STANFORD BIO-X

STANFORD BIO-X PHD FELLOWSHIP PROGRAM 2025

Stanford Bio-X Fellows Group Photo 2025

The Stanford Bio-X Graduate Fellowships

The mission of the Stanford Bio-X Program is to catalyze discovery by crossing the boundaries between disciplines to bring interdisciplinary solutions, to create new knowledge of biological systems, and to benefit human health.

Since it was established in 1998, Stanford Bio-X has charted a new approach to life science research by bringing together clinical experts, life scientists, engineers, and others to tackle the complexity of the human body. Currently, over 1,300 Stanford Faculty and over 8,500 students, postdocs, researchers, etc. are affiliated with Stanford Bio-X. The generous support from donors, including the Bowes Foundation, enables the program to remain successful—at any given time, Stanford Bio-X is supporting over 60 Ph.D fellows, and Fall 2025 brings 23 new fellows to the program. These remarkable young researchers receive full support (stipend and tuition) from Bio-X for three years of their graduate studies, allowing them to approach exciting research questions as they create connections within the Bio-X community and across campus.

The Stanford Bio-X Graduate Fellowship Program was started to answer the need for training a new generation of visionary science leaders capable of crossing the boundaries between disciplines in order to bring novel research endeavors to fruition. Since its inception in 2004, the three-year fellowships, including the Stanford Bio-X Bowes Fellowships and the Bio-X Stanford Interdisciplinary Graduate Fellowships (Bio-X SIGFs), have provided 429 meritorious graduate students with awards to pursue interdisciplinary research and to collaborate with multiple mentors, enhancing their potential to generate profound transformative discoveries.

Stanford Bio-X Fellows become part of a larger Stanford Bio-X community of learning that encourages their further networking and development. Bio-X provides this through formal career development workshops and through the Stanford Bio-X Travel Program, where we award grants to fellows who are accepted to give talks at national and international meetings. Stanford Bio-X Fellows are provided the opportunity to present their work at all Stanford Bio-X symposia in order to share their knowledge and interact with other students, faculty, and members of the industry.

We are honored to welcome the 2025 Fellows to the Bio-X community and look forward to supporting them as they pursue their passions and expand their research careers.

Stanford Bio-X Fellows Group Photo 2024

Success at Stanford and beyond…

2011 Stanford Bio-X Bowes Fellow 2011 Ron Alfa is the CEO and co-founder of Noetik, an AI-native biotechnology company. Their mission is to leverage advanced machine learning methods to discover and develop cancer immunotherapies. Noetik is deploying AI to better understand the uniqueness and complexity of tumor biology, in order to precisely match therapeutic targets to patient subpopulations and deliver the right therapies to the right patients. Previously, Ron received a Paul & Daisy Soros Fellowship, was a TEDMED Research Scholar, and served as the Senior Vice President and Acting CSO of Recursion Pharmaceuticals, Inc.

2016 Bruce and Elizabeth Dunlevie Fellow and Stanford Bio-X SIGF Elaine Ng is a co-founder and the Chief Scientific Officer of MagIC Lifescience. Devleoped from Elaine and her colleagues' work in Dr. Shan Wang's lab at Stanford, MagIC's MagChipR device, a point-of-care molecular diagnostic testing platform, is an affordable, ultra-fast PCR system that can deliver lab-quality pathogen and antimicrobial susceptibility results in under 20 minutes. The MagChipR hopes to deliver same-visit results, diagnosis, and treatment, leading to better patient outcomes and lower costs, and was a 2025 finalist in the Association for Diagnostics & Laboratory Medicine's Disruptive Technology Award Competition.

2017 Stanford Bio-X Bowes Fellow Hong-Pyo Lee is a co-founder and CTO at MEDiC Life Sciences, which aims to the discover the key path to novel cures for cancer by CRISPR functional genomics in 3D tumor models. Their mission is to make cancer drugs survive and resurrect from devastated clinical trials in which 93% of cancer drugs have failed. MEDiC's technology can produce 2 million different tumor samples to test pre-clinical cancer drugs. MEDiC collaborates with leading pharmaceutical companies, including Bristol Myers Squibb, Hanmi, and other U.S. firms, delivering its cancer biomarker/target discovery solution to enhance their cancer drug pipelines.

2020 Stanford Interdisciplinary Graduate Fellow (Anonymous Donor) and Stanford Bio-X SIGF Sedona Murphy is Group leader at the Max Planck Institute for Molecular Genetics in Berlin, Germany. She is a 2025 recipient of the NIH DP5 Early Independence Award, which enables scientists who have recently received their doctoral degree or completed their clinical training to bypass the traditional postdoctoral training period and launch independent research careers. Previously, Sedona led a research lab as a Yale School of Medicine Science Fellow, and her advocacy work at Stanford was recognized with the President's Award for Excellence Through Diversity.

2020 Lubert Stryer Interdisciplinary Graduate Fellow and Stanford Bio-X SIGF Zonghe Chua is an Assistant Professor at Case Western Reserve University in the Department of Electrical, Computer & Systems Engineering, where he develops intelligent telerobotic systems that deliver smart multisensory feedback to enhance human-robot system performance. Zonghe was a 2024 recipient of an NIH R21 Trailblazer Award to pursue this research program integrating engineering and the physical sciences with the life and biomedical sciences, and was also a 2023 Thinkbox Faculty Fellow.

Graduates of the program have transitioned to promising postdoctoral positions or medical training and to successful careers in academia and industry, while others have established their own start-up companies. Seven of our alumni – Ian Chen, Adam de la Zerda, Andreas Loening, Guillem Pratx, David Myung, David Camarillo, and Xiaojing Gao – are now faculty members at Stanford University. Additionally, our fellows publish high-impact first-author journal articles, receive grants and fellowships from Fulbright, the National Institutes of Health (NIH), the National Research Service Awards (NRSA), and the National Science Foundation (NSF) among others, file patent applications, and give TEDx talks, exemplifying the importance of interdisciplinary research.

To learn about the successes of our alumni, please see page 25.

Stanford Bio-X Graduate Fellowships 2025

PETER ALLEN

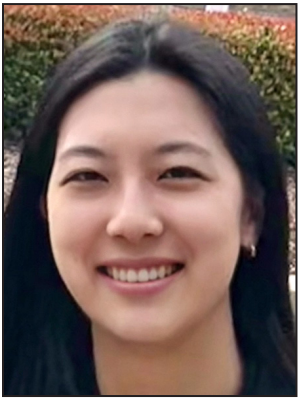
Stanford Bio-X Bowes Fellow

Biology

Mentors: Vayu Hill-Maini (Bioengineering) and Polly Fordyce (Bioengineering and Genetics)

Expanding the Mushroom Genetic Tool Kit Using High-Throughput Droplet Microfluidics Screening

Filamentous fungi – such as mushrooms and molds – hold immense potential in addressing climate change by converting waste into sustainable materials, valuable enzymes, and nutritious foods. Yet, fungal synthetic biology still lacks precise tools for gene expression control, and existing methods for growing and engineering these organisms are slow and labor-intensive. Peter's work focuses on building genetic tools and developing high-throughput, microfluidic-based methods to screen and sort large genetic libraries, helping accelerate the design-build-test cycle. His goal is to enable the rapid engineering of fungi for diverse sustainability applications – supporting innovations that promote both environmental resilience and human health for future generations.



DIXIN CHEN

Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF

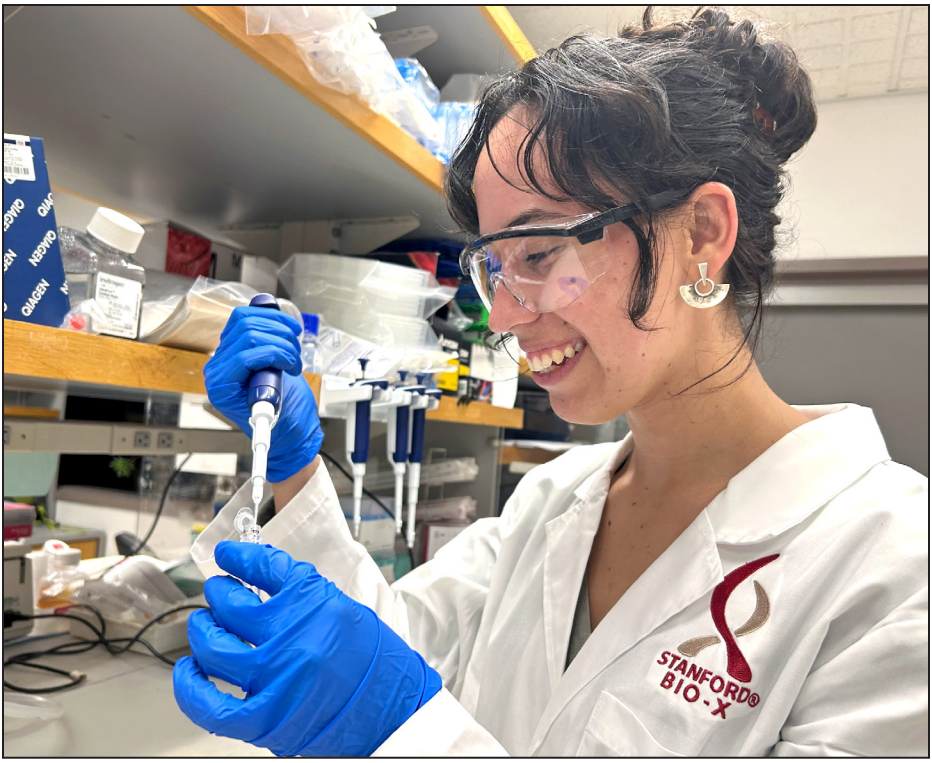
Biomedical Physics

Mentors: Billy Loo (Radiation Oncology) and Maximilian Diehn (Radiation Oncology)

Combining ATM Inhibition with FLASH to Improve Therapeutic Index of Radiotherapy for KEAP1-Mutant Lung Cancer

Changes in certain genes are a major reason why some lung cancers resist treatment. These changes appear in more than 1 in 5 cases of the most common type of lung cancer and are often tied to cancer returning after standard care. Blocking a DNA repair protein can make these tumors more sensitive to radiation, but it can also put healthy tissues at risk. Ultra-fast radiotherapy, called FLASH, delivers a full treatment dose in a fraction of a second and has shown in early studies that it can protect healthy tissues while still targeting tumors. Combining this protein blocking with FLASH can potentially improve control of these hard-to-treat cancers while reducing side effects, providing a new treatment solution for the top cancer killer.

Stanford Bio-X Fellows Group Photo 2019



Stanford Bio-X Bowes Fellow Simone Evans (see pg. 7 for research details)

LAUREN COOPER

Stanford Bio-X Bowes Fellow
Mechanical Engineering

Mentors: Guosong Hong (Materials Science & Engineering) and Xiaoke Chen (Biology)

Achieving Optical Transparency in the Brain Using Photonic Metamaterial Strategies

Optical imaging is crucial to biology and neuroscience, yet light scattering restricts penetration in deep tissues. While *in vivo* tissue transparency has been achieved, the high concentrations of solute required hinder its neuroscientific applications. Here, Lauren proposes to use resonant molecular metamaterials to reduce concentrations for index matching in neural tissues. She aims to optimize refractive index modulation through theoretical and experimental approaches, then validate optical transparency and cell viability in neuronal cultures. She will then demonstrate transparency and brain imaging in a live mouse. Success of this work would enable diffraction-limited resolution at >2 mm depth, revolutionizing neural circuit interrogation.

"The Bio-X fellowship gave me freedom to start a new, interdisciplinary line of research in my thesis lab at the intersection of climate, health, and biotech. This support made my journey possible beyond Stanford, as the project spun out into a company, Switch Bioworks, that is leading innovation in sustainable fertilizer development today."

—Tim Schnabel, Stanford Bio-X Bowes Fellow

ETHAN DARWIN

Stanford Bio-X Bowes Food Fellow*
Mechanical Engineering

Mentors: Ellen Kuhl (Mechanical Engineering), Vayu Hill-Maini (Bioengineering), and Marc Levenston (Mechanical Engineering)

Mechanics Meets Machine Learning: AI-Driven Modeling of Soft Biological Materials for Food and Tissue Applications

Comprehensive frameworks for characterizing the mechanical behavior of soft biological materials – from natural tissues to engineered food products – are developed through advanced mechanical testing and AI integration. By combining multi-mode loading experiments with physics-informed neural networks, Ethan's work discovers interpretable models that capture the nonlinear, anisotropic properties of these complex materials. Fungi-based meat alternatives serve as a key application, linking mechanical behavior with sensory perception to inform AI-guided design of healthier, more appealing products. This approach accelerates material optimization and expands to broader applications in tissue engineering and biomaterials. Ultimately, this research supports sustainable food systems that benefit both human and planetary health while advancing fundamental biomechanics.

**The Stanford Bio-X Bowes Food Fellowships pilot program offers one year of full funding support to PhD candidates conducting research at the intersection of food, medicine, and human health.*

SARAH DIIORIO

Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF
Stem Cell Biology & Regenerative Medicine, Medicine

Mentors: Michael Longaker (Surgery – Plastic & Reconstructive Surgery) and Vivian Feig (Mechanical Engineering)

Understanding the Cellular Components of Tendon Fibrosis and the Effect of Mechanomodulation on Reducing the Fibrotic Response to Injury in a Small Animal Model

Tendon injury arising from trauma, overuse, or age-related degeneration accounts for more than 30% of all musculoskeletal injuries. Tendons do not regenerate well after injury and often form scars, called fibrosis, which can cause pain and impair range of motion. Sarah's research seeks to identify the specific cell populations which are responsible for tendon fibrosis and define targets to prevent these cells from acting. Her project will combine this biological insight with a tissue-adhesive biomaterial which can transfer force to the healing tendon and prevent mechanically active cells from forming fibrosis. Together, these findings would help develop novel tools to treat tendon injury and improve regeneration.

Stanford Bio-X Fellows Group Photo 2011

YI YI DU

Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF
Bioengineering
Mentors: Mark Skylar-Scott (Bioengineering) and Joseph Wu (Medicine – Cardiovascular Medicine)

Organ-Scale Multicellular Continuous Bioprinting

Heart failure is a leading cause of death, with organ shortages leaving millions without transplants. 3D bioprinting using patient-specific iPSC-derived cardiomyocytes shows promise but struggles to produce organ-scale tissues due to slow printing speeds and cell viability loss. Cells in unperfused syringes risk degradation during long prints. Yi Yi's proposed 'BioEngine' addresses this by maintaining and continuously extracting cells in a stirred bioreactor, concentrating cells to physiologically representative densities, mixing cells with extracellular matrix, and printing the prepared bioink in a four-stroke cycle – akin to an internal combustion engine (ICE). This approach preserves cell viability and achieves continuous on-the-fly bioink composition adjustments during extended printing, advancing the feasibility of bioprinting functional, organ-scale cardiac tissues.

SIMONE EVANS

Stanford Bio-X Bowes Fellow
Genetics
Mentors: Alex Gao (Biochemistry and Microbiology & Immunology) and Daniel Hershlag (Biochemistry)

Mechanisms of Protease Defense and Regulation in Bacterial Innate Immunity

Immune proteases mediate inflammation and programmed cell death in eukaryotes, but their role in bacteria remains largely unexplored. Bacterial immune proteases are encoded next to genes the Gao lab predicts are downstream immune effectors. Understanding how bacterial proteases activate these effectors could reveal an uncharacterized class of molecular strategies used to combat phage infection and shed light on the evolution of eukaryotic innate immunity. Simone will investigate how protease cleavage of immune effectors induces programmed cell death and develop quantitative models of their regulation, which could inform the design of future antimicrobials targeting bacterial programmed cell death.

ANDREA FLORES PEREZ

Bioengineering
Mentors: Yunzhi Peter Yang (Orthopaedic Surgery), Guillem Pratx (Radiation Oncology), and John Sunwoo (Otolaryngology – Head & Neck Surgery)

Development of Vascularized Microphysiological Tumor Models for Mimicking Human PET Imaging

Many cancer drugs fail in clinical trials because results from animal testing often don't translate well to humans. To address this, Andrea is developing a human-based tumor model that more accurately mimics how cancer behaves in the body. While researchers have recreated patient tumors in lab devices using real cancer cells, these models lack blood vessels and can't support standard imaging techniques like PET scans. To overcome this limitation, Andrea aims to engineer tiny blood vessels within the tumor model and integrate PET imaging – just as it's done in the clinic. In addition to being able to observe cancer development in patients using lab-scale tools, this work could also lead to more reliable, cost-effective, and personalized tools for testing cancer treatments.

