



Life Sciences
RESEARCH FOUNDATION

2025 Annual Report



**FUNDING
HIGH-RISK,
HIGH-REWARD
RESEARCH**

Leadership Letter

Douglas Koshland, PhD, President



Douglas Koshland

Introduction

The Life Sciences Research Foundation (LSRF) is proud to present its 2025 Annual Report (July 1, 2024 – June 30, 2025), highlighting an exceptional year marked by significant fundraising success and notable achievements within our community.

LSRF is dedicated to advancing scientific discovery and innovation in the life sciences through its core mission of supporting outstanding postdoctoral researchers with the funding and resources to pursue independent, innovative research projects. LSRF aims to foster scientific excellence, encourage creativity, and help launch the careers of outstanding young scientists who will contribute significantly to biological and biomedical research.

2025 Brings A New Crop of Outstanding Fellows

Thanks to the generosity of our supporters, LSRF raised \$5.9 million in 2025 to support 22 outstanding new postdoctoral fellows. These individuals were selected from 606 applicants based on their impressive research accomplishments as doctoral students, the boldness and importance of their postdoctoral research proposals, and the excellence of the training environment offered by their mentors and their mentors' institutions.

The 2025 cohort of LSRF fellows exemplifies a remarkable diversity of scientific interests, spanning topics from protein structure to the complexity of immune responses and gene regulation. These researchers, each tackling questions at the forefront of their fields, demonstrate the wide-reaching impact and interdisciplinary nature of modern life sciences.

Leadership Letter

Douglas Koshland, PhD, President, continued

Alumni Achievements

We are thrilled to announce that LSRF alumnus David Baker was awarded the 2024 Nobel Prize in Chemistry for groundbreaking work on protein structure prediction and protein design, an area that he pioneered as an LSRF-supported postdoctoral fellow. His achievements not only reflect his extraordinary contributions to science but also demonstrates the lasting impact of LSRF's support for promising young researchers.

Defining Characteristics of LSRF's Success

LSRF's success stems from its unique structure, operating philosophy, community-building, and commitment to maximizing the impact of donations.

Volunteer-Driven Structure

One of the most remarkable aspects of LSRF is that it operates almost entirely based on volunteers. With 36 world-renowned scientists volunteering their time and expertise alongside only one paid employee, LSRF exemplifies the scientific community's dedication to the foundation's mission and success. This volunteer commitment not only reflects the belief in LSRF's impact but it also helps keep operational costs exceptionally low, with an overhead rate of only 5%. As a result, the vast majority of each sponsor's contributions flow directly to the fellows and their research, maximizing the sponsor's impact.

Funding Format

LSRF has pioneered a distinctive approach to funding scientific research. LSRF supports young researchers across the full range of modern biology, with 18 broad program areas, such as biophysics, neuroscience, microbiology, cancer biology, computational biology, and ecology. Each year, the foundation's review committee evaluates more than 500 applications, and from this highly competitive applicant pool, 40-50 outstanding finalists are selected.

Leadership Letter

Douglas Koshland, PhD, President, continued

Tailored Sponsorship Opportunities

LSRF offers sponsors a unique level of flexibility and engagement. Sponsors can select finalists to support based on shared scientific interests, geographic location, or institutional affiliations. There is no obligation to fund if no finalist matches the sponsor's criteria, making the process both selective and meaningful. Furthermore, fellowships are named after the sponsor, such as the "Ann Smith Fellow of the Life Sciences Research Foundation," providing recognition and a personal connection between the sponsor and the fellow.

Fostering Direct Interaction Between Fellows and Sponsors

To foster deeper engagement, LSRF encourages direct interactions between fellows and their sponsors. Fellows are available to meet with their sponsors, giving sponsors first-hand insight into the fellows' research and career progress. Additionally, sponsors are invited to attend LSRF's annual two-day science meeting, where they can meet the current LSRF fellows, the LSRF advisors, and other sponsors. This not only strengthens the relationship between sponsors and fellows but also enhances the sense of community and shared purpose.

The Challenging Funding Landscape: A Call to Action

The Paradox of Progress

Modern scientific breakthroughs, such as gene editing and targeted cancer therapies, are revolutionizing medicine, but the foundational research that makes these innovations possible is under threat. Foundational research – the study of life's fundamental building blocks – is the engine of transformative discovery. Without it, the pipeline for future progress will eventually run dry.

Leadership Letter

Douglas Koshland, PhD, President, continued

Barriers to Innovation

Current funding trends have shifted toward low-risk, short-term, and translational projects. This shift has created three critical challenges:

- The "Application Gap": An overemphasis on immediate practical applications, which restricts the "blue-sky" thinking necessary for true innovation.
- The Talent Drain: Limited opportunities for early-career researchers, who often struggle to find support for bold, original ideas.
- Underfunded Fundamentals: A scarcity of resources dedicated to impactful, curiosity-driven research that explores the unknown.

