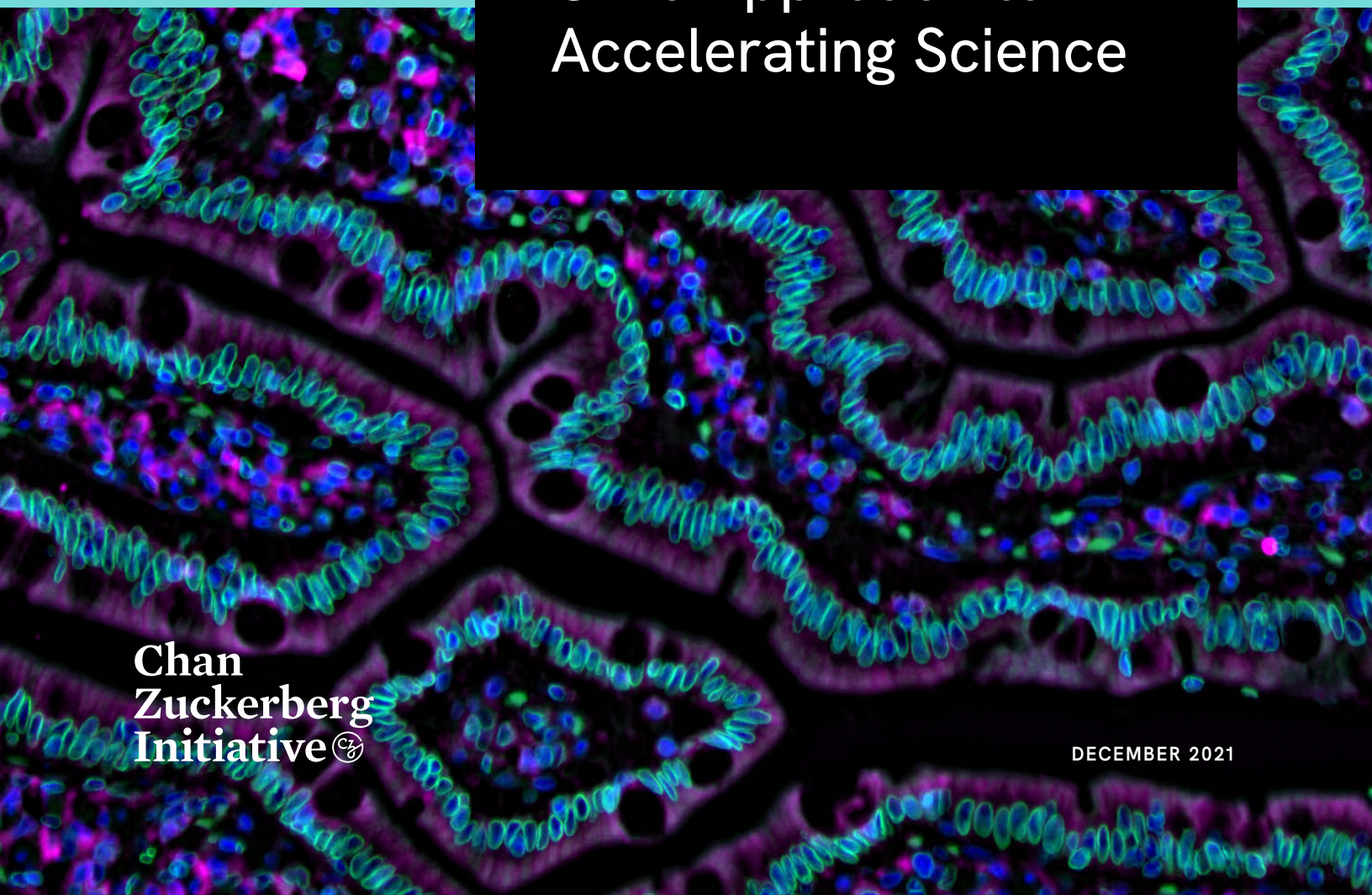
CZI Science 5-Year Anniversary Symposium

