

T W I S T  
BIOSCIENCE

# Synthetic DNA Real Sustainability

2025 Corporate Responsibility Report



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## SECTION 1

# Introduction

# A letter from our CEO, Emily Leproust, Ph.D.

At Twist, our commitment to corporate responsibility begins with the very core of our technology. Our DNA synthesis platform is not only industry-disruptive — it is inherently sustainable. By miniaturizing the chemistry of ‘writing’ DNA, we use 99.8% less chemicals than legacy 96-well plate approaches, enabling us to deliver exceptional products with a significantly smaller carbon footprint. This sustainable-by-design approach empowers our customers to pursue their boldest ideas while reducing impact on the planet.

Sustainability is not an add-on — it is engineered into how we operate, scale and serve our customers. Our platform exemplifies how science can be a force for good and for growth. And this year’s corporate responsibility report is a reflection of that vision — where science, sustainability and growth are deeply connected.

## What’s New This Year

Over the past year, we have deepened our commitment to sustainability by strengthening our sustainable procurement process. This effort not only enhances the value we deliver to our customers and shareholders but also helps us reduce risk and promote responsible practices throughout our value chain.

We also took an important step forward by committing to set near-term, company-wide emissions reduction targets aligned with climate science through the Science Based Targets initiative (SBTi).

## Product Innovation: Sustainability Included

By miniaturizing chemistry at the front end of our manufacturing, cutting chemical use by 99.8%, we embed sustainability into our products, enabling customers to do the same in theirs, from reducing reliance on petrochemicals to developing groundbreaking therapeutics, diagnostic tests and genotyping, resilient crops and advancing renewable energy.

## Broad Industry Impact

Our customers are transforming myriad industries — from designing next-generation medicines to creating bio-based alternatives to petroleum-derived products. With Twist as a critical input to our customers’ supply chains, they are developing solutions to some of the world’s most urgent challenges. We’re proud to be their partner in progress, providing tools that enable them to innovate with speed.

## Sustainable Manufacturing

We track and seek to improve our environmental footprint — from energy efficiency and recycling programs to waste reduction, sustainable packaging and forward-thinking lab operations.

## Empowering Our People

We cultivate an inclusive workplace that values diversity of thought, encourages creativity and supports our Twisters with career development resources and opportunities. We’re fostering a team culture centered around trust, grit, service and impact.

## Engaging with Our Communities

Through STEM education initiatives and community partnerships, we’re helping to inspire and equip the next generation of scientists and changemakers.

## Ethical Innovation and Strong Governance

Integrity is foundational to everything we do. Our robust governance practices include a strong biosecurity framework, transparent data protections and maintaining our manufacturing operations solely within the United States. We’re committed to ethical business practices, transparency and accountability at all levels of our organization.

As we look ahead, we remain focused on scaling innovation responsibly — always guided by science, grounded in ethics and driven by impact. Our sustainable platform positions us to lead with purpose, while delivering value for our customers, shareholders, communities and planet.

Together, with a performance-driven culture, we are #WritingTheFuture.



Emily Leproust  
CEO and Co-Founder  
Twist Bioscience Corporation

*Our platform exemplifies how science can be a force for good and for growth. And this year's corporate responsibility report is a reflection of that vision — where science, sustainability and growth are deeply connected.*

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EMILY LEPROUST, PH.D.  
CEO AND CO-FOUNDER,  
TWIST BIOSCIENCE



# Guiding principles



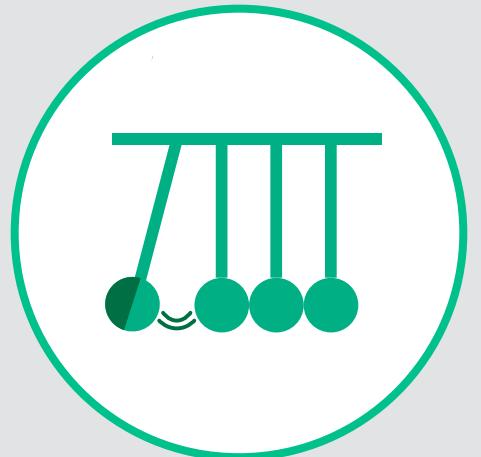
## GRIT

- ▶ Passionate drive, fierce determination.
- ▶ Always strive for excellence and persevere.
- ▶ Adapt resiliently and learn from each attempt.
- ▶ Drive strategic and sustainable outcomes.
- ▶ Take ego-less ownership and focus on resolution.



## TRUST

- ▶ Vigilant stewardship, transparent interactions.
- ▶ Provide products designed and intended for public benefit.
- ▶ Protect the well-being of people and our planet.
- ▶ Demonstrate integrity and ethical behavior.
- ▶ Interact in an accountable, respectful and transparent manner.



## IMPACT

- ▶ Bold ideas, daily incremental contributions.
- ▶ Skillfully deliver on ambitious goals and stay humble.
- ▶ Collaborate and share knowledge to create value.
- ▶ Diligently improve quality, velocity and cost.
- ▶ Voice your ideas, commit the time, find new ways.



## SERVICE

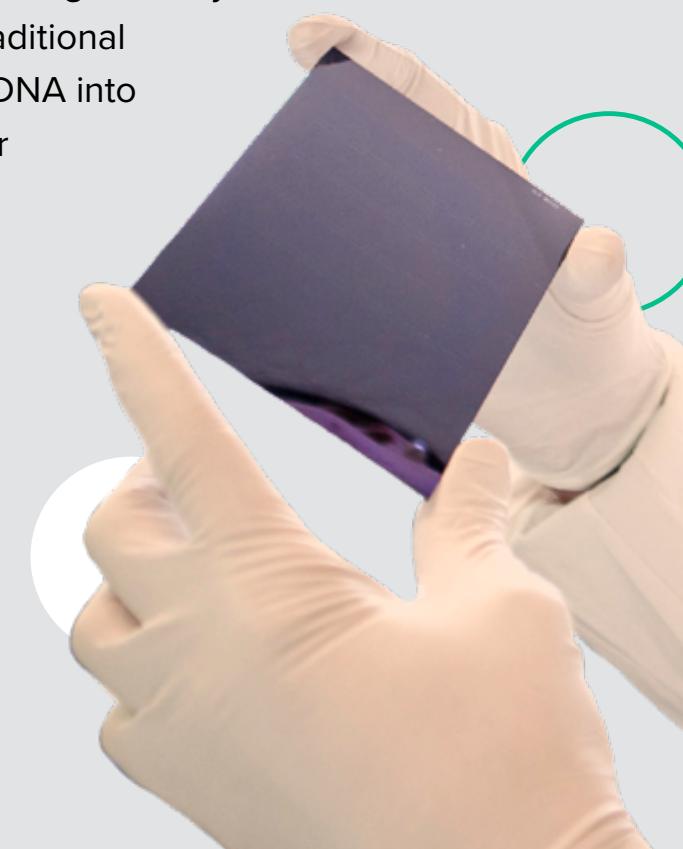
- ▶ Always ask, what can I do for you?
- ▶ Listen, hear and dialogue empathetically.
- ▶ Relentlessly focus on internal and external customer needs.
- ▶ Communicate to deliver outstanding service.
- ▶ Build mutually beneficial, long-lasting relationships.

# Our business

At Twist Bioscience, we work in service of our customers, who are changing the world for the better. Our synthetic DNA tools enable breakthroughs in various fields, including healthcare, food and agriculture, industrial chemicals, and academic research, enhancing lives and promoting sustainability. We believe that our customers' success benefits everyone, and we are dedicated to accelerating their progress through our advanced technology.

Because sustainability is built into both how we manufacture and what we create, we are uniquely positioned to delivering long-term value to our customers and shareholders alike.

Our proprietary DNA synthesis platform underpins our innovative products for diverse applications and markets. We've developed a revolutionary technology that "writes" DNA on a silicon chip, industrializing synthetic DNA production. This proprietary method allows us to miniaturize conventional chemical DNA synthesis reactions, writing over one million pieces of DNA at a time on a silicon chip about the size of a large mobile phone. Because we miniaturized the chemical process for making DNA, we reduced the chemical reagent consumption by 99.8%, making our process significantly more sustainable and eco-friendly than traditional methods.\* By incorporating our synthetic DNA into their products and workflows, we offer our customers more sustainable inputs for their product development.



Serving more than 3,500 customers worldwide, we reported record revenue of \$313 million in fiscal 2024, an increase of 27% over \$245.1 million in fiscal 2023.

***At Twist, we continue to push the boundaries of scientific progress to enable our customers to truly change the world for the better.***

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**EMILY LEPROUST, PH.D.**  
CEO AND CO-FOUNDER, TWIST BIOSCIENCE

\*Calculated Twist internal data using Dr. Oligo benchmark January 2021.

# We've developed a revolutionary technology that "writes" DNA on a silicon chip, industrializing synthetic DNA production.

The carbon emission impact of our sustainable approach for making all of our clonal genes in fiscal 2024 is impressive. We shipped approximately **773,000 genes** to customers during the year. For this quantity of genes, we reduced carbon emissions by almost **640 times**.

## STANDARD 96-WELL PLATE APPROACH

A traditional plate-based approach for manufacturing 773,000 genes would have generated a massive:

**17,779,000** kg of CO<sub>2</sub>e\*

## TWIST BIOSCIENCE

Our method significantly cut down the emissions, generating only:

**27,828** kg of CO<sub>2</sub>e\*

Our unique technology enables the production of a diverse range of synthetic DNA-based products, including synthetic genes, NGS tools, and antibody libraries for drug discovery and development. Our products can help customers conduct research more efficiently and effectively. In fiscal year 2024, we shipped our products to more than 3,500 customers worldwide, covering a wide range of industries.

We believe our products enable a broad range of applications that may ultimately improve health and the sustainability of the planet across multiple industries, including:

- **Healthcare** for the identification, prevention, diagnosis and treatment of disease (antibody discovery and optimization technology);
- **Chemicals/Materials** for cost-effective and sustainable production of new and existing specialty chemicals and materials, such as spider silk, nylon, rubber, fragrances, food flavors and food additives;
- **Food/Agriculture** for more effective and sustainable crop production; and
- **Academic research** for a broad range of education and discovery applications.



\*Calculated Twist internal data using Dr. Oligo benchmark January 2021.

## CASE STUDY OF HOW TWIST PRODUCTS PROVIDE COST, SUSTAINABILITY AND THROUGHPUT ADVANTAGES FOR CUSTOMERS.

In October 2024, Twist announced the launch of the FlexPrep™ Ultra-High Throughput Library Preparation Kit, designed with a proprietary Twist-developed enzyme to enable throughput at a low cost, and accelerate the adoption of Twist's FlexPrep (TM) library preparation kit with next generation sequencing instead of microarray for users in population and agricultural genomics (agrigenomics)

"At Twist, we continue to push the boundaries of what applications can be made possible with synthetic DNA and to develop products that open up new markets. Legacy methods of profiling very large numbers of samples for agrigenomics to genotype cows, pigs and other animals as well as for population genomics studies, have not kept pace with evolving NGS methods and are tied to a fixed set of markers. Innovative NGS methods provide far superior data to microarray technology, with the Twist FlexPrep UHT Kit surpassing even the most advanced NGS methods to maximize throughput and minimize cost," said Emily M. Leproust, Ph.D., CEO and co-founder of Twist Bioscience. "When conducting large scale experiments and running multiple samples in parallel, researchers must ensure that there is equivalent mass of each sample included, and this 'normalization' process takes time, energy and effort. Using novel technology, the FlexPrep UHT

Kit self-normalizes, eliminating a critical time-consuming step while at the same time enabling high throughput, streamlining workflows and enabling scalability and customization.

With the Twist FlexPrep UHT kit, researchers can run up to 1,152 samples in a single 96-well plate sequencing run, which can save researchers time and costs. And compared to processing samples individually, FlexPrep reduces consumables used by a factor of 12 as well as reduces the number of pipette tips from over 17,000 used in a standard kit to under 4,000 with the FlexPrep UHT kit. Designed for automation and to enable scientists to confidently multiplex, the Normalization by Ligation (NBL) technology simultaneously tags samples with a unique barcode to enable early pooling of up to 12 separate samples in one reaction, delivering 12x improvement on consumables and reagent efficiency. Utilizing this tagging method together with Twist's 3,000 unique dual indexes (UDIs) in the FlexPrep workflow, research sample sizes are not constrained by multiplexing capacity or throughput. The FlexPrep UHT kit can also be paired with Twist's custom target enrichment panels for tunable and uniform coverage of genomic regions of interest.

### Twist FlexPrep™ Ultra-High Throughput (UHT) Library Preparation Kit

The Twist Flex Prep™ UHT Kit workflow is purpose-built to streamline and massively scale up Twist's established enzymatic fragmentation methods. The NBL technology eliminates the need to measure the mass of each DNA sample and to perform labor-intensive concentration adjustment prior to library preparation, saving significant cost per sample. Following fragmentation and adapter ligation of each sample in a plate, up to 12 samples are pooled together in a single tube. This pooling strategy results in a meaningful reduction in both volumes and costs of reagents required for subsequent bead purification and amplification steps. Libraries prepared from this kit can be leveraged to perform whole genome or targeted sequencing with the use of target enrichment panels. All plate and tube formats are optimized to ensure compatibility with key automation systems, a critical consideration for labs looking to streamline workflows and reduce hands-on time.

**As compared to Twist Library Preparation EF Kit 2.0.**

#### REAGENT WASTE SAVINGS

Designed to decrease the amount of

- Ethanol used for clean up (12 x less)
- AMP mix for post-ligation (12 x less)
- SPRI beads and ethanol post-AMP (12 x less)

#### TIP USE

Individual tips used processing 1,152 samples.

