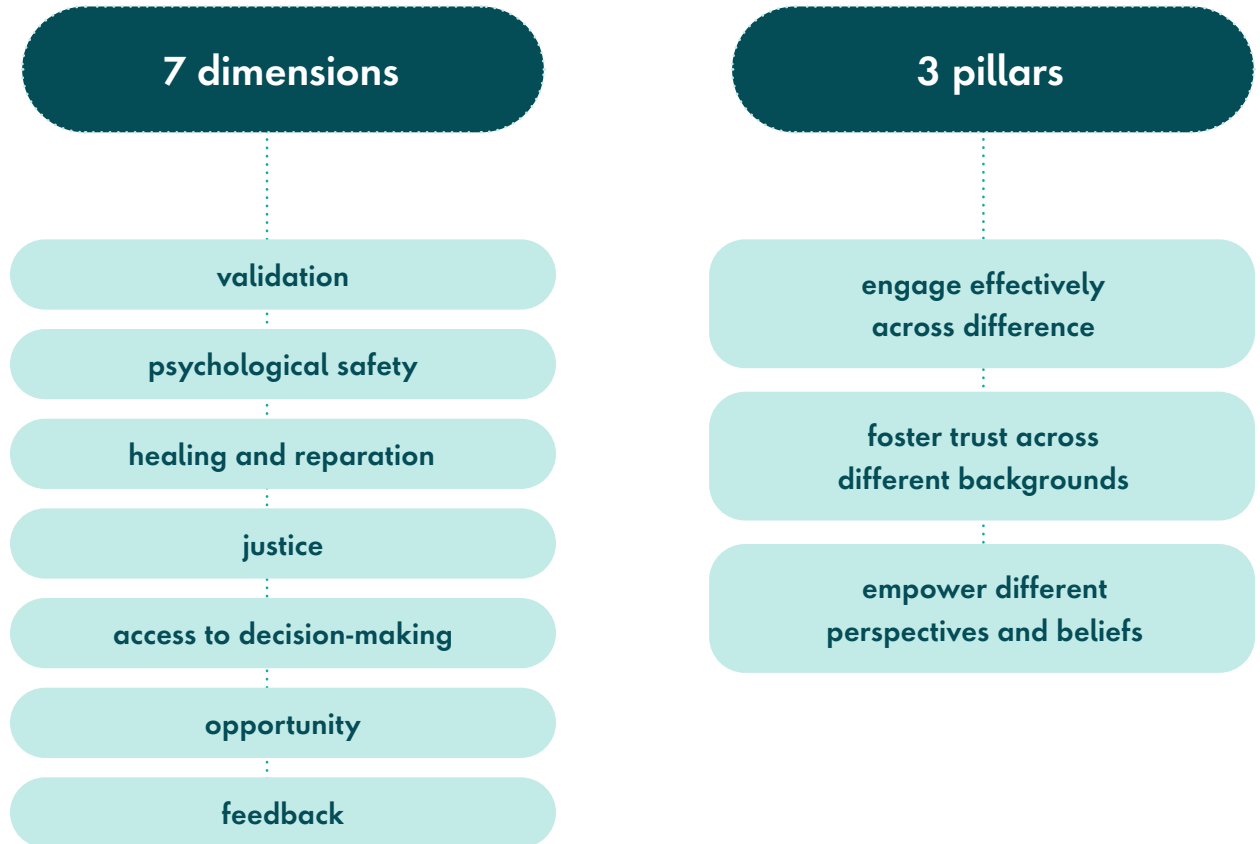
We're proud of our leadership diversity and work to ensure a fair and equitable workplace for people of all backgrounds, ethnicities and races. Our chief talent officer (CTO) and head of DEI lead our efforts in driving, growing and championing Invitae's DEI strategy, supported by our Management team. By creating DEI programs, they serve as trusted, inspiring leaders who ensure a sense of belonging for all Invitae colleagues.

### Belonging survey

In 2023, our DEI team launched a company-wide anonymous belonging survey designed to understand employee perceptions around diversity, equity and inclusion at Invitae. We surveyed 849 Invitae employees across seven dimensions (validation, psychological safety, healing and reparation, justice, access to decision-making, opportunity and feedback) and three pillars (engage effectively across difference, foster trust across different backgrounds and empower different perspectives and beliefs).

Invitae demonstrated key wins in two major areas according to the belonging survey. Across both quantitative survey data and qualitative comments, employees spoke positively of their relationships with their most direct and immediate colleagues.

By and large, **employees reported effective working relationships and feeling valued and accepted by their direct teammates**. The second win demonstrated strength in fostering an open and inclusive workplace. **Employees at Invitae, specifically from historically underrepresented and marginalized communities, spoke of a work environment that welcomes diversity and differences in several ways**. Rather than brushing diversity away, Invitae largely embrace it and accept one another for their differences.





Employee diversity metrics

Diversity among all employees

2023

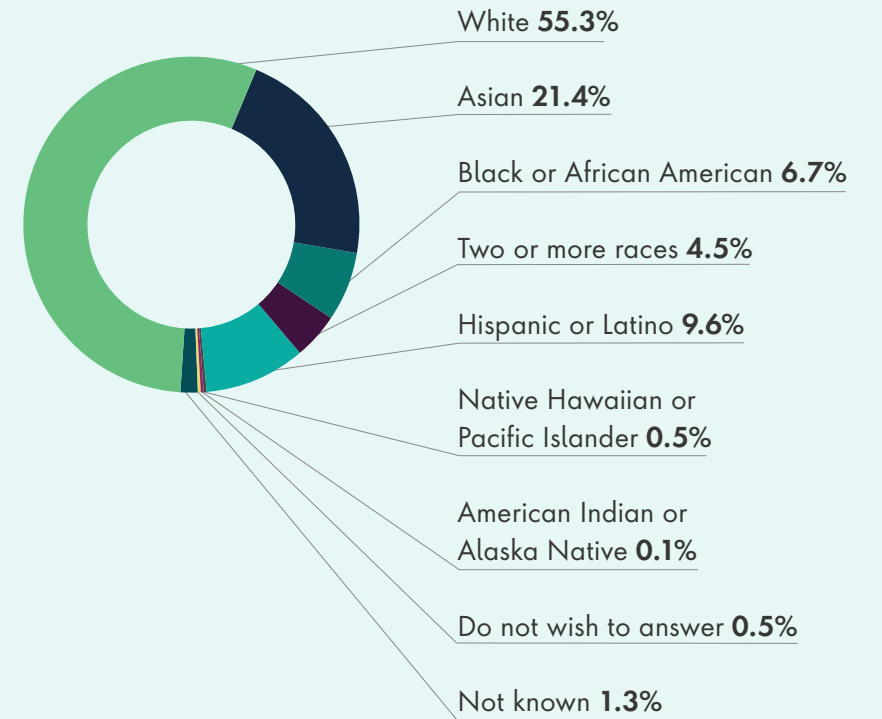
Gender: employees†



Gender: management team†



Racial/ethnic diversity (US only)



Management team racial/ethnic diversity 11.0%

†Non-binary and gender-nonconforming (GNC) individuals are not currently identifiable by our self-reporting payroll system, where we derived these metrics.



### Equal Employment Opportunity Commission EEO-1 data

DEI transparency is important to us at all levels of the organization. Invitae reports **EEO-1 annual data** to the federal government and makes it publicly available on our website as required by law.

### Diversity recruitment strategy

Building a diverse workforce starts with new hires. We're investing in technology and updating our processes to support data-driven, inclusive practices and create consistent, people-oriented candidate experiences that reduce recruitment bias. We use a third-party artificial intelligence (AI) tool to write job descriptions with neutral language for candidates across all backgrounds and genders.



# 2023

New hires

# 51.1%

Men

# 48.9%

Women

# 60.4%

Racial/ethnic diversity (US only)†

# 39.6%

White (US only)†

# 2023

Turnover Rates

# 29.6%

Total turnover rate (all employees)

# 10.5%

Involuntary turnover rate

# 19.1%

Voluntary turnover rate

†Total denominator does not include those who did not self-identify race/ethnicity.



### DEI awareness training

Our talent management program incorporates DEI training to create a workplace where team members feel safe to stretch, rebuild and evolve professionally and personally. We train our employees on managing unconscious bias. This foundational program addresses workplace bias and provides tools to engage in equitable decision-making and build an inclusive culture.