Building the Science of the Future

CZI's Approach to Accelerating Science



Chan Zuckerberg Initiative

DECEMBER 2021

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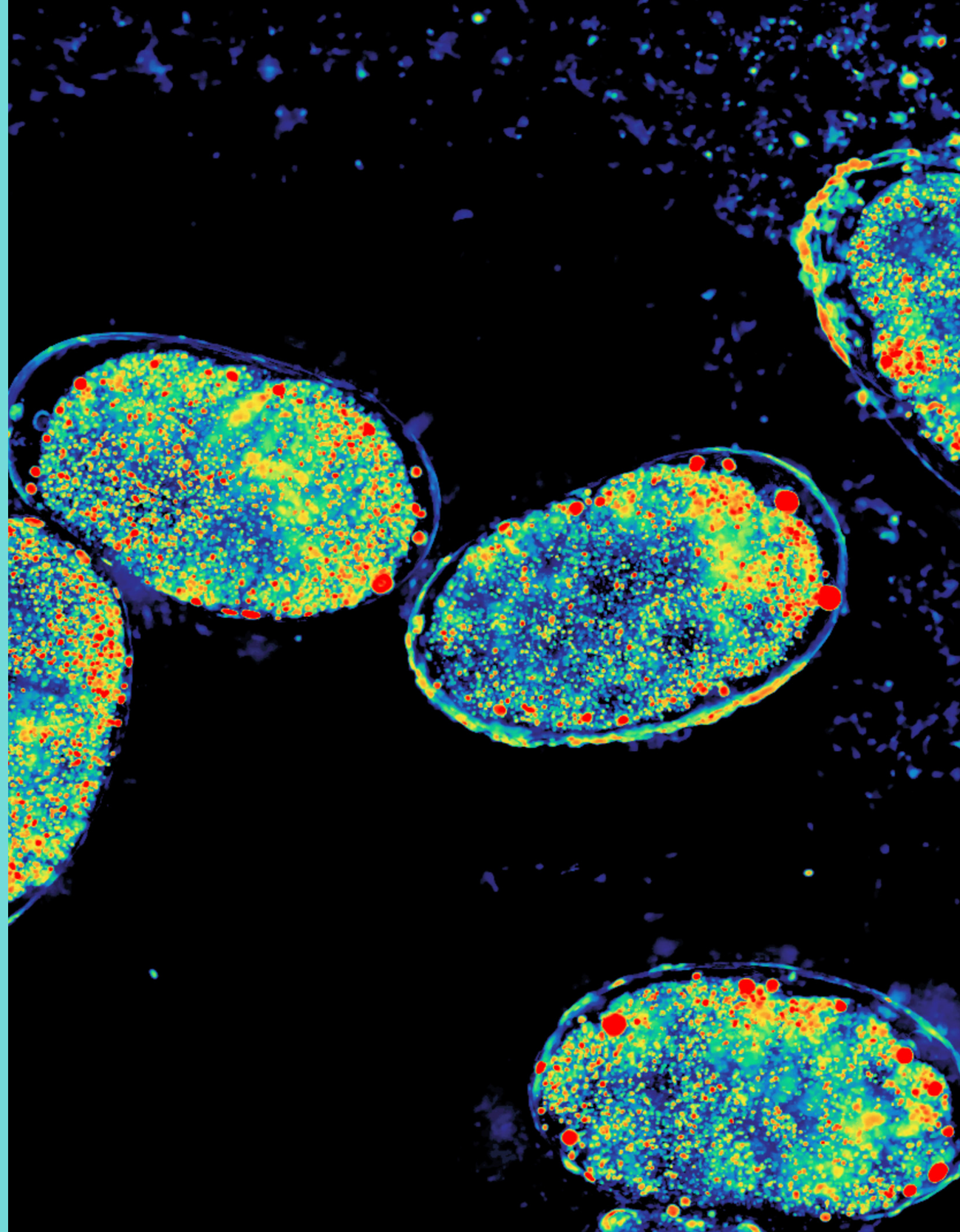


About CZI Science

The mission of the Chan Zuckerberg Science Initiative is to support the science and technology that will make it possible to cure, prevent, or manage all diseases by the end of this century.

While this may seem like an audacious goal, in the last 100 years, biomedical science has taken tremendous strides in advancing human health and treating disease. We believe that this can continue, and even accelerate.

We seek to accelerate progress by awarding grants for scientific research that can advance entire fields, building transformative technologies in partnership with the scientific community, and fostering interdisciplinary collaborations in science.

What's Next?

Building the Future of Science

Watch Video: 5-Year Milestones →

5 **THE FIRST FIVE YEARS** of our science journey were focused on learning where we could have an outsized impact in biomedicine. We explored the ways that open science, collaboration, and technology can accelerate science. We gave grants in a variety of areas and collaborated as partners with scientists, patients, and open source communities. We supported interdisciplinary research collaborations across scientific domains and career stages. We started a unique research institute at the Chan Zuckerberg Biohub. We built software tools with and for scientists. We've been astonished by the fact that methods in single-cell biology, microscopy, and artificial intelligence that were considered impossible just five years ago are now routine. As we look forward, we are taking the lessons from our first five years toward a defined vision for the next decade.

10 **IN THE NEXT TEN YEARS,** we will focus on developing technologies to measure human biology in new ways that will benefit human health. To measure the human body in action with spatial accuracy, biochemical specificity, and dynamic precision, we will need new instruments and analytical tools that enable new forms of biological measurement. How can the application of AI to biological imaging create new insights into how cells and tissues function? How do interactions between cancer cells, surrounding tissues, and the immune system promote or prevent tumor growth? How do the brain and the body communicate to regulate physiological and emotional states? Working in a spirit of openness with the scientific community, we will create the teams, build the instruments, and validate the uses that make these and other breakthroughs possible.

Watch Video →

Building the Science of the Future

MODERATED BY

Cori Bargmann,
Head of Science

SPEAKERS

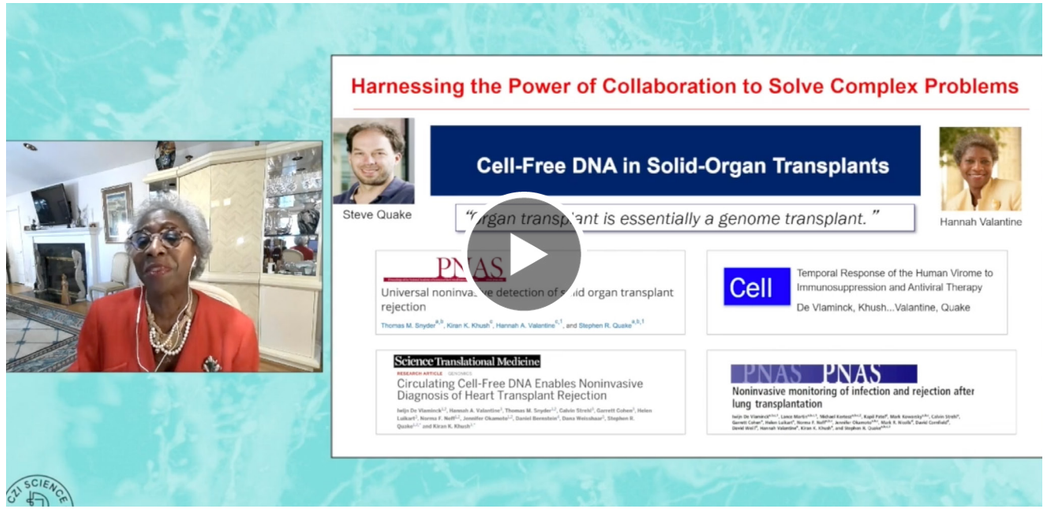
Priscilla Chan
Co-founder and co-CEO, Chan Zuckerberg Initiative