**Standard kits**  
**17,280**

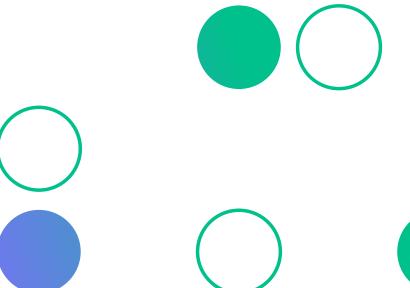
**FlexPrep UHT**  
**3,936**

# Supply chain management

## OVERSIGHT

At Twist, our commitment to corporate responsibility and ethical business practices is deeply embedded within our supply chain. We believe in partnering with businesses that share our values, and we've taken significant steps to ensure our suppliers uphold the highest standards.

During the last year, we made significant strides in our pursuit of greater supply chain sustainability and corporate responsibility by enhancing our oversight mechanisms and clarifying engagement goals.

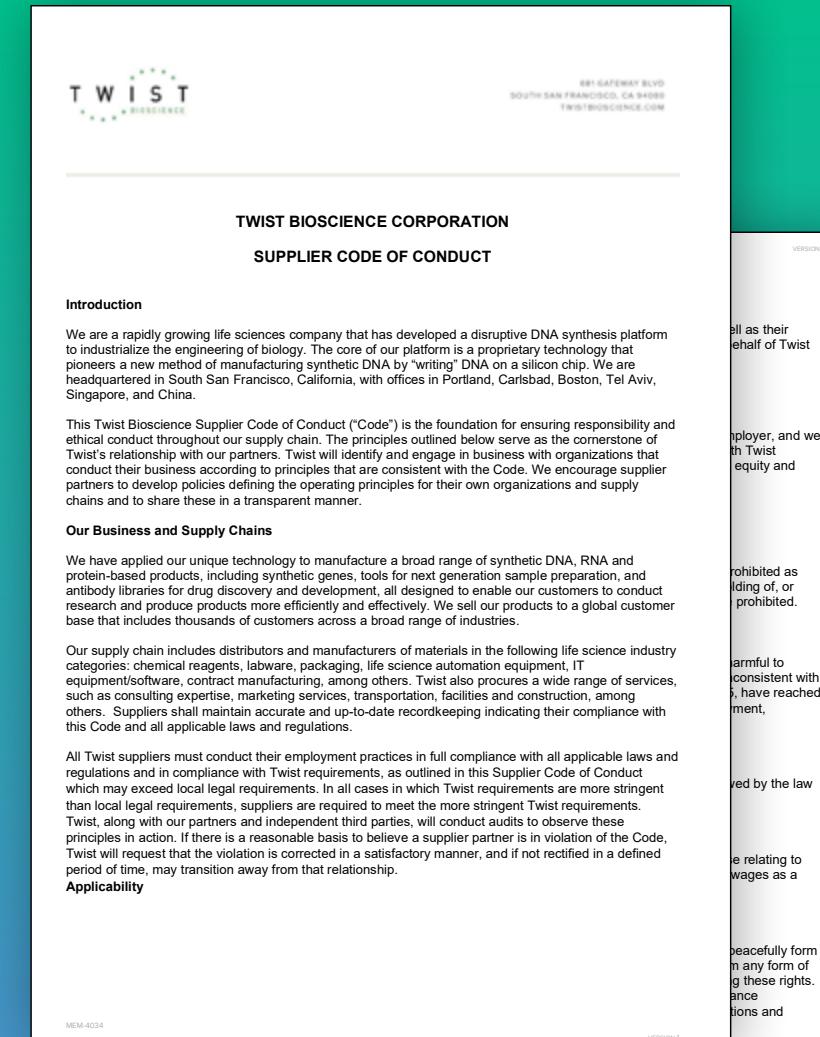


## Revised Supplier Code of Conduct

We revised our Supplier Code of Conduct in 2025 to better reflect our commitment to ethical and responsible practices across our global supply chain, extending to all individuals and organizations providing services or goods to us. This Code outlines stringent requirements for our partners, emphasizing adherence to all applicable laws and regulations while upholding our higher standards in crucial areas like human rights, fair labor practices (prohibiting forced and child labor), health and safety, environmental protection, and business ethics, including anti-corruption and sustainable procurement. We actively engage with our suppliers, encourage transparency, and conduct audits to ensure compliance, reserving the right to transition from relationships where violations are not satisfactorily rectified, reinforcing our dedication to a supply chain built on integrity and shared values.

## Engagement and Tracking

We rigorously evaluate our direct suppliers by integrating environmental, social, and governance (ESG) factors into a comprehensive framework, utilizing third-party sustainability ratings platforms to assess their performance. Our approach prioritizes partners who demonstrate a strong commitment to continuous improvement, actively encouraging them to adopt best practices and measurably improve their environmental and social impact. This engagement includes establishing clear sustainability targets, providing constructive performance feedback, and formally recognizing suppliers who exhibit leadership in advancing sustainable operations.



# SUSTAINABLE PROCUREMENT STRATEGY

To proactively drive responsible sourcing, we developed and implemented strategic initiatives last year, alongside ambitious targets for performance improvement:

## Sustainable Procurement Policy

We developed and implemented a new Sustainable Procurement Policy to guide our purchasing decisions, prioritizing environmental and social considerations alongside traditional business factors.

## Third-party Sustainability Ratings for Direct Suppliers

To enhance transparency and drive continuous improvement, we invited our direct suppliers to be rated by EcoVadis, a leading platform for evaluating supplier sustainability performance. This integration allows us to effectively monitor, assess, and mitigate sustainability risks across our supply chain.

## Supplier Code of Conduct Acknowledgment

To strengthen our commitment to ethical and responsible sourcing, our revised Supplier Code of Conduct is now seamlessly integrated into our supplier management system, requiring all suppliers to formally acknowledge its principles. This ensures a clear understanding and shared commitment to our high standards across our entire supply chain.



# Product quality and management

## OVERSIGHT

At Twist, our best-in class-Quality Management System (QMS) is the foundational framework that proactively ensures the safety and performance of our products for their intended use. Our Quality Policy explicitly underlines our unwavering commitment to customer satisfaction, rigorous legal and regulatory compliance, and delivering truly exceptional products and services. We consider this commitment to be a fundamental aspect of our organizational culture and values, fostering a collective accountability for achieving our quality objectives, continuously improving our practices, and meticulously maintaining an efficient QMS.

Our unwavering commitment to quality is powerfully demonstrated through consistently meeting stringent specifications, underpinned by rigorous technical evaluations and meticulous design and validation processes. Our dedicated Quality Assurance (QA) team, an intrinsic and integral component of our QMS, actively champions and supports all critical production functions, from proactive product release and precision calibration to comprehensive environmental monitoring, state-of-the-art facilities management, and thorough validation activities.

Complementing this, our Regulatory Affairs (RA) team strategically navigates the complex global landscape, ensuring Twist's unwavering compliance with all applicable regulations and laws set forth by the Food and Drug Administration, European Union Regulators (including IVDR), and other global authorities. We have proactively secured International Organization for Standardization (ISO) 13485:2016 certification for the QMS governing our key products in the NGS and Synbio space. This globally recognized standard for medical devices emphatically underscores our proactive commitment to a robust risk management framework and cultivates a highly skilled workforce through comprehensive training programs, rigorous competency assessments, and continuous professional development.

From design conceptualization through production and distribution, we proactively identify, rigorously assess, and effectively mitigate all potential risks across the entire product lifecycle. Recognizing the intricate nature of our global supply chain, we assure the unparalleled quality of all sourced raw materials and components through stringent supplier audits, robust quality agreements, and continuous performance monitoring. Our robust corrective and preventive action (CAPA) process ensures meticulous investigation of quality events, precise root cause analysis, and the implementation of impactful corrective actions, thereby consistently driving continuous quality improvement.



## STRATEGY

In line with our Quality Policy, we obtained ISO 13485:2016 certification and CE-marking for our EU IVDR product to ensure alignment with the requirements of our QMS for our key products, which is the industry's gold standard. ISO is a globally recognized network of international standards with over 18,000 standards that cover nearly every aspect of technology and business. ISO 13485 emphasizes the importance of a robust risk management process and requires that personnel are competent to perform their assigned tasks. At Twist, training and competency are core elements of our quality framework. We demonstrate our commitment to maintaining a highly skilled workforce through structured training programs, competency assessments, and continuous professional development initiatives.

We identify, assess, and mitigate risks throughout the product lifecycle, including all aspects of design, production, and distribution. Given the complexity of the supply chain in biotechnology, we ensure the quality of raw materials and components sourced from suppliers. This involves supplier audits, quality agreements, and ongoing monitoring. Our CAPA process defines how quality events are investigated, root causes identified, and corrective actions implemented, which enhances transparency. At Twist, customer feedback is systematically collected, analyzed, and used to drive continuous improvement which specifically includes product quality. To ensure our strict quality standards, we conduct regular internal audits to verify the effectiveness of the QMS. We have a well-documented QMS which is crucial for

traceability and compliance across the product lifecycle. Our approach to post-market surveillance, including complaint handling, data analysis, and reporting to regulatory authorities, demonstrates our commitment to end-user safety.

Twist continues to expand our ISO certification scope to include several additional products in our South San Francisco and Wilsonville facilities. We also continue to support CE-mark certification for the EU market. As we scale, training remains central to our quality culture, enabling us to deliver consistent, compliant, and high-quality products to our customers worldwide.

# Background on synthetic DNA and how it fuels product development

DNA's role as the fundamental building block of biology makes it a key component of many applications throughout several different industries. The ability to design and engineer DNA to drive innovative products is expanding at an unprecedented rate, driving significant growth across fields as diverse as medicine and data storage.

Synthetic DNA holds immense potential for developing sustainable products that are environmentally friendly and cost-effective, often replacing fossil fuels as primary materials. Through the power of our proprietary platform for manufacturing synthetic DNA, our customers can harness the capabilities of DNA to create groundbreaking applications across various industries, paving the way for a more sustainable future.



## APPLICATIONS OF OUR PRODUCTS

### Medicine

Research has shown that synthetic DNA plays a pivotal role in developing and producing next-generation therapeutics, including cell, gene, and nucleic acid therapies. The production of biologics and antibody drugs relies heavily on dependable synthetic DNA sources. Many of our products play a key role in enabling our customers to create NGS-based molecular diagnostic tools, crucial for personalized treatment of diseases such as cancer, Alzheimer's, and Parkinson's. Personalized medicine depends on the availability of individualized synthetic DNA to correct genetic mutations identified through NGS-based diagnostics using technologies like CRISPR or other genome editing tools.

Two examples of revolutionary applications are liquid biopsy—a blood test that can detect early-stage cancer—and tests for minimal residual disease (MRD), which can identify small amounts of circulating tumor DNA (ctDNA) in the blood. These developments have led to commercial availability of several tests, revolutionizing cancer detection and monitoring. Synthetic DNA is also critical for developing cell and gene therapies tailored to specific genetic mutations, potentially leading to more effective treatments.

Beyond personalized medicine, synthetic DNA plays a vital role in discovering new natural products through deep sequencing of environmental microbiomes and enables cost-effective production of key chemical compounds. These emerging applications highlight the importance of synthetic DNA in various scientific fields, emphasizing its potential to drive significant advancements in biotechnology, medicine, and beyond.



Photos provided to Twist by OncoDNA.

## Industrial chemicals

The chemical production industry is evolving towards bioprocesses that use atmospheric carbon dioxide (CO<sub>2</sub>) instead of petroleum as the carbon source. By introducing synthetic DNA into the genes of microorganisms like yeast, bacteria, and algae, these organisms can naturally ferment sugars to produce a wide range of chemicals. This method offers several key benefits:

- **Sustainability.** Utilizing CO<sub>2</sub> reduces dependence on petroleum, cutting greenhouse gas emissions and promoting environmental sustainability. This process leverages renewable resources, making it eco-friendly.
- **Diverse Product Range.** Synthetic DNA enables the creation of chemicals that are not accessible through petroleum-based processes. This includes high-value products like synthetic silk, cosmetics such as squalene, and other advanced materials.

This approach not only supports the shift towards greener and more sustainable industrial practices but also fosters innovation and may reduce production costs.



## Agricultural biotechnology and animal health

To ensure the security of the world's food supply, researchers continually engineer crops that can resist evolving pests and diseases, adapt to extreme drought and flood conditions, and grow more economically by increasing yield, which reduces the need for land, chemical pesticides and fertilizer use.

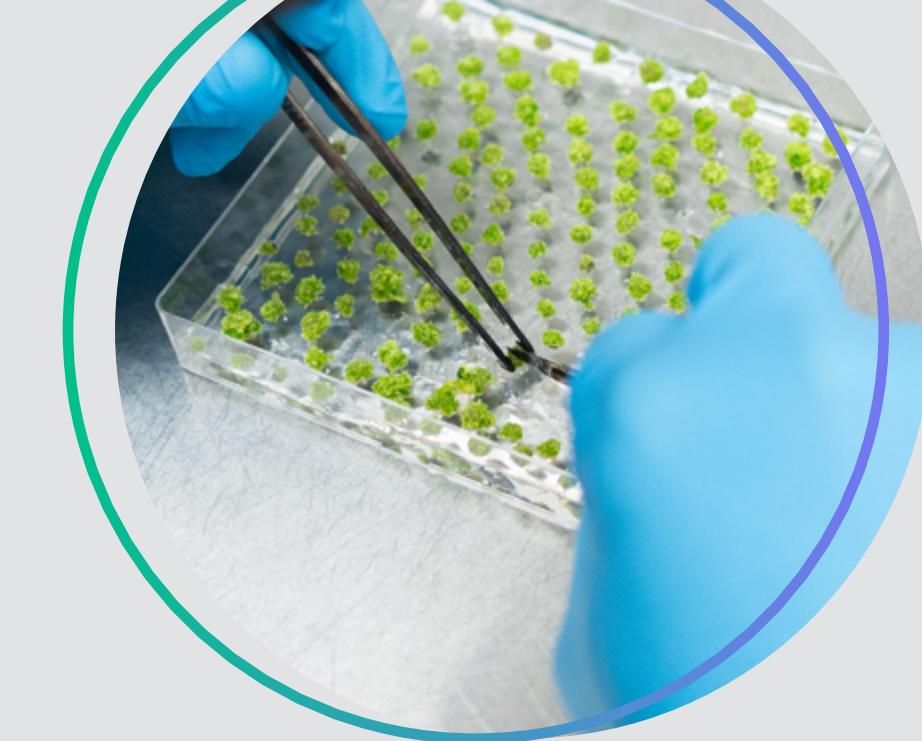
Current and emerging genomic technologies use synthetic DNA to add optimal traits to plants and their synergistic microbes. These technologies also enable the addition of multiple traits at once, which is known as trait stacking.