In 2023, we expanded training for Invitae leaders to better understand how to mitigate bias in their day-to-day work and interactions. This training established the foundations of defining and understanding bias, then explored practical and tactical ways to actively mitigate both conscious and unconscious bias with their teams and peers. Invitae’s Talent Acquisition team, as evangelists of our equity and inclusion strategy, also participate in training to improve inclusive hiring practices and collaboration with the business.

### Employee resource groups

Invitae believes that employee engagement directly connects to purpose, and through our employee resource groups (ERGs), we foster connections and meaningful work relationships. Since 2020, Invitae has hosted ERGs for employees to create stronger bonds based on shared identities and life experiences of historically underrepresented, underserved and disenfranchised individuals.

Highlights of our ERG program in 2023 include:

- launched a task force, led by ERG and DEI leaders, to craft the Inclusive Language Guide for the organization
- leaned into creating meaningful and impactful experiences around cultural and social moments for the organization
- led conversations and learning experiences around relevant topics such as mental health, ability and racial and gender impact on health equity

**“At Invitae, we foster a culture of belonging, celebrating diversity in all forms. Our mission is to engage, develop and retain talent while championing inclusive research and global health equity, weaving DEI into the very fabric of our organization.”**

**Cherise Bernard, PhD**  
head of diversity, equity and inclusion at Invitae





Our ERGs aim to serve three primary purposes:

- 1** community
- 2** learning
- 3** service

### Invitasians

exists to celebrate the cultural differences and similarities within the Asian and Pacific Islander diaspora.

### BlackGenX

exists to support and uplift Invitae employees who identify as members of the African diaspora.

### Differently Abled

focuses on creating a supportive and inclusive environment for Invitaens of all abilities.

### LatinX

supports individuals who identify as Latinx by openly discussing topics integral to the Latinx identity.

### Rainbow Connection

provides a safe space for LGBTQIA+ individuals and allies.

### Genetic Counseling at Invitae

exists to cultivate a community for those interested or involved in the field of genetic counseling.

### Veterans-in-Genetics

serves Invitae employees called into service or with family members who serve in the military.

### Women-in-Healthcare

supports and empowers women's growth, both personally and professionally.

### Peer Soul Support Team

focuses on mental wellness.



## Learning Strategy

### Experiential learning 70%

Stretch assignments

On-the-job and project-based learning

### Managing relationships 20%

Coaching

Mentoring

Communities of practice to share knowledge and expertise

### Formal development 10%

Courses and workshops

## Learning and development

Our corporate mission anchors our talent development strategy—our “why.” Namely, we strive to develop our workforce to live our leadership principles, which equips our team to execute our mission. All employees enroll in mandatory and optional education to continue their personal career development, and we regularly monitor and audit the required training compliance.

## Leadership program

Invitae’s leadership principles are foundational to our learning practices and capture what we’ve found to be critical skills and observable behaviors that best help our team deliver results. They link all talent processes: hiring, developing talent, differentiating performance, assessing potential, building a leadership pipeline, maintaining a strong leadership bench and implementing succession planning.

## Leadership principles

**Aware • Calm is contagious • Courage • Curiosity • Improve & grow • Ownership • Passion • Swift execution • Team • Vulnerable**

More than 250 new leaders participated in Leads 101, acquiring deeper understanding and competence in critical skills and behaviors outlined in our leadership principles. Invitae’s senior leadership facilitates the program twice annually, offering community-building and peer learning and welcoming new members of Invitae’s extended Leadership team.

We conducted the following monthly workshops on developing leadership and management skills: Situational Leadership, Coaching Habits, Giving and Receiving Feedback, Emotional Intelligence, Influencing without Authority, Conflict Resolution and Team Dynamics and Compassion Fatigue.



### Learning and development metrics for FY2023



### Performance management

In keeping with our commitment to creating a differentiated, equitable workplace, we developed a performance management system unique to our culture. Everyone, including the Management team, can give and receive continuous feedback regardless of seniority, experience or level. Our performance management framework includes quarterly reviews with performance assessments and professional development discussions with managers. Leads receive additional learning opportunities to develop their management and leadership skills.

**“At Invitae, we empower our workforce to embody our mission and leadership principles through continuous learning and development. Our commitment to mandatory and optional education ensures our team’s growth, fostering a culture of excellence.”**

**Nicole Francis-Mason**  
head of talent management  
and attraction at Invitae





## Employee health and safety (EH&S)

All employees are responsible for maintaining a safe workplace. Our training aims to ensure employees follow our protocols, rules, policies and practices. We also require them to report accidents, injuries and unsafe equipment, practices and conditions in accordance with our Code of Conduct and environment, health and safety (EH&S) policies.

### Oversight and compliance

Our Quality Group controls standard operating procedures (SOPs). The EH&S, Quality, Facilities and Laboratory directors and personnel review and approve the policies annually and as needed. Our health and safety program includes consent forms, employee safety reports, incident investigations and injury logs.

We are an International Organization for Standardization (ISO) 15189-accredited, College of American Pathologists (CAP)-accredited and Clinical Laboratory Improvement Amendments (CLIA)-certified clinical diagnostic laboratory. As a leader in advanced medical genetics, we aim to comply with all local, state and federal regulations. We conduct quarterly EH&S quality and safety inspections at our primary lab in San Francisco, California.

In 2023, we had two Occupational Safety and Health Administration (OSHA) recordable injuries and zero Environmental Protection Agency (EPA) reportable incidents, with a Total Recordable Incident Rate (TRIR) of 0.128.

### Environment, health and safety training

We continue to expand our employee health and safety initiatives through comprehensive and up-to-date training. Our training programs include general EH&S awareness for non-lab groups. We also provide lab-specific EH&S training for lab personnel and contractors. All employees are required to complete general EH&S awareness training on hiring and annually. This training incorporates our Emergency Action Policy, which outlines what to do in an emergency.

In 2023, we required lab personnel and contractors to take a course of training on many subjects, including:

- injury and illness prevention
- emergency action and fire prevention
- personal protective equipment
- ergonomics
- emergency contact
- biosafety and bloodborne pathogens (exposure control)
- chemical hygiene and hazard communication
- hazardous and medical (biohazardous) waste management
- infectious disease (including COVID-19)

In 2023, 95% of employees completed EH&S training.





## Quality and product safety

We have policies and standard operating procedures to manage health and safety. We promote, provide training on, and ensure that employees follow the protocols and practices in accordance with our Code of Conduct and health and safety policies.

By going above and beyond, we ensure that every test and every result will be a step towards advancing patient care and trust in the precision of medical genetics. For us, quality is a promise to our patients, our partners and the communities we serve, where every patient deserves to get the right test and the right results at the right time.

### Leadership and oversight

Cross-functional leaders support our quality management system (QMS) with oversight from the Global Quality Assurance team, which reports to the chief operating officer. The chief medical officer is a key sponsor of the QMS. Medical Affairs and Operations leadership are responsible for the standard of care provided by Invitae clinical laboratories and works with leadership to ensure appropriate controls.

Quality management review (QMR) is the periodic systematic process by which our Leadership team reviews key performance indicators that demonstrate the health of our QMS. Quality Assurance (QA) typically facilitates the review in partnership with key stakeholders, including executive leadership, Operations, Commercial, Medical Affairs and Regulatory Affairs. We incorporate the results of the management review into action plans, which include goals, objectives and effectiveness checks. Various mechanisms assist in documenting the action plans at Invitae, including those used for objectives and key results (OKRs) and individual quality improvement plans (QIPs).

**“Each of our laboratories meets or exceeds local and international standards, embodying our commitment to unparalleled quality. Our accreditations are proof of our dedication to maintaining the highest standards in laboratory excellence.”**

**Patty Cerulle**  
head of site quality assurance at Invitae





**Leaders in laboratory accreditation:  
Beyond CAP guidelines, CLIA and New  
York state (NYS) regulations**

## **Invitae laboratories earned accreditation by the International Organization for Standardization (ISO)**

Our San Francisco and Metropark labs earned the distinction of ISO 15189 accreditation for Clinical Laboratories. Embracing the ISO 15189 standard underpins confidence in the quality of medical laboratories through a process that verifies our integrity, impartiality and competence.

## **Invitae is one of 50 clinical labs that achieved both CLIA and ISO 15189 certifications**

We're in the company of other world-class institutions such as the Mayo Clinic, St. Jude Children's Research Hospital and Associated Regional and University Pathologists (ARUP) Laboratories.

## **Quality compliance**

We built our QMS on the principles of ISO 9001, 15189 and applicable elements of ISO 13485, plus specific country standards such as CLIA and FDA regulations. Local regulatory agencies license each facility and adhere to relevant country-specific requirements. We gain accreditation through appropriate bodies.