Stanford Bio-X Fellows Group Photo 2008

ALISA HATHAWAY

Stanford Bio-X Bowes Food Fellow*
Electrical Engineering
Mentors: Todd Coleman (Bioengineering) and Eric Stice (Psychiatry & Behavioral Sciences)

From Scent to Solution: Developing Naturalistic and Dynamic Training Approaches to Address Eating Disorders through Olfactory Food Cue Sensitivity

Olfaction, or our sense of smell, plays a powerful role in how we experience food, shaping preferences, memories, and emotions. This is because olfaction is closely linked to the limbic system, the brain region involved in emotion and memory. Alisa's research explores how the brain responds to food-related smells and how these neural signatures differ in individuals with eating disorders such as anorexia and bulimia. Ultimately, her work aims to develop more naturalistic and effective interventions that incorporate the power of scent to support eating disorder recovery.

**The Stanford Bio-X Bowes Food Fellowships pilot program offers one year of full funding support to PhD candidates conducting research at the intersection of food, medicine, and human health.*

TUAN KHOA HOANG

Stanford Bio-X Bowes Food Fellow*
Bioegineering
Mentors: Michael Snyder (Genetics), Markus Covert (Bioengineering), and Justin Sonnenburg (Microbiology & Immunology)

A Microbiome Engineering Framework for Metabolomic Modulation

Your gut is home to trillions of microbes, collectively known as the microbiome, which significantly influence your health. These microbes produce various substances, called metabolites, which directly regulate your metabolism, immune system, and overall well-being. Yet, identifying precisely how altering your microbiome affects these beneficial metabolites remains a challenge. Khoa aims to develop an innovative framework to predict how specific changes in your gut microbiome can modulate the production of key metabolites. By integrating longitudinal metagenomics and metabolomics data analysis, metabolic modeling of gut bacteria community, and controlled germ-free mouse experiments, the framework will enable targeted interventions to optimize microbial metabolites outputs. Ultimately, this could transform treatments for metabolic and immune-related disorders, leading to improved, personalized health outcomes.

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CHIHO IM

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF

Computer Science

Mentors: Anshul Kundaje (Genetics and Computer Science), Scott Boyd (Pathology), and Tho Duc Pham (Pathology)

Deciphering Memory B-Cell Repertoires to Uncover Immune Dynamics and Disease Associations

Chiho's project aims to decipher human memory B-cell repertoires – the record-keepers of our immune history – to better understand how our bodies respond to infections and vaccines. The Kundaje lab uses cutting-edge machine learning techniques to predict which pathogens someone has been exposed to, suggest receptor mutations that could enhance antibody binding, and identify disease-linked immune signatures using graph-based analysis. By integrating large-scale sequencing, generative models, and structural validation, this work enables a deeper view into immune memory at both the molecular and the repertoire level. The outcome could transform vaccine design, improve diagnostics, and lay the groundwork for personalized immunotherapies that adapt to an individual's unique immune experience.

JESSICA KARAGUESIAN

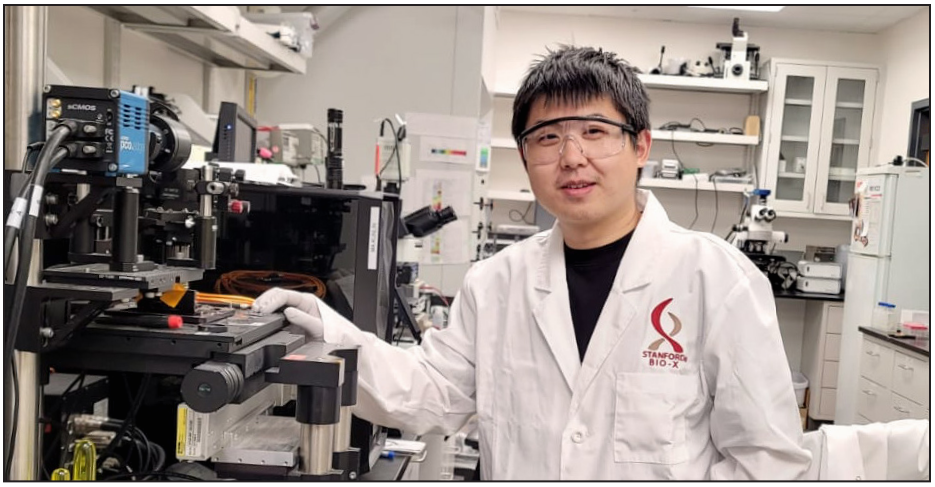
City Hill Foundation Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF

Bioengineering

Mentors: Polly Fordyce (Bioengineering and Genetics) and Ron Dror (Computer Science)

Mapping Protein-Protein Interactions at Scale with Microfluidics and Machine Learning

Proteins orchestrate all cellular processes through fine-tuned networks of binding interactions. While the combination of machine learning and large datasets is transforming protein science, our ability to measure and predict protein-protein interactions (PPIs) at scale remains limited. To address this, Jessica is developing a high-throughput microfluidic platform to quantify millions of PPIs in days and generate training data for predictive algorithms. She will integrate measurement and model development to map the strength and specificity of protein binding. These tools will contribute to the goal of deciphering how protein sequence encodes function, which is fundamental to understanding and engineering biological systems.



Rosenberg Ach Family Fellow, Stanford Bio-X SIGF Kunlin Ma (see pg. 11 for research details)

Stanford Bio-X Bowes Food Fellow Alisa Hathaway (see pg. 8 for research details)

TARA LOWENSOHN

Stanford Bio-X Bowes Fellow
Chemistry

Mentors: Elizabeth Sattely (Chemical Engineering), Mary Beth Mudgett (Biology), and Xiaojing Gao (Chemical Engineering)

A First-In-Class, *in planta* Single-Cell Genetic Screen to Accelerate the Engineering of Pathogen Resistance in Crops

Between 17-30% of the top five global crops are lost annually to pathogen infection, reducing human access to nutritious foods. Crops engineered with boosted immunity could resist devastating pathogen losses to ensure global food security. Innovative plant genetic screening methods are needed to discover critical plant immune proteins more rapidly and efficiently. Tara will harness plant synthetic biology and repurpose mammalian bioengineering tools to develop a first-in-class *in planta*, single-cell high-throughput genetic screen. Applying the screen will drastically accelerate the discovery of proteins that orchestrate systemic plant immune response, a critical step towards bioengineering pathogen-resistant crops that reduce yield loss.

"The Bio-X Fellowship gave me the freedom to pursue truly interdisciplinary research during my PhD. In the first year of my fellowship, we developed a new way to measure how letters and speech sounds combine in the human brain. This project shaped collaborations with educators to co-create in-school studies on early literacy, measuring both brainwaves and classroom learning. None of this would have been possible without the support of Bio-X."

— Lindsey Hasak, Stanford Bio-X Fellow

KUNLIN MA

Rosenberg Ach Family Fellow, Stanford Bio-X SIGF
Mechanical Engineering

Mentors: Juan Santiago (Mechanical Engineering) and Eric Shaqfeh (Chemical Engineering and Mechanical Engineering)

Basic Study of Single-Molecule DNA Trapping and Its Application to High-Throughput Genomic Analysis

Kunlin's research involves manipulation and control of individual DNA molecules using micro/nanofluidic chips and optical tools. By combining single-molecule experiments with theoretical modeling of polymers and ions, Kunlin will investigate how DNA behaves under confinements and interacts with other polymers, oxides, and metal-made sensing components. In the long run, Kunlin aims to develop a high-throughput platform technology that enables high-volume, high-resolution genomic analysis for multiple use. His research integrates cutting-edge semiconductor technologies, polymer physics, and micro/nanoscale transport theory to enable new technologies for diagnostics and bring us closer to precision health and point-of-care.

LORENZO MAGNI

Bioengineering

Mentors: Stanley Qi (Bioengineering) and Lars Steinmetz (Genetics)

Modular Genetic and Cell-Based Approaches for Mitochondrial Engineering

Mitochondria are the hub of energy metabolism in eukaryotic cells, with mitochondrial dysfunction involved in wide range of pathologies, including mitochondrial diseases, diabetes, cancer, neurodegeneration, and aging. With their own genome and the capacity to move horizontally between cells, mitochondria are natural orthogonal and transferrable membrane-bound bioenergetic modules. To expand this potential in synthetic biology and therapeutic applications, Lorenzo is trying to (1) develop genetic tools to edit mitochondrial DNA with high efficiency and programmability, and (2) to enhance the process of intercellular mitochondrial transfer and leverage it to deliver functional mitochondria by cell therapy.

JOSEPH NOH

Stanford Bio-X Bowes Fellow
Biophysics, Medicine

Mentors: Karl Deisseroth (Bioengineering and Psychiatry & Behavioral Sciences), Christopher Barnes (Biology), and Ron Dror (Computer Science)

Structure-Guided Optimization of Channelrhodopsin Function with Cryo-Electron Microscopy and Molecular Dynamics Simulations

More than 20% of adults in the U.S. live with mental illnesses. Understanding how cell-to-cell signaling in the brain affects mental illnesses is essential to developing better treatments. To that end, neuroscientists have adapted proteins called "channelrhodopsins" as tools to control and study cell-to-cell signaling in the brain. Joseph's project will combine high-resolution microscopy with computational simulations of protein motion to understand how channelrhodopsins function on an atomic level. This will enable further engineering and improvement of channelrhodopsins as tools that can be used to gain a deeper understanding of the brain and develop better treatments for mental illnesses.

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF Lorenzo Magni
(see pg. 11 for research details)

KAMSI NWANGWU

Stanford Bio-X Bowes Fellow
Neurosciences, Medicine

Mentors: Michelle Monje (Pediatric Neurology) and Crystal Mackall (Pediatrics – Hematology & Oncology and Medicine – Blood & Marrow Transplantation)

Optimizing the Effectiveness of GD2-CAR-T Cell Therapy by Modulating Neuronal Influences on Myeloid Cells

Chimeric antigen receptor (CAR) T cell therapy is a novel immunotherapeutic approach to treating various cancers. The Monje Lab has demonstrated promising results using CAR T cell therapy to treat the otherwise universally lethal cancer of the central nervous system, diffuse midline glioma (DMG). However, there remain several barriers to optimizing the use of this treatment for DMG. One significant challenge are the immune cells ("myeloid cells") which can infiltrate the tumor microenvironment and ultimately promote tumor growth and tumor immune escape, preventing efficient CAR T cell activity. Kamsi aims to create both cellular and animal models to study these myeloid cells in the presence of cancer cells and CAR-T cells. By performing small molecule screens with a focus on neurotransmitters, he will identify molecular signals to improve CAR-T cell efficacy even in the presence of immune suppressive myeloid cells.

"Bio-X is not only an incredible resource to support interdisciplinary research across campus, but also a wonderful community of researchers to grow with."

— Mira Moufarrej, Stanford Bio-X Fellow

MATTHEW PROEFKE

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF

Chemical Engineering

Mentors: Jennifer Cochran (Bioengineering) and Peter Jackson (Microbiology & Immunology and Pathology)

Reprogramming Lung Cancer Through Targeted Modulation of Secreted Signals

Non-small cell lung cancer (NSCLC) is an aggressive disease often driven by genetic mutations that promote uncontrolled cell proliferation and invasion. Although therapies targeting these driver mutations initially show promise, tumors frequently develop resistance, emphasizing the need for new treatment strategies. Using proteomics, the Cochran and Jackson labs have identified novel secreted proteins that foster growth and metastasis of NSCLC. Matthew aims to investigate how these proteins signal in NSCLC and to develop monoclonal antibody therapies that block their activity, ultimately advancing new treatment strategies for drug-resistant lung tumors.

DANIEL RICHMAN

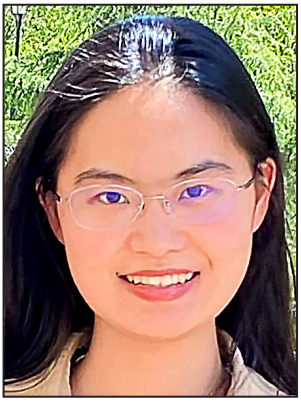
Stanford Bio-X Bowes Fellow

Computer Science

Mentors: Ron Dror (Computer Science), Kathleen Sakamoto (Pediatrics – Hematology & Oncology), and Soichi Wakatsuki (Photon Science and Structural Biology)

Designing a Peptide Therapeutic for Acute Myeloid Leukemia

The CREB:CBP protein-protein interaction is a major driver of acute myeloid leukemia. However, no drugs target this interaction, which is difficult to inhibit because of the structure of the protein-protein interface and its location within the nucleus. Daniel will engineer a new set of small proteins (peptides) aimed at blocking CREB:CBP binding. A combination of machine learning, molecular dynamics simulations, and experimental assays will allow for rapid prototyping and identifying 'needles in the haystack': molecular structures that are able to efficiently enter cells and inhibit the CREB:CBP interaction.



SHUYU SHI

Stanford Bio-X Bowes Fellow

Bioengineering

Mentors: Stephen Quake (Bioengineering and Applied Physics) and Ash Alizadeh (Medicine – Oncology)

Genomic and Transcriptomic Monitoring of Immunosuppression-Associated Lymphomas from Noninvasive Viral and Host Detection

Despite being ubiquitous in healthy adults, latent viral reactivation is associated with increased risks of cancer development and progression in immunosuppressed individuals. HIV infected hosts provide an ideal model to investigate the associations among immunosuppression, viral reactivation, and cancer development. However, there is a lack of methods for tracking viral expansion and immune response, and the evolution of genomic and transcriptomic landscapes during chemotherapy in HIV-associated lymphomas is poorly characterized. To directly address these challenges, Shuyu will apply an integrated non-invasive viral and host profiling method and use multiple interdisciplinary techniques to bridge the critical intersections of cancer biology, immunology, virology, and clinical medicine.

CRYSTAL STACKHOUSE

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF

Biophysics

Mentors: Joseph Puglisi (Structural Biology), Daniel Herschlag (Biochemistry), and Elisabetta Viani Puglisi (Structural Biology)

Mechanistic Role of Highly Structured 5' UTR RNA in Translation Initiation

HIV-1 RNA contains a highly structured region at the start of its genome, known as the 5' untranslated region (5' UTR), but how this structure affects the beginning of protein synthesis is not well understood. Crystal is combining single-molecule measurements with cryogenic electron microscopy to develop a mechanistic and structural model of HIV-1 translation initiation. Understanding the regulatory steps governing translation, the process that dictates protein expression and thereby drives cellular activity, is essential for understanding nearly all biological processes. Crystal's work will help reveal the foundational mechanisms by which structured 5' UTRs, such as those found in other viral systems, regulate protein synthesis. These insights could lead to new therapeutic strategies targeting viral translation, a process not currently addressed by existing HIV-1 drugs.

YUXIN WU

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF

Electrical Engineering

Mentors: Paul Nuyujukian (Bioengineering and Neurosurgery) and Monroe Kennedy (Mechanical Engineering)

Studying Computation Capacity of Motor Cortex Using a Spiking Neural Network Based Robotic System

Biological neural networks exhibit significantly greater capability and resilience than artificial neural networks. However, how this capability and resilience are achieved over individual neurons remains unknown. To address this key barrier, Yuxin will leverage spiking neural networks (SNNs), neuromorphic chips, and robotics systems to conduct comparison studies between computational models and awake, behaving animals. She proposes to engineer an SNN-based robotic experimental platform able to test hypotheses of the control strategies adopted by brains, as well as the recovery process after brain injuries. This study has value for both basic neuroscience research and future neuroprosthetic applications.

Stanford Bio-X Fellows Group Photo 2022

Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF Matthew Proefke
(see pg. 13 for research details)

WENYAN (LUCY) ZHANG

Pierce Family Goldman Sachs Fellow, Stanford Bio-X SIGF
Genetics

Mentors: Casey Gifford (Pediatrics – Cardiology and Genetics) and Michael Bassik (Genetics)

Linking Inflammation and Congenital Heart Disease Using a Cardioimmune Organoid System

Congenital heart disease (CHD) is the most common type of birth defect, yet its genetic and environmental causes remain unclear. Inflammatory diseases from the mother and the fetus increase CHD risk, but the mechanisms are poorly understood. Lucy hypothesizes that immune cells in the heart, macrophages, can disrupt heart development under inflammatory condition. She will use a 3D organoid system co-culturing heart cells and immune cells to study how immune-cardiac crosstalk affects heart development under diseased states. This project aims to uncover novel mechanisms linking inflammation and CHD, providing insights into immune-related birth defects and potential therapeutic targets.

"The Bio-X fellowship enabled me to carry out critical portions of my doctoral research in a focused manner, rather than worrying about cobbling together several smaller funding sources. It was also a great opportunity to meet other interdisciplinary researchers, and it provided me with... occasions to showcase my work. Earning a Bio-X fellowship was a great honor and I will always be grateful for that support!"