Mark Zuckerberg
Co-founder and co-CEO, Chan Zuckerberg Initiative

Cori Bargmann
Head of Science, Chan Zuckerberg Initiative

Phil Smoot
Vice President of Engineering and Head of Science Technology, Chan Zuckerberg Initiative

Watch Video →



Looking to the Future

SPEAKERS

Hannah Valantine
Professor of Medicine, Cardiovascular Medicine, Stanford University
Senior Science Advisor, Chan Zuckerberg Initiative

Cori Bargmann
Head of Science, Chan Zuckerberg Initiative

Our Approach

Accelerating science is a team effort. Collaboration, risk taking, and staying close to the scientific community are necessary to advance progress across biomedicine. By funding and supporting science, we can help find treatments and cures for diseases, and by building innovative technology, we can catalyze scientific discovery across the entire scientific community.

We develop tools and technologies
We work closely with the scientific community to support the development of transformative technologies to advance science. Our computational biologists and software engineers collaborate with scientists to identify challenges and build open source tools for analyzing, visualizing, and sharing data.

We support interdisciplinary research collaborations
When biomedical researchers, clinicians, patients, computational biologists, software engineers, and others work together, they enable breakthroughs that grow from their combined expertise. We support open and networked models of research, as well as new incentives and career paths for collaborative research.

We build public trust in science
We are part of a movement to support basic scientific research and grassroots public engagement in science. By working in partnership with government, industry, academia, the philanthropic community, patients, and advocates, we will win the fight against disease.

We continue to learn
We don't have all the answers. We actively seek the advice of and engage deeply with scientists, clinicians, national and international science funding organizations, software engineers, patients and their advocates, and experts of every kind in order to keep learning from the scientific community and improve our practices.

Our Values

Supporting Talented and Motivated People
Talented and motivated people drive progress in science. Supporting scientific excellence and creativity is the most effective way to advance discoveries.

Building and Sharing Technology
New technologies pave the way for discoveries that are reliable, robust, scalable, and shareable. All scientists should have access to the best tools to do their work, and creating and disseminating high-quality tools will improve all of science.

Fostering Collaboration in Science
Progress accelerates when people work together. We help bring new people and ideas to science, support early career researchers, and foster interdisciplinary collaborations between experts—from biomedical researchers, software developers, and computational biologists to patients and clinicians.

Open Sharing of Scientific Knowledge
The velocity of science and pace of discovery increase as scientists build on each others' discoveries. We support a culture of open science that shares results, experimental methods, open source software and biological resources as early as possible to accelerate scientific progress.

CZI Science by the Numbers

CZI SCIENCE-WIDE TOTALS

1001
Science grants awarded

$983.5M
In funding distributed

58
Meetings and convenings hosted with a total of **4901** external attendees

Totals are from September 2016 – December 2021

CZI SCIENCE GRANTEES:
INVESTIGATORS AND CO-INVESTIGATORS

1225
Grantees funded

59
Countries represented

31%
Are women

37%
Are from countries outside the U.S.

16%
Have an MD

42%
Are early career researchers, within 6 years of their first independent position

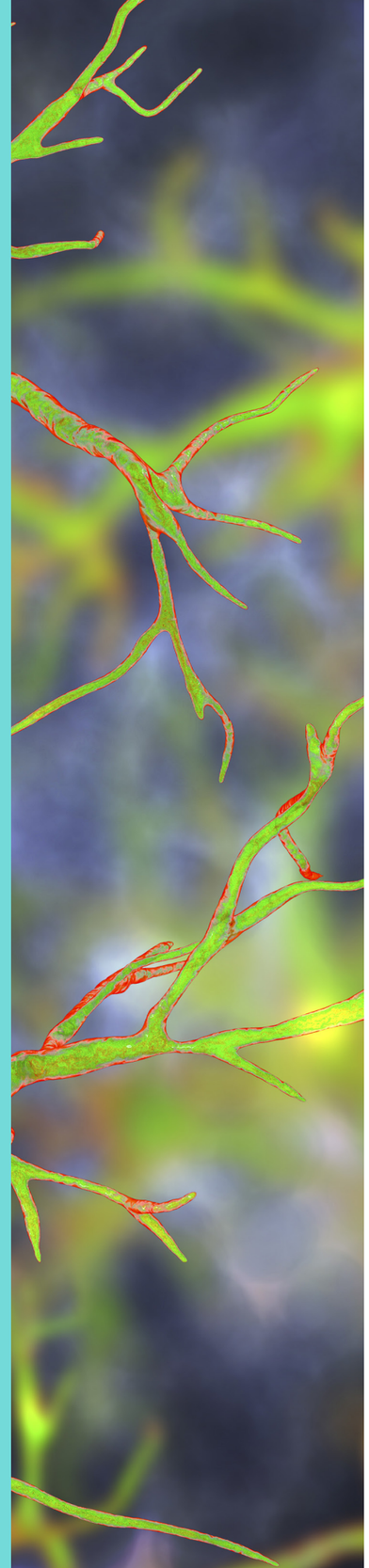
40%
Are computational scientists

Totals are from September 2016 – December 2021

Our Science Programs

We select science programs by engaging deeply with scientific and medical communities to identify unmet needs and barriers to success. We then identify if and where we can have a differentiated impact in addressing those challenges by supporting technology development, interdisciplinary research collaborations, and partnerships.