LSRF's Mission and the 2026 Funding Challenge

The Life Sciences Research Foundation (LSRF) remains committed to its goal of funding 25-30 finalists annually, corresponding to the top 3-5% of the applicant pool. However, achieving this target is a constant struggle in the face of shifting institutional priorities. Unlike organizations with endowments, LSRF does not maintain a permanent fund. Instead, it relies on the generosity of sponsors to support its finalists and their research endeavors.

Successes in 2025: We are deeply grateful for the expanded commitment of our partners. The Curci Family Foundation generously increased their sponsorship from one to three fellows. Recognition of recent NIH funding challenges led the Merck Foundation to reestablish their support, and we welcomed a new partnership with the Agouron-Resnick group.

The 2026 Shortfall: Despite these gains, we face a significant hurdle starting in 2026. Due to a change in internal priorities, the Howard Hughes Medical Institute (HHMI), the single largest LSRF sponsor, will no longer provide funding for new classes of LSRF fellows.

Leadership Letter

Douglas Koshland, PhD, President, continued

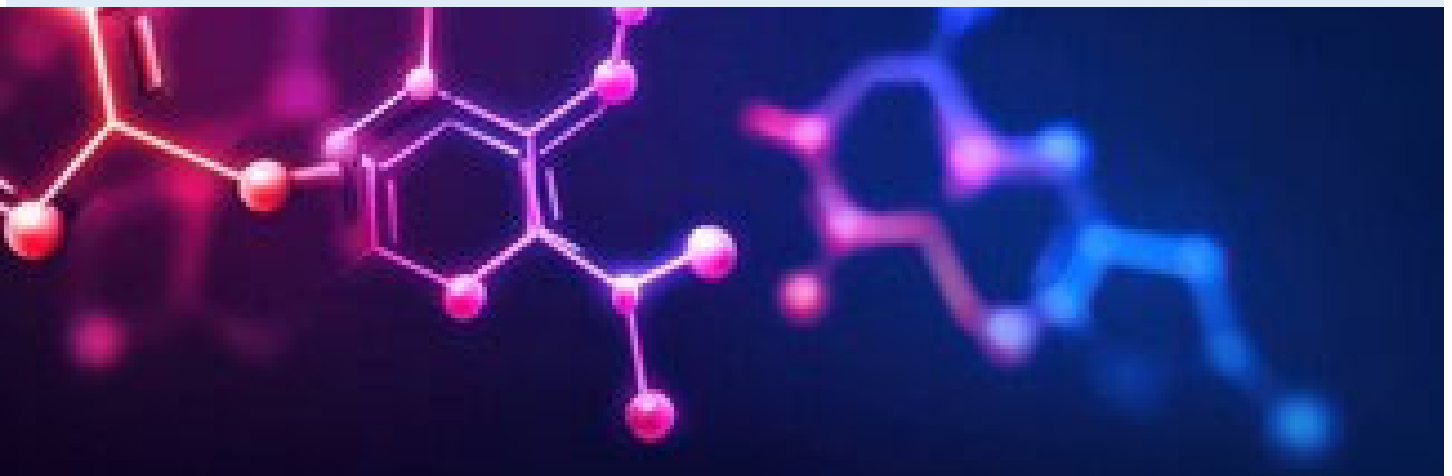
Looking Forward

The loss of HHMI sponsorship represents a critical gap in our ability to support the next generation of scientific innovators. The LSRF executive team is working hard to secure new partners to replace HHMI. We currently have several promising leads, but the urgency remains. To maintain the momentum of biological discovery, we must continue to find sponsors who value the long-term impact of foundational science.

Conclusion

The Life Sciences Research Foundation's defining characteristics – its volunteer-driven operation, sponsorship model, tailored opportunities for sponsor engagement, community-building, and commitment to low overhead – are essential to its ongoing success. By maximizing the impact of every contribution and fostering meaningful connections between sponsors and scientists, LSRF continues to advance life sciences research and support the brightest emerging talents in the field.

We thank our donors, partners, and community for making this year's successes possible and we look forward to another year of impactful research and discovery. The achievements highlighted in this report demonstrate the power of collective support and the exceptional capabilities of our fellows and alumni. With continued investment and collaboration, LSRF will remain at the forefront of life sciences research.



With Gratitude to our Sponsors

Agouron Institute-Resnick

Amgen

Astellas Pharma, Inc.