— Nina Horowitz, Stanford Bio-X Fellow

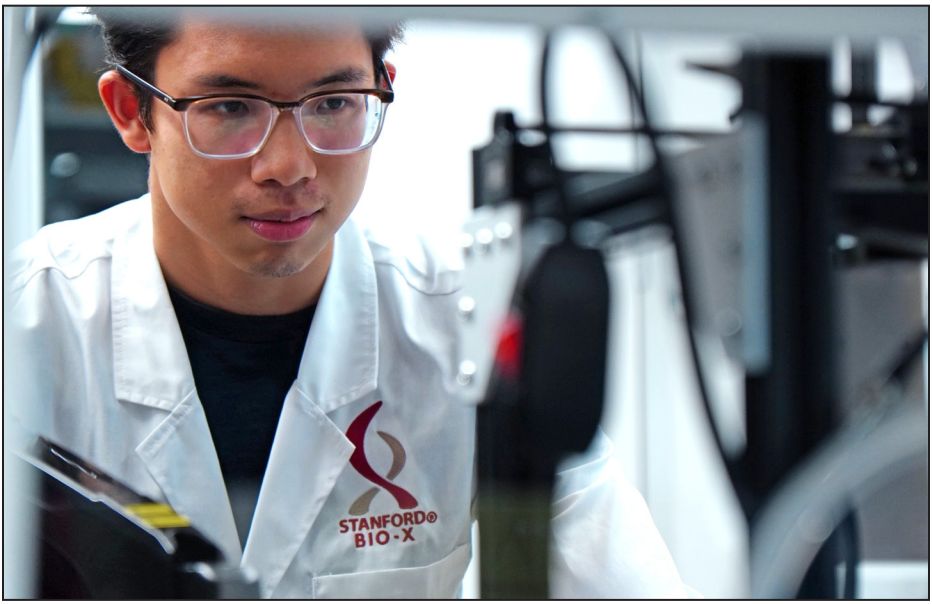
Stanford Bio-X Graduate Fellowships 2004-2024 (in alphabetical order)

Nayla Abney
Stanford Bio-X Bowes Fellow 2024
Bioengineering
Mentors: Jennifer Cochran (Bioengineering) and Mark Pegram (Medicine – Oncology)
"Engineering Bispecific Antibodies for Cytokine Sequestration in Cancer"

Carlos Alvarado Acosta
William and Lynda Steere Fellow, Stanford Bio-X SIGF 2021
Structural Biology
Mentors: Joseph Puglisi (Structural Biology) and Zev Bryant (Bioengineering)
"Uncovering the Kinetic and Mechanochemical Regulation of Scanning"

Isabella Archibald
Stanford Bio-X Bowes Fellow 2024
Bioengineering
Mentors: Jennifer Brophy (Bioengineering) and Xiaojing Gao (Chemical Engineering)
"Engineering Plant Root Development using Genetic Circuits"

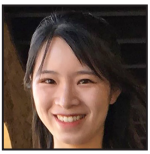
Nahal Bagheri
Stanford Bio-X Bowes Fellow 2023
Electrical Engineering
Mentors: Steven Boxer (Chemistry), Possu Huang (Bioengineering), and Thomas Markland (Chemistry)
"Electric Field Contribution to the Enzyme Activity of Trypsin"



Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF Yi Yi Du
(see pg. 7 for research details)

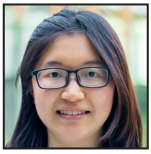
Preksha Bhagchandani
Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2022
Immunology
Mentors: Seung Kim (Developmental Biology), Everett Meyer (Medicine – Blood & Marrow Transplantation and Pediatrics – Stem Cell Transplantation), Judith Shizuru (Medicine – Blood & Marrow Transplantation and Pediatrics – Stem Cell Transplantation), and Kyle Loh (Developmental Biology)
"Pseudoislet Manufacturing and Hematopoietic Stem Cell Transplant to Advance Islet Transplantation"

Betty Cai
Stanford Bio-X Bowes Fellow 2024
Materials Science & Engineering
Mentors: Sarah Heilshorn (Materials Science & Engineering) and Jon-Paul Pepper (Otolaryngology – Head & Neck Surgery)
"3D Printing of Bi-Layer Nerve Conduits for the Controlled Delivery of a Hedgehog Pathway Modulator"



Sa Cai
Stanford Bio-X Bowes Fellow 2022
Materials Science & Engineering
Mentors: Stanley Qi (Bioengineering) and Guosong Hong (Materials Science & Engineering)
"Developing a Genetic Photothermal System (GPS) for Non-Invasive Neuromodulation"

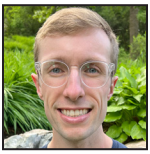
Crystal Chen
Stanford Bio-X Bowes Fellow 2023
Chemical Engineering
Mentors: Stanley Qi (Bioengineering) and Katherine Ferrara (Radiology)
"Autonomous Genetic Switches for mRNA Therapy and Autoimmune Disease"



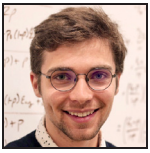
Xinyi Chen
Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2022
Bioengineering
Mentors: Stanley Qi (Bioengineering) and Wendy Fantl (Urology)
"Programmable Biomolecule Delivery Through Cell-Cell Communication"

Jennifer Co
Stanford Bio-X Bowes Fellow 2024
Chemistry
Mentors: Steven Banik (Chemistry) and Michael Bassik (Genetics)
"Silent Programming: Discovery and Characterization of the Onco-Interactome with Cell-Based Interaction Sensors and CRISPR Genetic Screening"

Madeline Cooper
Lavidge and McKinley Interdisciplinary Fellow, Stanford Bio-X SIGF 2020
Biophysics, Medicine
Mentors: Brad Zuchero (Neurosurgery) and Alex Dunn (Chemical Engineering)
"Myelin Loss and Regeneration by Oligodendrocyte Transformation"

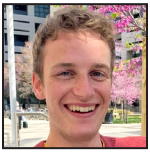


Matthew DeJong
Stanford Bio-X Bowes Fellow 2024
Chemical Engineering
Mentors: Polly Fordyce (Bioengineering and Genetics) and Alexander Dunn (Chemical Engineering)
"High-Throughput Microfluidic Force Spectroscopy for Engineering Protein Mechanosensors"

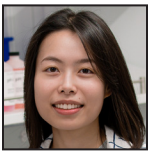


Benjamin Doughty
William and Lynda Steere Fellow, Stanford Bio-X SIGF 2023
Chemical Engineering
Mentors: William Greenleaf (Genetics), Jesse Engreitz (Genetics), and Polly Fordyce (Bioengineering and Genetics)
"Deciphering the Mechanisms of Non-Coding Genetic Variation in Enhancers"

Yi Shiou Duh
Stanford Bio-X Bowes Fellow 2021
Physics
Mentors: Mark Brongersma (Materials Science & Engineering), Bianxiao Cui (Chemistry), and Guosong Hong (Materials Science & Engineering)
"Scalable Electrophysiology Tool Based on Optics"



Mark Fleck
Stanford Bio-X Bowes Fellow 2023
Chemistry
Mentors: Fan Yang (Bioengineering and Orthopaedic Surgery), Michael Lim (Neurosurgery), and Ovijit Chaudhuri (Mechanical Engineering)
"A 3D Viscoelastic Model for Investigating Glioblastoma-Tumor Associated Macrophage Crosstalk"



Sipei Fu
Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2024
Biology
Mentors: Jonathan Long (Pathology), Christopher Barnes (Biology), and Michael Fischbach (Bioengineering)
"Uncovering Microbial Biosynthesis of N-acetyltaurine"

Jacob Horne
Stanford Bio-X Bowes Fellow 2022
Chemical Engineering
Mentors: Jian Qin (Chemical Engineering) and Daniel Jarosz (Chemical & Systems Biology and Developmental Biology)
"Unraveling the Molecular Drivers Behind LLPS and Coarsening of Biocondensates"

Yuan Jia
Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2021
Chemistry
Mentors: Robert Waymouth (Chemistry) and Ronald Levy (Medicine – Oncology)
"New Synthetic Transporters for Delivery and Release of mRNA"

Minji Kang
Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2022
Computer Science
Mentors: Aaron Newman (Biomedical Data Science) and Michael Clarke (Medicine – Oncology)
"Decoding Single Cell Developmental States in Health and Disease"

Karan Kathuria
Stanford Bio-X Bowes Fellow 2023
Immunology, Medicine
Mentors: Mark Davis (Microbiology & Immunology), Prasanna Jagannathan (Medicine – Infectious Diseases and Microbiology & Immunology), and Sarah Heilshorn (Materials Science & Engineering)
"Modeling Immune Responses to Malaria Infection and Vaccination in Human Spleen Organoids"

Rennie Kendrick
Tusher Family Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2023
Neurosciences
Mentors: Scott Owen (Neurosurgery), Scott Linderman (Statistics), and Laura Prolo (Neurosurgery)
"Elucidating Cellular and Molecular Mechanisms of OCD in the Human Brain"

Danielle Klinger
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2023
Bioengineering
Mentors: Kristy Red-Horse (Biology), Mark Skylar-Scott (Bioengineering), Casey Gifford (Pediatrics – Cardiology), and Marlene Rabinovitch (Pediatrics – Cardiology)
"Engineering Organoid Models of Early Cardiac Developmental Stages"

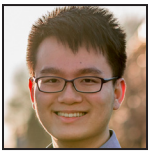
Alisa Levin
Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2024
Computer Science
Mentors: Scott Linderman (Statistics), Jaimie Henderson (Neurosurgery), and Frank Willett (Neurosurgery)
"Cross-Brain Transfer for Intracortical Handwriting and Speech BCIs"

Daniel Liu
Seth A. Ritch Graduate Fellow, Stanford Bio-X SIGF 2023
Stem Cell Biology & Regenerative Medicine, Medicine
Mentors: Irving Weissman (Pathology, Developmental Biology) and Laura Prolo (Neurosurgery)
"Characterization of the Glial Progenitor Cell in Human Health and Disease"

Kara Liu
Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2024
Computer Science
Mentors: Russ Altman (Bioengineering, Genetics, Medicine – Biomedical Informatics Research, and Biomedical Data Science) and Sanmi Koyejo (Computer Science)
"Integrating Generative Models to Address Selection Bias and Patient Privacy in EHR Data"

Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF Andrea Flores Perez
(see pg. 7 for research details)

Stanford Bio-X Bowes Food Fellow Tuan Khoa Hoang (see pg. 8 for research details)



Kang Yong Loh
Stanford Bio-X Bowes Fellow 2021
Chemistry
Mentors: Karl Deisseroth (Bioengineering and Psychiatry & Behavioral Sciences), Carolyn Bertozzi (Chemistry), and Zhenan Bao (Chemical Engineering)
"Genetically Targeted Chemical Assembly and Disassembly of Functional Molecules in Intact Living Systems"

Amrith Lotlikar
Seth A. Ritch Graduate Fellow, Stanford Bio-X SIGF 2024
Electrical Engineering
Mentors: Subhasish Mitra (Electrical Engineering and Computer Science) and E.J. Chichilnisky (Neurosurgery and Ophthalmology)
"Algorithms for Efficient Calibration of Bidirectional Brain-Computer Interfaces"

Marigold Malinao
Stanford Bio-X Bowes Fellow 2024
Materials Science & Engineering
Mentors: Guosong Hong (Materials Science & Engineering) and Jun Ding (Neurosurgery and Neurology)
"Non-Invasive and Spatiotemporally Precise Chemogenetic and Pharmacological Neuromodulation with an Ultrasound Interface"

Shaili Mathur
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2024
Biology
Mentors: Dmitri Petrov (Biology) and Jonas Cremer (Biology)
"Cellular Decision-Making in Dynamically Changing Environments and Population-Level Consequences"

Santiago Mille Fragoso
Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2024
Bioengineering
Mentors: Xiaojing Gao (Chemical Engineering) and Brian Hie (Chemical Engineering)
"Machine Learning-Assisted Design of Novel Modular Protein Sensors"

Steven Miller
Stanford Bio-X Bowes Fellow 2022
Chemistry
Mentors: Justin Du Bois (Chemistry), Merritt Maduke (Molecular & Cellular Physiology), Ron Dror (Computer Science), and John Huguenard (Neurology & Neurological Sciences)
"Design and Implementation of Small Molecule Tools to Study Chloride Channels and Epilepsy in the Central Nervous System"

Salvador Moncayo Von Hase
Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2024
Biology
Mentors: Steven Banik (Chemistry), Xiaojing Gao (Chemical Engineering), and Tom Soh (Radiology, Electrical Engineering, and Bioengineering)
"A Platform for Examining Small Molecule-Mediated Manipulation of RNA"

Pradnya Narkhede
Mona M. Burgess Fellow, Stanford Bio-X SIGF 2023
Chemistry
Mentors: Or Gozani (Biology) and James Chen (Chemical & Systems Biology, Developmental Biology, and Chemistry)
"Cracking the eEF1A Code: Unraveling the Differential Roles and Disease Relevance of eEF1A Lysine Methylation States in Regulating Proteome-Wide Translation Dynamics"

Babatunde Ogunlade
Stanford Bio-X Bowes Fellow 2023
Materials Science & Engineering
Mentors: Jennifer Dionne (Materials Science & Engineering) and Amanda Kirane (Surgery – General Surgery)
"Spatially Profiling the Melanoma Tumor Microenvironment Using Metasurface-Enhanced Raman Spectroscopy and Machine Learning"

Jennifer Parker
Stanford Bio-X Bowes and Anonymous Donor Fellow 2023
Stem Cell Biology & Regenerative Medicine
Mentors: Michael Longaker (Surgery) and Eric Appel (Materials Science & Engineering)
"Targeting Engrailed-1 Positive Fibroblasts and Mechanotransduction Signaling in Foreign Body Response"

Divya Rajasekharan
Stanford Bio-X Bowes and Anonymous Donor Fellow 2023
Mechanical Engineering
Mentors: Leanne Williams (Psychiatry & Behavioral Sciences), Ellen Kuhl (Mechanical Engineering), and Laura Hack (Psychiatry & Behavioral Sciences)
"An Integrated Continuum Finite Element & Network Neuroscience Method for Understanding Mechanisms of Transcranial Magnetic Stimulation"

Samantha Reyes
Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2024
Biomedical Physics
Mentors: Michelle James (Radiology – Molecular Imaging Program at Stanford and Neurology) and Marion Buckwalter (Neurology & Neurological Sciences and Neurosurgery)
"A New Translational Approach for Quantifying Innate Immune Activation in Stroke"

Stanford Bio-X Bowes Fellow Daniel Richman (see pg. 13 for research details)

Aubrey Roberts
William and Lynda Steere Fellow, Stanford Bio-X SIGF 2024
Epidemiology & Clinical Research
Mentors: Michael Snyder (Genetics), Jonathan Long (Pathology), and Francois Haddad (Medicine – Cardiovascular Medicine)
"Optimizing Training: Physiological and Molecular Adaptations to High-Intensity Interval Training (HIIT) vs. Moderate-Intensity Continuous Training (MICT)"

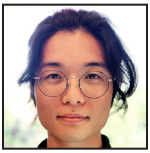
Fredrik Samdal Solberg
Pierce Family Goldman Sachs Fellow, Stanford Bio-X SIGF 2022
Mechanical Engineering
Mentors: Mark Skylar-Scott (Bioengineering), Allison Okamura (Mechanical Engineering), and Michael Ma (Cardiothoracic Surgery)
"In Situ In Vivo *3D Bioprinting"*

Joshua Sampson
Stanford Bio-X Bowes Fellow 2021
Bioengineering
Mentors: Mark Skylar-Scott (Bioengineering), Steven Boxer (Chemistry), and Michael Ma (Cardiothoracic Surgery)
"Optical Coagulation for 3D Bioprinting in vitro *and Directed Hemostasis* in vivo*"*

Gustavo Santiago-Reyes
Stanford Bio-X Bowes Fellow 2024
Bioengineering
Mentors: Russell Poldrack (Psychology) and Todd Coleman (Bioengineering)
"Modulation of Decision-Making Using Non-Invasive Vagus Nerve Stimulation"

Julia Schaepe
Colella Family Fellow, Stanford Bio-X SIGF 2023
Bioengineering
Mentors: William Greenleaf (Genetics) and Lacramioara Bintu (Bioengineering)
"Dissecting Dynamics of Gene Activation by Human Transcription Factors with Single Molecule Footprinting"