- Imaging
- Neurodegeneration Challenge Network
- Open Science
- Single-Cell Biology
- Science in Society
- Science Technology
- Chan Zuckerberg Biohub



Diversity, Equity, and Inclusion

Biomedical science is rife with systemic disparities, inequities, and injustices that are especially experienced by Black, Latinx, Indigenous communities and other communities of color. We are continuously learning and improving our practices, and strive to bring together diverse scientific teams that incorporate a wide range of lived experiences and perspectives. We believe resources created and used by scientists need to be inclusive and explicitly representative of communities of color. We aim to take an equitable and participatory approach to how we define and evaluate the success of our grants, and we are dedicated to making tools, methods, and datasets accessible to a broad set of researchers and communities. Additionally, we are lifting up approaches to public engagement in science that are ethical and inclusive of the perspectives, interests, and needs of community partners. Read more about our commitment to scientific equity in Nature Medicine.

Imaging

Imaging of proteins, cells, and tissues is central to biomedical research and clinical practice. Advances in imaging technology have the potential to unlock new discoveries and transform our understanding of health and disease. We want to enable researchers everywhere to visualize, measure, and analyze the biological processes underlying health and disease.

We do this by increasing collaboration and training between biologists and technology experts, improving imaging hardware and software tools, and supporting the development of new imaging technologies. We're supporting scientists worldwide who operate imaging facilities, which serve as hubs of imaging expertise for local communities of biomedical researchers, and we're creating community and building capacity through organizations like Global BioImaging and BioImaging North America.

We fund and build image analysis tools like napari, an interactive, multi-dimensional image viewer for Python, and fund Imaging Software Fellows. We're also pushing the frontiers of imaging by supporting technology development, including ultrasound, MRI, photoacoustic, optical, X-ray, and quantum imaging, that will allow researchers to better understand and cure disease.

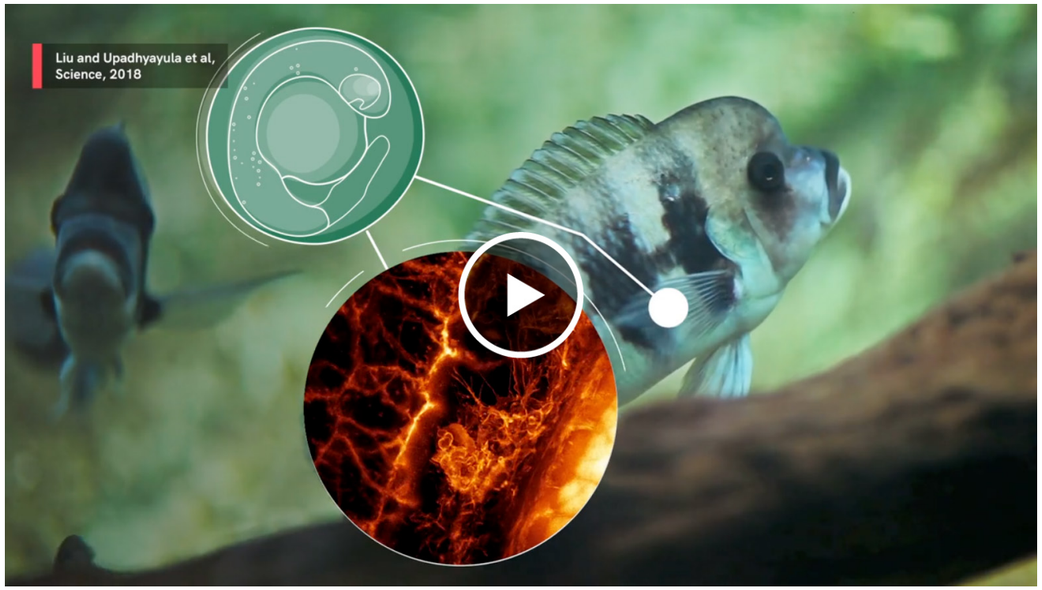
Learn more at czi.co/Imaging.

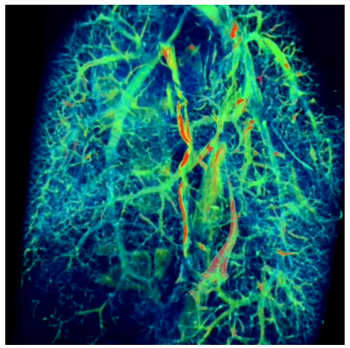
5-Year Milestones

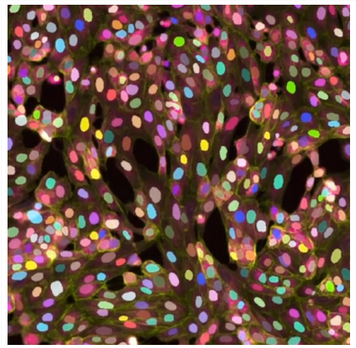
- **Funding 33 early discovery projects** that open new windows into biological systems:
  → Frontiers Grant Programs: Deep Tissue Imaging, Scialog: Advancing Bioimaging and Visual Proteomics
- **Creating a thriving global imaging ecosystem** to facilitate knowledge and technology sharing. Funding 48 imaging cores, 10 network organizations with 40+ countries involved in the program.
  → Imaging Community Grants Program
- **Enabling universal access** to reproducible quantitative insights:
  → napari
  → napari hub

Watch Video →

Frontiers of Imaging







Seeing Biology in Unprecedented Detail

Watch Video →

MODERATED BY

Stephani Otte
Program Officer, Imaging,
Chan Zuckerberg Initiative

SPEAKERS

Holger Müller
Associate Professor of Physics, University of California, Berkeley

Peter Lee
Professor of Material Science, University College London

Mikhail Shapiro
Professor of Chemical Engineering, California Institute of Technology

Nicholas Sofroniew
Group Product Manager, Imaging, Chan Zuckerberg Initiative

Neurodegeneration Challenge Network

Our fundamental vision is to reconceptualize neurodegenerative disease as a class of disorders, with shared mechanisms and potentially shared therapeutic strategies, in order to break down discipline siloes that have held back progress in this field.