Synthetic DNA has facilitated the development of robust and cost-effective livestock diagnostic tests that screen for diseases, drive breeding decisions and are pivotal for health management.

Furthermore, NGS-based genetic tests make it possible for improved crop breeding and genomic selection. These tests allow for the identification of beneficial traits in plants (disease resistance, drought tolerance, and higher yields) at the genetic level. This facilitates selective breeding to develop crops with desired characteristics more quickly and precisely.

Researchers have used Twist NGS technology to identify the region of DNA in diverse noncommercial peanut varieties that have resistance to smut fungus. They now use this DNA as a marker to confirm efficient transfer of this resistance gene to commercial peanut varieties through genomic selection and speed breeding.

Sustainable maintenance and optimization of production plants and livestock are crucial for supporting local and global economies. Overall, synthetic DNA and genomics are revolutionizing agriculture by providing tools and insights that optimize productivity, sustainability, and resilience in farming systems.



*Photos provided to Twist by Phytoform.*

## PURSUING VERTICAL MARKET OPPORTUNITIES

### Drug discovery and development

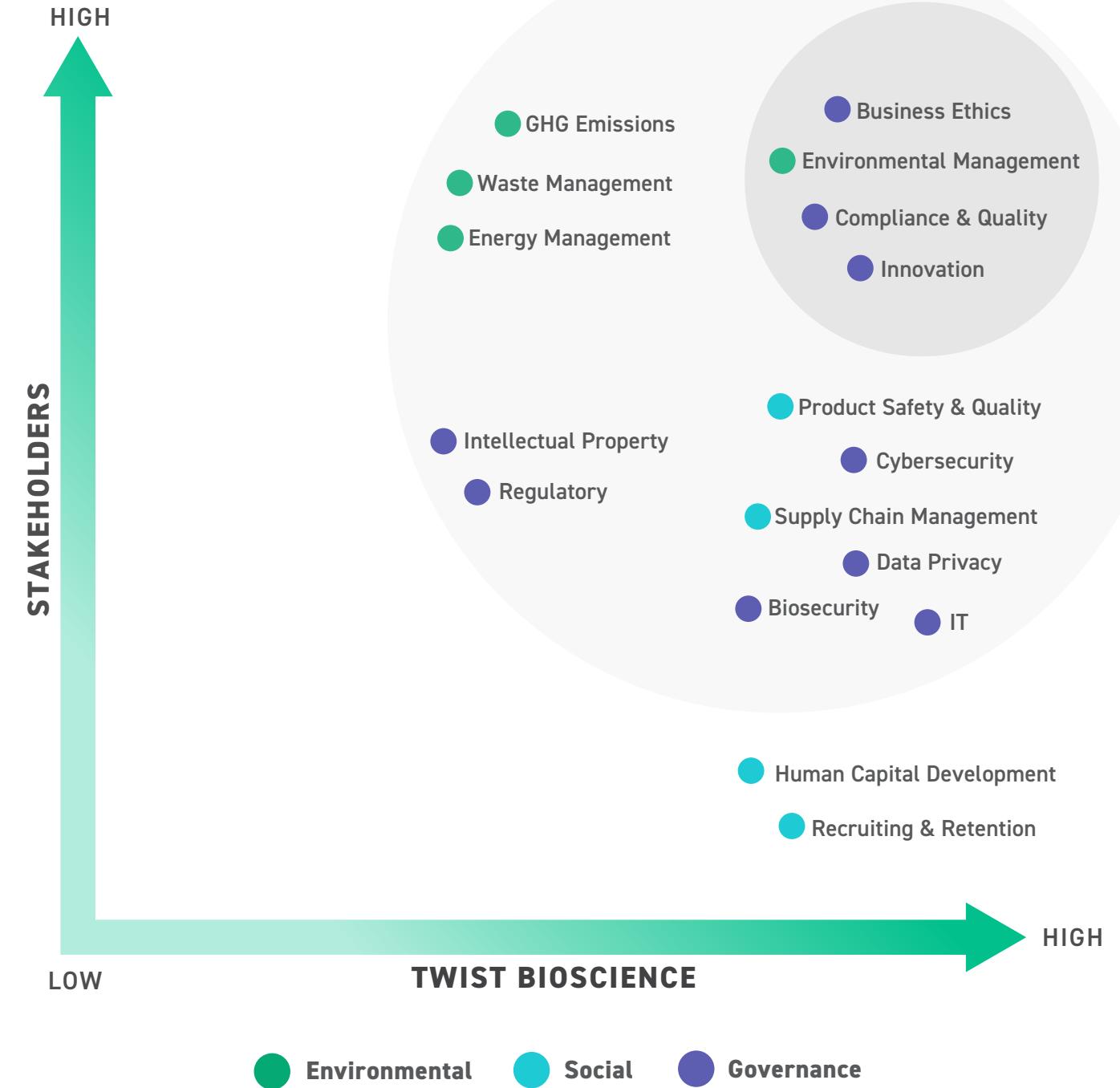
Our antibody discovery services combine cutting-edge technologies, advanced bioinformatics, and unparalleled expertise to deliver custom antibody solutions that surpass expectations for our partners. Whether our partner is navigating complex target landscapes or seeking to optimize antibody performance, our team applies in vitro, in vivo and in silico approaches to identifying lead antibodies against specific biological targets for our partners.



# Materiality assessment

An integral aspect of our Corporate Responsibility initiatives is our Materiality Assessment process. In 2024 we conducted a second assessment through a meaningful engagement with all our internal and external stakeholders to identify significant environmental, social, and governance risks that could impact Twist and our stakeholders.

This year's Corporate Responsibility Report includes a number of new disclosures as a result of our stakeholder engagement process. We have engaged executive members and various departments throughout the company. We have significant and meaningful engagement with our employees, customers, investors and suppliers. We then assessed the outcomes with the executive leadership team to determine the prioritization of risks and shared the findings with the Board of Directors. For each risk identified, we have established plans to mitigate them.



# Who leads Corporate Responsibility at Twist Bioscience

As a company, we are committed to Corporate Responsibility goals and have established an internal Corporate Responsibility Team.

Nelson Chan is our Board of Directors representative overseeing our Corporate Responsibility efforts. Angela Bitting is our Chief Corporate Responsibility Officer, with executive objectives and compensation tied to achieving Corporate Responsibility goals. Carlos Zapata is our Senior Staff Corporate Responsibility Specialist.



**NELSON CHAN**

Board of Directors, Lead Corporate Responsibility Representative



**ANGELA BITTING**

Chief Corporate Responsibility Officer



**CARLOS ZAPATA**

Senior Staff Corporate Responsibility Specialist

Our Corporate Responsibility Ambassadors represent diverse areas of the company and meet at least quarterly. These ambassadors include the following Twist Employees:



**PATRICK FINN**  
President & Chief Operating Officer



**ADAM LAPONIS**  
Chief Financial Officer



**PAULA GREEN**  
SVP, Human Resources



**SHANI MAMAN**  
VP, Supply Chain



**JAMES DIGGANS**  
Distinguished Scientist,  
Bioinformatics &  
Biosecurity



**JIMMY JIN**  
VP, Marketing



**KRISTIN BUTCHER**  
Senior Scientist



**SIYUAN CHEN**  
Chief Technology Officer



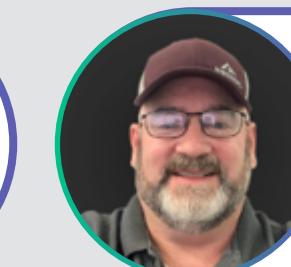
**DENNIS CHO**  
Chief Legal Officer & Corporate Secretary



**JUDY YAN**  
Assistant General Counsel,  
Corporate, Regulatory



**QUINNE ANDERSON**  
Director, Customer Success & Experience



**ROD WALSTON**  
Manager, Facilities

# Twist Bioscience Participates in the UN Global Compact

Twist Bioscience joined the United Nations Global Compact (UNGC) in October 2022, and we remain committed to our ongoing pledge to support the Ten Principles of the UNGC on human rights, labor, environment and anti-corruption.

Specifically, we committed to advancing support for the following Sustainable Development Goals (SDGs):



Using synthetic DNA, Twist's technology contributes significantly to achieving the zero hunger SDG by engineering crops for improved resilience and sustainability. This enhances food security, improves nutrition, and promotes sustainable agriculture. By making plants more resistant to pests and extreme weather and reducing reliance on fertilizers, Twist's synthetic DNA tools help ensure a stable and nutritious food supply while minimizing environmental impact.



Reducing pesticide reliance with synthetic DNA not only lowers environmental pollutants but also enhances community health. Additionally, synthetic DNA can help replace plastic with proteins, offering an eco-friendly alternative. In healthcare, synthetic DNA plays a crucial role in developing therapeutics and NGS applications, aiding in disease detection and monitoring. During public health crises like COVID-19 and the H5N1 bird flu, Twist provides synthetic positive controls to ensure the accuracy of diagnostic tests, enable development of therapeutic treatments and accelerate research.



At Twist, we are committed to building an inclusive company. Currently, 26% of our executive team and 44% of our total workforce identify as women. Additionally, 55% of our employees in the United States identify as people of color.



At Twist, we prioritize reducing waste in every possible way. Our labs embrace recycling programs, with our efforts recognized multiple years in a row through the Kimberly-Clark Greenovation Award for diverting over 31,000 lbs. of gloves from landfills since we began this program (through July 2025). Our platform minimizes the chemical reaction size needed to create DNA, cutting reagent usage by 99.8% compared to traditional methods. Additionally, we produce only the required amount of DNA, eliminating the need to discard excess oligonucleotides in the gene synthesis process.

## SECTION 2

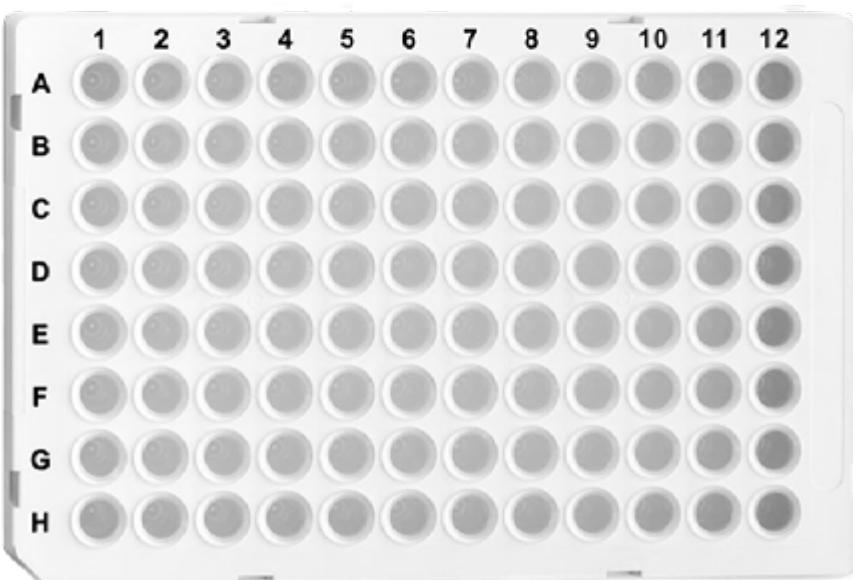
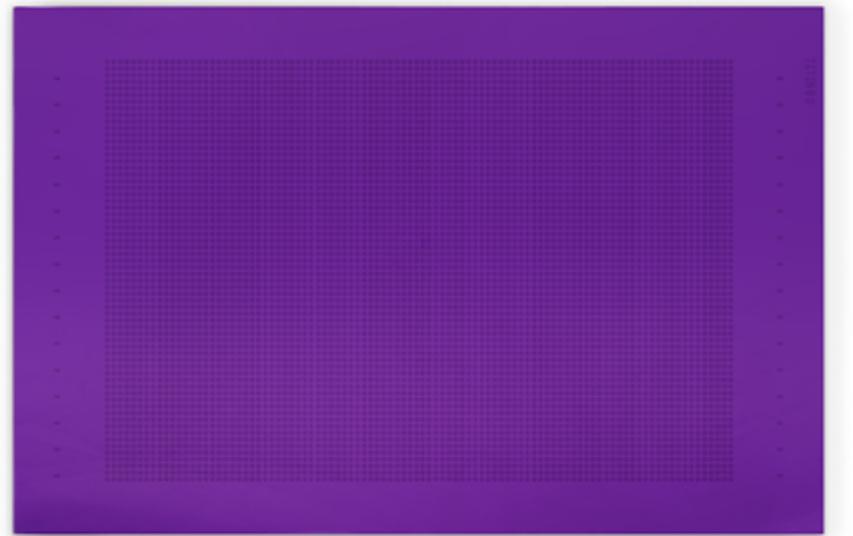
# Twist's Commitment to the Planet



# Sustainability is in our DNA

At Twist Bioscience, our corporate vision is to make synthetic DNA to improve health and sustainability. We recognize our crucial role in shaping a positive and prosperous future for our world and its inhabitants, remaining steadfast in our commitment to our mission: working in service of our customers who are changing the world for the better.