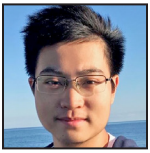
Six Skov
Stanford Bio-X Bowes Fellow 2024
Mechanical Engineering
Mentors: Scott Delp (Bioengineering and Mechanical Engineering), Karen Liu (Computer Science), and John Day (Neurology & Neurological Sciences and Pediatrics – Medical Genetics)
"Developing in the Wild Motion Capture for Exoskeleton Use in Charcot-Marie-Tooth Patients"



Jun Ho Song
Stanford Bio-X Bowes Fellow 2023
Biology
Mentors: Liqun Luo (Biology) and Scott Linderman (Statistics)
"Deconstructing the Serotonin System: Projectomes, Transcriptomes, and Animal Behavior"

Jon Stingel
Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2020
Mechanical Engineering
Mentors: Scott Delp (Bioengineering and Mechanical Engineering) and Maarten Lansberg (Neurology & Neurological Sciences)
"Elucidating Energy Expenditure During Human Movement"

Jiankai Sun
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2024
Aeronautics & Astronautics
Mentors: Mac Schwager (Aeronautics & Astronautics), Scott Delp (Bioengineering and Mechanical Engineering), and Mykel Kochenderfer (Aeronautics & Astronautics)
"Wearable Intelligence for Healthcare Robotics: From Brain Activity to Body Movements"



Jiawei Sun
Rosenberg Ach Family Fellow, Stanford Bio-X SIGF 2022
Bioengineering
Mentors: Kerwyn Casey Huang (Bioengineering and Microbiology & Immunology), Denise Monack (Microbiology & Immunology), and Naima Sharaf (Biology)
"Exploiting the Physical Properties of the Bacterial Cell Envelope to Combat Antibiotic Resistance"

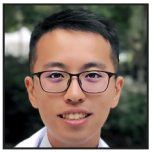
Kyle Swanson
Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2024
Computer Science
Mentors: James Zou (Biomedical Data Science) and Joseph Wu (Medicine – Cardiovascular Medicine and Radiology)
"Generative AI to Design, Synthesize, and Validate Drug Candidates"

Michelle Tai
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2023
Bioengineering
Mentors: Fan Yang (Bioengineering and Orthopaedic Surgery), Christina Curtis (Medicine – Oncology, Genetics, and Biomedical Data Science), and Joy Wu (Medicine – Endocrinology)
"Engineering a 3D Model for Mimicking Breast Cancer Metastasis at the Bone Tissue Interface"

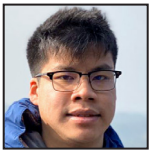
Abby Thurm
Stanford Bio-X Bowes Fellow 2023
Biophysics, Medicine
Mentors: Lacramioara Bintu (Bioengineering), Daniel Herschlag (Biochemistry), and William Greenleaf (Genetics)
"High-Throughput Measurements of RNA-Mediated Regulation of Gene Expression"

Ethan Trepka
Stanford Bio-X Bowes Fellow 2024
Neurosciences
Mentors: Tirin Moore (Neurobiology) and Guosong Hong (Materials Science & Engineering)
"Patterning the Brain with Conductive Polymers"

Javier Weddington
Stanford Bio-X Bowes Fellow 2022
Neurosciences
Mentors: Stephen Baccus (Neurobiology) and Nick Haber (Education and Computer Science)
"Rapid Perceptual Learning in Rewarded Tasks – The Efficient Learning Hypothesis"



Ting-Hsuan (Timothy) Wu
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2022
Biochemistry, Medicine
Mentors: Mark Krasnow (Biochemistry) and Peter S. Kim (Biochemistry)
"Human Alveolar Stem Cells in Lung Regeneration, Repair, and Cancer"



Jonathan Yang
Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2022
Chemistry
Mentors: Carolyn Bertozzi (Chemistry) and Alice Ting (Genetics and Biology)
"Cell Delivered Targeting Chimeras for Precision Oncology"

Theo Yang
Lavidge and McKinley Interdisciplinary Fellow, Stanford Bio-X SIGF 2023
Chemical Engineering
Mentors: Daniel Jarosz (Chemical & Systems Biology and Developmental Biology) and Jian Qin (Chemical Engineering)
"Dissecting the Molecular Grammar of Prion Material States"

Maiya Yu
Stanford Bio-X Bowes Fellow 2024
Structural Biology
Mentors: Jeff Axelrod (Pathology), Liang Feng (Molecular & Cellular Physiology), and Alexander Dunn (Chemical Engineering)
"Parsing Molecular Determinants of Asymmetry in Planar Cell Polarity Signaling"

Stanford Bio-X Fellows Group Photo 2014

Where are they now?

347 of our Stanford Bio-X Fellows have graduated and gone on to utilize what they have learned in the corporate, academic, and governmental sectors...

Amin Aalipour (Stanford Bio-X Fellow 2017) is a Clinical Fellow in Hematology & Oncology at Dana-Farber Cancer Institute.

Namiko Abe (Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2006) is the Associate Director, Medical Writing at Johnson & Johnson, as a contractor.

Shelley Ackerman (Stanford Bio-X Bowes Fellow 2014) is VP of Research at ImmunEdge.

Eliza Adams (Stanford Bio-X Bowes Fellow 2017) is Chief of Staff, VP Corporate Strategy, at Clarify Health.

Afsheen Afshar (Stanford Bio-X Bowes Fellow 2005) is the founder and a managing member of Pilot Wave Holdings, the first investment firm in the world dedicated to bringing world-class technologies to small businesses.

Atish Agarwala (Stanford Bio-X Bowes Fellow 2015) is a research scientist at Google, where he is studying the connections between physics, evolution, and machine learning.

Rachel Agoglia (Stanford Bio-X Honorary Fellow 2016) is a Senior Field Application and Bioinformatics Scientist at Mission Bio.

Carlos Aldrete (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2023) is a Scientist I at GeneFab.

Ron Alfa (Stanford Bio-X Bowes Fellow 2011) is the CEO and co-founder of Noetik, an AI-native biotechnology company. Their mission is to leverage advanced machine learning methods to discover and develop cancer immunotherapies.

Laura Amaya Hernandez (Stanford Bio-X Bowes Fellow 2020) is a postdoctoral fellow at Caltech working in Dr. Magdalena Zernicka-Goetz's laboratory.

Katherine Amberg-Johnson (William and Lynda Steere Fellow, Stanford Bio-X SIGF 2016) is a principal scientist at Schrodinger, a biotechnology company that uses a physics-based computational platform to accelerate drug development.

Meelad Amouzgar (Felix and Heather Baker Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2023) will continue as a postdoctoral fellow at Stanford working with Dr. Theodore Roth (Pathology), Dr. Zinaida Good (Medicine), and Dr. Allison Betof Warner (Medicine).

Suhaas Anbazhakan (Stanford Bio-X Bowes Fellow 2018) is a clinical data scientist on the Health team at Meta.

Andrés Aranda-Díaz (Stanford Bio-X Bowes Fellow 2016) is a postdoctoral researcher at the Barcelona Institute for Global Health. Andrés is empowering Sub-Saharan African scientists and public health personnel to conduct malaria genomic epidemiology in the continent.

Edith Arnold (Stanford Bio-X Bowes Fellow 2006) is working at Apple Inc. as a Senior Engineering Manager, leading a biomechanics research team supporting design of wearable products.

Georgios Asimenos (Stanford Bio-X Bowes Fellow 2005) is the Chief Product Officer at DNAnexus, a Stanford-spawned startup company which sits at the intersection of two of the most ground-breaking fields: cloud computing and genomics.

Oguzhan Atay (Colella Family Fellow, Stanford Bio-X SIGF 2014) is the co-founder and CEO of BillionToOne, a next-generation molecular diagnostics company. BillionToOne's proprietary Quantitative Counting Templates (QCT) platform unlocks transformative improvements in prenatal screening and liquid biopsy for cancers.

Manish Ayushman (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2021) is a Cancer Research Institute Irvington postdoctoral scholar in the Wendell Lim lab at University of California, San Francisco.

Lawrence Bai (Stanford Bio-X Bowes Fellow 2019) is a Life Sciences Consultant at L.E.K. Consulting, where he has worked on strategy and due diligence projects across the life sciences industry, including biopharma, pharma services, diagnostics, and medical devices.

Aakash Basu (Stanford Bio-X Bowes Fellow 2009) is an Assistant Professor in the Department of Biosciences at Durham University.

Eva Gabriela Baylon (Stanford Bio-X Skippy Frank Fellow 2014) is a Principal Systems Engineer with Abbott.

Daniel Bechstein (Stanford Bio-X Bowes Fellow 2012) is a Sensor System Architect at Apple, Inc.

Kaisha Benjamin (Stanford Bio-X Bowes Fellow 2019) is a recipient of a 3-year High Potential Individual UK visa with plans to relocate to the UK in September 2025.

Salil Bhate (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2016) is a postdoctoral researcher at the Broad Institute of Harvard and MIT, working on scaling up the machine learning and conceptual tools for analyzing tissues that he developed in his thesis.

Elsa Birch (Stanford Bio-X Bowes Fellow 2009) is a software engineer at Duckbill.

Johannes Birgmeier (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2017) is working for Citadel Securities in Zurich.

Jennifer Brady (Stanford Bio-X Skippy Frank Fellow 2010) is Director of Biology at Variant Bio, overseeing the progression of multiple therapeutic programs based on human genetics and an ethics-minded approach to human genetic research.

Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF Dixin Chen
(see pg. 4 for research details)

Relly Brandman (Stanford Bio-X Bowes Fellow 2004) is a project lead at GoogleX.

Cecelia Brown (Stanford Bio-X Bowes Fellow 2021) recently graduated and is currently exploring opportunities in the pharmaceutical and biotech industry. She is particularly interested in drug development roles where she can contribute to bringing innovative therapies from concept to clinic.

Craig Buckley (Stanford Bio-X Bowes Fellow 2011) graduated in 2015.

Matthew Bull (Stanford Bio-X Honorary Fellow 2015) is a fellow in the Allen Institute's neurosciences program.

Pamela Cai (Stanford Bio-X Honorary Fellow 2019) is an Arnold O. Beckman Postdoctoral Fellow at the University of Chicago, working with Matthew Tirrell.

David Camarillo (Stanford Bio-X Bowes Fellow 2004) is an Associate Professor in the Department of Bioengineering at Stanford University.

Shengya Cao (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2013) is a part of the Inceptive team in Palo Alto.

Chien-Yi Chang (Stanford Bio-X Bowes Fellow 2020) is an Assistant Professor of Law and Assistant Professor of Computer Science at Durham University.

Je-Rui (Ray) Chang (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2021) is a postdoc in Professor Juan Santiago's lab at Stanford. He is developing a microfluidics device for low-cost medical diagnostics.

Mindy Chang (Stanford Bio-X Bowes Fellow 2005) is exploring the intersection of art and health.

Binbin Chen (Stanford Bio-X Bowes Fellow 2018) is the co-founder and CEO of Vcreate, Inc. focusing on computationally linking T-cell receptors and antigen targets for immunotherapies.

Elizabeth Chen (Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2013) is a computational scientist in the immunology-dermatology department at Johnson & Johnson (J&J) in San Diego, working on analyzing sequencing datasets of patients enrolled in J&J's clinical trials.

Ian Chen (Stanford Bio-X Bowes Fellow 2006) is an Assistant Professor of Medicine and Radiology at Stanford University.

Jin Chen (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2012) is a Principal Investigator at Altos Labs.

Shi-An Chen (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2018) is a scientist at Altos Labs, a start-up working on cellular rejuvenation.

Junhong Choi (Stanford Bio-X Bowes Fellow 2015) is an Assistant Member of Memorial Sloan-Kettering Cancer Center.

Fang-Chieh Chou (Stanford Bio-X Fellow 2012) is a software engineer at DoorDash.

Vincent Chu (Stanford Bio-X Pfizer Fellow 2005) is the CTO and co-founder of HomeVision.

Virginia Chu (Stanford Bio-X Bowes Fellow 2005) is an Associate Professor of Occupational Therapy at Virginia Commonwealth University.

Zonghe Chua (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2020) is an Assistant Professor at Case Western Reserve University in the Department of Electrical, Computer & Systems Engineering.

Kelsey Clark (Stanford Bio-X Bowes Fellow 2007) is an Instructor at Montana State University.

Roshni Cooper (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2012) is a machine learning manager at Netflix, where her team is working with movie creators to leverage generative AI to bring their creative visions to life. Previously, she was an engineer and manager at Waymo, Alphabet's self-driving car company, developing machine learning and computer vision techniques to enable cars to perceive the world around them.

Robert Coukos (Stanford Bio-X Skippy Frank Fellow 2019) is a postdoctoral fellow in the lab of Professor Dimitri Krainc, MD, PhD, Chair of the Department of the Neurology in the Feinberg School of Medicine at Northwestern University.

Jing-yu Cui (Stanford Bio-X Bowes Fellow 2011) is working at Google as a software engineer.

Kiara Cui (Stanford Bio-X Bowes Fellow 2018) is a senior scientist in Formulation and Process Development at Gilead Sciences, a biopharmaceutical company focusing on the development of therapeutics for HIV, viral hepatitis, emerging viruses, oncology, and inflammatory diseases.

Rebecca Culver (Stanford Bio-X Honorary Fellow 2019) is a team lead, senior software engineer, at Curve Biosciences.

Anna Cunningham (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2015) is a software engineer at Freenome, a mid-size biotech startup developing a blood-based assay for early detection of colorectal cancer.

Sanjay Dastoor (Stanford Bio-X Bowes Fellow 2006) has sold Skip, a company he co-founded that designs a network of lightweight electric vehicles. He is currently working on a new project.

Olivia de Goede (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2019) is a data scientist at AbCellera.

Adam de la Zerda (Stanford Bio-X Skippy Frank Fellow 2008) is an Associate Professor of Structural Biology at Stanford University and the founder and CEO of Visby Medical.

Adi de la Zerda (Stanford Bio-X Fellow 2013) is doing technical project management and business development at Applied Materials. Previously, she was a lecturer of materials science and engineering at Stanford.

Ana Sofia de Olazarra (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2021) is a Senior Bioinformatics Scientist at Tempus AI.

Christopher Dembia (Stanford Bio-X Bowes Fellow 2016) is a Vehicle Dynamics Simulation Engineer at Zoox.

Sarah Denny (Stanford Bio-X Honorary Fellow 2013) is a director with Scribe Therapeutics. She leads the Molecular Engineering team to develop new CRISPR tools for therapeutic applications.

Darrel Deo (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2016) is an Instructor at Stanford School of Medicine, Department of Neurosurgery.

Mario Diaz de la Rosa (Stanford Bio-X Bowes Fellow 2008) is a senior data scientist at Deloitte Consulting.

Rebecca DiMarco (Stanford Bio-X Bowes Fellow 2009) is a substance use disorder and addiction recovery counselor.

Sheng Ding (Stanford Bio-X Bowes Fellow 2007) works at Gilead, one of the world's leaders in the biopharma industry, as a Director of Protein Therapeutics.

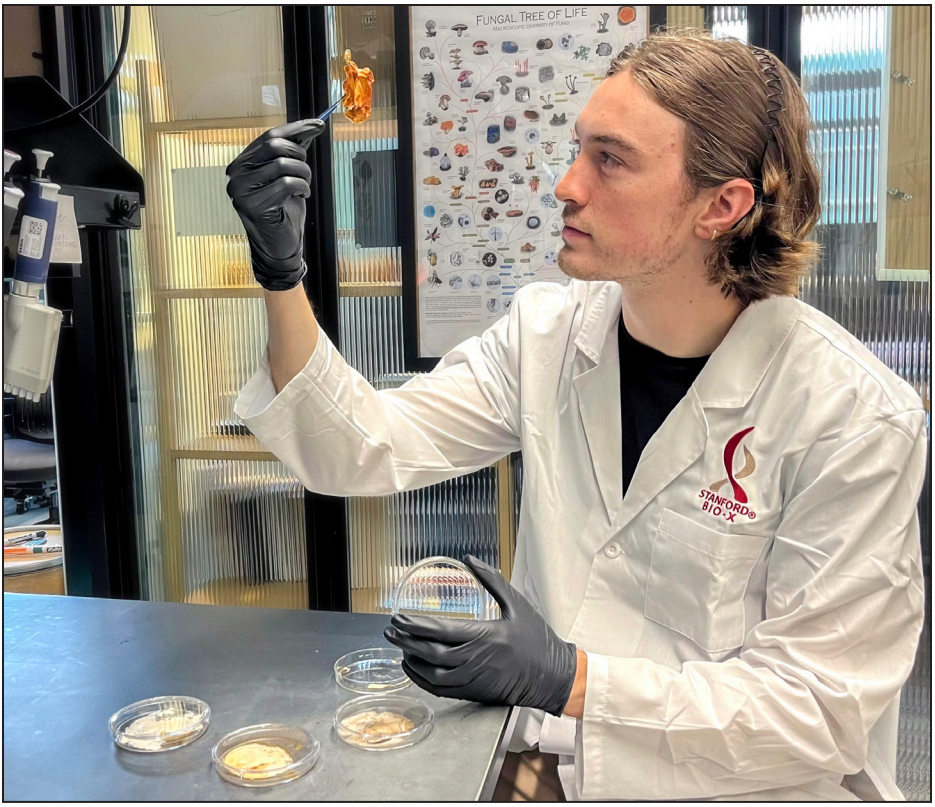
Sarah Divel (Stanford Bio-X Bowes Fellow 2016) is a Senior Innovation Engineer at RapidAI.