We comply with country-specific requirements and standards applicable to the geography of our facilities and the country where we provide services. In our US clinical laboratory facilities, we meet or exceed ISO, CLIA and College of American Pathologists (CAP) standards and implement required elements set by the FDA. Assessments validate the trust in our capabilities. Our quality systems exceed the minimum required standards for clinical laboratory testing by also incorporating elements of quality system requirements for manufacturers. For a complete list of our licenses and certifications, please visit the [Licensing](#) section of our website.



## Quality control and assurance

Quality control (QC) and QA programs ensure the effectiveness of our processes. We have several levels of internal controls throughout the stages of genetic testing, such as:

- document controls (policies, procedures and work instructions)
- nonconformity management
- process controls (procedures and statistical process controls [SPCs])
- material controls that dictate how we control raw materials before production use
- equipment controls (installation, operational and performance qualifications, calibrations and monitoring)
- verification and control of materials (quality control, batch controls and lot controls)
- change control (validation and verification of process changes)
- corporate audit program
- training and competency program

## Employee training and awareness on quality

Our quality training begins when employees are hired, enabling us to effectively communicate the requirements needed for each person's role. For employees performing regulated tasks within the QMS, we require training before performing duties and competency assessments within six months of the initial training assignment (and annually thereafter). All employees participate in ongoing training specific to their roles.





## Incident reporting framework

Invitae’s incident reporting framework program guides the management of nonconformities, which may impact patient care. These procedures ensure the timely identification, remediation, corrective action and communication of activities, tasks, processes, changes or system improvements generated as a result of an investigation of a nonconformity.

We require all employees to identify, document and report any incident or complaint that impacts or potentially impacts the quality of test results or harms client satisfaction. Incidents include any nonconformance involving the violation of the Health Insurance Portability and Accountability (HIPAA) or international privacy regulations. Invitae staff train in investigative techniques such as Process Failure Modes and Effects Analysis (PFMEA) and root cause analysis (RCA).

Our reporting system allows us to address immediate problems and analyze data and trends over time, including frequency and where in the process it occurred, to identify systemic issues and root causes. We categorize each incident based on severity and follow guidelines and regulations regarding agency notification, including specific procedures outlining adverse event management and potential product recalls.

## Invitae 2023 audits

18 external

13 internal

Led to the successful renewal of all core laboratories’ certifications for CAP, CLIA and NYS

## Performance monitoring, certifications and audits

Invitae has a culture of continuous improvement and uses certain methods to monitor performance trends, identify improvement opportunities, implement corrective actions and monitor the effectiveness of those actions.

We achieve continuous improvement through activities including:

- customer complaints and customer satisfaction surveys
- internal and external audits
- key performance indicator (KPI) analysis
- defect trends (incident response/change acceleration process/deviations)
- Lean Six Sigma
- quality management reviews

Invitae has implemented core laboratory quality performance monitors and reviews them every month for tracking, trending and continuous process opportunities. Areas monitored include:

- corrected and amended reports
- incidents/corrective action program
- sample volumes
- complaints
- audits (internal and external)
- document control
- change management



# Supply chain management

## Supplier quality management

The Supplier Quality team oversees our quality management program, ensuring a robust supply chain that operates ethically, sustainably and in line with legislation and standards. The Supplier Quality team ensures supplier quality via policies, procedures, contracts, performance monitoring and problem escalation. Invitae designed its supplier quality program to meet applicable standards such as ISO 15189 and ISO 13485. In periodic management reviews, we maintain and assess selected metrics to measure the program's overall health.

Our supplier qualification program incorporates risk assessment and quality agreements with companies on our approved supplier list (ASL). In 2022, the Supplier Quality team performed a thorough, three-year review of supplier-caused quality incidents, managed internal audits and initiated corrective action as needed.

We set a higher bar for our top suppliers with closer oversight, defining "critical to quality" as the suppliers that significantly impact products and services. For these critical suppliers, we identify alternatives and contingencies where possible. We developed a supplier issue resolution (SIR) procedure to address when an incident or nonconformance investigation identifies an approved supplier as the possible root cause of a quality issue.

The procedure starts with a notification to Corporate Supplier Quality (CSQ) of an issue requiring investigation. CSQ reviews the internal investigation and root cause and initiates a SIR ticket.

Based on the supplier's issue risk ranking, CSQ issues:

1. notify the supplier of the issue and then track and trend the quality issue.
2. request immediate supplier correction of the quality issue.
3. request that the supplier contains, investigates and identifies the root cause; corrects, prevents and verifies the effectiveness of the correction/prevention; and tracks the progress, documentation review and approval of the ticket. Invitae performs a supplier quality audit if multiple corrective action reports have been logged.

## Vendor compliance policies

Vendors are subject to a thorough due diligence review, including screening for healthcare and global sanctions, prohibited entities and countries and, if appropriate, completing a due diligence questionnaire. Our contracts have anti-corruption provisions, and applicable overseas distributor agreements contain import/export compliance language.



## IT security and privacy

Our vendor risk management program assesses potential vendors' IT governance, security and data privacy policies and practices prior to the execution of contractual agreements. Our technology solutions continuously monitor a vendor's risk profile and enable detailed assessments to identify data access and processing risks.

Vendor risk level is determined based on data processed, vendor maturity, and potential impact to the business. All new vendors are assessed for data security risks prior to approval, and all existing vendors are assessed prior to renewing a contract with Invitae.

A vendor risk assessment must be completed if::

- the vendor will access, manage, review, analyze or store any of Invitae's data.
- the vendor will access Invitae's network.

All vendors are provided with [Invitae's Supplier Code of Conduct \(SCODE\)](#), which outlines our expectations for our suppliers and their subcontractors to comply with applicable laws and to operate their businesses ethically and sustainably. We also distribute our [Human Rights Policy](#) that outlines the fundamental rights, freedoms and standards of treatment to which we believe all people are entitled. These rights include recognizing labor rights, treating all people with dignity and respect, enabling a healthy and safe work environment, promoting ethical behavior and protecting privacy. We recognize we're 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.

## Supplier diversity

Invitae prioritizes the integrity and diversity of our supply chain. This year, we introduced a new supplier scorecard, actively encouraging our suppliers to obtain diversity certifications. Of our direct spending, \$4.5 million is with certified diverse suppliers, and we are striving to grow that figure.

### By the numbers: Supplier Code of Conduct

**100%** of our direct suppliers adopted our SCODE or provided internal requirements or codes equal to or exceeding our requirements

**100%** of renegotiated indirect suppliers have signed our SCODE

**\$116.5** million of spend is covered under SCODE

**\$4.5** million of our direct spending is with certified diverse suppliers



**"At Invitae, we uphold ESG principles in our global supply chain, prioritizing ethical business practices and fostering strong partnerships with our vendors. Together, we continuously improve, creating a win-win scenario for all stakeholders involved."**

**Anna Galan**  
head of global supply at Invitae



# Environmental sustainability

We continue to integrate environmental stewardship and sustainable practices throughout our business operations and to demonstrate our commitment to stewardship where possible.

## 2023 highlights

Developed and adopted an Environmental Policy that outlines our commitments and approach

Submitted our first CDP questionnaire

Reinforced our dedication to operating in a responsible and sustainable manner through an Earth Month engagement campaign

Completed greenhouse gas (GHG) Scope 1 and Scope 2 inventories for the third year in a row and performed Scope 3 materiality screening to identify relevant Scope 3 categories

Improved kit return rates through demand management and logistic strategies

## In this section

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## Our work contributes to the following SDGs:





**Invitae recognizes that climate change directly impacts human health and well-being, making sustainability a critical part of the company's DNA.**

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## Management and employee engagement

Our chief sustainability officer identifies and mitigates environmental initiatives and risks, and our chief compliance officer and the Compliance committee oversee these efforts. At the Board level, the Nominating and Governance Committee provides oversight concerning the company’s ESG strategy, initiatives and policies.

In 2023, we developed an **Environmental Policy** that outlines our commitment to use our resources, influence and expertise to help protect our planet and secure a sustainable future for all. The policy will be reviewed annually, with changes approved by the NGC first and then the full Board.

**“Sustainability isn’t just a goal; it’s a responsibility. At Invitae, we recognize the importance of minimizing environmental impact in our global operations. We are committed to making choices that ensure a brighter, more sustainable future for all.”**

**Philip Clay**

vice president of integrated lab operations, global supply & workspace solution at Invitae





## Facility considerations

Staying true to our mission of providing for patients first and foremost, in 2023 we reduced the number of facilities we lease, own and operate. This has allowed us to focus in on locations and facilities that provide the most benefit to our testing, research and data solutions activities. This has also reduced our environmental impact due to the decrease in building maintenance as well as energy, water and waste consumption.