Coefficient Giving

Cystic Fibrosis Foundation

Dr. Donald Brown

Howard Hughes Medical
Institute

Innovative Genomics
Institute

MacMillan Family
Foundation

Merck Research Laboratories

Dr. Michael Brown

PCLB Foundation

Shurl and Kay Curci
Foundation

Simons Foundation

Valhalla Foundation

Welch Foundation



Thank You!

LSRF by the Numbers

Applications and Awardees 2021 - 2025

	2021	2022	2023	2024	2025
Applications Reviewed	600	463	531	549	606
Finalists	62	54	53	53	52
New Awards Made	24	25	18	21	22
Sponsorships	\$ 4,690,000	\$ 4,623,000	\$ 4,422,000	\$ 4,507,400	\$ 4,697,000

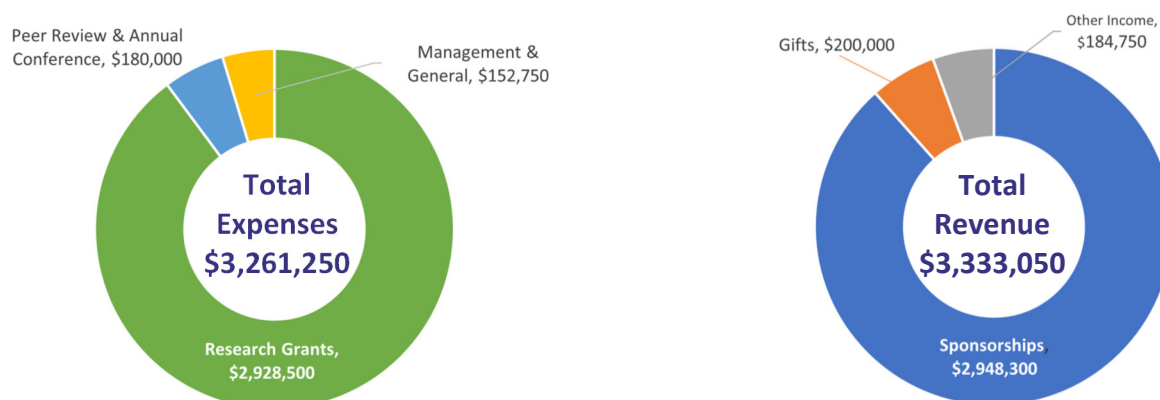


LSRF Fellowship Sponsorship Structure (Three-Year Commitment)

	Year 1	Year 2	Year 3	Total
Salary Support	\$ 79,000	\$ 79,000	\$ 79,000	\$ 237,000
Research Allowance	\$ 6,000	\$ 6,000	\$ 6,000	\$ 18,000
Total Direct Support to Fellow	\$ 85,000	\$ 85,000	\$ 85,000	\$ 255,000
Administrative & Program Oversight	\$ 5,000	\$ 5,000	\$ 5,000	\$ 15,000
Total Annual Sponsorship	\$ 90,000	\$ 90,000	\$ 90,000	\$ 270,000

Financial Summary

The reviewed financial summary information presented herein includes the restricted and unrestricted accounts of the Life Sciences Research Foundation. Thanks to our generous sponsors and donors, Fiscal 2025 was a successful year, enabling us to award 22 new fellowships. Continuing with our commitment to accountability and transparency, our full financial report can be found on our website. A summary appears below.



STATEMENT OF FINANCIAL POSITION

May 31, 2025

Cash and Receivables	\$665,244
Certificates of Deposit	\$2,790,000
Investments in Marketable Securities	\$0.00
Total Assets	\$3,455,244
Total Liabilities	\$1,064,666
Net Assets	\$2,390,578
Total Liabilities and Net Assets	\$3,455,244

Advisory Board

Bruce Alberts, Ph.D.

Professor Emeritus
Department of Biochemistry and Biophysics
University of California, San Francisco
President Emeritus, National Academy of Sciences
President Emeritus, American Society for
Cell Biology
National Medal of Science (2014)
Lasker-Koshland Special Achievement Award in
Medical Science (2016)

Bonnie Bassler, Ph.D.

Andrew K. Golden University Professor
Squibb Professor in Molecular Biology
Department of Molecular Biology
Princeton University
Investigator, Howard Hughes Medical Institute
Shaw Prize (2015)
Genetics Society of America Medal (2020)

Thomas Cech, Ph.D.

Distinguished Professor
Department of Chemistry and Biochemistry
University of Colorado, Boulder
Investigator, Howard Hughes Medical Institute
President Emeritus, Howard Hughes
Medical Institute
Lasker Basic Medical Research Award (1988)
Nobel Prize in Chemistry (1989)
National Medal of Science (1995)

Elaine Fuchs, Ph.D.