Melody Dong (Stanford Bio-X Honorary Fellow 2017) is a Senior Clinical Scientist at Abbott.

Graham Dow (Stanford Bio-X Bowes Fellow 2009) is a group leader at NIAB (National Institute of Agricultural Botany) in Cambridge, UK.

Michelle Drews (Stanford Bio-X Fellow 2021) is a pediatric intern at Nationwide Children's Hospital.

Haotian Du (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2021) is a Scientist I in Computational Protein Generation at Generate Biomedicine, a start-up that works on applying protein generative modeling to develop novel therapeutic solutions.



Stanford Bio-X Bowes Fellow Peter Allen (see pg. 4 for research details)

Karen Dubbin (Stanford Bio-X Bowes Fellow 2013) is a Principal Engineer at Stryker.

Remy Durand (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2010) is the founder and Chief Executive Officer of a stealth, venture-backed biotech company. Previously, he served as the Chief Business Officer of Alpine Immune Sciences which was acquired by Vertex Pharmaceuticals for $4.9 billion in 2024.

Stephan Eismann (Stanford Bio-X Bowes Fellow 2019) is leading the machine learning team at Atomic AI, Inc. located in South San Francisco.

Anna Elleman (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2018) is a postdoctoral fellow in the molecular and cell biology department at the University of California, Berkeley.

Christopher Emig (Stanford Bio-X Bowes Fellow 2011) is the co-founder and CEO of Augmenta Bioworks (as of 2024 a Vaxanix Ltd. subsidiary) and a scientific advisor to Chimera Bio and CytoKind, Inc.

Nir Even-Chen (Stanford Bio-X Bowes Fellow 2015) is a Director of Head of Brain Interfaces Applications at Neuralink.

Yuhang Fan (Enlight Foundation Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2020) is a Professor in the School of Physics at Xi'an Jiaotong University.

Corey Fernandez (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2019) is an Assistant Professor of Psychology at Nevada State University.

Jonas Fowler (Stanford Bio-X Honorary Fellow 2019) is a Scientist II at a stealth biotech start-up developing targeted gene therapies in Berkeley, CA.

Stanford Bio-X Bowes Fellow Tara Lowensohn (see pg. 10 for research details)

Gabriela Fragiadakis (Stanford Bio-X Bowes Fellow 2013) is an Associate Professor at the University of California, San Francisco in Systems Immunology and Data Science.

Limor Freifeld (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2010) is a Senior Lecturer (a position equivalent to assistant professor) at the Faculty of Biomedical Engineering at the Technion, Israel Institute of Technology.

Stephen Fried (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2012) is Associate Professor in the Departments of Chemistry and Biophysics at Johns Hopkins University.

Julia Fukuyama (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2014) is an Assistant Professor in the Department of Statistics at Indiana University.

Xiaojing Gao (Enlight Foundation Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2012) is an Assistant Professor of Chemical Engineering at Stanford.

Pablo Garcia-Nieto (Stanford Bio-X Bowes Fellow 2017) is a senior data scientist at insitro.

Courtney Gegg (Stanford Bio-X Bowes Fellow 2016) is an engagement manager at Headland Strategy Group.

Tony Ginart (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2019) is a principal scientist at Salesforce AI Research, developing generative AI for the enterprise.

"The Bio-X program has been a wonderful source of community and professional support for me. During my PhD, as a Bio-X Fellow, I was funded to pursue cutting-edge research based on my own proposal. I was also given many opportunities to present and discuss my work... Since graduating, I've also enjoyed staying in touch with other fellows and participating in the Bio-X Undergraduate Summer Research Program."

— Petar Petrov, Stanford Bio-X Fellow

David R. Glass (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2018) is a postdoc in the Fred Hutchinson Cancer Center.

David S. Glass (Stanford Bio-X Bowes Fellow 2013) is an assistant professor in the Laufer Center at Stony Brook University.

Caleb Glassman (Stanford Bio-X Honorary Fellow 2017) is a postdoc in Steve Elledge's lab at Harvard Medical School.

Emma del Carmen Gonzalez Gonzalez (Stanford Bio-X Bowes Fellow 2018) is a Senior Research Specialist at Dow.

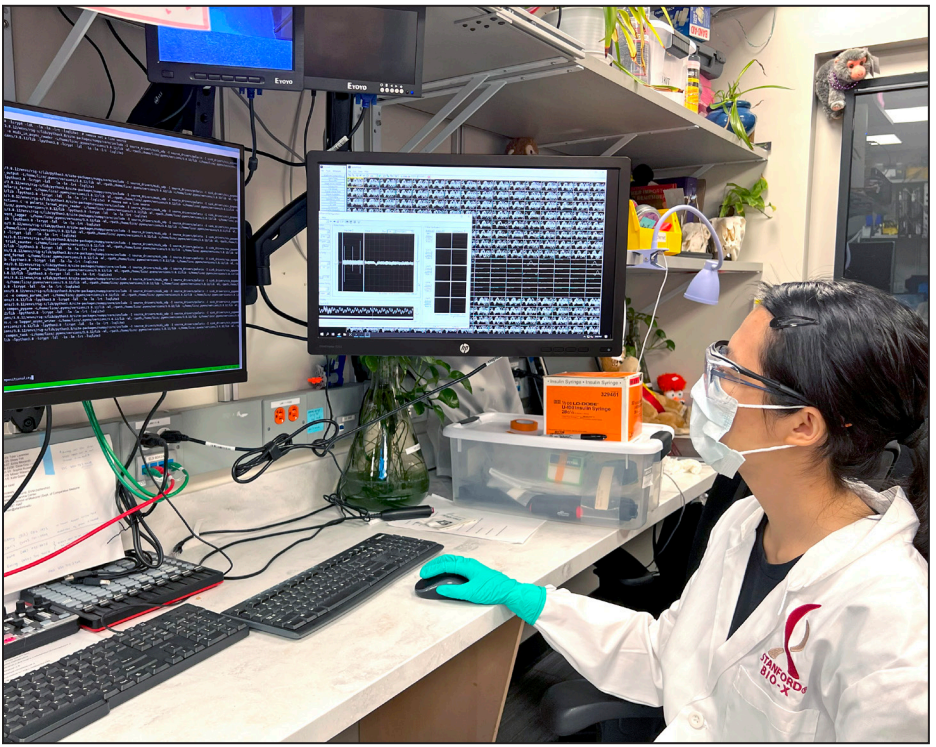
Peyton Greenside (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2015) is the co-founder and CSO of BigHat Biosciences.

Viviana Gradinaru (Colella Family Fellow, Stanford Bio-X SIGF 2008) is a Professor of Neuroscience and Biological Engineering at the California Institute of Technology (Caltech). She is also the director of the Center for Molecular and Cellular Neuroscience and director of the Richard N. Merkin Institute for Translational Research.

Alex Grant (Stanford Bio-X Bowes Fellow 2010) is the VP of Engineering at the startup Ceribell, Inc.

Adam Grossman (Stanford Bio-X Bowes Fellow 2004) is a co-founder and SVP of Emerging Risk at Praedicat, Inc., the world's leading liability emerging risk analytics company for casualty insurers and industrial companies. Praedicat was acquired by Moody's Analytics in 2024, and Adam is now the Head of Casualty Emerging Risk at Moody's Insurance Solutions.

Gunsagar Gulati (Stanford Bio-X Bowes Fellow 2018) is a clinical fellow in hematology/oncology at Dana-Farber Cancer Institute.



Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF Yuxin Wu (see pg. 14 for research details)

Stanford Bio-X Fellows Group Photo 2015

Lisa Gunaydin (Stanford Bio-X Bowes Fellow 2008) is an Associate Marriage and Family Therapist in a group private practice setting as well as an Adjunct Professor in the Counseling Psychology departments at both Palo Alto University and Santa Clara University.

Amalia Hadjitheodorou (Stanford Bio-X Bowes Fellow 2014) is a Project Leader with the Boston Consulting Group doing Healthcare/Ops work.

Mary Hall (Stanford Bio-X Bowes Fellow 2018) is currently searching for job opportunities.

Shuo Han (Stanford Bio-X Bowes Fellow 2017) is a Principal Investigator at the Shanghai Institute of Biochemistry and Cell Biology.

Yukun (Alex) Hao (Stanford Bio-X Bowes Fellow 2020) is a postdoc researcher in the Hie lab at Stanford and works at the interface of generative genomics and neuroscience.

Kevin Hart (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2015) is a Senior Scientist at Kite Pharma.

Lindsey Hasak (Stanford Bio-X Fellow 2019) is looking for her next role at the intersections of education, psychology, and neuroscience research.

Fidel Hernandez (Stanford Bio-X Honorary Fellow 2013) is a Director of Private Equity Portfolio Operations at Elliott Investment Management.

Jennifer Hicks (Stanford Bio-X Bowes Fellow 2007) is Executive Director of the Wu Tsai Human Performance Alliance at Stanford, with a focus on collaborative research projects and programs to advance our understanding of the biological principles underlying human performance. Dr. Hicks also serves as the Director of Research for the Mobilize Center, an NIH Biomedical Technology Resource Center at Stanford University and the Restore Center, an NIH-funded center that brings state-of-the-art engineering tools to rehabilitation scientists.

Tyler Hillman (Stanford Bio-X Bowes Fellow 2008) is a gynecologic oncologist and Associate Professor of OBGYN & Reproductive Sciences at the University of California, San Diego. His clinical practice focuses on the genetics of rare gynecologic malignancies.

Nina Horowitz (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2019) is the CEO of ImmuneBridge, a start-up with the unique capacity to expand stem cells from cord blood for inexpensive manufacturing of cancer immunotherapies.

Timothy Horton (City Hill Foundation Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2017) is a scientist at Transpire Bio Inc, in Weston, Florida.

Zahid Hossain (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2014) is a perception systems architect at Meta.

Brian Hsueh (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2015) is a resident physician in neurosurgery at the Massachusetts General Hospital.

Eva Huang (Stanford Bio-X Bowes Fellow 2014) is a Supervising Staff Scientist at Cellares.

Kexin Huang (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2023) is a co-founder at Phylo AI, a start-up that builds AI-native workspace for biologists to automate day-to-day research tasks.

Jacob Hughey (Stanford Bio-X Bowes Fellow 2007) is an Adjunct Assistant Professor of Biomedical Informatics and Biological Sciences at Vanderbilt University. He works as a Core Team Member of the Agency Fund, a new philanthropic initiative whose mission is to invest in ideas and organizations that expand human agency.

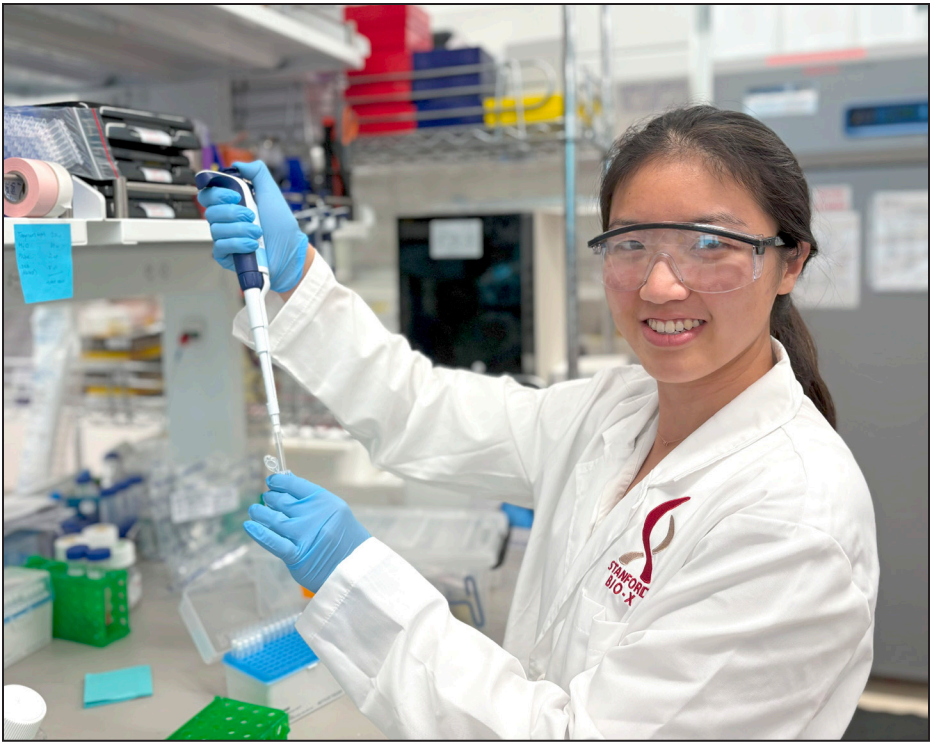
Sarah Hull (Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2019) is a senior scientist at Gilead Sciences.

Haisam Islam (Stanford Bio-X Bowes Fellow 2010) is a software development engineer at Amazon.

Johnny Israeli (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2016) is an engineering lead at NVIDIA.

Ivan Ivanov (Tusher Family Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2015) is a staff research and development engineer at the Chan Zuckerberg Biohub.

Kwang Eun Jang (Stanford Bio-X Bowes Fellow 2014) recently completed his postdoctoral fellowship and is currently exploring employment opportunities.



Pierce Family Goldman Sachs Fellow, Stanford Bio-X SIGF Wenyan (Lucy) Zhang
(see pg. 15 for research details)

Xiaofan Jin (Stanford Bio-X Bowes Fellow 2014) is an Assistant Professor of Biomedical Engineering at the University of Calgary.

YoungJu Jo (Stanford Bio-X Bowes Fellow 2020) is a postdoc in the bioengineering department at Stanford.

Rachel Kalmar (Stanford Bio-X Bowes Fellow 2005) is a Principal Product Manager at Moderna.

Mihalis Kariolis (Stanford Bio-X Bowes Fellow 2008) is the VP, Head of Non-Viral, at Voyager Therapeutics.

Kristjan Eerik Kaseniit (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2021) co-founded Radar Therapeutics around a part of his Bio-X research project creating mRNAs whose expression can be targeted to specific cell types and states. Radar's recently announced seed fundraise of over $13M from NfX, Eli Lilly & Co., and others was covered by End-points News, GEN, and other biotech media.

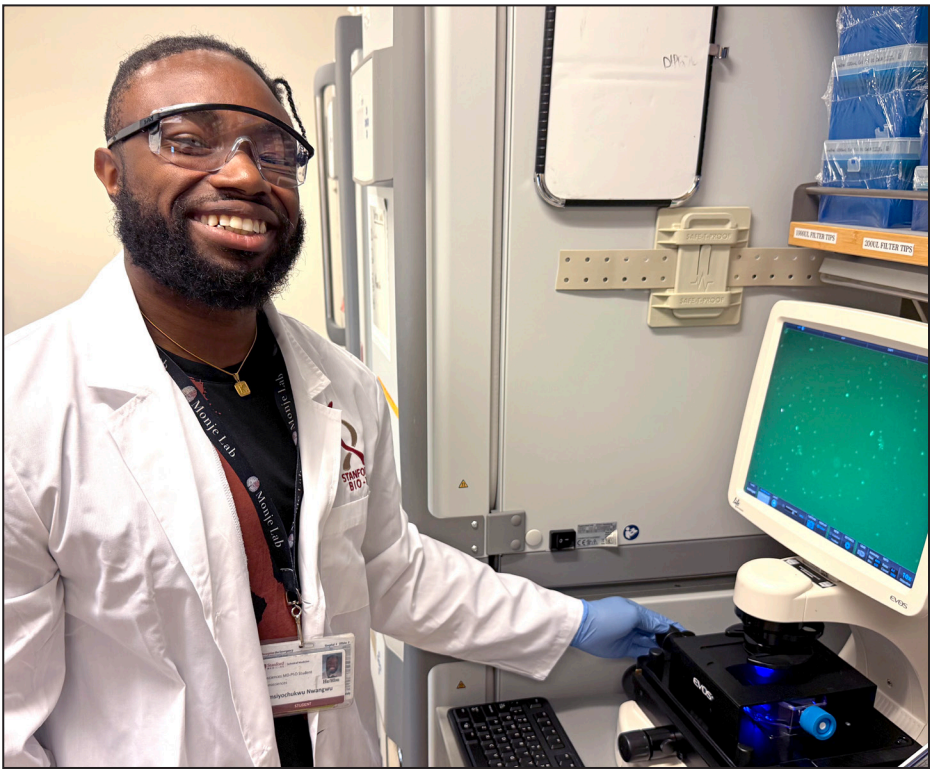
Jasmine Kaslow (Stanford Bio-X Honorary Fellow 2015) is a product analyst at Google.