For the facilities that we do continue to use, we incorporate environmental considerations into selection and operation. For example, several of our facilities have achieved Leadership in Energy and Environmental Design (LEED) certification or better. We're proud that our primary laboratory, in San Francisco, is LEED Gold-certified.

## Earth Month campaign

In April, we kicked off our Earth Month campaign to encourage employees to make sustainable choices and support the environment in their homes, in their communities and at work. Together, we aim to drive a year of energy, enthusiasm and commitment to a sustainable and equitable future for our planet.

Through outreach efforts and initiating meaningful conversations, we shared insights and promoted awareness on safeguarding the planet's health. Throughout the year, we rallied behind the theme "Invest In Our Planet," highlighting the importance of dedicating our time, resources and energy to solving climate change and other environmental issues.



## Energy and GHG management

We continued to examine how to minimize our environmental impact and decrease our emissions footprint in 2023. The quality and scope of our data continue to improve, allowing for a clearer picture to better inform our emissions reduction strategy.

### Carbon assessment

#### Scope 1 and 2 emissions

We collected available Scope 1 and Scope 2 data from our facilities and vehicle fleet to calculate our energy consumption and greenhouse gas (GHG) emissions following the guidelines of the GHG Protocol. Our office and facility needs can change yearly, impacting our carbon footprint. Invitae closed and divested several sites, changing operations and number of locations. In 2023, we had 14 facilities in our operational control boundary, including 11 in our GHG inventory.

§ Inventory exclusions: three international offices, refrigeration and fire suppression, fuels combusted on-site other than natural gas (the primary fuel used by Invitae)

†Methodology: our GHG assessment followed The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition) and the Greenhouse Gas Protocol: Scope 2 Guidance.

‡MTCO<sub>2e</sub>: metric tons of carbon dioxide equivalent

### 2023 Carbon Emissions Disclosure §

Invitae GHG emissions reporting†	Emissions in MTCO <sub>2e</sub> ‡
<b>Scope 1 emissions</b>	
Stationary combustion	411
Mobile sources	1
Fugitive sources	190
Total Scope 1 emissions	602
<b>Scope 2 emissions</b>	
Scope 2 (market-based)	2,829
Scope 2 (location-based)	2,681
<b>Total Scope 1 and 2 (market-based)</b>	<b>3,432</b>
<b>Total Scope 1 and 2 (location-based)</b>	<b>3,284</b>

Energy usage in megawatt-hours (MWh)	
<b>Electricity consumption</b>	8,252
<b>Fuel (stationary combustion)</b>	2,267



## Methodology

We calculated greenhouse gas emissions from our offices, data centers and vehicle fleet using the GHG Protocol's GHG calculation methodology and the US EPA's publicly available emissions factors. US electricity emissions factors are updated using the EPA's eGRID GHG emission factors. From 2022 to 2023, Invitae's Scope 1 and 2 emissions (location-based) decreased by 28%. This change was primarily driven by consolidating our operational footprint and reducing energy consumption within operations.

In 2023, we began accounting for fugitive sources from AC equipment, which we had historically excluded from our inventory. We excluded three international laboratories due to data availability limitations. Over time, we intend to evolve our methods and improve our data collection to ensure our inventory is as complete and accurate as possible.

## Energy consumption

Our total energy consumption in 2023 decreased from the previous year, a change that was primarily driven by consolidating our operational footprint throughout the reporting year. Invitae also uses colocation data centers and cloud solutions for our data storage needs, which are both excluded from our energy footprint. We leverage cloud solutions from Amazon Web Services and Microsoft Azure, which are excluded from our operational control boundary. Both companies have publicly pledged carbon-neutral goals (Microsoft in 2030 and Amazon in 2040) and a 100% renewable energy supply by 2025. Invitae, while not permitted to provide data due to nondisclosure limitations, estimates our usage of both data centers to be less than 10% of our total carbon footprint.

## Scope 3 emissions

A significant portion of our total GHG footprint occurs across our entire value chain, not just in our direct operations. In 2023, we completed a Scope 3 materiality screening to identify which of the 15 Scope 3 categories were relevant and most material to our business operations following the methods from the GHG Protocol Corporate Value Chain Reporting Standard. Results from this assessment informed our overall climate strategy, including:

- working towards accounting for Scope 3 emissions to better understand our overall footprint
- identifying opportunities for emission reduction drivers
- prioritizing strategies to pursue stronger data quality
- assessing climate-related risks and opportunities within our organization and value chain partners

**28%** reduction in  
carbon emissions\*  
year over year

\*Scope 1 and 2 (location-based),  
see Appendix for comparison tables



## Waste and water management

Supported by our Environmental Policy, we are dedicated to reducing waste generation and committed to responsible waste management.

### Waste management

We're committed to reducing and diverting the waste generated through our operations by recycling, composting, donating and more.

In 2023, we made great strides in expanding the coverage of company-wide waste data based on the data collection gaps identified by third-party analysis across our operations. Our Facilities team used these insights to enhance our data-gathering and waste diversion practices. Notably, our total waste decreased from 834 tons in 2022 to 718 tons in 2023, while our non-hazardous waste diversion rate improved from 50% in 2022 to 56% in 2023.

Given the plastic waste generated during our sample-to-answer process, addressing plastic waste diversion remains a top priority for our business. Paper waste is also one of our focus areas. Our Commercial team is working to decrease the number of orders placed on paper requisitions versus electronic methods. We continue to optimize Invitae's healthcare provider portal.

### Water usage

Our facilities and offices actively submit their water usage data as a continual demonstration of our commitment to sustainable business practices.

### By the numbers: waste and water

Total waste	Hazardous waste	Medical waste
<b>718 tons</b>	<b>106.8 tons</b>	<b>27 tons</b>

Non-hazardous waste	Non-hazardous waste diversion rate
<b>584 tons</b>	<b>56%</b>

Non-hazardous waste sent to landfill	Non-hazardous recycling
<b>260 tons</b>	<b>324 tons</b>

Water consumption (2023)

**2,290,005 gallons**



## Hazardous and medical waste

We're committed to responsibly tracking, categorizing and disposing of hazardous and medical waste. The wastes produced by our lab operations are subject to strict regulations, and their management is covered by policies and SOPs. We treat medical waste as a separate stream, and we follow strict protocols to meet applicable rules and regulations related to its disposal.

In 2023, we partnered with Illumina to purchase its NovaSeq X sequencers, which will significantly improve the environmental impacts associated with our sample processing. These machines generate less chemical waste while processing more samples at once, thereby conserving energy and protecting human health and safety. We plan to operationalize these sequencers as we continuously improve our processes in 2024.

See the [Employee health and safety section](#) for additional details on employee training requirements regarding hazardous and medical waste management.

## Specimen collection kit logistics

To increase supply chain efficiency and decrease the carbon footprint of our specimen collection process, we focus on two key factors in the specimen collection kit lifecycle: materials and transportation. In 2023, we increased our fulfillment efficiencies by implementing process improvements and optimizing the number of kits sent out and returned from our clients.

By reducing the number of kits required by our partners with no impact to the patient experience, we can decrease materials used and waste less. This also resulted in fewer outbound shipments, reducing associated emissions. From a transportation and logistics perspective, we began consolidating multiple kits in a single package, thereby minimizing the transportation required for shipping. We are also enhancing our practices for responsible disposal of kits through ongoing recycling initiatives.

In April 2023, we implemented a program to ship outbound test kits via ground transit without impacting order fulfillment time to our patients and clinicians. Through this effort, about 50% of the outbound shipments were converted from air to ground transportation, lowering the level of carbon emissions associated with our shipping.



# Governance, trust, transparency and responsible business practices

Invitae’s strategy for responsible leadership integrates resilient corporate governance, ethical business and marketing practices and sustainable supply chain management, enhancing the interests of our stockholders and strengthening our Board and Management accountability.