Rebecca C. Lancefield Professor
Laboratory of Mammalian Cell Biology
and Development
Rockefeller University
Investigator, Howard Hughes Medical Institute
President Emerita, American Society for
Cell Biology
National Medal of Science (2009)
Benjamin Franklin Medal in Life Science (2023)

Susan Hockfield, Ph.D.

Professor of Neuroscience
Department of Brain and Cognitive Sciences
President Emerita, Massachusetts Institute
of Technology
President Emerita, American Association for
the Advancement of Science

H. Robert Horvitz, Ph.D.

David H. Koch Professor
Department of Biology
Massachusetts Institute of Technology
Investigator, Howard Hughes Medical Institute
Gruber Prize in Genetics (2002)
Nobel Prize in Physiology or Medicine (2002)

David J. Julius, Ph.D.

Morris Herzstein Professor and Chair
Department of Physiology
University of California, San Francisco
Breakthrough Prize in Life Sciences (2020)
Nobel Prize in Physiology or Medicine (2021)

Ruth Lehmann, Ph.D.

Professor
Department of Biology
Director
Whitehead Institute for Biomedical Research
Massachusetts Institute of Technology
President Emerita, American Society for
Cell Biology
Thomas Hunt Morgan Medal (2021)
Gruber Prize in Genetics (2022)

Scott Mclsaac, Ph.D.

Head of Research
Foresite Capital

Advisory Board

Steven L. McKnight, Ph.D.

Distinguished Chair in Basic Biomedical Research
Department of Biochemistry
The University of Texas Southwestern
Medical School
Wiley Prize (2014)
Lasker Basic Medical Research Award (2025)

Eric Olson, Ph.D.

Annie and Willie Nelson Professorship in
Stem Cell Research
Pogue Distinguished Chair in Research on
Cardiac Birth Defects
The Robert A. Welch Distinguished Chair
in Science
Department of Molecular Biology
The University Texas Southwestern Medical School
March of Dimes Prize (2013)
Louisa Gross Horwitz Prize (2025)

Phillip A. Sharp, Ph.D.

Institute Professor
Department of Biology
Massachusetts Institute of Technology
Nobel Prize in Physiology or Medicine (1993)
National Medal of Science (2004)

Marc Tessier-Lavigne, Ph.D.

CEO, Xaira Therapeutics
President Emeritus, Stanford University
President Emeritus, Rockefeller University
Director of Research Emeritus, Genentech, Inc.
Gruber Neuroscience Prize (2020)

Shirley M. Tilghman, Ph.D.

Professor
Department of Molecular Biology
Princeton University
President Emerita, Princeton University
President Emerita, American Society for
Cell Biology
Genetics Society of America Medal (2007)

Robert Tjian, Ph.D.

Li Ka Shing Chancellor's Chair in Biology
Department of Molecular and Cell Biology
University of California, Berkeley
Investigator, Howard Hughes Medical Institute
President Emeritus, Howard Hughes
Medical Institute
Louisa Gross Horwitz Prize (1999)
Glenn T. Seaborg Medal (2010)
Grand Prix Charles-Leopold Mayer (2010)

Feng Zhang, Ph.D.

James and Patricia Poitras Professor
Broad Institute
Harvard University and Massachusetts Institute
of Technology
Investigator, Howard Hughes Medical Institute
Gairdner Foundation International Award (2016)
Keio Medical Science Prize (2018)
National Medal of Technology (2025)

Executive Officers

Doug Koshland, Ph.D., President

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Department of Molecular and
Cellular Biology
University of California, Berkeley
Member, National Academy of Sciences

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Distinguished Professor
Department of Biochemistry and
Molecular Biology
Director, Institute for Personalized
Medicine
Penn State University Medical School

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Calico Life Sciences, LLC
Member, National Academy of Sciences

Leanne Jones, Ph.D.

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Experimental Pathology
Director, Bakar Aging Research Institute
University of California, San Francisco
LSRF alumna (2001-2003)

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Department of Molecular Biology and
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Johns Hopkins Medical School
Investigator, Howard Hughes
Medical Institute
Member, National Academy of Sciences

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Princeton University
Member, National Academy of Sciences

Neal Silverman, Ph.D.

Professor
Division of Infectious Diseases and
Immunology
Department of Medicine
University of Massachusetts
Chan Medical School

Meng Wang, Ph.D.