Catie Meis Kasse (William and Lynda Steere Fellow, Stanford Bio-X SIGF 2020) is a senior scientist at Donaldson Company, Inc.

Katy Keenan (Stanford Bio-X Bowes Fellow 2006) is the Project Leader in Quantitative MRI at the National Institute of Standards and Technology (NIST) in Boulder, Colorado.

Hannah Kempton (Stanford Bio-X Honorary Fellow 2017) is a scientist at Stylus Medicine.

Margarita Khariton (Lavidge and McKinley Interdisciplinary Fellow, Stanford Bio-X SIGF 2017) is developing platforms for next-generation enzymatic DNA synthesis as a Senior Engineer at Ansa Biotechnologies.



Stanford Bio-X Bowes Fellow Kamsi Nwangwu (see pg. 12 for research details)

Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF Sarah Dilorio (see pg. 6 for research details)

Carolyn Kim (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2017) is a researcher at Genesis Therapeutics.

Daniel Kim (Stanford Bio-X Bowes Fellow 2015) is a Physician Scientist at Memorial Sloan Kettering Cancer Center.

Jongmin Kim (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2011) is an Assistant Professor in the Department of Biomedical Sciences at Cornell University.

Jun Woo Kim (Stanford Bio-X Bowes Fellow 2013) is a postdoc with Dr. Julien Sage at Stanford.

Samuel Kim (Stanford Bio-X Bowes Fellow 2004) is a principal research scientist at Gilead Sciences.

Yoon Seok Kim (Stanford Bio-X Bowes Fellow 2016) is an assistant professor at EPFL in Switzerland.

Daniel Kimmel (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2006) is an Associate Research Scientist at Columbia University.

Ryosuke Kita (Stanford Bio-X Bowes Fellow 2013) is a Consultant at Enceladus Bio.

Benjamin Knapp (Colella Family Fellow, Stanford Bio-X SIGF 2020) is a research investigator at Bristol Myers Squibb.

Fikunwa Kolawole (Felix and Heather Baker Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2021) is a medical student in clinical rotations at Stanford University. As an aspiring physician-scientist, he aims to focus on improving management of cardiovascular diseases by combining engineering and medicine.

Elgin Korkmazhan (Stanford Bio-X Bowes Fellow 2018) is a postdoctoral scholar at the Schier lab at Biozentrum, University of Basel, working on vertebrate embryogenesis.

Benjamin Kotopka (Stanford Bio-X Bowes Fellow 2015) is the Head of Data Science at Antheia, a startup enabling the discovery and production of plant-inspired drugs through a pioneering approach to bioengineering and fermentation.

Brad Krajina (Stanford Bio-X Bowes Fellow 2015) is the owner and director of BK SciViz, a scientific visualization and animation studio located in Seattle.

Rachael Kretsch (Stanford Bio-X Bowes Fellow 2021) is a postdoctoral scholar at Stanford University expanding her knowledge of RNA structure in test tubes towards RNA structure in cells.

Deepak Krishnamurthy (Stanford Bio-X Bowes Fellow 2015) is a postdoctoral Schmidt Science Fellow at UC Berkeley.

Gaurav Krishnamurthy (Stanford Bio-X Medtronic Fellow 2008) is Partner at The Foundry (leading medical device incubator).

Thomas Lampo (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2013) is the co-founder and Chief AI Officer at DownPat.

Frances Lau (Stanford Bio-X Bowes Fellow 2007) is an R&D manager at Meta Reality Labs Research, working on robotics and human-computer interaction.

Melinda Cromie Lear (Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2008) is a Senior Staff Systems Engineer at Johnson & Johnson MedTech.

Paul Lebel (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2011) is a senior staff R&D engineer at the Chan Zuckerberg Biohub.

Andrew Lee (Stanford Bio-X Bowes Fellow 2010) is the founder and managing director of the StartX-QB3 joint technology venture, a co-founder of StartX Med, and also a co-founder of the biotech spin-out startup, Stem Cell Theranostics.

Austin Lee (Stanford Bio-X Bowes Fellow 2011) is a Senior Director of Portfolio Strategy with ResMed in San Diego. He leads the Portfolio Strategy function within ResMed's Product organization seeking to revolutionize Sleep and Breathing health. He was previously a Principal with the health care practice of the Boston Consulting Group in the Chicago office.

Hong-Pyo Lee (Stanford Bio-X Bowes Fellow 2017) is a founder and CTO at MEDiC Life Sciences.

Soah Lee (Stanford Bio-X Bowes Fellow 2012) is as an Assistant Professor in the School of Pharmacy at Sungkyunkwan University in South Korea.

Stanford Bio-X Fellows Group Photo 2013

Stanford Bio-X Bowes Fellow Shuyu Shi (see pg. 13 for research details)

Stephen Lee (Stanford Bio-X Bowes Fellow 2005) is a principal consultant for Work Networks.

Bauer LeSavage (Stanford Bio-X Bowes Fellow 2018) is a Research Associate at Dimension Capital in San Francisco, investing in platform biotech companies at the intersection of life science and tech.

Michael Leung (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2016) is the co-founder and COO of Spect Inc. Spect enables Eye Care, Anywhere through their telemedicine platform that trains front-line healthcare workers to perform critical eye screenings, with contracts with Blue Cross Blue Shield and Johns Hopkins.

Steven Leung (Stanford Bio-X Bowes Fellow 2013) is a software engineer at Orchard Ultrasound Innovation.

Hongquan Li (Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2017) is a co-founder and CEO of Cephla, a startup building open and versatile microscope platforms and solutions with the goal of accelerating discoveries and solutions.

Veronica Li (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2021) is a scientist in Professor Jonathan Long's lab at Stanford Pathology and the Sarafan ChEM-H Institute, where she works on metabolic disease.

Ye (Henry) Li (William and Lynda Steere Fellow, Stanford Bio-X SIGF 2013) is the co-founder of Nova AI, a start-up that provides automated testing for every platform, powered by AI.

"The Bio-X fellowship supported my PhD research and helped facilitate collaboration across disciplines. My project combined expertise from materials science and pediatric endocrinology to develop next generation insulin formulations to treat diabetes. It was especially impactful for me as an international student, as there are limited fellowship opportunities available to us and having access to stipend support impacts the flexibility of the research directions we pursue."

— Stanford Bio-X Fellow Caitlin Maikawa

Liang Liang (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2009) is an Assistant Professor of Neuroscience at Yale University.

Orly Liba (Stanford Bio-X Bowes Fellow 2014) works at YouTube as a senior staff research scientist developing video generation algorithms.

Prasheel Lillaney (Stanford Bio-X Bowes Fellow 2005) is a director of decision science and AI at GSK.

Catherine Liou (Stanford Bio-X Bowes Fellow 2018) is continuing in the Sattely Lab at Stanford to finish up work investigating the impact of gut microbial metabolism on dietary plant compounds.

Sungwon Lim (Stanford Bio-X Bowes Fellow 2011) is the co-founder and CEO of ImpriMed, Inc., a start-up that develops an AI-driven precision medicine service for pets with cancer.

Chao Liu (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2015) is a staff scientist at the Lawrence Livermore National Lab.

Chunzi Liu (Stanford Bio-X Bowes Fellow 2019) is a postdoctoral fellow at UC Berkeley, studying the evolution of cell surfaces under the advice of Professor Daniel Fletcher.

Erica Liu (Stanford Bio-X Bowes Fellow 2022) is an optical scientist at Cision Vision, a medical imaging startup.

Zhiru Liu (Stanford Bio-X Bowes Fellow 2022) is a Postdoctoral Research Scholar in the laboratory of Dr. Benjamin Greenbaum at the Sloan Kettering Institute for Cancer Research, where he develops computational approaches to guide the design of mRNA cancer vaccines.

Andreas Loening (Stanford Bio-X Bowes Fellow 2004) is an Associate Professor in the Department of Radiology at Stanford University.

Chris Long (Stanford Bio-X Fellow 2021) is an associate consultant at ZS Associates, a consulting firm that advises clients working on novel pharmaceutical and medical technology developments.

Mark D. Longo (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2011) is the Chief Technology Officer at Sirona Medical, where he is helping to build a next generation AI-powered radiologist workstation.

Molly Lucas (Stanford Bio-X Bowes Fellow 2019) is a Senior Manager of Machine Learning at Precision Neuroscience.

Bertrand Lui (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2006) co-founded SetSail (acquired by ZoomInfo) and is currently a Director of Product at Moloco.

Li Ma (Larry Yung Fellow, Stanford Bio-X SIGF 2009) is a Professor of Statistics and Data Science at the University of Chicago.

Niru Maheswaranathan (Stanford Bio-X Honorary Fellow 2013) is a research scientist at Facebook Reality Labs working on neural interfaces.

Caitlin Maikawa (Stanford Bio-X Bowes Fellow 2019) is an Assistant Professor at the Institute of Biomedical Engineering at the University of Toronto. Her group works on developing dynamic polymer materials for drug delivery and biosensing.

Amanda Malone (Stanford Bio-X Bowes Fellow 2004) is the Chief Operating Officer and Scientific Officer of Eupraxia Pharmaceuticals Inc., a clinical-stage biotechnology company leveraging its proprietary DiffuSphere™ technology to optimize drug delivery for applications with significant unmet need.

Ian Marshall (Stanford Bio-X Bowes Fellow 2008) is an Associate Professor at the Section for Microbiology, Department of Biology, at Aarhus University in Denmark.

Payton Marshall (Stanford Bio-X Bowes Fellow 2017) is completing his residency in anesthesiology at Stanford.

Trevor Martin (Stanford Bio-X Bowes Fellow 2012) is the CEO and a co-founder of Mammoth Biosciences. They have raised over $465M in capital including over $100M in non-dilutive funding to build the next generation of CRISPR based permanent cures for genetic disease.

Rebecca Marton (Seth A. Ritch Graduate Fellow, Stanford Bio-X SIGF 2017) is a Scientist III at Genentech.

Melina Mathur (Stanford Bio-X Bowes Fellow 2010) is a Senior Director, Commercial Operations, at Ginkgo Bioworks.

Joanna Mattis (Stanford Bio-X Bowes Fellow 2010) completed her neurology residency and epilepsy fellowship at the University of Pennsylvania. She is now a tenure track Assistant Professor at the University of Michigan.

Aaron Mayer (Stanford Bio-X Honorary Fellow 2015) is co-founder and Chief Scientific Officer of Enable Medicine, a biopharma company that is building biological maps to guide better medicine.

Jennifer McCaney (Stanford Bio-X Bowes Fellow 2006) is the Chief of Innovation at UCLA Health and an Adjunct Associate Professor at the David Geffen School of Medicine at UCLA and the UCLA Anderson School of Management. She is the Executive Director of UCLA Biodesign and an Associate Director of the UCLA Clinical and Translational Science Institute (CTSI).

Kelly McGill Bernhardt (Stanford Bio-X Bowes Fellow 2017) is a scientific program analyst at the National Center for Complementary and Integrative Health.

Allister McGuire (Stanford Bio-X Bowes Fellow 2013) is a staff hardware engineer at Echo Neurotechnologies in San Francisco.

Cory McLean (Stanford Bio-X Bowes Fellow 2007) is a senior staff software engineer at Google.

Arek Melkonian (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2016) is a Research/Clinical Fellow in the Department of Pathology at Brigham and Women's Hospital and an Instructor in Pathology at Harvard Medical School.

Stanford Bio-X Bio-X Bowes Fellow Joseph Noh (see pg. 11 for research details)

Leslie Meltzer (Stanford Bio-X Bowes Fellow 2004) is the Chief Research and Development Officer at Apellis.

Samir Menon (Colella Family Fellow, Stanford Bio-X SIGF 2011) is the founder and CEO of Dexterity, Inc., a start-up focused on building an AI platform for robots to gain human-like skills.

Jorge Meraz (Stanford Bio-X Bowes Fellow 2018) is an analyst at PG&E, where he conducts research and analysis on emerging technologies to plan for California's transition to clean energy.

Amanda Miguel (Stanford Bio-X Honorary Fellow 2013) is a senior data scientist for the consultant company Hitachi Solutions.

Denitsa Milanova (Stanford Bio-X Medtronic Fellow 2011) is the founder and CEO of Medici Therapeutics.

Caitlyn Miller (Stanford Bio-X Honorary Fellow 2017) is CEO and co-founder of TwoStep Therapeutics.

Delaney Miller (Stanford Bio-X Bowes Fellow 2021) is a robotics engineer at Intuitive Surgical, which develops minimally invasive robotic surgical systems.

Murtaza Mogri (Stanford Bio-X Bowes Fellow 2006) is a Delivery Science/Clinical Informatics Fellow at Kaiser Permanente, developing predictive models to support clinical decision-making.

Amr Mohamed (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2021) is a quantitative researcher at Engineers Gate, a quantitative investment management firm in New York City.

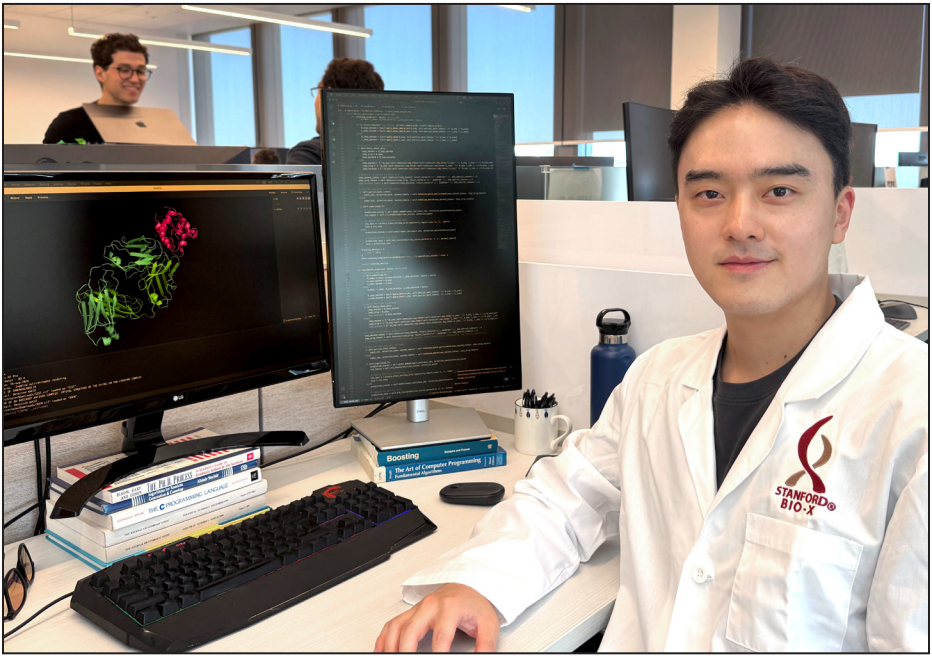
Kate Montgomery DeMers (Stanford Bio-X Bowes Fellow 2009 and William and Lynda Steere Fellow, Stanford Bio-X SIGF 2012) is the director of scientific affairs at Enspectra Health. The company's technology, minimally invasive cellular imaging, was supported as an academic project by a Stanford Bio-X Seed Grant when it was early stage and high-risk, and is now being commercialized to improve human health.

Sergio Moreno (Stanford Bio-X Bowes Fellow 2004) is currently searching for job opportunities.

Paola Moreno-Roman (Stanford Bio-X Bowes Fellow 2014) is a Strategic Partnerships Consultant at Foldscope Instruments, Inc., where she works on bringing powerful low-cost tools to communities around the world. She is also a Professor at Cayetano Heredia Peruvian University, where she teaches biology to undergraduates.

Mira Moufarrej (Stanford Bio-X Bowes Fellow 2018) is a Stanford Science Fellow working with Kristy Red-Horse. She was previously an associate at The Column Group, a science-driven venture capital firm, where she focused on early-stage drug discovery company creation.

Stanford Bio-X Fellows Group Photo 2016



Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF Chiho Im
(see pg. 9 for research details)

Adi Xiyal Mukund (Tusher Family Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2021) is a research track anesthesiology resident at UCSF.