The Neurodegeneration Challenge Network (NDCN) is a new model for collaborative, open science that will accelerate understanding of neurodegenerative diseases by bringing together experimental scientists, physicians, and computational biologists from diverse research fields to understand the fundamental biology of neuro-degenerative disorders. These collaborative teams work together across fields to develop new strategies to treat and prevent neurodegenerative diseases.

Our grantmaking includes supporting early career researchers, small group interdisciplinary collaborations that include a physician with active clinical engagement, and pairs of researchers to collaborate on high-risk projects.

Learn more at czi.co/NDCN.

5-Year Milestones

- **We are supporting the next generation** of leaders in the neurodegeneration field. Through the Ben Barres Early Career Acceleration Award (ECA) and the Collaborative Pairs Pilot project grants we are supporting over 50 early career investigators, many who are new to the neurodegeneration field, bringing in talent and expertise from diverse disciplines such as immunology, stem cells, structural biology, materials science, and computer science. For example, AI expert Serena Yeung (Collaborative Pairs) is deploying her expertise in computer vision to develop new imaging methods for neurodegeneration. Rick Van Der Kant and Martin Giera (Collaborative Pairs) are a biologist and chemist developing new tools to explore the contribution of lipids and cholesterol to neurodegenerative disease.

- **We've built a robust and thriving Network** that brings together researchers, clinicians, and patient advocates—including students, post-docs, and staff scientists, to pioneer new approaches for advancing the science of neurodegenerative disease. These interactions are leading to exciting, unexpected collaborations that are breaking new ground. As one example of the type of innovative collaborations emerging from NDCN: computational biologist Debora Marks (ECA) is collaborating with two clinicians, Elizabeth Bhoj and Rebecca Ahrens-Nicklas (Collaborative Pairs), to apply new computational methods to diagnose pediatric genetic neurological diseases.

- **In support of open science,** we are developing robust, accessible research tools for the research community. For example, we are supporting the development and dissemination of a collection of genetically engineered iPSC (stem cell) lines for the neurodegeneration research community. NDCN grantees are contributing to the validation of these lines and the development of rigorous protocols and methods to deploy these tools.

Watch Video →

What is the Neurodegeneration Challenge Network?

Backing Rising Talent in Science

Watch Video →

MODERATED BY

Katja Brose
Program Officer, Neurodegeneration Challenge Network, Chan Zuckerberg Initiative

SPEAKERS

Viviana Gradinaru
Professor of Neuroscience and Biological Engineering, California Institute of Technology

Sergiu Pasca
Associate Professor of Psychiatry and Behavioral Science, Stanford University School of Medicine

Molly Gale Hammell
Associate Professor of Genomics, Cold Spring Harbor Labs

Open Science

When researchers share data, methods, software, and new discoveries in a timely and effective manner, other scientists can quickly learn and build off of their efforts, leading to scientific breakthroughs faster. Our goal is the universal and immediate open sharing of all scientific knowledge and outputs. CZI's Open Science program empowers more people to engage in research practices that accelerate the pace, robustness, and reproducibility of science through partnerships, policies, and grants.

We support our grantees and the broader scientific community to deposit software code to open repositories, make experimental protocols openly accessible, and submit results to preprint servers to communicate results more quickly.

Learn more at czi.co/OpenScience.

5-Year Milestones

- **CZI's Essential Open Source Software for Science program** supports 100+ maintainers of the most widely used computational tools used by biomedical scientists globally. Many of these projects had never received dedicated funding for technology improvements, maintenance or community building prior to CZI funding.
- **Platforms for rapid sharing** (bioRxiv, medRxiv, protocols.io) and organizations like ASAPbio that helped the preprint movement coalesce played a critical role in the scientific community's response to the COVID-19 pandemic. Key open access protocols for SARS-CoV-2 diagnostics and sequencing were hosted and shared on protocols.io during the pandemic. The majority of COVID-19-related research was shared through preprints on bioRxiv and medRxiv, accelerating the dissemination and timing of final publication of results.
- **We committed $6M in funding** to initiatives and organizations to support the participation, retention, and leadership progression of underrepresented groups in scientific computing and open source and to help ensure the community developing and maintaining key computational tools for science matches the diversity of their audience.

Watch Video →

How Open, Early Sharing of Scientific Results Proved Crucial to COVID-19 Response

The New Perspective: Open Science

Watch Video →

MODERATED BY

Dario Taraborelli
Program Officer, Open Science,
Chan Zuckerberg Initiative

SPEAKERS

Richard Sever and John Inglis
Co-founders, bioRxiv and medRxiv,
Cold Spring Harbor Laboratory

Fernando Pérez
Associate Professor in Statistics, University of California, Berkeley
Co-founder, Jupyter/2i2c

Single-Cell Biology

Single-cell biology is the application of technologies that enable multi-omics investigation at the level of the building block of life—a single cell. By accelerating the development and application of single-cell tools and technologies, we can better understand how disease manifests in the body's cells and tissues.

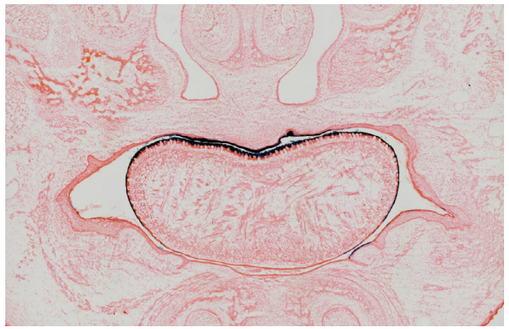
We support the Human Cell Atlas, a global, scientist-led effort to map all cells in the human body as a resource for studies of health and disease. CZI's Single-Cell Biology team contributes to the HCA by building computational tools and through grantmaking that enables methods development and data generation.