Senior Group Leader
Janelia Farms Research Campus, Howard
Hughes Medical Institute
LSRF alumna (2007-2009)

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University of North Carolina, Chapel Hill

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University of Pennsylvania
Member, National Academy of Sciences

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Distinguished Professor
Department of Biochemistry and Molecular Biology
Director, Institute for Personalized Medicine
Penn State University Medical School

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Assistant Professor and Attending Physician
Immuno-Oncology Program
Memorial Sloan Kettering Cancer Center
Howard Hughes Medical Institute
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Princeton University

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Chair, Department of Molecular Biology
Princeton University

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Principal Investigator
Calico Life Sciences, LLC
Member, National Academy of Sciences

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Department of Pathology and Cell Biology
Columbia University College of
Physicians and Surgeons

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Department of Molecular and Systems Biology
Dartmouth University Geisel School of Medicine

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Scientist Emeritus
Center for Cancer Research
National Cancer Institute, NIH

Leanne Jones, Ph.D.

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Experimental Pathology
Director, Bakar Aging Research Institute
University of California, San Francisco

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Department of Developmental Biology
Washington University School of Medicine

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Department of Molecular and Cellular Biology
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Member, National Academy of Sciences

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Head, Systems Biology of Gene Expression Section
National Cancer Institute, NIH

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Frederick National Laboratory for Cancer Research
National Cancer Institute, NIH

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Department of Molecular Biology
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Princeton University

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Department of Genetics
University of North Carolina Medical School

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Departments of Neural Science and Psychology
New York University
Member, National Academy of Sciences

Uli Mueller, Ph.D.

Bloomberg Distinguished Professor
Department of Neuroscience
Johns Hopkins Medical School

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Department of Molecular Biology and Genetics
Johns Hopkins Medical School
Investigator, Howard Hughes Medical Institute
Member, National Academy of Sciences

Gregory Petsko, Ph.D.

Professor
Department of Neurology
Harvard Medical School
Member, National Academy of Sciences

Naomi Pierce, Ph.D.

Sidney A. and John H. Hessel Professor
Department of Organismic and Evolutionary Biology
Harvard University
Member, National Academy of Sciences

Scott Poethig, Ph.D.

John H. and Margaret B. Fassitt Professor (Emeritus)
Department of Biology
University of Pennsylvania
Member, National Academy of Sciences

Daniel Rubenstein, Ph.D.

Class of 1877 Professor of Zoology (Emeritus)
Department of Ecology and Evolutionary Biology
Princeton University

Piali Sengupta, Ph.D.

Harold and Bernice Davis Chair in Aging and
Neurodegenerative Disease
Department of Biology
Brandeis University

Geraldine Seydoux, Ph.D.

Huntington Sheldon Professor in Medical Discovery
Molecular Biology and Genetics
Johns Hopkins Medical School
Investigator, Howard Hughes Medical Institute
Member, National Academy of Sciences

Mara Sherman, Ph.D.

Associate Professor
Department of Cancer Biology & Genetics
Memorial Sloan Kettering Cancer Center

Peer Review Committee

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Warner-Lambert Parke-Davis Professor
Department of Molecular Biology
Princeton University
Member, National Academy of Sciences

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Professor
Division of Infectious Diseases and Immunology
Department of Medicine
University of Massachusetts Chan Medical School

Ann Stock, Ph.D.

Distinguished Professor
Department of Biochemistry and Molecular Biology
Associate Director, Center for
Advanced Biotechnology and Medicine
Robert Wood Johnson Medical School,
Rutgers University

Peter Tonge, Ph.D.

Distinguished Professor
Department of Chemistry
Director, Center for Advanced Study of Drug Action
State University of New York at Stony Brook

Ned S. Wingreen, Ph.D.

Howard A. Prior Professor of the Life Sciences
Department of Molecular Biology
Princeton University

Ilana Witten, Ph.D.

Professor
Department of Psychology and
Institute for Neuroscience
Investigator, Howard Hughes Medical Institute
Princeton University



Our Current Fellows

Award Period 2023-2026

Jorge Almagro, PhD

Project: Characterizing skin cancer mechanics and the mechanosensory tumor microenvironment

Mentor: Elaine Fuchs, PhD

Affiliation: Rockefeller University

Sponsor: MacMillan Family Foundation

Samhita Banavar, PhD

Project: Mechanical organizing centers in early lung development

Mentor: Celeste Nelson, PhD

Affiliation: Princeton University

Sponsor: Shurl and Kay Curci Foundation

Karishma Bisht, PhD

Project: The role of body temperature in aberrant viral replication and immune activation

Mentor: A.J. te Velthuis, PhD

Affiliation: Princeton University

Sponsor: Coefficient Giving

Joël Sharon Bloch, PhD

Project: Toward the ultrastructure of the node of Ranvier

Mentor: Roderick MacKinnon, MD, PhD

Affiliation: Rockefeller University

Sponsor: Howard Hughes Medical Institute

Andrew Butler, PhD

Project: Deconvolving the heterogeneous response of single cells to influenza infection

Mentor: Jesse Bloom, PhD

Affiliation: Fred Hutchinson Cancer Center

Sponsor: Coefficient Giving

Danielle Garshott, PhD

Project: Discovery of Tau aggregate clearance pathways and their roles in neuronal function and survival