In line with this vision, we have made significant investments in our technology to ensure that our processes are not only innovative but also environmentally sustainable. In 2023, we conducted an analysis of the total carbon footprint involved in manufacturing a single gene using our silicon plate technology. The results were striking: one gene manufactured at Twist emits just 0.036 kilograms of CO<sub>2</sub>e. In stark contrast, the traditional 96-well plate approaches emit up to 23 kilograms of CO<sub>2</sub>e per gene. These calculations were validated by SRI Quality System Registrar in the United States, and Silinnov Consulting in France.



Our proprietary process and dedication to sustainability not only reduce our carbon footprint but also make Twist the sustainable choice for our customers. We are proud to support our customers in their endeavors to create positive change while also contributing to a more sustainable future for all.

## What is a carbon footprint?

A carbon footprint, as defined by the U.S. Environmental Protection Agency, is the total amount of greenhouse gasses emitted into the atmosphere by an individual, organization, or company. Various activities contribute to a carbon footprint, including electricity usage, manufacturing processes, commuting, and many others. Understanding a carbon footprint is crucial for recognizing how various activities contribute to climate change.

## What is a chemical footprint?

Every company has a chemical footprint, which signifies the total volume of chemicals utilized by an event, organization, service, building, or product. Minimizing the use of toxic or environmentally harmful chemicals throughout supply chains reduces hazardous waste, ensures a safer workplace for employees, and fosters a cleaner environment for the planet.

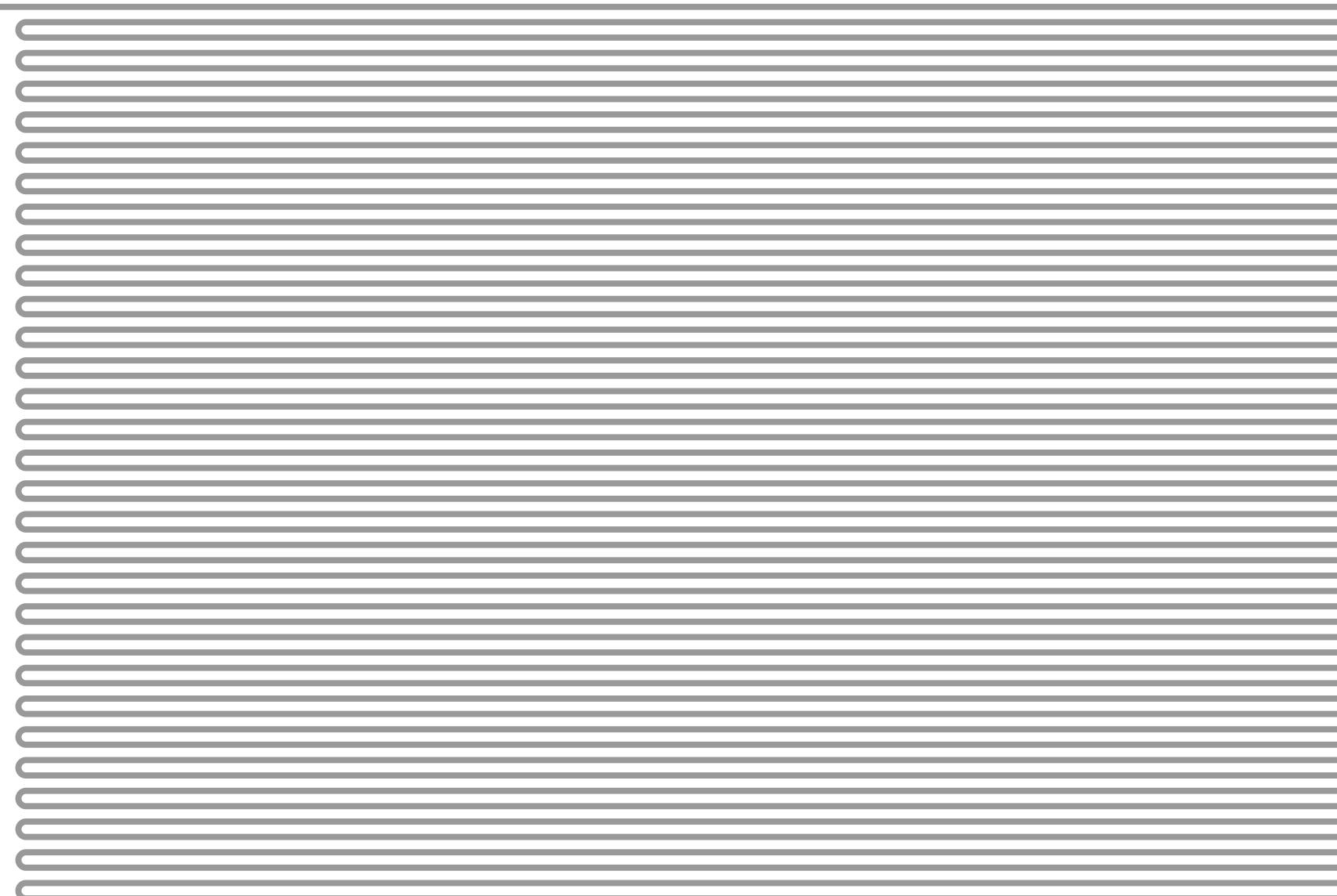
In FY24, Twist Bioscience shipped 773,000 genes. The carbon footprint (27,828 kgs. CO<sub>2</sub>e) of this production using our technology was the equivalent of 70,866 miles driven by an average gasoline-powered passenger vehicle in one year, or 3,131 gallons of gasoline consumed. If we had used the industry standard 96-well plate approach, the carbon footprint would have been equivalent to 2,000,563 gallons of gasoline consumed in one year, or 45,275,282 miles driven by an average gasoline-powered passenger vehicle.

Manufacturing **one gene** is equivalent to driving:



**TWIST BIOSCIENCE**

**0.092 miles** (0.15 km)



1 horizontal line = 1 mile driven

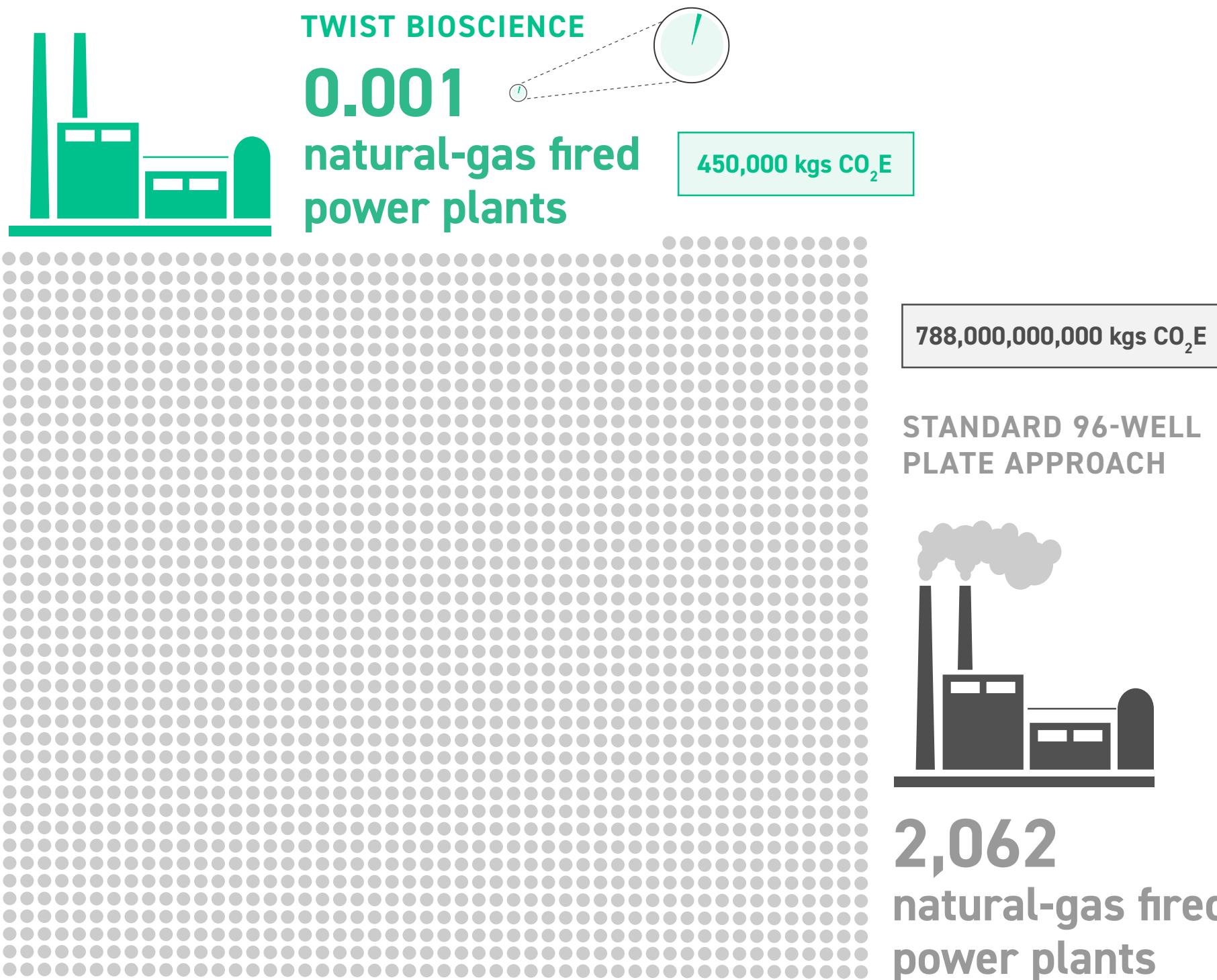
From the EPA Greenhouse Gas Equivalencies Calculator EPA 2024

\*Calculated Twist internal data using Dr. Oligo benchmark January 2021.

We did not stop at calculating the carbon footprint of manufacturing our genes. In 2024, we took this further and calculated the carbon footprint of our oligo panels manufacturing process. The findings were, again, stunning. Our oligo manufacturing process generates just 0.0025 kilograms of CO<sub>2</sub>e emission per panel, in contrast to the industry standard\* approach CO<sub>2</sub>e emission of 28.4 kilograms per oligo panel. And as with our gene manufacturing carbon footprint validations, these calculations were validated by SRI Quality System Registrar in the United States, and Silinnov Consulting in France.

The CO<sub>2</sub>e produced in FY2024 from **manufacturing oligos** is equivalent to:

(Specific to NGS TE Panels)



From the EPA Greenhouse Gas Equivalencies Calculator EPA 2024

# Chemicals used in Twist Bioscience's workflow

At Twist Bioscience, we excel in DNA synthesis. To manufacture our synthetic DNA, we use phosphoramidite chemistry. For a detailed explanation of this process, [please visit our blog](#).

## 6 MAIN COMPONENTS USED IN OUR WORKFLOW:

### Phosphoramidites

The building blocks of synthetic DNA

### Activator

Activates the new phosphoramidite for addition to the growing DNA strand

### Oxidizer

Forms a more stable chemical linkage between the newly added base and the growing DNA strand

### Capping Reagents

Blocks off any DNA molecules that did not react as intended in the previous cycle

### Deblock

Removes protective chemical groups on the end of growing DNA strand to enable next cycle

### Wash

Removes active chemicals from the surface between steps, minimizing unintended reactions

# Continuous Process Improvements

At Twist, we are dedicated to continually enhancing our internal operations to better support the groundbreaking research our customers conduct across a wide range of industries—and to further improve the sustainability of our products.

We have expanded our Twist Express Genes, preps and IgGs offering to include midiprep (10 µg to 100 µg) and maxiprep (100 µg to 1 mg) DNA preparations, with turnaround times starting at just four business days.\* By delivering rapid gene synthesis across a range of prep scales, we're helping researchers accelerate discovery and streamline their workflows.

We also made meaningful progress in advancing our sustainability goals. Key steps included fully automating critical components of our NGS Panel manufacturing, which eliminated plastic waste previously generated by manual processes.

Additionally, we assessed our lab resource usage and launched several initiatives to cut waste, scale production, and improve product quality—including more than doubling the efficiency of a key chemical used in our processes.

\*Turnaround time for Express Genes starts at 4-7 business days and increases to 8-10 business days for 10 µg - 100 µg and 100 µg - 1 mg DNA prep scales. Onboarding your own custom vector will incur 1-2 weeks additional turnaround time.



# Recycling Programs at Twist

## OVERSIGHT

Twist is committed to sustainability beyond our DNA synthesis platform, recognizing the critical need to minimize waste throughout the supply chain. By using miniaturized chemistry, the company significantly reduces its chemical footprint while scaling the DNA synthesis process. In addition, Twist believes that achieving a sustainable future requires going beyond products to address the challenge of sustainable science by recycling plastic gloves, PPE, reducing plastic waste in labs and more.

*We use far fewer gloves than traditional processes would require. And for the gloves we do use, we make sure they don't go to waste.*

## THE RIGHTCYCLE™ PROGRAM

Since 2019, Twist has partnered with The RightCycle™ Program from Kimberly-Clark Professional to recycle nitrile gloves. Gloves are collected in designated reusable bins and shipped in recycled boxes to processing facilities, where they are transformed into new pellets for other consumer products including adirondack chairs.