## 2023 highlights

44% of our Board members identify as women, and 44% identify as an underrepresented minority

22% of our Management team members identify as women, and 11% identify as an underrepresented minority

We enhanced our emergency response and resiliency practices, completing tabletop exercises related to business continuity planning

The Healthcare Compliance team conducted a third-party due diligence assessment to detect and mitigate corruption risks in our value chain

## In this section

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- Risk management and business continuity..... 63
- Business ethics and compliance ..... 65
- Privacy and data security ..... 69

## Our work contributes to the following SDGs:





**Invitae believes ethical practices depend on a foundation of trust, transparency, compliance and protection for patients, customers and stakeholders**

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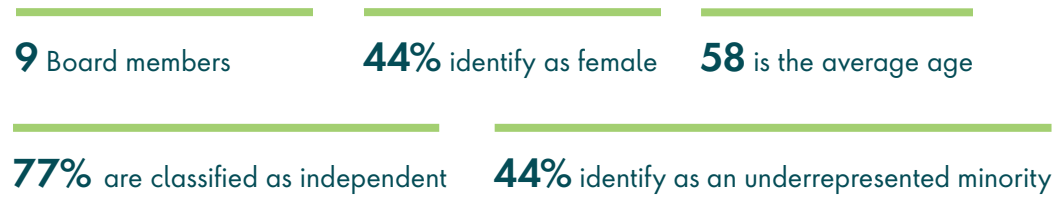
## Corporate governance

### Governance and Board diversity

The Board of Directors is responsible for securing the company’s long-term success. Through ongoing evaluation of business needs and stakeholder interests, we shape our approach to risk management, prioritize transparency, enhance supplier credibility and improve patient accessibility.

The Board reflects diversity across a spectrum of experience, skills, race, ethnicity, age and gender.

#### By the numbers: Invitae Board diversity<sup>§</sup>



Recognizing that diversity generates valuable perspectives and capabilities, our Board strives to find experienced and dedicated directors with diverse backgrounds, perspectives and skills. 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 (NYSE) and that one or more of our directors is an audit committee financial expert under the rules of the Securities and Exchange Commission (SEC). For more information on our Board composition, please see the Governance section of our website and our latest proxy statement.

<sup>§</sup>As of January 26, 2023

**“At Invitae, we recognize that our approach to reaching our goals is just as important as the achievements themselves. Ethical practices are rooted in how we conduct business, which includes a commitment to integrity, transparency and accountability.”**

**Tom Brida**  
general counsel and chief compliance officer  
at Invitae





## Risk management and business continuity

We've instituted business continuity planning and risk management processes to understand and manage risks related to our operations, both physical and IT-related. IT and Operations teams lead these efforts with oversight from the Board and the Management team.

### Risk management approach

The full Board is entrusted with supervising the company's overall risk management process while the Management team addresses and executes risk management initiatives. Our Management team regularly conducts evaluations that strengthen the foundation of our risk management approach.

Business functions elevate and identify these business risks to the Management team regularly and quarterly to the Board.

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### Management's risk assessment and mitigation processes include reviews of:

- Management team development and evaluation
- climate risk
- internal risk management and internal controls
- long-term strategic and operational planning
- identified material business risks
- regulatory and legal compliance
- financial reporting
- ESG initiatives
- cybersecurity
- supplier quality and compliance





## Climate risk management

We acknowledge that a shifting climate may disrupt operations, particularly in our labs. That's why we actively build controls to manage this risk, such as identifying reference labs for each of our locations that may be impacted by climate-specific changes. We added environmental risk scenarios during our business continuity plan (BCP) tabletop exercises with the Management team. We have conducted two such exercises with the Management team.

While we currently assess the impact of climate-related risks in connection with our SEC filings, in the future we intend to further evaluate the more formal incorporation of climate-related risks and opportunities into our processes.

## Business continuity plan

The Invitae business continuity plan was developed 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. We review the plan annually to ensure the effective identification and mitigation of risks to safeguard the business.

## Emergency & resilience planning

We integrate emergency and resilience planning into our overall business continuity strategy and have refined our emergency response policy by reinforcing the roles and responsibilities involved. In addition, we are enhancing our safe and effective lab shutdown procedure, which will be completed in 2024.



## Business ethics and compliance

### Compliance Committee oversight

At Invitae, we treat compliance and ethics as elements that create value. Led by the chief compliance officer (CCO) and general counsel, we ensure that Invitae operates with integrity, adhering to ethical practices and complying with legal and regulatory requirements. The CCO chairs our Compliance Committee, which regularly apprises the Board of all material and relevant company-wide compliance issues. The committee is responsible for ensuring that Invitae continues to conduct our operations and activities ethically, with the highest level of integrity, and in compliance with legal and regulatory requirements. This committee meets monthly to review and report all material issues by functional groups, and committee members take appropriate action to resolve issues.

### Fraud and abuse laws

The Board diligently ensures Invitae's adherence to regulations, particularly given our exposure to specialized fraud and abuse laws that govern how we deal with our patients and clinicians (our customers).

We provide our employees thorough training on the regulatory issues we are subject to, including US and international fraud waste and abuse laws such as the US Foreign Corrupt Practices Act.





## Compliance policies and training

The following compliance-related policies are in effect at Invitae. They are reviewed regularly and updated periodically with Board or Nominating and Governance Committee approval, as needed.

### Invitae policies

- Code of Ethics for Senior Financial Officers
- Code of Business Conduct and Ethics
- Ethics Hotline Policy
- Interactions with Healthcare Professionals Policy
- Insider Trading and Communications Policy
- Anti-Bribery Policy (refreshed in 2023 to better outline responsibilities for employees)
- Charitable Donations and Educational Grants Policy
- Medical Legal Regulatory (MLR) Policy
- Human Rights Policy

### Code of Business Conduct and Ethics

Our Board of Directors has adopted a Code of Business Conduct and Ethics (Code) that applies to the Management team and each of our directors, officers, employees and contractors. The Code addresses topics that are integral to our compliance success.

## Stakeholders and responsibilities



**The patient and clinician community**



**Invitae employees and management**



**Fair and sustainable business practices**



**Our company**

## How we ensure successful compliance

- adherence to healthcare laws
- interacting with healthcare professionals
- commitment to quality of products and services
- responsibility to privacy and security
- promotion of health, safety and inclusivity in the workplace
- open and respectful corporate culture
- confidential and secure means to report concerns
- company-wide compliance week participation
- responsible climate risk management
- prohibiting bribery and corrupt payments
- responsible transfers of value
- competition and fair dealing
- environmental stewardship
- confidentiality
- zero tolerance for conflicts of interest and insider trading
- ethical company communications
- corporate opportunities and use of assets
- financial reporting and record-keeping



### Ethics hotline policy

Embedded within our Code of Business Conduct and Ethics is our Ethics Hotline Policy. The policy ensures that all employees worldwide, including part-time, temporary and contract employees and vendors, have a confidential, safe and anonymous avenue for reporting concerns. The hotline is available globally and managed by an independent party that takes reports at all times. Reports are directed to the chair of the Audit Committee to determine the need for an investigation and further action. Please visit the Governance section of our website for more information.

The code covers serious concerns that could have a substantial impact on Invitae, including actions that:

- may lead to incorrect financial reporting
- are unlawful
- are out of line with company policy, including the Code of Business Conduct, Ethics Hotline Policy and Human Rights Policy
- otherwise amount to serious improper or unethical conduct

### Compliance training

We provide the following education, training and communications about compliance to employees upon hire and annually thereafter:

- Code of Business Conduct and Ethics
- data security and phishing
- healthcare fraud, waste and abuse
- HIPAA and privacy
- anti-bribery and anti-corruption, including the US Foreign Corrupt Practices Act
- social media
- anti-harassment
- environment, health and safety
- human rights policy

97% of employees completed annual enterprise compliance training in 2023.

## Compliance and Ethics Week

**Invitae participated in nationally recognized Compliance and Ethics Week activities to demonstrate our continued commitment to conducting business with integrity, transparency and accountability.**

As part of our initiative to create awareness, we encouraged our employees to participate in one of the following ways:

- take the compliance quiz to win prizes from the Invitae store valued up to \$200
- complete assigned compliance training
- read and acknowledge policies assigned in our intranet



### Third-party due diligence

Invitae conducts due diligence on existing and prospective third-party partners to proactively detect and mitigate corruption risks, ensuring ethical practices throughout the value chain. Relationships among third-party organizations in the healthcare sector are complex, which can expose us to higher compliance risks associated with applicable laws and regulations.

Our third-party due diligence process follows industry best practices, such as:

- identification of third parties
- validation through screening
- risk assessment and prioritization
- continuous vendor monitoring
- due diligence process audits
- process automation
- defining the escalation process

In 2023, our Healthcare Compliance team conducted a comprehensive assessment of our compliance program, affirming the adequacy of our existing processes and controls.