We fund scientists studying the role of inflammation in maintaining health and triggering diseases so that we can better diagnose, treat, and manage them. Inflammation is a natural defense that helps our bodies maintain a healthy state, but chronic inflammation results in harmful diseases like asthma, arthritis, and heart disease.

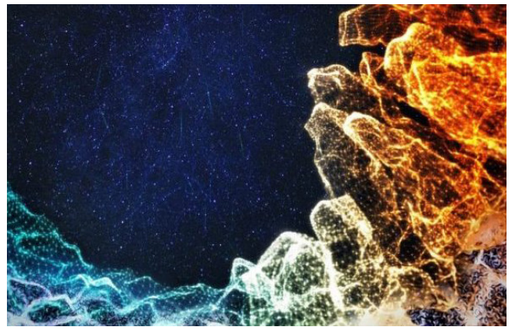
Learn more at czi.co/SingleCell.

5-Year Milestones

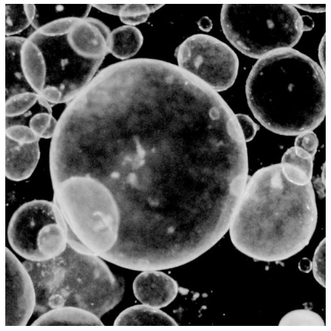
- **A first draft of the Human Cell Atlas:** A reference of all the cell types in the human body, is on the horizon. CZI has supported the work of over 300 labs in greater than 25 countries to accelerate the generation of data from diverse organs and tissues necessary to reach this milestone. We are the most active international funder of this effort and have effectively catalyzed work across tissues and among global leaders.
- **Multi-organs atlases supported by CZI:** Enriched the ecosystem by complementing deep dives into specific organs with broad sampling of individual donors. This work provides a critical framework for first drafts but also a valuable resource for understanding cell types found in multiple tissues, off target drug responses and other areas. CZI has been a leading funder of these multi-organ efforts.
- **Cellxgene and data ecosystem:** CZI is building scalable tools for the analysis and sharing of single-cell data. Cellxgene has accelerated the annotation of single-cell datasets by large collaborative efforts by over 10X. The cellxgene data portal is the largest interoperable data corpus for single-cell data and includes studies from CZI-funded and also non-CZI funded partner projects.
- **Support for computational groups and open problems:** Computational biology is a cornerstone of single-cell biology. CZI has provided focused support of single-cell computational biology that has resulted in key advances in multi-modal data integration, data visualization, file formats and compression, image analysis, and more. In addition to funding cutting-edge resources, we have convened the community to address shared bottlenecks via jamborees on data normalization, image-based transcriptomics workflows, and doublet detection. Outputs from these meetings have become standards in the field and lead to larger competitions at large international meetings such as NeurIPS.
- **Resources:** We have generated many open resources, such as preprints and on GitHub and protocols.io. Single-cell biology is the largest community on protocols.io, with many hundreds of preprints, journal articles, and code repositories.



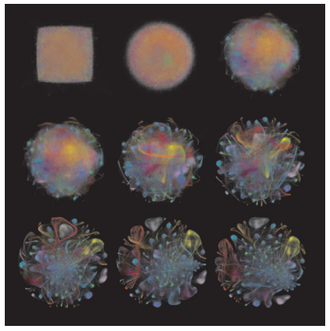
A section of a mouse head, focused on the craniofacial structures and cells of the oral cavity. Photo courtesy of Inês Sequeira and team.



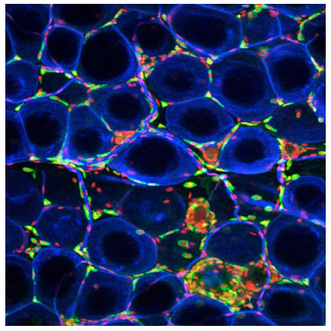
An artistic rendering of the human fetal intestine. Photo courtesy of Hashem Koohy.



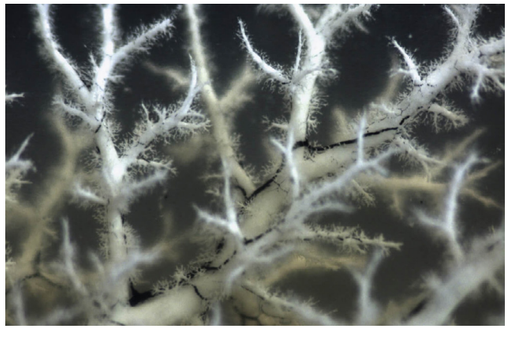
Gut organoids. Photo courtesy of Jason Spence.



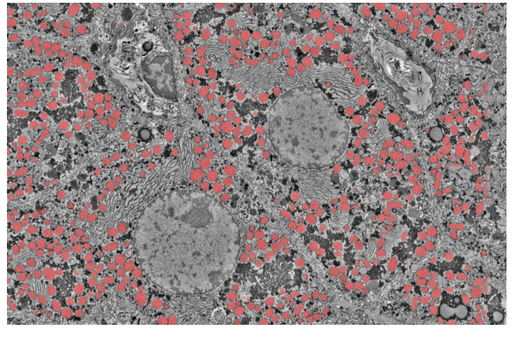
Computational analyses of cells from different tissues in the body. Photo courtesy of Carly Ziegler.



Fat or adipose tissue. Photo courtesy of Carey Lumeng.



A three-dimensional blueprint of the hepatic portal vein (white) and the bile ducts (black). Photo courtesy of Stacey Huppert.



An electron microscope image of liver hepatocyte cells. Red dots highlight mitochondria, automatically identified using machine learning. Photo Courtesy of Gary Bader.