Our miniaturization technology dramatically reduces the amount of consumables we need in the first place—meaning we use far fewer gloves than traditional processes would require. And for the gloves we do use, we make sure they don't go to waste. Through our glove recycling program, we've kept more than 31,422 pounds of gloves (over 15.7 tons) out

of landfills over the past seven years. A huge thank you to our recycling partner, Kimberly-Clark Professional, for recognizing this milestone with a beautiful award and for helping us turn efficiency into real environmental impact!

As a result of our efforts and commitment, Twist has received the Kimberly-Clark Professional Greenovation Award every year since 2020, including 2025. This recognizes our waste diversion achievements. Twist takes pride in this program and aims to inspire similar initiatives for a more sustainable future.

### How Twist's partnership with The RightCycle™ Program works:



Gloves and eligible PPE are collected at Twist



They are taken to a recycling center and processed into plastic pellets



Raw materials are molded into new consumer products

## PARTNERSHIP WITH POLYCARBIN

In September 2022, Twist Bioscience partnered with Polycarbin to recycle plastic tip boxes used in our R&D labs in South San Francisco. Subsequently, we expanded this program to include our Wilsonville, OR and Quincy, MA facilities.

Since then, as of July 15, 2025\*, we have achieved the following:

- Diverted 28,350 lbs. of single-use scientific plastic from landfills.
- Over 44,073 lbs. of crude oil equivalents displaced in manufacturing.
- Approximately 159,369 lbs. total CO<sub>2</sub>e reduced by purchasing Polycarbin products.
- Approximately 18,930,590 liters of water conserved through closed loop recycling.

Again, our miniaturization technology dramatically reduces the amount of consumables we need in the first place, but these metrics highlight the impact of Twist's ongoing efforts with Polycarbin and our strong commitment to the planet and the environment.

We remain committed to seeking further opportunities where our operations can positively impact the environment.

Since 2022, Twist has:



Conserved approximately 18,930,590 liters of **water**



Diverted 28,350 kg of **single-use plastic** from landfills



Reduced approximately 159,369 lbs total of **CO<sub>2</sub>e**

\*July 15, 2025 reporting through PolyCarbin recycling equivalence numbers. These numbers were generated by use of PolyCarbin calculator.

# Sustainable packaging

As we continue to seek further opportunities where we can make a positive impact on the environment, in 2023, Twist Bioscience partnered with Veritiv to adopt more sustainable packaging for our product shipments. We now utilize highly efficient coolers that require less dry ice. Our boxes contain 50% recycled material and are recyclable.



# Sustainable events

Twist proudly partners with Minnac Life Sciences, an event supplier certified to ISO 20121 (the international standard for sustainable event management). This ensures that specific events are delivered using ISO-aligned practices, including responsible sourcing, waste reduction, digital-first materials, and a commitment to continuous improvement in sustainability. We are proud to work with a partner who shares our values and supports our efforts to reduce the environmental impact of our events.

# Battery recycling

As a company, we are committed to many forms of recycling, including batteries. We have placed battery recycling boxes throughout our sites for employees to recycle all types of batteries they use, even from their homes.

Since starting this program, we have proudly recycled more than 40 pounds of batteries.

## SECTION 3

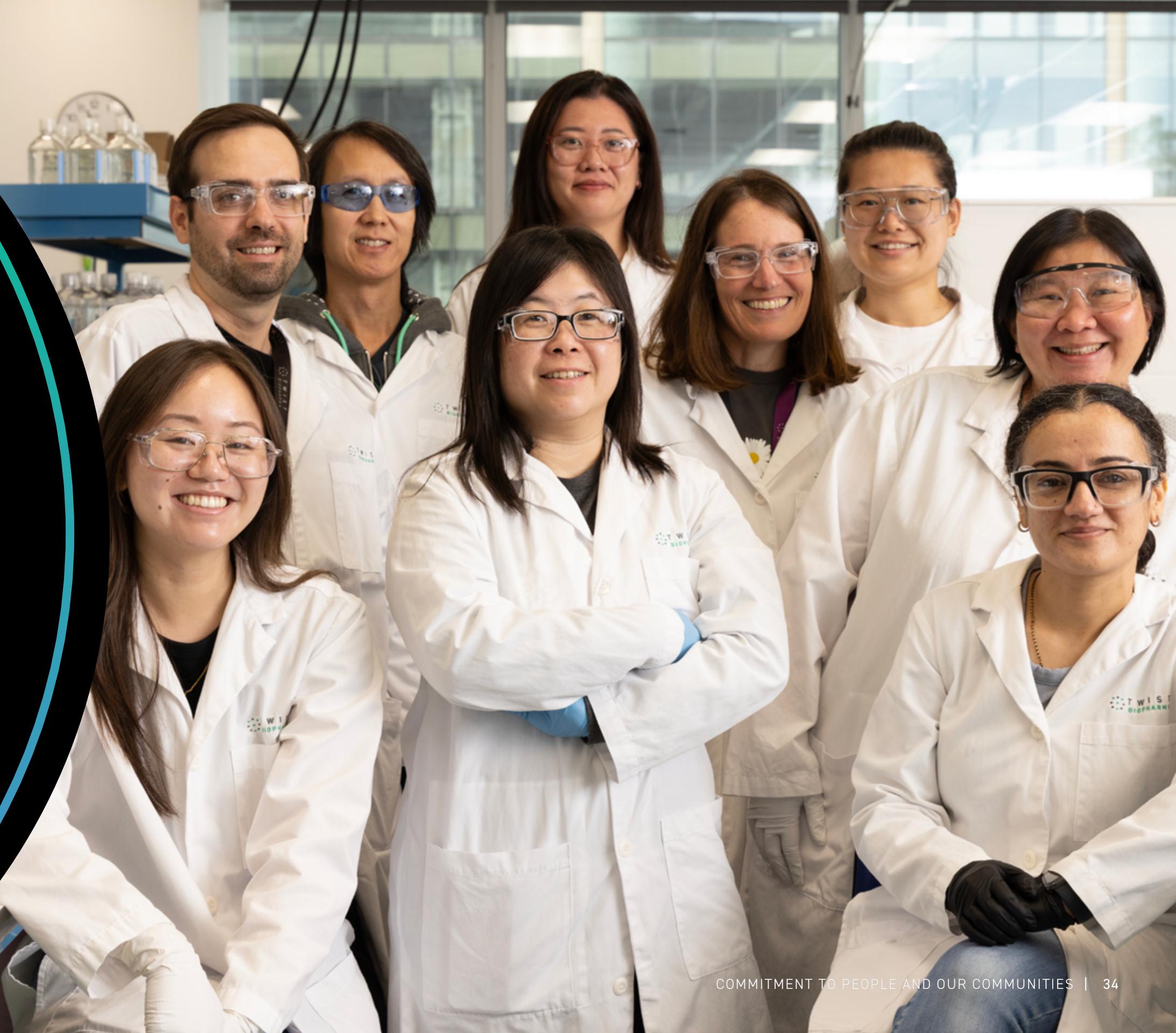
# Twist's Commitment to People and Our Communities

# Diversity is in our DNA

At Twist, we recognize that our people are our most valuable asset. We are deeply committed to, and invest in, attracting, developing and retaining a performance-driven diverse and talented global workforce.

We strive to create an inclusive, respectful, and safe workplace where every employee feels empowered to contribute fully—regardless of gender, age, race, ethnicity, national origin, sexual orientation, gender identity, disability, education, or any other defining characteristic.

Twist provides equal opportunities for employment and advancement at all levels, and we value the distinct perspectives that individuals from diverse backgrounds bring to our boardroom, leadership teams, and broader organization.



# Human Capital Management

## OVERSIGHT

Our dedicated team of seventeen full-time professionals oversee all facets of human resources, focusing on attracting, retaining, and engaging our employees. We continuously seek innovative approaches and strategies to recruit top talent.

At the Board level, human capital management is overseen by our Compensation Committee, which receives quarterly updates from our Senior Vice President of Human Resources. Our executive team also stays informed with regular updates on workforce-related matters.

## A GREAT PLACE TO WORK

To strengthen diversity in our recruitment efforts, we've established partnerships with community colleges and universities in California, Oregon, and Massachusetts. Through these collaborations, we hire students directly from their programs, support the Bioscience Development Hub initiative, and participate on the Advising Committee to help guide the development of biotech curriculum.



# Building the future workforce

Investing in STEAM education and talent development

At Twist Bioscience, we are committed to cultivating a diverse and future-ready workforce. We achieve this through strategic initiatives focused on engaging youth, forging strong educational partnerships, and collaborating with workforce development leaders, community organizations, and industry trade associations.

## KEY INITIATIVES AND HIGHLIGHTS

### Apprenticeship Program

Launched in August 2024, our joint apprenticeship program with Access Bio provides hands-on experience in manufacturing and operations roles. We are expanding this initiative to include additional apprentices in Spring and Fall 2025. This program reflects our dedication to early career development and investing in local talent.

### Pathways to STEAM Conference

On November 12, 2024, Generation STEAM held the pathways to STEAM Conference in South San Francisco, engaging 60 students from the San Francisco Unified School District. Students participated in interactive workshops led by professionals from various industry partners, including Twist Bioscience, gaining insights into real-world STEAM applications.

## SUPPORTING EFFECTIVE EDUCATIONAL PROGRAMS THROUGH VOLUNTEER AND MENTORING OPPORTUNITIES

### Educational Partnerships

We actively collaborate with universities and community colleges, sharing industry perspectives to shape curricula and career technical education programs. Twisters volunteer their time to provide mentorship, mock interviews, resume critiques, career panel discussions, industry presentations, and facility tours.

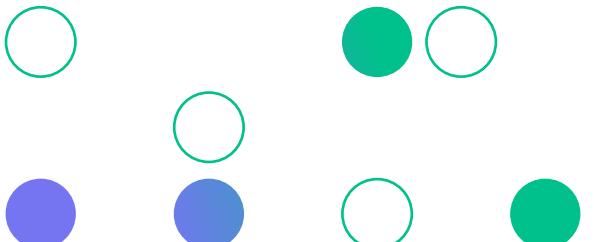
PHOTO: Twist Bioscience interns



# Leadership and development

## OVERSIGHT

We are a performance-driven culture that employs a diverse workforce. Our workforce remains a differentiating strength, enabling us to attract a wide range of talent and perspectives. We believe our varied backgrounds fuel innovation and deepen employee engagement. Once individuals join our team, we prioritize their growth and development, with a strong focus on internal advancement. We emphasize building cultural agility and effective communication to support long-term success and career progression.

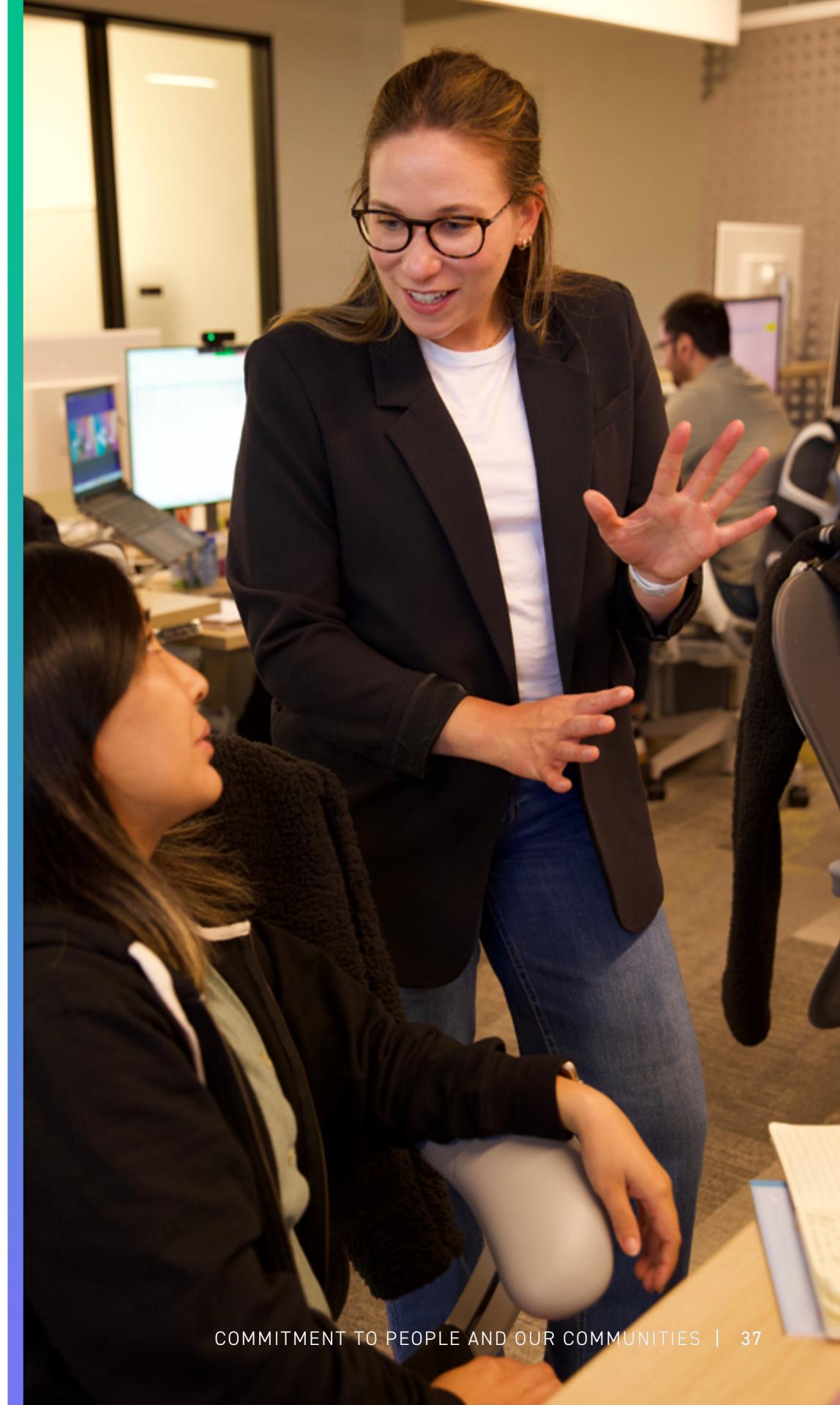


## STRATEGY

At Twist Bioscience, we invest both financial and human resources to cultivate the talent needed to maintain our leadership in innovation and position ourselves as an employer of choice. Our performance management system is closely aligned with our core values, with a strong focus on continuous learning and development—especially during our annual performance reviews. We actively encourage cross-functional collaboration and communication to broaden our employees' skill sets and create clear paths for growth. To further support leadership development, we offer a comprehensive program twice a year specifically designed for mid-level managers.