Sedona Murphy (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2020) is Group Leader at the Max Planck Institute for Molecular Genetics, Berlin, Germany.

Gabriella Muwanga (Stanford Bio-X Fellow 2021) is a scientific analyst at Morrison Foerster (MoFo), a premier law firm with offices around the globe. She is a member of the patent group and focuses on life sciences patent preparation and prosecution. She is based at MoFo's Palo Alto office.

David Myung (Stanford Bio-X Bowes Fellow 2005) is an Associate Professor of Ophthalmology at the Byers Eye Institute (BEIS) and the VA Palo Alto Health Care System, and, by courtesy, of Chemical Engineering at Stanford. He is also a Director of the Ophthalmic Innovation Program and the Director of the Stanford Teleophthalmology Autonomous Testing and Universal Screening (STATUS) Program, which oversees a Bay Area-wide, AI-powered diabetic retinopathy screening program.

Dania Nanes Sarfati (Stanford Bio-X Bowes Fellow 2020) is a postdoctoral fellow at Carnegie Science.

Daniel Newburger (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2011) works as a software engineer at Google.

Elaine Ng (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2016) is the Chief Scientific Officer and a co-founder of Magic Lifescience.

Wendy Ni (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2012) is a senior data science manager at LinkedIn.

Akshatkumar Nigam (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2022) is employed at a stealth mode startup.

William Noderer (Stanford Bio-X Bowes Fellow 2010) is working for the Anduril as the GM of Maritime.

James Notwell (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2013) is the senior director of computation at MapLight Therapeutics, which was founded by Stanford Bio-X faculty members Dr. Karl Deisseroth and Dr. Robert Malenka.

Johanna O'Day (Stanford Bio-X Bowes Fellow 2017) is a scientific program manager at the Wu Tsai Human Performance Alliance, a collaborative center working to discover the unknown principles of peak performance and translate them to enable optimal health and well-being for all.

Abdulmalik Obaid (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2018) is working at a stealth startup developing microelectronic devices in the Bay Area.

Peter Olcott (Presidential Fellow, Stanford Bio-X SIGF 2009) is a principal at First Spark Ventures, a deep tech venture fund in Menlo Park investing in breakthrough technologies that make the world healthier, safer, and more productive.

Carmichael Ong (Stanford Bio-X Bowes Fellow 2011) is a research engineer in the Bioengineering department at Stanford.

Shawn Ouyang (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2009) is a co-founder of NewCo.

Anusri Pampari (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2022) recently graduated and is exploring professional industry opportunities.

Sung Jin Park (Stanford Bio-X Bowes Fellow 2013) is a Senior Manager for Rare Disease Pipeline Forecasting at Amgen.

William Parsons (Presidential Fellow, Stanford Bio-X SIGF 2010) is an Associate Professor of Chemistry and Biochemistry at Oberlin College.

Christine McLeavey Payne (Stanford Bio-X Bowes Fellow 2009) is an audio research team lead at OpenAI. After Stanford, she worked for six years as a classical pianist, and co-founded Ensemble SF with members of the SF Symphony and Ballet.

Bethany Percha (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2013) is Chief Data and Analytics Officer at New York-Presbyterian and Adjunct Assistant Professor at Columbia University and at the Icahn School of Medicine at Mount Sinai.

Petar Petrov (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2017) is a Visiting Researcher both at the Institute of Science and Technology Austria and at UC Berkeley.

Steven Petsche (Stanford Bio-X Bowes Fellow 2011) works as a software engineer for Google in Irvine, California.

Samantha Piekos (Tusher Family Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2018) is an Assistant Professor of Informatics at the University of Pennsylvania.

Benjamin Poole (Seth A. Ritch Graduate Fellow, Stanford Bio-X SIGF 2014) is a senior staff research scientist at Google DeepMind.

Arjun Prabhakar (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2016) is a Senior Scientist in R&D at Pacific Biosciences.

Guillem Pratx (Stanford Bio-X Bowes Fellow 2006) is an Associate Professor in Radiation Oncology at Stanford University. His research focus is on biomedical imaging for radiotherapy.

Teresa Purzner (Felix and Heather Baker Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2015) is a neurosurgeon, developmental neurobiologist, and co-founder and CSO of Cerebelly, a brain-focused nutritious baby food line that she started while at Stanford, which can now be found in over 10,000 stores nation-wide.

Jeffrey Quinn (Stanford Bio-X Bowes Fellow 2012) is a Director for Off-Target Biology at Beam Therapeutics.

Amanda Rabe (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2016) graduated in 2020.

Ashwin Ramachandran (Stanford Bio-X Bowes Fellow 2017) is an Assistant Professor of Mechanical Engineering at Purdue University.

Kalani Ratnasiri (City Hill Foundation Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2022) is a postdoctoral fellow at Genentech in Translational Medicine.

Alexander Ratner (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2017) is the co-founder and CEO at Snorkel AI, a startup supporting and commercializing the open source Snorkel framework (snorkel.org) for programmatically building and managing training data for machine learning, which he developed as part of his thesis work. He is an Affiliate Assistant Professor in Computer Science at the University of Washington in Seattle.

Manuel Rausch (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2012) is an Associate Professor in the Department of Aerospace Engineering & Engineering Mechanics at University of Texas at Austin. Manuel has received the American Heart Association Career Development Award, the Moncrief Grand Challenge Award, the NSF Career Award, and the Cockrell School of Engineering Award for Outstanding Engineering Teaching by an Assistant Professor.

Andreas Rauschecker (Stanford Bio-X Bowes Fellow 2008) is an Assistant Professor in Neuroradiology (Department of Radiology & Biomedical Imaging) at the University of California, San Francisco and co-director of the UCSF Center for Intelligent Imaging.

Heather Rogan (Rogers Family Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2016) is an Engagement Manager at Headland Strategy Group, a biotech consulting firm focused on assisting healthcare companies with commercial, corporate (BD/M&A), and portfolio and R&D strategy.

Lucero Rogel-Hernandez (Stanford Bio-X Bowes Fellow 2020) is a postdoc in Dr. Miriam Goodman's lab at Stanford.

Nicholas Rommelfanger (Stanford Bio-X Fellow 2021) is an engineer at General Atomics Aeronautical Systems in San Diego, CA.

City Hill Foundation Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF
Jessica Karaguesian (see pg. 9 for research details)

Adam Rubin (William and Lynda Steere Fellow, Stanford Bio-X SIGF 2015) is a Helen Hay Whitney Foundation Postdoctoral Fellow at the Broad Institute in the labs of Dr. Aviv Regev and Dr. Alex Shalek.

Sanaz Saatchi (Stanford Bio-X Amgen Fellow 2009) is the Director of New Business Development at Intuitive Surgical, the pioneer and leader of robotic surgery. Collaborating with the internal Strategy, Venture, and Research organizations, she is focused on leading Intuitive's corporate development efforts by identifying and developing opportunities for new technology initiatives at Intuitive.

Joel Sadler (Stanford Bio-X Bowes Fellow 2012) previously co-founded Patch XR and is currently Chief Technology Officer at the George Lucas Educational Foundation, Lucas Learning Division.

Rachel Hagey Saluti (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2014) is the co-founder and director of R&D for a biopharmaceutical start-up in stealth mode.

Jayodita Sanghvi (Stanford Bio-X Bowes Fellow 2007) is Head of AI Platform at Color.

Annina Sartor (William and Lynda Steere Fellow, Stanford Bio-X SIGF 2018) works at RMI on the Carbon Dioxide Removal initiative.

Andrew Savinov (Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2014) is a K99 postdoctoral fellow in Dr. Gene-Wei Li's lab at the Massachusetts Institute of Technology.

Nicole Schiavone (Stanford Bio-X Bowes Fellow 2019) is a scientific reviewer at the FDA in the Division of Circulatory Support, Structural and Vascular Devices in the Office of Cardiovascular Devices.

Tim Schnabel (Stanford Bio-X Bowes Fellow 2015) is the founder and CEO of Switch Bioworks, a biotech startup based on research started at Stanford. Switch's mission is to feed the world sustainably by engineering microbes to produce climate-smart nitrogen "biofertilizer," directly at the roots of plants.

Alia Schoen (Stanford Bio-X Bowes Fellow 2009) is a Research Development Specialist in Stanford's Research Development Office, where she supports faculty teams from across the University with a focus on large, collaborative research proposals in the STEM fields and with emphasis on climate and sustainability research.

Mark Sellmyer (Stanford Bio-X Bowes Fellow 2008) is an Assistant Professor of Radiology with a secondary appointment in Biochemistry and Biophysics at the University of Pennsylvania. Mark is the Director of the PET Center and a founding Co-Director of the Center for Translational Chemical Biology.

Jake Sganga (Stanford Bio-X Bowes Fellow 2014) is a co-founder and CTO of Remedy Robotics, a surgical robotics startup.

Pankaj Sharma (Stanford Bio-X Bowes Fellow 2012) is a silicon design engineer at AMD.

Anna Shcherbina (Stanford Bio-X Bowes Fellow 2017) is a machine learning engineer at insitro, a start-up focused on high throughput drug target discovery and development.

"The Bio-X cohort and its collaborative culture taught me to set my sights on grand challenges, scaffold my own resources and apply my creativity to chart a new course towards my goals. This support and training gave me the courage to train in multiple fields for my Ph.D. and postdoc and rise to the challenge of developing expertise in new domains. These experiences also changed my vision of how my research could address grand challenges in human health. Ultimately, the interdisciplinary experience being a Bio-X fellow has allowed me to develop my own unique and innovative program at the intersection of nanotechnology, medicine and manufacturing."

— Stanford Bio-X Fellow Rebecca Taylor

Stanford Bio-X Fellows Group Photo 2012

Liyue Shen (Stanford Bio-X Bowes Fellow 2019) is an Assistant Professor in the Department of Electrical Engineering & Computer Science (EECS) at the University of Michigan.

Handuo Shi (Rosenberg Ach Family Fellow, Stanford Bio-X SIGF 2016) is a research staff in Dr. KC Huang's lab at Stanford. Her research focuses on the biophysical modeling of human gut bacterial communities.

Sophia Shi (Stanford Bio-X Bowes Fellow 2021) is a Rowland Fellow and Principal Investigator at Harvard University.

Avanti Shrikumar (Stanford Bio-X Bowes Fellow 2016) is a postdoctoral researcher in the University of Sydney's Imaging and Phenotyping Laboratory.

Steven Shuken (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2017) is a postdoctoral research fellow in the Gygi Laboratory in the Department of Cell Biology at Harvard Medical School in Boston, MA. The Gygi Lab develops novel methodologies in mass spectrometry-based proteomics.

Jack Silberstein (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2020) is the founder and CEO of a stealth biotech startup in Cambridge, MA.

Herbert Silva (Stanford Bio-X Bowes Fellow 2013) is working at Johnson Space Center (NASA) in the Aerospace Engineering department.

Joo Yong Sim (Stanford Bio-X Bowes Fellow 2010) is an Assistant Professor at Sookmyung Women's University, South Korea.

Steven Sloan (Stanford Bio-X Bowes Fellow 2014) is an Associate Professor in the Department of Human Genetics at Emory University.

Ruth Sommese (Paul Berg Interdisciplinary Biomedical Graduate Fellow, Stanford Bio-X SIGF 2011) is an Associate Research Fellow at Pfizer.

Min-Sun Son (Stanford Bio-X Bowes Fellow 2007) is a director of clinical engineering at Neptune Medical.

Ryan Squire (Stanford Bio-X Bowes Fellow 2010) is the owner of Lembas Data Science, a consulting practice focused on statistics and geospatial data science for internet technology companies, as well as vice president of investment data science with The Carlyle Group.

Alice Stanton (Stanford Bio-X Bowes Fellow 2017) is a Member of the Faculty, Harvard Medical School and Massachusetts General Hospital.

Lyndsay Stapleton Smith (Affymetrix Bio-X Fellow, Stanford Bio-X SIGF 2018) is a Director of Corporate Development at Calcilytix Therapeutics, a BridgeBio company.

Jaimie Steinmetz (Stanford Bio-X Honorary Fellow 2010) is a Lead Research Scientist at the Institute for Health Metrics and Evaluation.

Ajay Subramanian (Rosenberg Ach Family Fellow, Stanford Bio-X SIGF 2019) is a postdoc at Stanford continuing work in the relationships between neural signals and psychiatric symptoms.

Pakpoom Subsoontorn (Stanford Bio-X Bowes Fellow 2008) is the Vice Dean of Research & Innovation, Faculty of Medical Science, at Naresuan University.

Patricia Suma (Stanford Bio-X Bowes and Stanford Bio-X Amgen Fellow 2011) is the middle grades programmer and 8th-grade biology teacher at Washington Heights Expeditionary Learning School (WHEELS) in Washington Heights in New York City.

Laksshman Sundaram (Stanford Bio-X Bowes Fellow 2019) works at NVIDIA as a Senior Manager in AI Research for Biology.

Jong Min Sung (Stanford Bio-X Bowes Fellow 2009) is an AI engineering consultant at Aten Security (cybersecurity) and Addition Therapeutics (protein engineering). He is also a member of the Human Frontier Collective (HFC) at Scale AI, focusing on LLM agent evaluation.

Peter Suzuki (Stanford Bio-X Bowes Fellow 2021) is graduating in Fall 2025 and joining ADAPT Lab at Houston Methodist Research Institute developing vaccines and antibodies to address emerging infection diseases.

Johanna Sweere (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2015) is Programs Lead at the Mirror Biology Dialogues Fund, a non-profit dedicated to advancing the global dialogue on the risks from mirror bacteria.

Jiongyi Tan (Enlight Foundation Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2014) is a senior scientist at Eikon Therapeutics.

Grace Tang (Stanford Bio-X Bowes Fellow 2008) is a principal staff machine learning engineer at LinkedIn.

Alexander Tarashansky (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2018) is a senior software engineer at the Chan Zuckerberg Initiative.

Noureddine Tayebi (Stanford Bio-X Bowes Fellow 2009) is a founder/investor of Yassir as well as investor and advisor of Punchword.

Rebecca Taylor (Stanford Bio-X Bowes Fellow 2007) is a Professor of Mechanical Engineering at Carnegie Mellon University.

Terence Theisen (Colella Family Fellow, Stanford Bio-X SIGF 2017) is a scientist at Bruker Spatial Biology in Seattle, WA.

Ella Thomson (Stanford Bio-X Bowes Fellow 2020) is an electrical engineer at Meta Reality Labs.

Victor Tieu (Stanford Bio-X Bowes Fellow 2020) is a scientist at Site Therapeutics, an early stage startup in SF (Mission Bay) focusing on high-throughput functional genomics to treat immune-related diseases.

Matthew Titchenal (Stanford Bio-X Bowes Fellow 2015) is continuing his post-graduate career as a technical consultant at InSciTech in Mountain View, California.

Carolina Tropini (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2011) is an Assistant Professor in the School of Biomedical Engineering and the Department of Microbiology and Immunology at the University of British Columbia.

Baris Ungun (Stanford Bio-X Bowes Fellow 2014) is a Staff Machine Learning & Optimization Engineer at TheraPanacea.

Raeline Valbuena (Stanford Bio-X Bowes Fellow 2022) is a Pharmaceutical Writer at Valor Compounding Pharmacy, a Berkeley-based pharmacy making quality customized prescription medications for patients across the nation.

Jules VanDersarl (Stanford Bio-X Bowes Fellow 2005) works at Meso Scale Diagnostics as a Senior Director of Engineering.

Kimberly Vasquez (Stanford Bio-X Bowes Fellow 2019) is an industry postdoc at Gilead, studying regulatory T cells.

Avin Veerakumar (Lubert Stryer Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2017) has started his Psychiatry Residency (research-intensive track) at Harvard Medical School/Brigham and Women's Hospital in Boston.

Ramandeep Vilkhu (Stanford Bio-X Bowes Fellow 2021) is a venture fellow at age1, which funds breakthrough longevity companies addressing the core challenges of the field.

Cassandra Villicana (Stanford Bio-X Bowes Fellow 2022) recently graduated and is in the process of determining her next steps professionally.

Mathias Voges (Stanford Bio-X Bowes Fellow 2013) is a senior research scientist at the Chan Zuckerburg Biohub Network.