### Interactions with healthcare professionals

Ethical engagement with healthcare professionals is integral to our commitment to strong governance. Our Interactions with Healthcare Professionals Policy ensures that our collective conduct aligns with ethical standards, preventing interference with medical judgment and ensuring compliance with local laws, regulations and company policies. We also have a formal fair market value process, which helps guide our engagements with and transfers of value to healthcare professionals.

### Responsible marketing and ethical selling practices

To ensure responsible interactions with healthcare providers, our sales and marketing teams receive targeted training. Furthermore, every piece of marketing and sales material undergoes thorough Medical Legal Regulatory (MLR) review to guarantee accuracy and compliance.





## Privacy and data security

### Privacy and data security oversight

Invitae has a robust privacy and data security program. Our chief privacy officer (CPO) leads our privacy program, and our chief information security officer (CISO) leads our security program. The CPO chairs Invitae’s Data Use Committee (DUC), which focuses on data usage and sharing activities with a lens on privacy and regulatory compliance based on HIPAA, CLIA, General Data Protection Regulation (GDPR), the Common Rule and other domestic and foreign rules. As part of risk oversight, our Board oversees patient privacy and data security and receives a quarterly update from our CPO and our CISO.

**“Information security is not just about safeguarding data; it’s about protecting our patients and their trust. At Invitae, we are unwavering in our commitment to ensuring the highest levels of security to keep patient information safe and secure.”**

**Mita Hartland**  
chief information security officer at Invitae





## Protecting patient privacy

Ensuring that people own and control their genetic data has been one of our core principles from our 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 data on our platform.

Our privacy practices are explained within our HIPAA Notice of Privacy Practices and Privacy Policy on our privacy website, with explicit references for each product. 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 (HHS) and the Office for Civil Rights (OCR) for complaint investigation and monitoring our compliance with these three rules. We regularly review and update our Privacy and Security Compliance Program to respond to emerging risks.

We take robust measures to help keep patient data safe and secure. These include:

- limiting the use of data to only permitted purposes
- using technical, administrative and physical safeguards to secure patient data and protect against misuse, loss or alteration
- ensuring that patient data are de-identified or anonymized per applicable laws
- providing patients with choices in how we share their de-identified data
- requiring informed consent for patient testing (done by ordering clinicians) and for research studies, including studies related to clinical trials or sponsored programs conducted by partners

In 2023, we also rolled out a new AI policy and enhanced the informed consent forms in response to new privacy laws enacted in several US states.

**We take robust measures to help keep patient data safe and secure, and we are committed to the privacy and security of all PHI.**



### Certifications and third-party audits

The following security certifications went through a reassessment in 2023 and are currently maintained:

- Hitrust Certifications for our core applications and facilities
- SOC2 Type for Integrated Genomic Toolkit

We routinely engage with a reputable, objective and licensed third party to comprehensively assess our controls, capabilities and programs against stringent standards.

### Training and compliance

We require annual privacy and security training for all employees on subjects including ransomware, clean desk policy and multifactor authentication. Privacy team training addresses HIPAA and other privacy laws that apply to Invitae. We conduct separate and regular phishing training and exercises. We update the Security Training and Phishing Program on an ongoing basis. Employees, independent contractors and business associates must follow our policies and procedures and report any process failures or disclosures.

### Intellectual property and patents

We rely on a combination of intellectual property rights, including trade secrets, copyrights, trademarks, customary contractual protections and, to a lesser extent, patents to protect our core technology and intellectual property. US Supreme Court cases have clarified that naturally occurring DNA sequences are natural phenomena that should not be patentable. We do not currently have any patents or patent applications directed to the sequences of specific genes or variants of such genes, nor do we rely on any such in-licensed patent rights of any third party. Please see our most recent filing of Form 10-K for more information on our intellectual property and patents.

### Open source data protection

To prevent open-source data loss, we have implemented security controls including:

- making regular backups of our systems with redundancy
- protecting our hardware through physical security and fire suppression
- educating our employees about data leakage
- implementing antivirus and anti-malware software
- ensuring sensitive data are encrypted
- maintaining and patching our systems regularly
- implementing and enforcing security policies in place for devices and endpoints





# Appendix

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## ESG data table

Human capital	Unit	2023	2022	2021
Total headcount	#	1,509	1,732	2,957
Total headcount (US)	#	1,489	1,692	2,798
Total headcount (non-US)	#	20	40	159
Diversity	Unit	2023	2022	2021
<b>Gender</b>				
Male employees	%	38.2%	39.0%	45.0%
Female employees	%	61.8%	61.0%	55.0%
Management team (male)	%	77.8%	71.0%	-
Management team (female)	%	22.2%	29.0%	-
<b>Racial/ethnic diversity (US only)</b>				
White	%	55.3%	56.3%	63.0%
Asian	%	21.4%	20.5%	18.0%
Black or African American	%	6.7%	5.2%	5.1%
Two or more races	%	4.5%	4.0%	4.0%
Hispanic or Latino	%	9.6%	9.3%	7.8%
Native Hawaiian or Pacific Islander	%	0.5%	0.2%	-
American Indian or Alaska Native	%	0.1%	0.1%	0.1%
I do not wish to answer	%	0.5%	-	-
Not known	%	1.4%	4.4%	2.0%
Management team racial/ethnic diversity	%	11.1%	21.0%	-

Human capital	Unit	2023	2022	2021
<b>New hires</b>				
Men	%	51.1%	39.7%	56.0%
Women	%	48.9%	60.3%	44.0%
White (US only)	%	39.6%	44.1%	45.7%
Racial/ethnic diversity (US only)	%	60.4%	55.9%	47.4%
<b>Turnover rates</b>				
Total turnover rate (all employees)	%	29.6%	68.0%	14.8%
Voluntary turnover rate	%	19.1%	-	-
Involuntary turnover rate	%	10.5%	-	-
<b>Employee health and safety</b>				
Total recordable injury rate	Rate	0.128	0.0416	-



## ESG data table



Environmental sustainability	Unit	2023	2022	2021
<b>Scope 1 emissions</b>				
Stationary combustion	MTCO2e	411	492	500
Mobile sources	MTCO2e	1	1	12
Fugitive sources	MTCO2e	190	-	-
<b>Total Scope 1 emissions</b>	MTCO2e	602	493	512
<b>Scope 2 emissions</b>				
Scope 2 (market-based)	MTCO2e	2,829	3,634	3,258
Scope 2 (location-based)	MTCO2e	2,681	3,704	3,190
<b>Total Scope 1 and 2 (market-based)</b>	MTCO2e	3,432	4,127	3,770
<b>Total Scope 1 and 2 (location-based)</b>	MTCO2e	3,284	4,197	3,702
<b>Energy usage</b>				
Electricity consumption	MWh	8,252	10,970	-
Fuel (stationary combustion)	MWh	2,267	2,713	-
<b>Water consumption</b>				
Water consumption	Gallons	2,290,005	2,732,034	2,840,265
<b>Waste generation</b>				
Total waste	Tons	717.5	834	-
Total waste recycled	Tons	327.8	361.7	-
Total waste incinerated	Tons	103.1	60.7	-
Total waste landfilled	Tons	286.6	360	-

Environmental sustainability	Unit	2023	2022	2021
<b>Hazardous waste (total)</b>	Tons	133.9	117.8	-
<b>Hazardous waste: medical waste</b>	Tons	27	51.8	-
<b>Hazardous waste: chemical/other waste</b>	Tons	106.8	66	-
<b>Hazardous waste recycled</b>	Tons	3.8	5.7	-
<b>Hazardous waste incinerated</b>	Tons	103.1	60.7	-
<b>Hazardous waste landfilled</b>	Tons	27	-	-
<b>Percentage of hazardous waste diverted from disposal (diversion rate)</b>	%	3%	-	-
<b>Non-hazardous waste (total)</b>	Tons	583.7	716.2	-
<b>Non-hazardous waste recycled</b>	Tons	324	356	-
<b>Non-hazardous waste incinerated</b>	Tons	0	-	-
<b>Non-hazardous waste landfilled</b>	Tons	259.6	360	-
<b>Non-hazardous waste diverted from disposal (diversion rate)</b>	%	56%	-	-



# United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals are a collaborative, global effort to achieve a better and more sustainable future for all. Represented by 17 Global Goals and 169 targets, the SDGs address challenges of poverty, inequality, climate change, environmental degradation, peace and justice. We identified four SDGs where we have the greatest influence and impact given their relevance to our business mission and activities, as follows:

SDG	Description	How we support their goals	Section in this report
	Ensure healthy lives and promote well-being for all at all ages	<p>We were founded with a singular mission—to bring genetics into mainstream medicine to improve healthcare for billions of people on the planet. Decoding the human genome is one of humankind’s seminal scientific accomplishments. Using that knowledge to improve health for all of humanity is one of our greatest responsibilities.</p> <p>Our 2023 efforts include the following:</p> <ul style="list-style-type: none"> <li>invested in AI-based machine learning tools to improve clinical variant classification in genetic testing results in underrepresented populations</li> <li>engaged in advocacy efforts for expanded access to genetic testing, resulting in policies and guidelines that now qualify more patients and their families for genetic testing, which demonstrates our commitment to health equity</li> <li>published our second Data Use Transparency and Impact Report in line with our commitment to consented patient data use to advance precision medicine research and patient outcomes</li> </ul>	Healthcare for all
	Achieve gender equality and empower women and girls	<p>Our vision is to cultivate a place where we all belong. Our DEI mission is to engage, develop and retain talent from diverse backgrounds by fostering community, providing education and support, and advancing inclusive research and health equity globally.</p> <p>Our 2023 efforts include the following:</p> <ul style="list-style-type: none"> <li>launched company-wide belonging survey for all employees</li> <li>77% of the Board and 44% of our Management team reflect diversity by race, ethnicity and gender</li> <li>among total employees, 61% are female and 44% are racially/ethnically diverse</li> </ul>	Healthcare for all




## United Nations Sustainable Development Goals (continued)

SDG	Description	How we support their goals	Section in this report
	Reduce inequality within and among countries	<p>One of our founding principles is accessible, affordable genetic testing, so we work to drive down the price to increase its clinical and personal utility. By dramatically lowering the costs of testing, advocating with our partners who sponsor testing in specific patient populations and offering a generous patient assistance program, we have expanded access and pledge to continue such efforts.</p> <p>Our 2023 efforts include the following:</p> <ul style="list-style-type: none"> <li>invested in AI-based machine learning tools to improve clinical variant classification in genetic testing results in underrepresented populations</li> <li>revised our patient assistance program and introduced our family variant testing program</li> <li>continued to partner with biopharma organizations to offer sponsored testing programs to improve patient access</li> <li>engaged in advocacy efforts for expanded access to genetic testing</li> </ul>	Healthcare for all
	Ensure sustainable consumption and production patterns	<p>We understand the impact of our operations and recognize that our environmental commitment is important to support our vision of improving healthcare affordability and accessibility. We take steps to reduce the footprint of our business operations through proper waste management and increased energy efficiency.</p> <p>Our 2023 efforts include the following:</p> <ul style="list-style-type: none"> <li>developed an Environmental Policy to outline our commitments and approach to environmental stewardship</li> <li>identified data collection gaps across our operations to enhance our waste measuring, managing and reporting processes</li> <li>implemented initiatives to consolidate our testkit shipments and reduce our packaging and transportation footprint</li> </ul>	Environmental sustainability



## United Nations Sustainable Development Goals (continued)

SDG	Description	How we support their goals	Section in this report
 <p><b>13</b> CLIMATE ACTION</p>	<p>Take urgent action to combat climate change and its impacts</p>	<p>We acknowledge that a shifting climate may disrupt our operations, and we are actively building controls to manage the impacts of climate change.</p> <p>Our 2023 efforts include the following:</p> <ul style="list-style-type: none"> <li>• initiated efforts to align our ESG initiatives with the TCFD framework</li> <li>• submitted our first CDP questionnaire response</li> <li>• continued comprehensive data collection to track our energy usage and greenhouse gas (GHG) emissions for Scope 1 and Scope 2</li> <li>• completed Scope 3 materiality screening to identify which of the 15 Scope 3 categories were relevant and most material to our business operations</li> </ul>	<p>Environmental sustainability</p>



## Sustainability Accounting Standards Board

In developing this report, we have referenced the SASB framework for the Health Care Delivery (HC-DY) industry, now a part of the IFRS. As an additional level of diligence, we have referenced the SASB framework for the Healthcare Biotechnology and Pharmaceuticals (HC-BP) industry, which, due to our straddling of both healthcare and biotech, we felt would add another layer of transparency to our annual reporting.

The table that follows is aligned with the SASB areas. It describes the sections of our report where more information can be found about our efforts in each specific area.





Topic	Accounting metric	SASB code	Response
<b>Energy management</b>	1) Total energy consumed	HC-DY-130a.1	See <a href="#">Energy and GHG management section</a> and <a href="#">ESG data table</a> for information. 1) Total energy consumed: 10,519 MWh 2) Percentage grid electricity: 78.4%
	2) percentage grid electricity		
<b>Waste management</b>	Total amount of medical waste, percentage a) incinerated, b) recycled or treated and c) landfilled	HC-DY-150a.1	See <a href="#">Waste and water management section</a> and <a href="#">ESG data table</a> for more information. Total medical waste: 27 tons a) Percentage medical waste incinerated: 0% b) Percentage medical waste recycled or treated: 0% c) Percentage medical waste landfilled: 100%
	Total amount of 1) hazardous and 2) non-hazardous pharmaceutical waste, percentage a) incinerated, b) recycled or treated and c) landfilled	HC-DY-150a.2	Invitae does not handle pharmaceutical waste. Our processing waste is managed through robust EH&S policies. See <a href="#">Waste and water management section</a> and <a href="#">ESG data table</a> for more information.
<b>Patient privacy and electronic health records</b>	Description of policies and practices to secure customers' protected health information (PHI) records and other personally identifiable information (PII)	HC-DY-230a.2	See <a href="#">Privacy and data security section</a> for more information.
	1) Number of data breaches, 2) percentage involving a) personal data only and b) personal health data, 3) number of customers affected in each category, a) personal data only and b) personal health data	HC-DY-230a.3	We did not experience any material breaches during 2023. See <a href="#">Privacy and data Security section</a> for more information.
	Total amount of monetary losses as a result of legal proceedings associated with data security and privacy	HC-DY-230a.4	We experienced no material losses resulting from legal proceedings associated with data security and privacy. See <a href="#">Privacy and data security section</a> for more information.
<b>Access for low-income patients</b>	Discussion of strategy to manage the mix of patient insurance status	HC-DY-240a.1 HC-BP-240a.1 HC-BP-240a.2"	We make our testing and services accessible. Our pricing practices are transparent, and patient pricing is available upon request. We are in-network with national payers and accept Medicare and Medicaid. See <a href="#">Broadening access through affordability section</a> for more information.



Topic	Accounting metric	SASB code	Response
<b>Quality of care and patient satisfaction</b>	Number of serious reportable events	HC-DY-250a.2 HC-BP-250a.3	Not applicable. We do not operate hospitals and these scores do not apply. See <a href="#">Quality and product safety section</a> for our quality management practices.
	Hospital-acquired condition per hospital	HC-DY-250a.3	Not applicable. We do not operate healthcare facilities.
	Number of unplanned and total readmissions per hospital	HC-DY-250a.6	Not applicable. We do not operate healthcare facilities.
<b>Management of controlled substances</b>	Description of policies and practices to manage the number of prescriptions issued for controlled substances	HC-DY-260a.1	Not applicable. We do not issue prescriptions for controlled substances.
<b>Pricing and billing transparency</b>	Description of policies or initiatives to ensure that patients are adequately informed about price before undergoing a procedure	HC-DY-270a.1	Our pricing practices are transparent, and patient pricing is available upon request. See <a href="#">Broadening access through affordability section</a> for more information.
	Discussion of how pricing information for services is made publicly available	HC-DY-270a.2	
	Number of the entity's 25 most common services for which pricing information is publicly available, percentage of total services performed (by volume) that these represent	HC-DY-270a.3	
<b>Employee health and safety</b>	Total recordable incident rate (TRIR) for direct employees and contract employees	HC-DY-320a.1	TRIR: 0.0416 We do not track DART. See <a href="#">Employee health and safety (EHS) section</a> for more information.
<b>Employee recruitment, development &amp; retention</b>	1) Voluntary 2) involuntary turnover rate	HC-DY-330a.1 HC-BP-330a.1	Total turnover rate: 29% 1) Voluntary turnover rate: 19% 2) Involuntary turnover rate: 10% See <a href="#">Our people and culture section</a> for more information.
	Description of talent recruitment and retention efforts for healthcare practitioners	HC-DY-330a.2 HC-BP-330a.2	See <a href="#">Our people and culture section</a> for more information.
<b>Climate change impacts on human health and infrastructure</b>	Description of policies and practices to address 1) the physical risks due to an increased frequency and intensity of extreme weather events, 2) changes in the morbidity and mortality rates of illnesses and diseases, associated with climate change, and 3) emergency preparedness and response	HC-DY-450a.1	1) See risk management and business continuity section for more information. 2) Not applicable. We do not operate healthcare facilities.
	Percentage of healthcare facilities that comply with the Centers for Medicare and Medicaid Services (CMS) Emergency Preparedness Rule	HC-DY-450a.2	Not applicable. We do not operate healthcare facilities.