To support ongoing education, Twist provides up to \$5,250 annually in tuition reimbursement. We've also implemented an on-demand, video-based online learning platform that enables employees to refine their skills and explore new software tools. As part of our performance review process, we've introduced a platform to help employees and managers create personalized development plans.

In the last fiscal year, Twist invested almost \$400,000 in employee learning, training, and development—offering self-directed learning opportunities companywide and leadership coaching to 195 employees.



# Culture

## OVERSIGHT

At Twist, our employees come from a wide range of backgrounds, and we value each person for the unique perspective they bring to the company. We employ a rigorous performance-driven culture where diversity expands beyond race and gender to cultural background, upbringing, work experience and so much more. By bringing together diverse viewpoints we experience more conflict but also push beyond comfort zones to approach challenges from a new frame of reference. Because we bring multicultural expertise, we find that our varied perspectives squash “group think” and uniquely advantage us to remain nimble and innovative, driving better business decisions and more successful outcomes for the company, which has been validated by numerous studies. Ultimately, sound business decisions and successful outcomes strengthen our ability to deliver sustained value to both customers and shareholders.

## STRATEGY

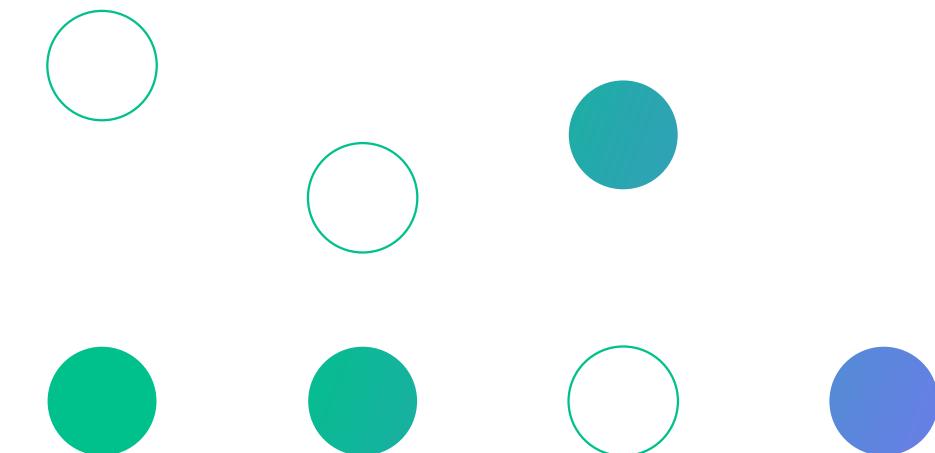
At Twist Bioscience, we are committed to building an inclusive workplace that values diversity and promotes equity, with a strong focus on supporting underrepresented groups. Our efforts span the entire employee experience—from recruitment and retention to learning, engagement, and partnerships within the broader community.

To foster greater understanding across diverse backgrounds, we host monthly Culture Conversations, which explore a wide range of topics such as disability, LGBTQIA+ identity, ageism, and Hispanic/Latino identity. These sessions are designed to celebrate individual experiences and challenge stereotypes based on single traits.

Culture Conversations also deepen our understanding of intersectionality, using speakers and open dialogue to examine how overlapping social identities shape people’s unique experiences, challenges, and opportunities. We are unwavering in our commitment to a respectful and harassment-free workplace, requiring annual training for all employees and managers on identifying and addressing inappropriate behavior.

In addition to workplace inclusion, we actively engage underrepresented groups through targeted recruiting efforts and partnerships with local community colleges. We also invest in STEM education across different age groups and demographics, helping create clear pathways into synthetic biology careers.

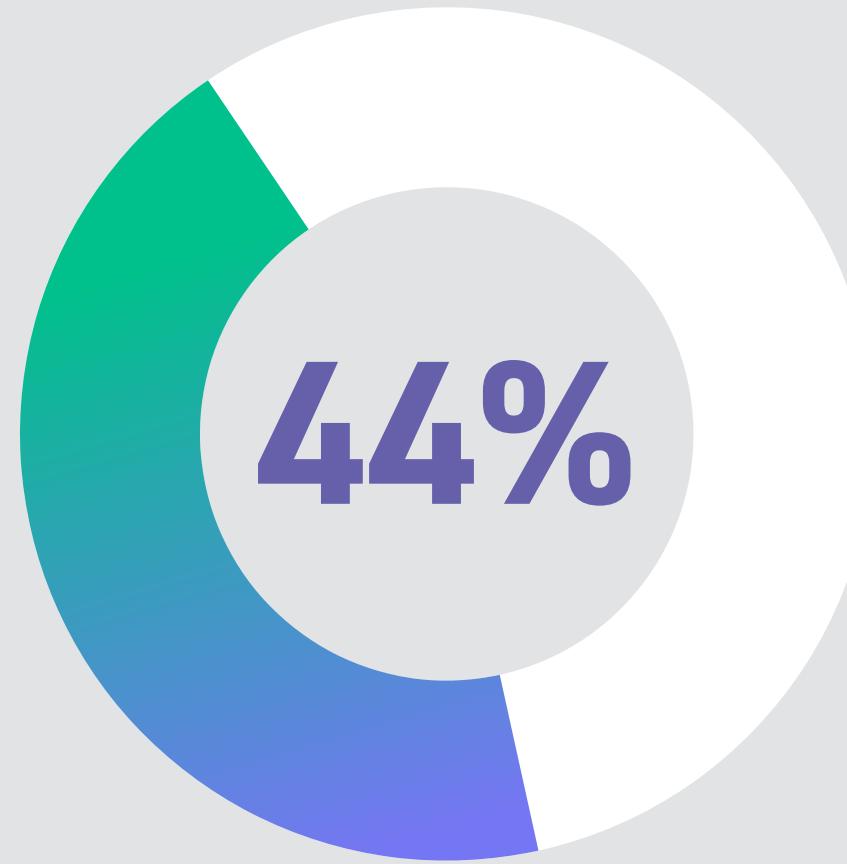
Twist Bioscience remains dedicated to promoting diversity and inclusion at every level of the organization—supporting career growth for women and underrepresented employees, while prioritizing diverse hiring for leadership roles.



# Women at Twist by the numbers

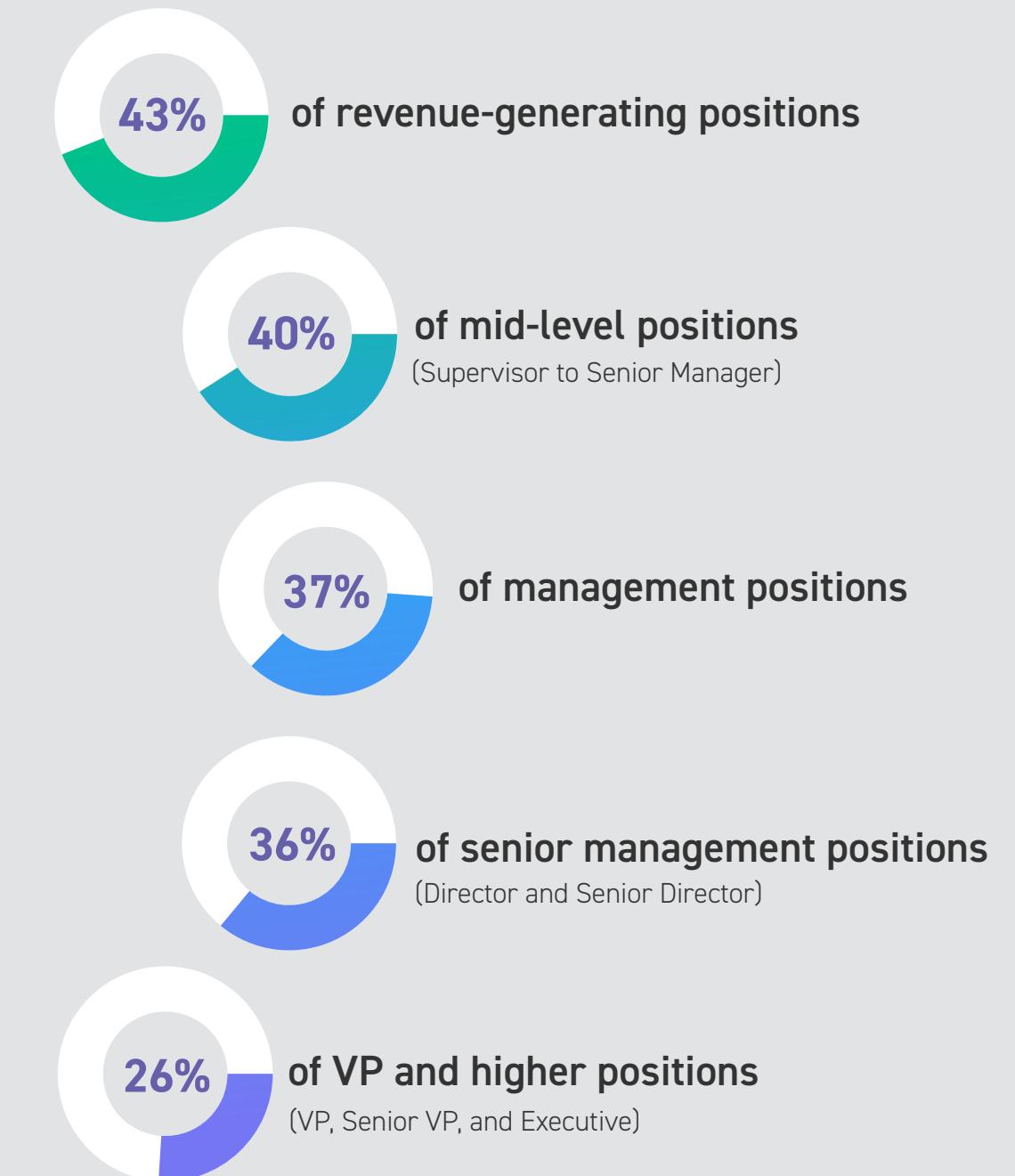
At Twist, we take pride in our strong commitment to gender equality and in cultivating an environment where women have equal opportunities to grow and lead. Women are well represented throughout the organization, including in key leadership positions.

As of the end of our fiscal year on September 30, 2024, women made up 44% of our total workforce. Additionally, many women hold revenue-generating roles, reflecting our ongoing dedication to achieving gender parity across all areas of the company.



of our total workforce

**Women at Twist are:\***



\*Data as of September 30, 2024.

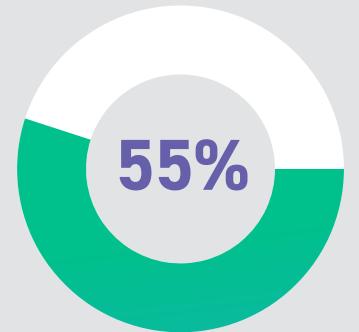
# Race and ethnicity at Twist

Since our inception, Twist's leadership team has made it a priority to cultivate a diverse and inclusive culture, recognizing that a wide range of cultural perspectives is essential to building innovative and high-impact teams. As of our fiscal year end on September 30, 2024, 55% of our U.S. workforce identified as individuals of color, and 23% of our organization identifies as women of color.

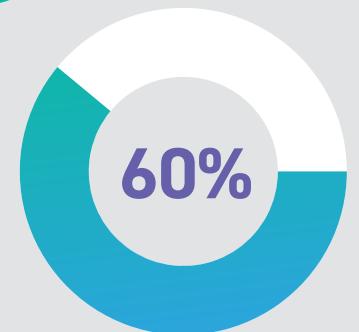
We are deeply committed to fostering a workplace where inclusivity and allyship are integral to our culture. Through ongoing diversity education, we aim to create a strong sense of belonging for underrepresented communities at Twist. Our workforce reflects this commitment, with representation including 10% Hispanic/Latino, 3% Black or African American, 2% Native Hawaiian or Pacific Islander, 34% Asian, 7% identifying as two or more races, and individuals from American Indian/Alaskan Native backgrounds. This diversity is present across all departments and organizational levels.

Looking ahead, we remain focused on tracking our progress in leadership development and further strengthening diversity across our leadership ranks.

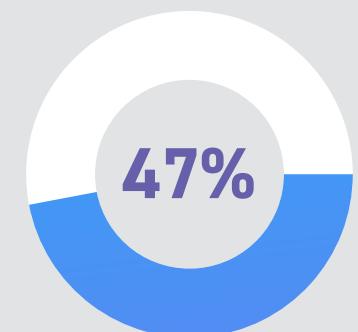
**People of color at Twist are:\***



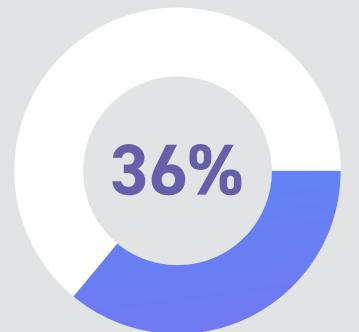
of our organization



of mid-level managers



of senior positions



of VP and higher positions

\*Data as of September 30, 2024. Data on race/ethnicity for U.S. employee base only.