A Periodic Table of Human Cells

Watch Video →

MODERATED BY

Jonah Cool
Program Officer, Single-Cell Biology, Chan Zuckerberg Initiative

SPEAKERS

Aviv Regev
Executive Vice President of Genentech Research and Early Development, Genentech
Co-founder, Human Cell Atlas International Consortium

Sarah Teichmann
Head of Cellular Genetics and Senior Group Leader, Sanger Institute
Co-founder and Principal, Human Cell Atlas International Consortium

Rahul Satija
Core Faculty Member, NY Genome Center
Associate Professor of Biology, New York University

Ambrose Carr
Group Product Manager, Chan Zuckerberg Initiative

Science in Society

Science is one of our most important tools for developing knowledge about the world around us and for understanding health and disease. Effectively leveraging science to address society's greatest challenges requires broad public trust in science.

We work with patient communities, scientists, policymakers, advocates, and philanthropic partners to catalyze widespread public engagement with science, enable more responsive and inclusive practices, and bring science closer to the communities it aims to serve.

Our program areas include:

Rare As One: As many as 7,000 rare diseases affect 400 million people globally. The Rare As One Project is committed to uniting rare disease patient advocates in their quest for cures. Patients are experts in their disease area and their knowledge has the power to dramatically accelerate the pace of research. We work to lift up their efforts by offering new tools, grants programs, and capacity-building support and training.

Movement for Science: Public support is foundational to advancing biomedical science. CZI's Movement for Science program works to build broad belief in science so that support for science is a commonly held value. We envision a world where people understand the importance of science to their daily lives, where leaders apply scientific evidence to solve problems, and scientists view public engagement as central to their work.

Learn more at czi.co/ScienceSociety.

5-Year Milestones

- **Committed $30M to support** 50 patient-led, rare disease advocacy organizations to build and strengthen collaborative research networks and accelerate research in their disease areas as part of the Rare As One Project.
- **Launched a first-of-its-kind incubator for patient-led organizations** that provided comprehensive organizational and scientific capacity building support—including science advising, coaching and mentorship, and 36 trainings and 20 community calls over two years—to 30 rare disease organizations.
- **Scaled direct-to-participant research efforts,** including the Rare Genomes Project, an effort dedicated to expanding genomic research access to families from underrepresented and underserved communities, and Pattern.org, an effort that enables patients with rare cancers to direct their tissues to research that has resulted in the development of 41 confirmed models for rare and understudied cancers to date, with many more in development.
- **Rapidly mobilized $12M in funding to strengthen public confidence in the COVID-19 vaccines** in communities that were disproportionately impacted by the virus during the height of the pandemic.
- **Strengthened science communication and engagement with local communities and civic decision-making**, including through support of local science journalism and science and technology policy fellowship programs in five states.

Watch Video →

Rare As One Project

Changing the Culture: Patient Communities as Essential Drivers of Research

MODERATED BY

Tania Simoncelli
Vice President, Science in Society, Chan Zuckerberg Initiative

SPEAKERS

Rashmi Sinha
Co-founder, Systemic JIA Foundation

Medha Deoras-Sutliff
Executive Director, The EHE Foundation

Kimberly Nye
Co-founder and President, TESS Research Foundation

Watch Video →

Science Technology

Our Science Tech team accelerates the pace and reach of scientific research by identifying and democratizing emerging and valuable methods, tools, and datasets and bringing them to a broad and diverse set of scientists, clinicians, and patient communities. Our tools help scientists come to meaningful conclusions quickly to speed up the process of scientific discovery.

Infectious Disease
In collaboration with the Chan Zuckerberg Biohub, the Infectious Disease Program seeks to enable access to high-resolution, actionable insights that accelerate the detection, identification, and tracking of infectious disease.

Single-Cell Biology
The Single-Cell Biology program aims to accelerate the development and application of single-cell tools and technologies to better and more quickly understand how disease manifests in the body's cells and tissues.

Imaging
The Imaging Tech Team is partnering with the open source napari project to make reproducible quantitative image analysis more accessible, helping scientists to make more discoveries, faster.

5-Year Milestones

- **Collaborating with the CZ Biohub** to develop and deploy Chan Zuckerberg ID, an open-source, no-code, metagenomics analysis platform for researchers.
- **Collaborating with the imaging community** to create napari, an open source quantitative imaging visualization and analysis platform.
- **Developing cellxgene,** a data visualization tool that enables analyses at scale, and a data platform that fosters data reuse.

Our Tools

Chan Zuckerberg ID →
Chan Zuckerberg ID (CZ ID) is an open source metagenomics analysis platform for researchers to rapidly identify new and emerging infectious diseases. CZ ID processes sequencing data to provide actionable information on the state of pathogens in a given set of samples. This allows scientists to make data-driven decisions about when to deploy antibiotics, where to prioritize immunization campaigns, how to shape vector-borne disease surveillance and control efforts, and more.

Chan Zuckerberg GEN EPI →
Chan Zuckerberg GEN EPI (CZ GEN EPI) is an open source genomic epidemiology analysis platform for public health departments to investigate disease outbreaks and perform pathogen surveillance using genomic data, starting with SARS-CoV-2. CZ GEN EPI helps public health laboratorians, epidemiologists, and public health officers track outbreaks and variants, and gain an overall picture of how pathogens are spreading in their community. These insights help drive public health interventions that can prevent and contain outbreaks more effectively.

cellxgene →
Cellxgene is an open source cell-resolution data publishing and exploratory analysis platform. Cellxgene empowers scientists to answer questions about the functionality of cells and tissues, and help scientists publish complex data to enable reuse by cell biologists and computational biologists. Through standardization and integration of published single-cell datasets, we create a database that enables scientists to answer questions about the function of cells in seconds, instead of executing experiments that take years.

napari →
Built with a global community, napari is a modern, open source visualization and analysis platform for scientific imaging. napari enables researchers with large 3D, time-series, or multi-channel imaging datasets to visualize and analyze their data using the latest methods in machine learning and scientific computing. Recent advances in microscopy and bioimaging technologies have made generating very large datasets much easier, which makes analyzing them much harder.

napari hub →
Built by the CZI Imaging Tech team, the napari hub helps researchers find high-quality image analysis methods that solve their unique data analysis needs. The napari hub hosts a growing ecosystem of open source, community-built napari plugins to help researchers find trusted, relevant, high-quality analysis methods that they can use to quantify their data and gain insights into biology.