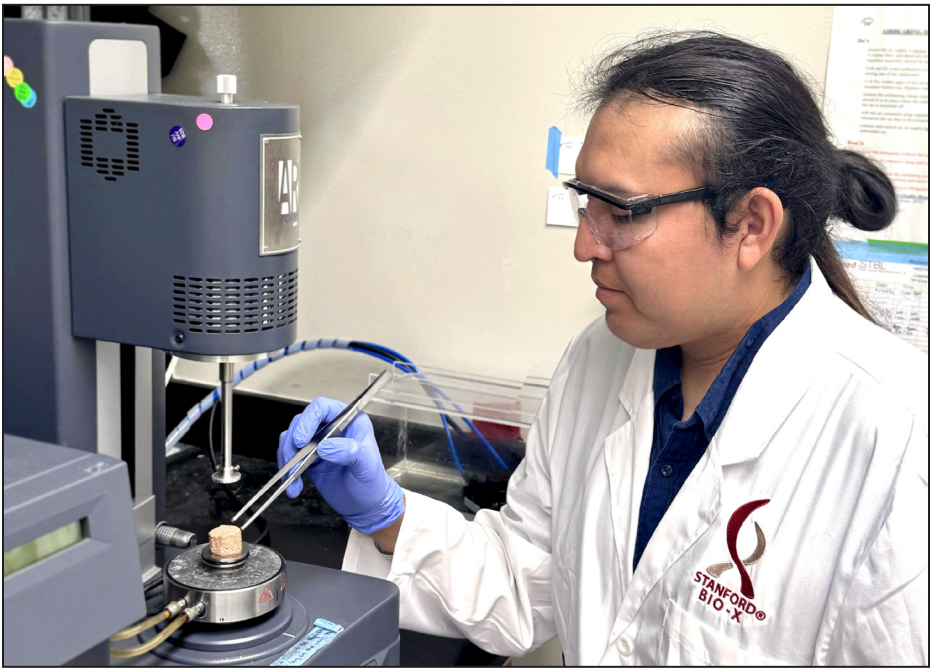
Pranav Vyas (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2019) is a postdoctoral fellow at the University of Chicago as a Biological Sciences Department Chicago Fellows Postdoctoral Fellow and the Center for Living Systems Postdoctoral Fellow, working on bridging effects of temperature across scales.

Michael Wainberg (Stanford Bio-X Bowes Fellow 2016) is a PI at Mount Sinai Hospital's Lunenfeld-Tanenbaum Research Institute in Toronto.

Graham Walmsley (Stanford Bio-X Fellow 2015) is a co-founder and Managing Partner of Logos Capital, a fundamental biotechnology-focused investment fund that seeks to combine in-house data analytics with scientific and clinical expertise to identify transformative therapies in healthcare.

Aaron Wang (Stanford Bio-X Bowes Fellow 2006) is part of a private practice in Pittsburgh, Pennsylvania, as a corneal specialist. He is working on commercializing a new ophthalmic imaging device, for which he recently obtained a patent. He is also developing new surgical instruments.

Austin Wang (Stanford Bio-X Bowes Fellow 2023) is a researcher at EvolutionaryScale, where he is building AI to understand and synthesize biological sequences.



Stanford Bio-X Bowes Food Fellow Ethan Darwin (see pg. 6 for research details)

Christine Wang (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2014) is a senior software engineer at Flatiron Health.

Cosmos (Yuqi) Wang (Felix and Heather Baker Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2018) is a postdoctoral fellow in Xiaowei Zhuang's lab at Harvard University, where he is applying spatially resolved single-cell multi-omics technologies to the brain.

David C. Wang (Stanford Bio-X Bowes Fellow 2020) is a research-track psychiatry resident at Stanford Health Care, working with Robert Malenka on the role of early life stress and its effects on the development of the norepinephrine system.

Jack Wang (Stanford Bio-X Bowes Fellow 2011) is a neurocritical care physician at Stanford University Medical Center.

Jiarui Wang (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2018) is a clinical applications manager at Miltenyi Biotec.

Larry Wang (Stanford Bio-X Bowes Fellow 2007) is a launch program manager at Pebble Technology.

Lucy Wang (Stanford Bio-X Bowes Fellow 2020) is working as a product design Finite Element Analysis (FEA) engineer at Apple.

Wanxin Wang (Stanford Bio-X Bowes Fellow 2015) is a staff scientist at Takara Bio USA, Inc.

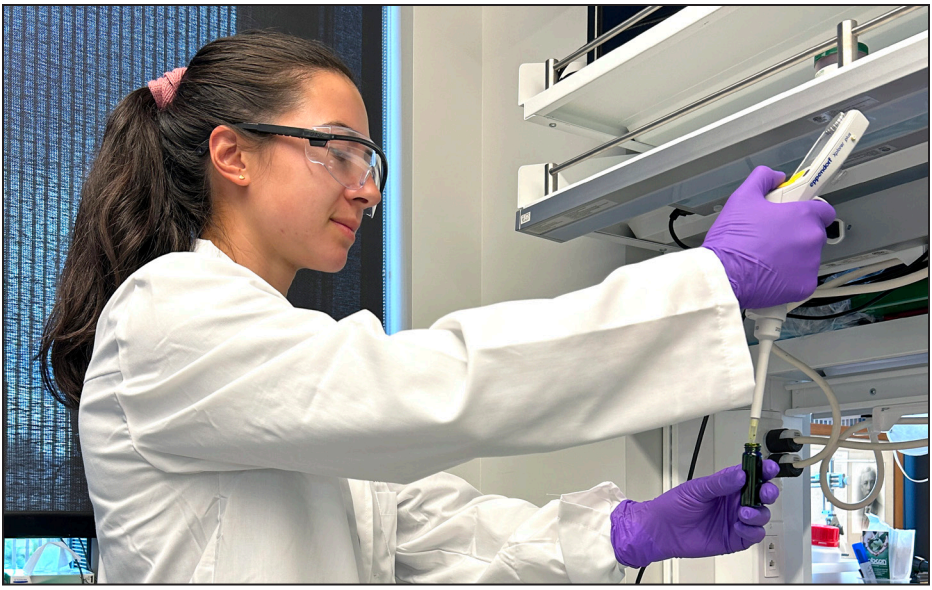
Yen-Hsiang Wang (Stanford Bio-X Bowes Fellow 2009) is the VP of Strategy & Partnerships at Antheia.

Jonathan Weiss (Stanford Bio-X Fellow 2021) is a mechanical engineer at Exponent focusing on failure analysis of medical devices and consumer electronics.

Lucien Weiss (Stanford Bio-X Bowes Fellow 2012) is an Associate Professor of Engineering Physics at Polytechnique Montreal.

Andrew Weitz (Stanford Bio-X Bowes Fellow 2012) is a co-founder of Lemon Slice.

John Wen (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2019) is a research scientist in the lab of Dr. Lisa Giocomo at Stanford.



Stanford Bio-X Bowes Fellow Lauren Cooper (see pg. 5 for research details)

Aaron Wenger (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2010) is a senior director at Pacific Biosciences, developing applications of long-read genome sequencing.

Aaron Wilk (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2019) is a resident in Clinical Pathology at Stanford Health Care. He plans to complete fellowship training in hematopathology, and his research will aim to bring advances in systems immunology into the clinical laboratory.

Kitchener Wilson (Stanford Bio-X Bowes Fellow 2007) is the co-founder and CEO of Rosebud Biosciences.

Brian Wilt (Stanford Bio-X Bowes Fellow 2008) is a Head of Data, ML Software Engineer, at Waymo.

Yonatan Winetraub (Stanford Bio-X Bowes Fellow 2016) won the NIH Director's Early Independence Award in 2021 and started his lab in the structural biology department at Stanford. His lab explores how to detect cancer non-invasively by combining optical coherence tomography and machine learning.

Katrina Wisdom (Stanford Bio-X Honorary Fellow 2016) is a Scientific Leader of Oligo Sciences at GlaxoSmithKline.

Remus Wong (Stanford Bio-X Bowes Fellow 2010) is a Principal Scientist at Nkarta, where he performs cell therapy research and process development activities on Nkarta's engineered NK cells.

Angela Wu (Stanford Bio-X Bowes Fellow 2006) is an Associate Professor in the Division of Life Science and the Department of Chemical and Biological Engineering at Hong Kong University of Science and Technology (HKUST).

Eric Wu (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2022) is at GXL, a Palo Alto-based startup building expert AI agents.

Lyndia Wu (Stanford Bio-X Bowes Fellow 2014) is an Assistant Professor in the Mechanical Engineering Department at the University of British Columbia in Vancouver, Canada.

Yan Wu (Stanford Bio-X Bowes Fellow 2022) is a scientist at Genentech, working on antibody therapeutics development.

Nan Xiao (Stanford Bio-X Bowes Fellow 2007) works for Heartflow, Inc. in Redwood City as a computational scientist.

Adele Xu (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2019) recently graduated from Stanford's Medical Scientist Training Program and is now an intern in the Stanford Internal Medicine residency program.

Yuan Xue (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2018) is a bioinformatics scientist who leads process optimization at ClearNote Health.

Pumiao Yan (Seth A. Ritch Graduate Fellow, Stanford Bio-X SIGF 2020) recently graduated and is employed at Whisp AI.

Andrew Yang (Stanford Bio-X Honorary Fellow 2015) opened his lab at University of California, San Francisco and the Gladstone Institutes as an Assistant Professor.

Helen Yang (Lavidge and McKinley Interdisciplinary Fellow, Stanford Bio-X SIGF 2014) is a research fellow at Harvard Medical School with Dr. Rachel Wilson.

Renzhi Yang (Stanford Bio-X Bowes Fellow 2016) is a postdoctoral researcher in Dr. Nirao Shah's lab at Stanford.

Yufeng Yang (Stanford Bio-X Bowes Fellow 2005) is a Professor/Investigator in the Institute of Life Sciences at Fuzhou University.

Peggy Yao (Stanford Bio-X Bowes Fellow 2006) is an Engineering Manager of a machine learning team at Facebook.

Sara Z. Yao (Stanford Bio-X Bowes Fellow 2004) founded DeviceDebut, LLC after exploring medical device R&D for over 5 years. DeviceDebut helped U.S. and E.U. medical device manufacturers register with CFDA, enter the Chinese market, and receive funding from Chinese investors. Since late 2020, Sara has shifted her career focus to the local Bay Area, and has been a Realtor serving the local communities.

Anne Ye (Stanford Bio-X Bowes Fellow 2012) is working at Xaira in Brisbane.

Patrick Ye (Bruce and Elizabeth Dunlevie Fellow, Stanford Bio-X SIGF 2013) is a fellow at BillionToOne, a molecular diagnostics startup in Menlo Park, CA.

Michael Yip (Stanford Bio-X Bowes Fellow 2013) is an Associate Professor of Electrical and Computer Engineering at the University of California, San Diego. He is the founder of Channel Robotics, a surgical robotics startup, and AtmosphereData, an AI platform for business intelligence in healthcare.

Jennifer Yong (Morgridge Family SIGF Fellow, Stanford Bio-X SIGF 2012) is a Human Factors Researcher at Google.

Ryan York (Stanford Bio-X Bowes Fellow 2013) is a scientist at Arcadia.

Alexander Yoshikawa (Stanford Bio-X Bowes Fellow 2017) is the co-founder and CSO of Adaptyx Biosciences, a startup developing continuous biosensors, located in Menlo Park.

Noah Young (Stanford Bio-X Bowes Fellow 2012) is a senior machine learning engineer at Mashgin.

Maxim Zaslavsky (Stanford Bio-X Bowes Fellow 2022) is a co-founder of a stealth mode startup.

Bo Zhang (Mona M. Burgess Fellow, Stanford Bio-X SIGF 2013) is the VP of chemistry and co-founder of Apostle, Inc. Apostle is a biotechnology company in Sunnyvale, California, which has been accepted by the Stanford StartX accelerator. Bo is also an Associate Professor at Southern University of Science and Technology of China.

Eric Zhao (Donna Schweers and Thomas Geiser Fellow, Stanford Bio-X SIGF 2020) is a Croucher Foundation Fellow at Stanford University with Professor Zhenan Bao in Chemical Engineering and Professor Julia Kaltschmidt in Neurosurgery.

Xiaoxue Zhou (Larry Yung Fellow, Stanford Bio-X SIGF 2010) is an Assistant Professor at NYU Biology.

Danqing Zhu (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2015) is an Assistant Professor at Hong Kong University of Science & Technology in the Department of Chemical & Biological Engineering.

Biyao Zou (City Hill Foundation Stanford Interdisciplinary Graduate Fellow, Stanford Bio-X SIGF 2020) is an epidemiologist and observational research manager at Amgen, a leading biotech company. At Amgen, she leverages real-world patient data to address questions throughout the drug development lifecycle and enhance the understanding of diseases, therapeutic interventions, and clinical outcomes.

Xinzhi Zou (Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF 2019) is a postdoctoral scholar in the lab of Dr. Michael Lin at Stanford.

Stanford Bio-X Fellows Group Photo 2018

Stanford Bio-X Postdocs

The Stanford Bio-X Postdoctoral Fellowships are made possible through the support of our industry contacts. To date, eight students have been postdoctoral fellows, all of whom are now making an impact in academia and industry.

Tiffany Chung (Stanford Bio-X Postdoctoral Fellow 2005) is a chemist for the Hong Kong government.

Anna Geraghty (Stanford Bio-X Genentech Postdoctoral Fellow 2015) is a senior staff scientist in the department of neurology and neurological sciences at Stanford University.

Subhaneil Lahiri (Stanford Bio-X Genentech Postdoctoral Fellow 2012) is a Physical Science Research Scientist at Stanford University.

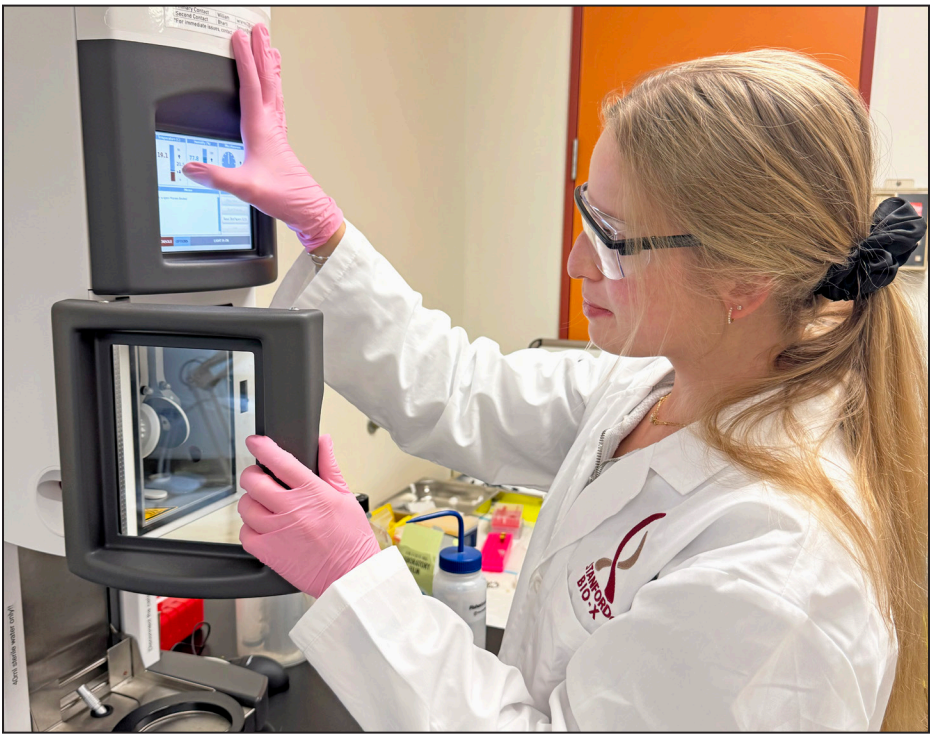
Yu-Shan Lin (Stanford Bio-X Postdoctoral Fellow 2009) is a Professor of Chemistry, and chair of the department, at Tufts University.

Elena Rykhlevskaia (Stanford Bio-X Lubert Stryer Interdisciplinary Postdoctoral Fellow 2008) is a Director of Marketing Data Science at Meta.

Shilpa Sambashivan (Stanford Bio-X Genentech Postdoctoral Fellow 2007) is a member of the founding scientific team at Nura Bio and serves as Chief Executive Officer.

Sergey Solomatin (Stanford Bio-X Postdoctoral Fellow 2005) is the VP of Food Science and Product Development at Alpine Bio.

Tristan Ursell (Stanford Bio-X Genentech Postdoctoral Fellow 2009) is a Team Lead of Carbon Market Research at Zero Me and an Agritech & Climate Product Manager at Carbonleap IO.



Stanford Interdisciplinary Graduate Fellow (Anonymous Donor), Stanford Bio-X SIGF Crystal Stackhouse (see pg. 14 for research details)

Stanford Bio-X PhD Fellowship Program 2025

Stanford Bio-X Fellows Group Photo 2023

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To learn more, please email us at:
contact-biox@stanford.edu