RACE AND ETHNICITY AT TWIST	TOTAL EMPLOYEES	MID-LEVEL MANAGERS	SENIOR POSITIONS	VP AND HIGHER POSITIONS	REVENUE GENERATING POSITIONS
<b>Hispanic/Latino</b>	10%	13%	2%	5%	12%
<b>White</b>	45%	40%	53%	64%	64%
<b>Two or More Races</b>	7%	7%	7%	0%	5%
<b>Black or African American</b>	3%	0%	2%	5%	3%
<b>Native Hawaiian or Pacific Islander</b>	2%	2%	2%	0%	0%
<b>Asian</b>	34%	37%	35%	23%	16%
<b>American Indian or Alaskan Native</b>	1%	1%	0%	5%	0%
<b>Women of Color</b>	23%	24%	22%	5%	17%
<b>Men of Color</b>	32%	36%	25%	32%	19%
<b>Total People of Color</b>	55%	60%	47%	36%	36%

Data as of September 30, 2024.

NOTES

1. There are limitations in the way the federal government collects race/ethnicity data. For example, individuals may identify as Hispanic/Latino and an additional race/ethnicity, but may only be reflected as Hispanic/Latino in the data.
2. People of color includes Hispanic/Latino, Black or African American, Native Hawaiian or Pacific Islander, Asian, American Indian or Alaskan Native, and Two or More Races.
3. Data on this page for U.S. employee base only.

# Employee engagement

## OVERSIGHT

Twist Bioscience conducts an annual employee engagement survey to gauge cultural alignment and coherence. This survey assesses how well the company's culture aligns with employees' behaviors and how these behaviors contribute to organizational success. In the most recent survey, 93% of Twist employees participated, with the following key findings:

- 93% understand Twist's mission.
- 90% understand how their individual goals contribute to Twist's objectives.
- 87% understand how their contributions align with the company's mission.

## STRATEGY

Our executive leadership team identified targeted, department-specific initiatives based on insights from our annual employee engagement survey. Each executive is responsible for driving a core objective aligned with their department's goals, supporting our broader commitment to improving employee engagement. To foster open communication and active participation, Twist hosts:

- All employee meetings 2x per month led by the CEO or President
- Monthly manager meetings for all people managers led by the CEO or President

Additionally, we maintain a dynamic intranet platform delivering regular updates on company happenings and events. Our intranet, "The Strand" serves as a go-to hub for Twisters seeking up-to-date information on all fronts.



# Compensation and benefits, health and wellness

## OVERSIGHT

We are committed to offering a comprehensive total rewards package designed to meet the diverse needs of our employees. In the United States, this package features competitive compensation that exceeds living wage standards, fully covered healthcare benefits for employees, and 85% or higher coverage for their families. Employees also receive above benchmark Health Savings Account (HSA) contributions for themselves and their dependents, approximately four weeks of paid time off, a minimum of 16 weeks of parental leave for all global employees, flexible work arrangements, and commuter benefits.

All full-time employees—both exempt and non-exempt—are granted equity in the company, with a few country-specific exceptions, through Restricted Stock Units (RSUs) and the ability to participate in our Employee Stock Purchase Plan (ESPP).

To further support fertility and family-building, we provide access to an expert-designed educational platform with resources covering treatments, fostering, adoption, egg freezing, egg donation, and tailored support for LGBTQIA+ families and single parents. We also prioritize employee well-being through a range of mental health and wellness offerings,

including stress monitoring tools, sleep and meditation apps, guided relaxation sessions, and telehealth mental health services in the United States.

In January 2022, Twist introduced a 401(k) matching contribution program, along with pension benefits where applicable. Our executive leadership remains committed to regularly evaluating and enhancing our benefits to ensure we provide the strongest possible support for our team.



# Health and Safety

## OVERSIGHT

At Twist Bioscience, the safety and well-being of our employees are our top priorities. We have charters, policies, and plans in place to guide our Health and Safety program.

## STRATEGY

Our strategy is to 1) engage all employees to help eliminate or minimize recognized workplace hazards, (2) collaborate and share lessons learned from workplace incidents to better protect employees, and (3) encourage and promote safe work behaviors through ongoing education and training.

INCIDENT RATE [Total recordable injuries]	GOAL	2021	2022	2023	2024	INDUSTRY AVG
<b>Site 1</b>	0.00 [0]	0.25 [1]	0.76 [5]	0.52 [2]	0.70 [3]	0.90
<b>Site 2</b>	<1.00 [2]	—	0.00 [0]	1.28 [3]	1.81 [5]	2.00
<b>Site 3</b>	0.00 [0]	—	0.00 [0]	0.00 [0]	2.89 [1]	0.90

Data as of December 31, 2024.

## EXECUTION

We have EH&S professionals overseeing our three U.S. manufacturing sites. Recent examples of safety initiatives include (1) deployment of hand safety training to our operations team, teaching hand safety best practices to reduce hand injuries and (2) launching a prescription safety glasses program to provide comfortable & effective PPE to our employees who require safety glasses to perform their work.

Below is our Incident Rate for Total Recordable Injuries covering a four-year period as well as the company's 2024 Lost Time Injury Frequency Rate:

LOST TIME INJURY FREQUENCY RATE	2024
U.S. SITES	1.99



# Our community/ philanthropy

## EMPLOYEE VOLUNTEER TIME OFF

As a company committed to social responsibility and supporting our employees' passion for giving back, we're proud to share that in fiscal year 2024, Twist employees dedicated a total of 423 volunteer hours to causes and organizations that matter to them. This milestone was made possible through our Volunteer Time Off program, which offers each employee eight paid hours per year to engage in volunteer work.

Building on this momentum and through our growing community partnerships, we remain focused on increasing employee volunteer hours each year in the communities where we live and work.



## LIFE SCIENCE CARES

Twist is proud to participate in the Life Science Cares (LS Cares) initiative—a coalition of life science companies united in the mission to combat poverty and inequality in the San Francisco Bay Area, Boston, Philadelphia, and San Diego. This partnership gives our employees meaningful opportunities to engage with impactful community organizations.

Looking ahead, we will continue working alongside LS Cares to explore new opportunities for involvement with organizations across their network. LS Cares focuses on closing three critical gaps: survival, education, and sustainability.

## TOY DRIVE

This past holiday season, Twist once again served our local communities through volunteering and toy drives. We partnered with several local organizations to give back to the communities where we operate.



## INTERNATIONAL GENETICALLY ENGINEERED MACHINE (iGEM) FOUNDATION

Twist Bioscience is a proud and long-standing supporter of iGEM, the global synthetic biology competition that began with undergraduate participants and has since grown to include high school students, entrepreneurs, community labs, and more.

As a key partner, Twist has transformed how iGEM teams contribute to the Registry of Standard Biological Parts—an open-access resource for the synthetic biology community. Teams can now submit their part sequences and documentation to the Registry, and Twist synthesizes samples of these parts for use in the following year's competition. Each participating team receives up to 10kb of synthetic DNA to support their project development.

In fiscal year 2024, Twist generously provided 647,843 total base pairs of DNA and 635 genes to 94 iGEM teams, helping to advance innovation and hands-on learning in synthetic biology worldwide.

## SECTION 4

# Twist's Commitment to Ethics and Governance

## Guiding principles and business ethics

Our core principles—Grit, Impact, Service, and Trust—are the foundation of our culture. They guide how we collaborate, support open and constructive feedback, and strengthen our brand identity. At the center of everything we do is Service—it drives how we operate and how we engage with both colleagues and customers. We are committed to consistently exceeding the expectations of our internal teams and external partners alike.



*PHOTO: Twist Bioscience. Wilsonville, Oregon facility.*

# Data Protection and Information Security at Twist

Protecting customer and partner data is a critical responsibility and top priority at Twist. Our customers and partners trust us with confidential information that could become the basis of their intellectual property.

For Twist, protecting critical customer data involves implementing robust security measures to safeguard sensitive and confidential information from unauthorized access, breaches and cyber threats as well as using encryption, secure storage systems, and strict access controls. We have established clear data handling policies, regularly train employees on security best practices and stay compliant even ahead of relevant national and international data protection regulations. Regular security audits and updates to systems are essential to address emerging vulnerabilities.

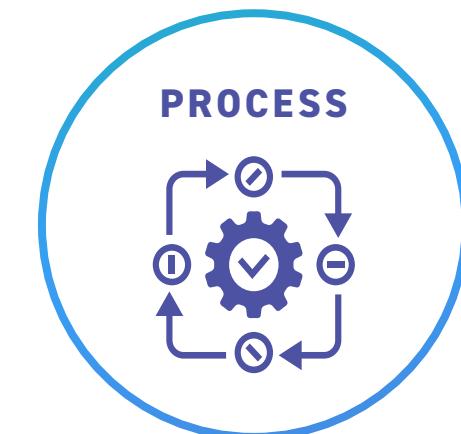
Twist's Information Security program, like our Quality, Privacy, and Biosecurity programs, is built upon the foundation of international standards and is overseen by experts in the field and rigorously and continuously scrutinized.

Twist is ISO 27001-certified to the most up to date 2022 revision of the standard. An accredited, independent certification body audits Twist each year to make sure that all working parts of the Information Security program – our People, our Processes, and our Technology – comply or exceed the standard. Our Board of Directors oversees all efforts at the highest level of the company.



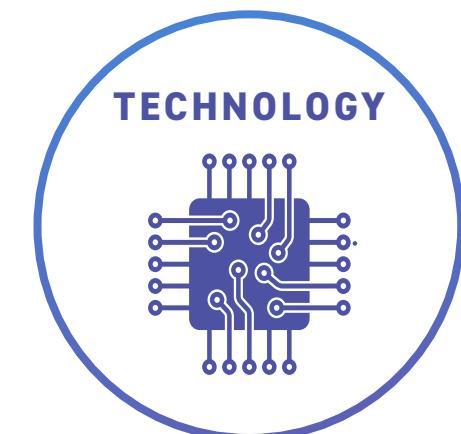
PEOPLE

Executive sponsorship.  
User buy-in “security consciousness.”  
Change people’s behavior and thinking.  
Acquire security oriented skills.



PROCESS

Governance.  
Policies and procedures.  
Compliance monitoring.  
Performance KPIs.



TECHNOLOGY

Protective.  
Detective.  
Monitoring.  
Intelligent defensive technology (AI).

## PEOPLE

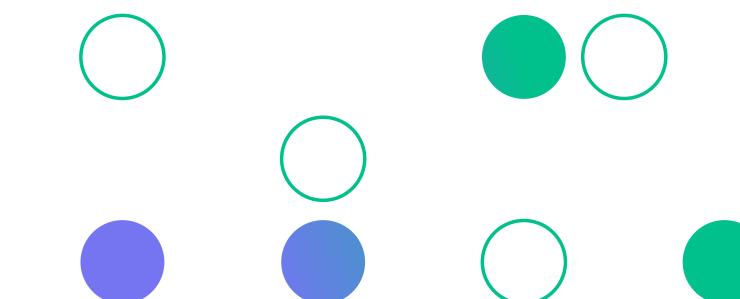
- All company employees are trained in our Cybersecurity Awareness program which includes phishing and social engineering. The program includes yearly training, quarterly testing, and weekly informational campaigns to keep digital safety high in our team's consciousness.
- We perform employee background checks, clearly delineate roles and responsibilities, apply a strict philosophy of least privilege governing access control, and we build segregation of duties into our policies and operations.
- We partner with compliance experts, penetration testers, security operation center teams, law firms specializing in cybersecurity, and national and global agencies including the Center for Internet Security (CIS), MITRE, the United States Computer Emergency Readiness Team (US-CERT), the Cybersecurity and Infrastructure Security Agency (CISA), and the Federal Bureau of Investigation (FBI).
- Our Executive Leadership Team (ELT), Audit Committee (AC), and Product Approval Committee (PAC) are all regularly briefed on the company's cybersecurity posture and provide guidance on strategy and priorities.
- The Board is briefed on our Cybersecurity landscape and Roadmap, maturity on a semi-annual basis.

## PROCESS

- Annual audits and re-certification for ISO 27001 to ensure data protection practices comply with applicable laws and cybersecurity best practices.
- Annual risk assessment run by ISMS team and sponsored by the CIO.
- Annual penetration testing performed by an accredited, third-party agency.
- Continuous vulnerability scanning and mitigation both in our code and in our services.
- Quarterly access control reviews for all significant Applications.
- Incident Response, Business Continuity, and Disaster Recovery policies and procedures to deal with cybersecurity incidents or natural disasters.
- Supply chain management with vendor selection security assessments and vendor assessments.
- Company Privacy Policy and privacy practices which align with GDPR, CCPA and Dutch PDPA.

## TECHNOLOGY

- Production infrastructure housed in AWS SOC-audited data centers.
- AI-driven endpoint protection and gateway security.
- Identity lifecycle management.
- Single Sign-On, Multi-factor Authentication, and VPN.
- Secrets and privileged access management.
- At-rest and in-transit encryption with KMS.
- Next-gen firewall technology, segmented networks, and certificate-based authentication.





## Biosecurity at Twist Bioscience

Twist Bioscience is a global leader in synthetic DNA and is deeply committed to ensuring the responsible use of its technologies. As part of this commitment, the company has dedicated substantial resources to building and continuously enhancing a robust biosecurity program.

This program involves active participation in both national and international efforts to improve the algorithms, models, metadata, and tools used by researchers to evaluate potential biological risks associated with specific DNA and protein sequences. Recognizing its role as a foundational technology provider, Twist prioritizes the advancement of biosecurity to help foster a safe and secure biotechnology ecosystem.