Topic	Accounting metric	SASB code	Response
<b>Fraud and unnecessary procedures</b>	Total amount of monetary losses as a result of legal proceedings associated with medical fraud	HC-DY-510a.1	We experienced no material losses resulting from legal proceedings associated with fraud. See <a href="#">Governance, trust and transparency section</a> for more information.
<b>Ethical marketing</b>	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	HC-BP-270a.1	We experienced no material losses resulting from legal proceedings associated with false marketing claims. See <a href="#">Governance, trust and transparency section</a> for more information.
	Description of code of ethics governing promotion of off-label use of products	HC-BP-270a.2	Not applicable. We have no off-label use of products.
<b>Safety of clinical trial participants</b>	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	HC-BP-210a.1	See <a href="#">Quality and product safety section</a> for our quality management practices.
	Number of inspections related to clinical trial management and pharmacovigilance that resulted in entity voluntary remediation or regulatory or administrative actions taken against the entity	HC-BP-210a.2	See <a href="#">Quality and product safety section</a> for our quality management practices.
	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	HC-BP-210a.3	We experienced no material losses resulting from legal proceedings associated with clinical trials in developing countries. If material losses had occurred, they would have been addressed in our 2023 Form 10-K. See <a href="#">Quality and product safety section</a> for our quality management practices.
<b>Business ethics</b>	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery	HC-BP-510a.1	We experienced no material losses resulting from legal proceedings associated with corruption and bribery. See <a href="#">Governance, trust and transparency section</a> for more information.
	Description of code of ethics governing interactions with healthcare professionals	HC-BP-510a.2	See <a href="#">Governance, trust and transparency section</a> for more information.



## Task Force on Climate-Related Financial Disclosures

In 2023, we initiated efforts to align our ESG initiatives with the TCFD framework, as outlined in the table below. Our commitment involves ongoing improvements in TCFD alignment and disclosures as our initiatives progress and evolve over time.

TCFD pillar	TCFD guidance recommendation	Invitae response	Section in this report
<b>Governance</b> Disclose the organization’s governance around climate-related risks and opportunities.	a) Describe the Board’s oversight of climate-related risks and opportunities	Invitae’s Board of Directors (Board) is committed to strengthening oversight and integration of ESG within our long-term strategy and risk management practices.  While the entire Board engages in corporate ESG matters, the Nominating and Governance Committee (NGC), per its charter, has oversight responsibility for our company-wide corporate social responsibility (CSR) and ESG strategy initiatives and policies including climate-related issues. The full board receives ESG updates on a semi-annual basis.	Our ESG approach
	b) Describe the management’s role in assessing and managing climate-related risks and opportunities	Invitae’s CEO and Management team (senior executive leadership team) oversee the ESG initiatives, including climate, and report to the NGC of the Board.  The chief sustainability officer, appointed by the CEO, oversees the day-to-day sustainability program. The CSO also focuses on advancing our multiyear effort to improve our ESG capabilities in all areas of our business, including climate matters. The Management team is updated on ESG progress on a quarterly basis.	Our ESG approach



TCFD pillar	TCFD guidance recommendation	Invitae response	Section in this report
<p><b>Strategy</b> Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.</p>	<p>Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term</p>	<p>We acknowledge that a shifting climate may disrupt lab operations and are actively building controls to manage this risk, such as identifying reference labs for each of our locations that may be impacted by climate-specific changes. We have also added additional environmental risk scenarios during our business continuity plan (BCP) tabletop exercises with the Management team. We have conducted two such exercises with the Management team to date.</p> <p>Notable climate-related risks and opportunities are described in more detail below:</p> <ul style="list-style-type: none"> <li>• Our laboratories may be harmed or rendered inoperable or inaccessible due to natural or human-made disasters, including earthquakes, hurricanes, flooding, fire and power outages, or by health epidemics, such as the COVID-19 pandemic, which may render it difficult or impossible for us to perform our tests for some period of time. The inability to perform our tests or the backlog that could develop if our laboratories are inoperable for even a short period of time may result in the loss of customers or harm our reputation. If a natural disaster were to damage one of our facilities significantly or if other events were to cause our operations to fail or be significantly curtailed, we may be unable to provide our services or develop new services.</li> <li>• We also rely on a limited number of suppliers, or, in some cases, sole suppliers, for certain laboratory substances used in the chemical reactions incorporated into our processes, as well as sequencers and other equipment and materials that we use in our laboratory operations. Our main suppliers are exposed to acute physical risks such as extreme weather events and wildfires. For example, any disruption in Illumina’s operations due to wildfire could impact our supply chain and laboratory operations, as well as our ability to conduct our tests, and it could take a substantial amount of time to integrate replacement equipment into our laboratory operations.</li> </ul>	<p>Risk management and business continuity</p>
	<p>Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy and financial planning</p>	<p>The lack of access to our laboratories or inaccessibility of laboratory substances and equipment due to disruption in our suppliers’ operations would result in an interruption of our business and, consequently, would adversely affect our production and overall revenues.</p>	<p>Risk management and business continuity</p>
	<p>Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario</p>	<p>We have added additional environmental risk scenarios during our business continuity plan (BCP) tabletop exercises with the management team and conducted two such exercises with the management team to date.</p>	<p>Risk management and business continuity</p>



TCFD pillar	TCFD guidance recommendation	Invitae response	Section in this report
<p><b>Risk management</b> Disclose how the organization identifies, assesses and manages climate-related risks.</p>	<p>a) Describe the organization’s processes for identifying and assessing climate-related risks</p>	<p>Our risk management processes help us to understand, evaluate and mitigate the physical risks related to our operations. These processes are intended to capture any material climate-related risks that are disclosed in Invitae’s SEC filings. We will continue to evaluate the more formal incorporation of climate-related risks and opportunities in our enterprise risk management (ERM) process in the future.</p> <p>We have also implemented a formal Invitae business continuity plan based on an enterprise-wide assessment in 2022 to identify critical business areas and processes that have the potential, if disrupted, to significantly impact overall business operations, reputation and quality. The plan is reviewed annually to ensure all risks are identified and mitigated effectively.</p>	<p>Risk management and business continuity</p>
	<p>b) Describe the organization’s processes for managing climate-related risks</p>		
	<p>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management</p>		
<p><b>Metrics and targets</b> Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>	<p>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process</p>	<p>We calculate Scope 1 and 2 GHG emissions year over year, and continue to build on an established baseline to facilitate ongoing measurement, management and reporting. We also use intensity values to better understand the trends in our footprint and leverage results from our GHG inventory to inform opportunities for efficiency improvements and cost savings.</p>	<p>Energy and GHG Management</p>
	<p>b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks</p>	<p>Scope 1 and 2 emissions: For our emissions and energy use metrics, see pages 56 and 57 of this report.</p> <p>Scope 3 emissions: In 2023, we completed a Scope 3 materiality screening to identify which of the 15 Scope 3 categories were relevant and most material to our business operations following the methods from the GHG Protocol Corporate Value Chain Reporting Standard. Results from this assessment informed our overall climate strategy.</p>	<p>Energy and GHG Management</p>
	<p>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets</p>	<p>We will establish a more consistent emissions baseline over several years before setting an emissions reduction target.</p>	<p>Energy and GHG Management</p>



## Forward-looking statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements relating to the company's ESG and sustainability plans and initiatives and the expected impact thereof. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: risks and uncertainties regarding the company's ability to successfully consummate and complete a plan of reorganization under Chapter 11; the company's ability to continue operating in the ordinary course while the Chapter 11 proceeding is pending; potential adverse effects of the Chapter 11 proceeding on the company's business, financial condition, liquidity and results of operations; the company's ability to use rapidly changing genetic data to interpret test results accurately and consistently; risks associated with litigation; security breaches, loss of data and other disruptions; laws and regulations applicable to the company's business; and the other risks set forth in the company's filings with the Securities and Exchange Commission, including the risks set forth in the company's most recent filings on Form 10-K and 10-Q. These forward-looking statements speak only as of the date hereof, and Invitae Corporation disclaims any obligation to update these forward-looking statements.