Mentor: Michael Rapé, PhD

Affiliation: University of California, Berkeley

Sponsor: Howard Hughes Medical Institute

Sharon Kaisari, PhD

Project: The role of non-canonical phosphorylation of nuclear lamins during interphase in enhanced migration and invasion

Mentor: Michele Pagano, PhD

Affiliation: New York University

Sponsor: Howard Hughes Medical Institute

Faith Karanja, PhD

Project: Exploring the Role of Hopx as a Conserved Regulator of Quiescence in Adult Stem Cells

Mentor: Jonathan Epstein, PhD

Affiliation: University of Pennsylvania

Sponsor: PCLB

Ryan Moreira, PhD

Project: Targeting cytolysin virulence through complimentary biosynthetic and mechanism of action studies

Mentor: Wilfred van der Donk, PhD

Affiliation: University of Illinois Urbana-Champaign

Sponsor: Howard Hughes Medical Institute

Diego Pacheco Pinedo, PhD

Project: Neural circuits underlying feedback control of locomotion speed

Mentor: Rachel Wilson, PhD

Affiliation: Harvard Medical School

Sponsor: Howard Hughes Medical Institute

Heidi Pak, PhD

Project: Role of Feeding Entrainment in Mediating Health and Lifespan

Mentor: Joseph Takahashi, PhD

Affiliation: University of Texas Southwestern Medical Center

Sponsor: Welch Foundation

Isobel Ronai, PhD

Project: Developing tick control strategies to prevent Lyme disease and other tick-borne diseases

Mentor: Cassandra Extavour, PhD

Affiliation: Harvard University

Sponsor: Howard Hughes Medical Institute

Jeffrey Rosa, PhD

Project: Identifying the molecular basis of sleep maturation in *Drosophila melanogaster*

Mentor: Matthew Kayser, MD, PhD

Affiliation: University of Pennsylvania

Sponsor: Simons Sfari

Eric Schuppe, PhD

Project: Neuro-genomic mechanisms underlying multifaceted vocal phenotypes

Mentor: Michael Brainard, PhD

Affiliation: University of California, San Francisco

Sponsor: Howard Hughes Medical Institute

Jacob Steenwyk, PhD

Project: Investigating the molecular underpinnings of complex traits like multicellularity

Mentor: Nicole King, PhD

Affiliation: University of California, Berkeley

Sponsor: Howard Hughes Medical Institute

Reika Tei, PhD

Project: A programmable synthetic GPCR platform for customized antigen sensing and cell responses

Mentor: Alice Ting, PhD

Affiliation: Stanford University

Sponsor: Astellas Pharma, Inc.

Zhongshou Wu, PhD

Project: Understanding how histone methylation connects DNA replication, repair, and transcription

Mentor: Steve Jacobsen, PhD

Affiliation: University of California, Los Angeles

Sponsor: Howard Hughes Medical Institute

Xuhui Zheng, PhD

Project: C-di-GMP and cAMP signaling during *Pseudomonas aeruginosa* biofilm formation

Mentor: Matthew Parsek, PhD

Affiliation: University of Washington

Sponsor: Cystic Fibrosis Foundation

Award Period 2024-2027

Han Altae-Tran, PhD

Project: Enabling accurate 3D modeling and design of RNA-protein complexes with deep learning

Mentor: David Baker, PhD

Affiliation: University of Washington

Sponsor: Howard Hughes Medical Institute

John Bowler, PhD

Project: Neural Correlates of Timing in the Entorhinal Cortex

Mentor: James Heys, PhD

Affiliation: University of Utah

Sponsor: Simons Sfari

Sydney Cason, PhD

Project: Investigating lipid transport proteins involved in plasma membrane physiology and disease

Mentor: Pietro De Camilli, PhD

Affiliation: Yale University

Sponsor: Howard Hughes Medical Institute

Our Current Fellows

Award Period 2024-2027 (continued)

Karen Cunningham, PhD

Project: Neural control of swimming and behavioral state switching in a genetically tractable model jellyfish

Mentor: Brandon Weissbourd, PhD

Affiliation: Massachusetts Institute of Technology

Sponsor: Shurl and Kay Curci Foundation

Thomas Day, PhD

Project: How feedback between cell interactions and emergent multicellular states shape the ecology of a patchy marine environment