Shasta →
Shasta is a de novo genome assembler for long-read DNA sequencers. It assembles genomes in a fraction of the time and cost and with comparable accuracy to traditional methods. It is used by scientists to explore the genomic diversity of all species.

Visit our GitHub organization to browse projects, or learn more at tech.chanzuckerberg.com.

Building a New Future of Global Science

Watch Video →

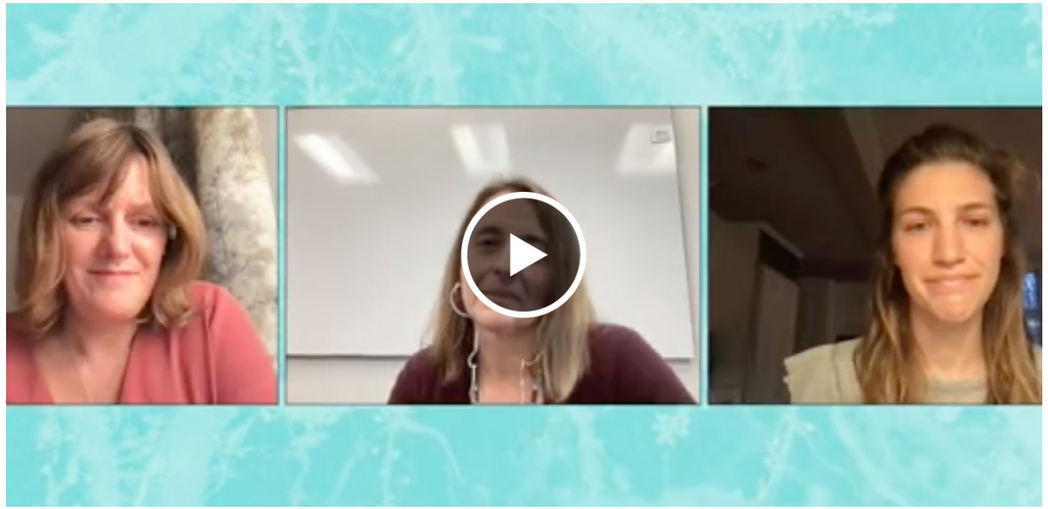
MODERATED BY

Patricia Brennan
Director of Product Management for Science Technology, Chan Zuckerberg Initiative

SPEAKERS

Olivia Holmes
Senior Product Manager, Chan Zuckerberg Initiative

Cristina Tato
Director, Rapid Response, Chan Zuckerberg Biohub



Chan Zuckerberg Biohub

In 2016, the Chan Zuckerberg Initiative announced a bold new mission to support the science and technology that will make it possible to cure, prevent, or manage disease by the end of the century.

CZ Biohub was created to support that mission—by understanding the fundamental mechanisms underlying disease and developing new technologies to lead to actionable diagnostics and effective therapies.

CZ Biohub is a regional research endeavor with international reach—where the Bay Area's leading academic institutions (Stanford University; University of California, Berkeley; and University California, San Francisco) join forces with CZ Biohub's innovative internal team to catalyze impact, benefiting people and partnerships around the world.

Learn more at czbiohub.org.

Research Initiatives

CZ Biohub's research initiatives combine the best scientists and engineers with the most advanced technology to solve the world's biggest health challenges.

These challenges demand a new course of action, new energy and new voices. They demand a space where nothing is impossible and collaboration is the only way to get things done.

Quantitative Cell Science: Diseases are caused by disruptions in the inner workings of cells or in the communication between cells. That's why CZ Biohub supports rigorous, quantitative research in cell biology, showing how cells work in healthy people and, more importantly, what takes place when disease strikes.

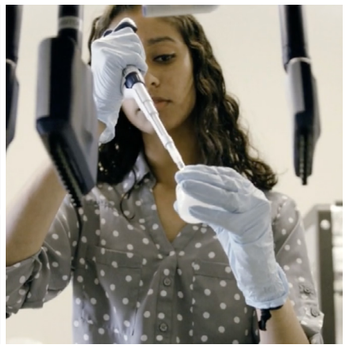
Infectious Disease Research: Existing and emerging pathogens continue to threaten human health worldwide. That's why CZ Biohub creates and deploys systems to detect and respond to infectious diseases globally.

Technology Platforms: Access to data and tools expedites solutions and catalyzes innovation. CZ Biohub's technology platform teams proactively identify and develop enabling technologies that advance biomedical research—at CZ Biohub, at its partner universities, and worldwide through its open source dissemination.

CZ Biohub Investigator Program: The CZ Biohub Investigator Program is funding research by world-renowned scientists, engineers, and technologists from UC Berkeley, Stanford University, and UCSF. This funding is unrestricted, giving these extraordinary Investigators the freedom to pursue their riskiest, most exciting ideas. Many of these high-risk projects will involve the invention of new tools and techniques that accelerate the pace of scientific discovery and help CZ Science realize its vision of curing, preventing, or managing every disease by the end of the century.

Watch Video →

CZ Biohub 5th Anniversary



Resources

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Sign up link: **czi.co/ScienceFunding**

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