Twist collaborates closely with governments, academic institutions, international NGOs, and other DNA synthesis companies to establish and align on consistent biosecurity best practices. As biotechnology and synthetic biology rapidly progress, Twist remains at the forefront—helping shape the biosecurity framework that safeguards the future of science.

## NATIONAL AND INTERNATIONAL REGULATIONS

To comply with all U.S. government guidance and regulations, Twist Bioscience implements strict biosecurity and export control screening measures to ensure that all orders are fulfilled appropriately. These measures include adhering to the Screening Framework Guidance for Providers and Users of Synthetic Nucleic Acids published in 2023 by the U.S. government and the Harmonized Screening Protocol established by the International Gene Synthesis Consortium. The U.S. Federal Select Agent Program (FSAP) is the primary regulatory framework governing the control of certain synthetic DNA and RNA sequences within the United States. In addition, as Twist Bioscience manufactures all products in the United States (Wilsonville, OR, and South San Francisco, CA), the sale of synthetic DNA is subject to compliance with the Export Administration Regulations (EAR) administered by the U.S. Department of Commerce, which dictates that certain nucleic acid sequences may require a license prior to export.

By adhering to these regulatory frameworks, Twist Bioscience ensures that DNA sequences that pose a significant risk if misused are not synthesized or shipped to organizations that may not use them responsibly.

## SCREENING OF SEQUENCES AND CUSTOMERS

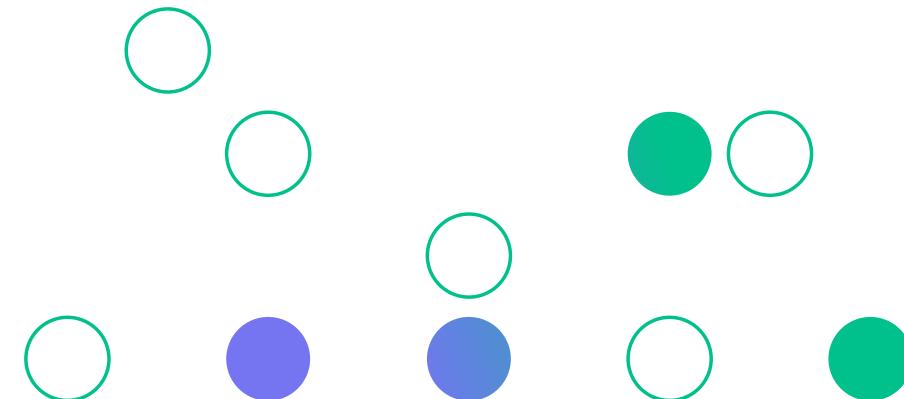
In order to ensure against the misuse of potentially dangerous sequences, Twist Bioscience has implemented a comprehensive biosecurity screening program.

All double-stranded DNA sequences ordered are screened to identify whether they originate from an organism or toxin that is domestically or internationally controlled for possession. These controlled organisms or toxins include variola (which causes smallpox), dangerous strains of avian influenza, and other pathogens that pose a significant threat to animal, plant, or human health. Controlled organisms and toxins are highly regulated, and possession is restricted.

If a controlled sequence (or a portion thereof) is detected during screening, Twist Bioscience verifies the legitimacy of the customer and order which may include contacting the customer to verify customer identity and their intended use for the sequences, past publication record on similar research, and ensures any required licenses are issued before shipment.

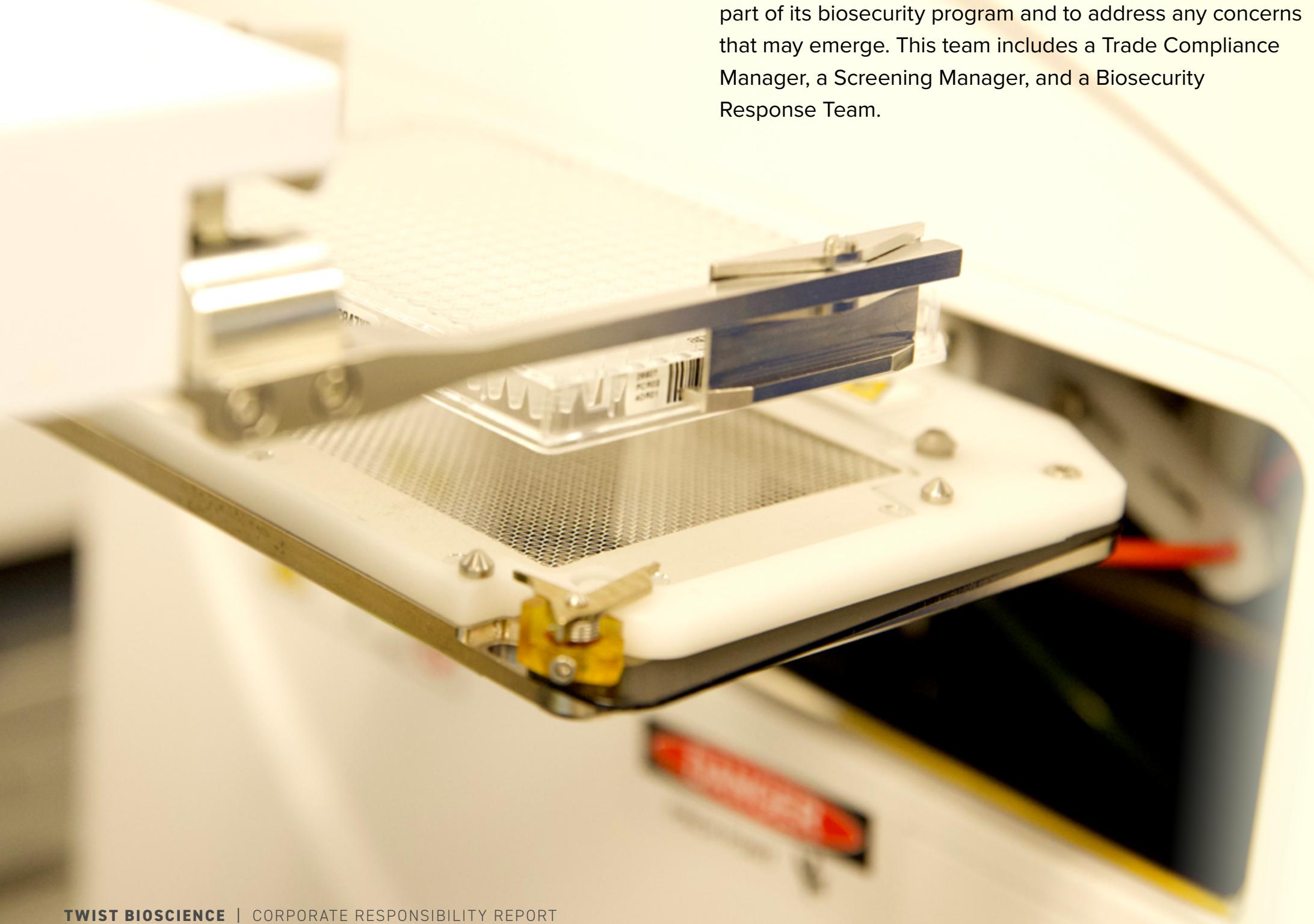
Moreover, Twist Bioscience uses various government lists, such as the U.S. Treasury Specially Designated Nationals list, the U.S. State Department Denied Parties List, and the Department of Commerce Entity List to screen each customer, ensuring that synthetic DNA is not sold to potentially dangerous individuals or organizations. Additionally, Twist confirms the validity of each organization to which they sell and requires customers to agree not to resell synthetic DNA produced by Twist Bioscience unless they have been licensed to do so under a specific contract.

Twist Bioscience only ships its products to valid commercial addresses and will not ship to a residential address or a P.O. Box.



## STAFFING

Twist Bioscience assigns human resources to ensure that its employees adhere to all the policies and procedures that are part of its biosecurity program and to address any concerns that may emerge. This team includes a Trade Compliance Manager, a Screening Manager, and a Biosecurity Response Team.



## REPORTING

Twist Bioscience collaborates with various governing and industry organizations to address biosecurity concerns. These organizations include the Federal Bureau of Investigation (FBI), the Centers for Disease Control and Prevention (CDC), the U.S. Commerce Department's Bureau of Industry and Security, and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service. Additionally, Twist is a member of, and currently chairs, the International Gene Synthesis Consortium (IGSC), an industry trade group consisting of more than 25 of the world's largest synthetic DNA manufacturers. IGSC members may use an existing mechanism to notify each other of suspicious orders received to prevent the ordering of dangerous DNA sequences from other vendors.

## RECORD KEEPING

At Twist Bioscience, we have implemented internal policies that meet or exceed recommendations set out in the 2023 U.S. Department of Health & Human Services Screening Framework Guidance of Providers and Users of Synthetic Nucleic Acids with regard to retention of documentation for each biosecurity screening of a DNA sequence that has been ordered. Twist maintains this documentation for a period of at least eight years.

## RED TEAMING

Twist Bioscience has challenged the effectiveness of its biosecurity program by engaging skilled consultants to attempt to breach its security measures, a practice commonly known as red teaming in cybersecurity. The consultants place real orders that are intended to deceive the screening process. Despite these attempts, none of the experts' obfuscation methods have succeeded, indicating that the biosecurity program implemented by Twist Bioscience is highly robust.

We recognize that biosecurity is an ever-evolving field, and we strive to keep up with best practices and adapt to emerging concerns. We believe that life sciences research has the potential to improve public health and emergency preparedness, and we encourage flexible governance to address new information and changing dynamics.

To ensure that our screening protocols meet or exceed best practices, we actively engage with leading experts including partnering with the National Institute of Standards and Technology (NIST), the Engineering Biology Research Consortium (EBRC) and the International Biosecurity & Biosafety Initiative for Science (IBBIS) to develop and improve biosecurity screening practices.

While implementing these policies and procedures requires investment in both time and resources, we remain committed to advancing scientific research to benefit society. Synthetic biology has the potential to improve human health and the environment, and we are proud to provide high-quality synthetic DNA while maintaining disciplined biosecurity screening ensuring public safety.



## In conclusion

At Twist, we believe corporate responsibility initiatives should be fully embedded in our business strategy. From the beginning, our innovative technology—which reduces the chemical reactions needed for synthetic DNA synthesis by 99.8%\*—was designed with sustainability and scalability in mind. We are committed to delivering excellence across all areas of our business, including offering our customers more sustainable synthetic DNA and RNA solutions. This approach underpins our ability to create and deliver sustained value for shareholders.

As we move forward, we will continue #WritingTheFuture.

\*Calculated Twist internal data using Dr. Oligo benchmark January 2021

# Appendix

# Disclosures

Forward-looking statements may be identified by words such as believe, goal, plan, potential, may, will, intend, expect, strive, seek, and design, and include, among other things, statements about the Company's mission, plans, goals, assets, and programs. For such statements, the Company claims the protection of the Private Securities Litigation Reform Act of 1995. Actual events or results may differ materially from the Company's expectations. Factors that could cause actual results to differ materially from the forward-looking statements are disclosed in the Company's filings with the Securities and Exchange Commission (SEC), including under the Risk Factors heading of the Company's most recently filed Annual Report on Form 10-K or Quarterly Report on Form 10-Q. These forward-looking statements represent the Company's judgment as of the time this report was first published. These statements, like all statements in this report, speak only as of their date, and the Company undertakes no obligation to update or revise these statements in light of future developments.

The inclusion of information and data in this report is not an indication that such information or data, or the subject matter of such information or data, is material to the Company for purposes of applicable securities laws or otherwise. The principles used to determine whether to include information or data in this report do not correspond to the principles of materiality or disclosure contained in U.S. securities laws used to determine whether disclosures are required to be made in filings with the SEC, or principles applicable to the inclusion of information in financial statements.

# Reporting frameworks

## UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

SUSTAINABLE DEVELOPMENT GOAL	RESPONSE
2 ZERO HUNGER 	<p><b>Working in service of our customers:</b> Twist's customers are making plants more durable and reducing the need for pollutants, which enables sustainability and could provide greater and continued access to nutritious foods. Our customers are also engineering pests-resistant crops.</p> <p><b>Synthetic DNA applications:</b> Agricultural biotechnology and animal health. Corporate Responsibility Report.</p>
3 GOOD HEALTH AND WELL-BEING 	<p><b>Working in service of our customers:</b> Twist Bioscience manufactures synthetic DNA for our customers to develop therapeutics and next-generation sequencing applications to detect and monitor diseases, as well as significant advances in research.</p> <p><b>Our products:</b> <a href="#">10-K</a>, pg. 5</p>
5 GENDER EQUALITY 	<p><b>Board of Directors Diversity Policy:</b> <a href="#">LINK</a></p> <p><b>Diversity is in our DNA:</b> Corporate Responsibility Report.</p>
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	<p><b>Sustainability is in our DNA:</b> Corporate Responsibility Report.</p> <p><b>Kimberly-Clark Greenovation Award 2020-2025 for nitrile glove recycling.</b></p> <p><b>Supplier Code of Conduct:</b> <a href="#">LINK</a></p>

## ENERGY CONSUMPTION AND CARBON EMISSIONS

ENERGY CONSUMPTION AND CARBON EMISSIONS	2024
<b>Energy consumption (MWh)</b>	5,483
<b>Natural gas (therms)</b>	141,286
<b>Diesel fuel (gallons)</b>	665
<b>Scope 1 GHG emissions (metric tons CO<sub>2</sub>e)</b> ACROSS ALL U.S. SITES	7
<b>Scope 2 GHG emissions (metric tons CO<sub>2</sub>e)</b> ACROSS ALL U.S. SITES	3,000



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