Mentor: Julia Schwartzman, PhD

Affiliation: University of Southern California

Sponsor: Simons Foundation

Bradley Ganoe, PhD

Project: Spin Projection for Strong Correlation: A Quantum Monte Carlo Approach

Mentor: James Shee, PhD

Affiliation: Rice University

Sponsor: Welch Foundation

Kayla Goforth, PhD

Project: Shedding Light on the Mechanisms Underlying Animal Magnetoreception

Mentor: Christine Merlin, PhD

Affiliation: Texas A&M University

Sponsor: Welch Foundation

Changhao He, PhD

Project: Developing a bitopic CDK2 inhibitor as a Cip/Kip tumor suppressor surrogate

Mentor: Kevan Shokat, PhD

Affiliation: University of California, San Francisco

Sponsor: Howard Hughes Medical Institute

James Held, PhD

Project: The mitochondrial role in carbon concentrating mechanisms for photosynthetic optimization

Mentor: Arthur Grossman, PhD

Affiliation: Carnegie Institution for Science / Stanford University

Sponsor: Simons Foundation

Johannes Hevler, PhD

Project: Sweet Connections: Deciphering the Intricate Relationship between Glycosylation, Protein Function, and Disease Mechanisms

Mentor: Carolyn Bertozzi, PhD

Affiliation: Stanford University

Sponsor: Howard Hughes Medical Institute

Xupeng Hong, PhD

Project: Identifying the Factors Required for Breaching the Species Barrier of Hepatitis B Virus Infection

Mentor: Charles Rice, PhD

Affiliation: Rockefeller University

Sponsor: Coefficient Giving

Albana Lavinia Kodra, PhD

Project: The role of the enteric neuro-epithelium sensory hubs in food allergy

Mentor: Daniel Mucida, MD, PhD

Affiliation: Rockefeller University

Sponsor: Howard Hughes Medical Institute

Unghwi Lee, PhD

Project: Molecular Foundations of Brain Stability

Mentor: Graeme Davis, PhD

Affiliation: University of California, San Francisco

Sponsor: Simons Sfari

Briana Nixon, PhD

Project: Determining how Mammary Gland-Innervating Sensory Neurons Contribute to Lactation

Mentor: Ishmail Abdus-Saboor, PhD

Affiliation: Columbia University

Sponsor: Howard Hughes Medical Institute

Sang Woo (Daniel) Park, PhD

Project: Developing data-driven models for predicting the impact of climate change on spatiotemporal population and disease dynamics

Mentor: Sarah Cobey, PhD

Affiliation: University Chicago

Sponsor: PCLB

Judy Shon, PhD

Project: A bottom up approach to combinatorial control of cytokine responses

Mentor: Michael Elowitz, PhD

Affiliation: California Institute of Technology

Sponsor: Howard Hughes Medical Institute

Yekaterina (Kate) Shulgina, PhD

Project: Mechanism of quadruplet decoding by the ribosome

Mentor: Jamie Cate, PhD

Affiliation: University of California, Berkeley

Sponsor: Don Brown Fellow

Erik Toraason, PhD

Project: Mechanisms of survival: Defining pathways mediating cellular rejuvenation and danger signaling

Mentor: Coleen Murphy, PhD

Affiliation: Princeton University

Sponsor: Simons Sfari

Stephanie Pei Tung Yiu, PhD

Project: Spatial-temporal Dynamics, Immune Organization, and Glycosylation Architecture in the Intact Follicular Lymphoma Microenvironment

Mentor: Sizun Jiang, PhD

Affiliation: Beth Israel Deaconess Medical Center

Sponsor: MacMillan Family Foundation

Ziyi Zhang, PhD

Project: Tunable Dynamic Covalent Bonding for Programmable Assembly of Colloidal Nanocrystal Gels

Mentor: Eric Anslyn, PhD

Affiliation: University of Texas, Austin

Sponsor: Welch Foundation

Franz Zingl, PhD

Project: How genomic adaptations shape *Vibrio cholerae* virulence during and across pandemics

Mentor: Matthew Waldor, PhD

Affiliation: Brigham and Women's Hospital

Sponsor: Howard Hughes Medical Institute

Award Period 2025-2028

Katelyn Baumler, PhD

Project: Crystal growth of Ln₂Fe₄Sb₅ phases toward the study of novel quantum properties

Mentor: Julia Chan, PhD

Affiliation: Baylor University

Sponsor: Welch Foundation

Brian Carrick, PhD

Project: Resolving the roles of poly(A) binding protein in mRNA stability

Mentor: Lori Passmore, PhD

Affiliation: MRC Laboratory of Molecular Biology

Sponsor: Shurl and Kay Curci Foundation

John Ciemniecki, PhD

Project: Characterization and mechanisms of antibiotic persister cell maintenance metabolism in *Salmonella enterica*

Mentor: Jorge Escalante, PhD

Affiliation: University of Georgia

Sponsor: Open Philanthropy

Our Current Fellows

Award Period 2025-2028 (continued)

Lachlan Deimel, PhD

Project: Biophysical and Immunological Divergence of IgM and IgD

Mentor: Michel Nussenzweig, MD, PhD

Affiliation: The Rockefeller University

Sponsor: Howard Hughes Medical Institute

José Delgado, PhD

Project: Mitochondrial Pathogen Sensing Mechanisms for Cellular Immunity

Mentor: Lena Pernas, PhD

Affiliation: University of California, Los Angeles

Sponsor: Innovative Genomics Institute (IGI)

Yaara Finkel, PhD

Project: Viral subversions of gene regulatory networks

Mentor: Lacramioara Bintu, PhD

Affiliation: Stanford University

Sponsor: Shurl and Kay Curci Foundation

Tyler Hill, PhD

Project: Olfactory coding strategies in *Aedes Aegypti* mosquitoes

Mentor: Meg Younger, PhD

Affiliation: Boston University

Sponsor: Shurl and Kay Curci Foundation

Jason Johansen-Leete, PhD

Project: High-resolution mapping of the BAF interactome with novel chemoproteomic technologies

Mentor: Tom Muir, PhD

Affiliation: Princeton University

Sponsor: Amgen

Nicholas Karavolias, PhD

Project: Role of lineage-specific cis-regulatory accelerations in transcriptional and functional diversity

Mentor: David Savage, PhD

Affiliation: University of California, Berkeley

Sponsor: Howard Hughes Medical Institute

Yoonji Kim, PhD

Project: Mechanisms of accelerated aging in mosquitoes for vector and disease control

Mentor: Leslie Vosshall, PhD

Affiliation: The Rockefeller University

Sponsor: Howard Hughes Medical Institute

Miao Liu, PhD

Project: Spatially resolved 3D genome architecture and whole transcriptome landscape to decode pancreatic cancer progression

Mentor: Rong Fan, PhD

Affiliation: Yale University

Sponsor: MacMillan Family Foundation

Olivia (Skye) Montoya, PhD

Project: Design and optimization of cRIPTACs for enhanced cancer specificity in overcoming BTK inhibitor resistance

Mentor: Craig Crews, PhD

Affiliation: Yale University

Sponsor: Merck Foundation

Christopher Nardone, PhD

Project: Elucidating the mechanism and regulation of V-ATPase assembly by a novel protein complex

Mentor: Tom Rapoport, PhD

Affiliation: Harvard University

Sponsor: Howard Hughes Medical Institute

Dinh Nguyen, PhD

Project: Discovery and characterization of bacterial anti-protist systems

Mentor: Michael Laub, PhD

Affiliation: Massachusetts Institute of Technology

Sponsor: Howard Hughes Medical Institute

Ethan Perets, PhD

Project: Imaging the Mechanisms of cGAS-STING Innate Immune Signaling in Neurodegeneration and Aging

Mentor: Zhijian Chen, PhD

Affiliation: University of Texas Southwestern Medical Center

Sponsor: Michael Brown Fellow

Jiaxuan Qi, PhD

Project: Mechanisms of Neural Circuit Dynamics Underlying Resilience to Chronic Stress

Mentor: Ilana Witten, PhD

Affiliation: Princeton University

Sponsor: Howard Hughes Medical Institute

Lijun Qi, PhD

Project: Early-active striatal neurons, neonatal action selection, and maturation of motor circuits

Mentor: Liqun Luo, PhD

Affiliation: Stanford University

Sponsor: Howard Hughes Medical Institute

Shailab Shrestha, PhD

Project: Cell envelope biogenesis and maintenance in a bacterial pathogen

Mentor: Thomas Bernhardt, PhD

Affiliation: Harvard Medical School

Sponsor: Howard Hughes Medical Institute

Daphne Siciliani, PhD

Project: The fundamental role of newly discovered toxic molecules in African lungfish estivation

Mentor: Irene Salinas, PhD

Affiliation: University of New Mexico

Sponsor: PCLB

Sherzod Tokamov, PhD

Project: Exploring the role of nuclear speckles in gene expression control during gamma-herpesvirus infection

Mentor: Britt Glaunsinger, PhD

Affiliation: University of California, Berkeley

Sponsor: Howard Hughes Medical Institute

Renée Wang, PhD

Project: Discovering missing steps in the nitrogen cycle: N₂O-dependent enzymes

Mentor: Patrick Shih, PhD

Affiliation: University of California, Berkeley

Sponsor: Agouron-Resnick

Teng Yuan, PhD

Project: Unlocking New Chemistry of Nonheme Iron Enzymes for α -Amino Acids and γ -Lactones Synthesis

Mentor: Han Xiao, PhD

Affiliation: Rice University, Chemistry department

Sponsor: Welch Foundation