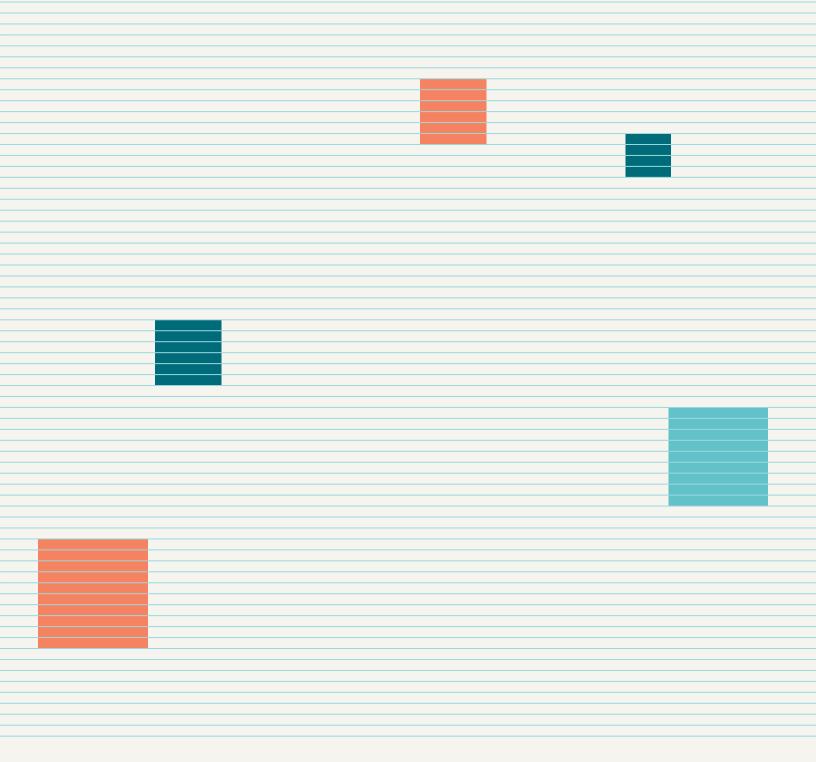


### **CONTENTS**

About the Burroughs Wellcome Fund	4	Career Awards for Medical Scientists	13
2023 Highlights	5	Career Award for STEM Teachers	14
President's Message	8	Climate and Health Interdisciplinary Awards	15
Grant Programs	10	Climate Change and Human Health Seed Grants	15
Ad Hoc Grants	11	Graduate Diversity Enrichment Program	16
Career Awards at the Scientific Interface	12	Innovation in Regulatory Science	17



Investigators in the Pathogenesis of		Science and Philanthropy	22
Infectious Disease	18	Science Communication	22
Next Gen Pregnancy Initiative	19	Student STEM Enrichment Program	23
Postdoctoral Diversity Enrichment Program	20	Report on Finance	24
Resident Faculty Scholar	21	Grant Awardee Index	28
Science and the Arts	21	Board of Directors and Staff	39

# About the Burroughs Wellcome Fund

#### 70 YEARS OF INVESTING IN SCIENCE, PEOPLE, AND POSSIBILITY

The Burroughs Wellcome Fund serves and strengthens society by nurturing a diverse group of leaders in the biomedical sciences to improve human health through education and by powering discovery in frontiers of greatest need.

BWF channels its financial support primarily through competitive, peer-reviewed award programs. Grants are awarded to institutions on behalf of individual researchers, with a strong emphasis on supporting early-career scientists and cultivating pathways to leadership in research and discovery. To complement these efforts, BWF also funds nonprofit organizations whose work enhances the broader environment for science.

A commitment to "science for all" is central to BWF's mission. We believe that a diverse scientific workforce is essential to advancing innovation, academic excellence, and public service.

The Fund is governed by a Board of Directors composed of distinguished scientists and business leaders. Founded in 1955 as the corporate foundation of the Burroughs Wellcome Co., BWF became fully independent in 1993 through a transformational gift from the Wellcome Trust in the United Kingdom. The Fund has no affiliation with any corporation and operates as a private, independent foundation headquartered in Durham, North Carolina.

# 2024 Highlights

**Burroughs Wellcome Fund** NC Teachers of the Year (L to R): Maureen Stover (2020), Eugenia Floyd (2021), Leah Carper (2022)



STEM robot from STEM Awardee Meeting Exhibit







Captain Barrington Irving, Founder and CEO Flying
Classroom and Alfred Mays





The Burroughs Wellcome Fund traveling backpack by Beverly Owens 2019 Career Award for STEM Teachers Recipient

Andrea Gladden, East Burke Middle School | Burke County Public Schools 2023 Career Award for STEM Teachers (CAST) Recipient



Overview of Burroughs Wellcome Fund with Dr. Lou Muglia





The STEM journey interview with 2019
Career Award for STEM Teachers Recipient,
Beverly Owens, Mandeep Sekhon and Ben
Allison, Benco Productions





### PRESIDENT'S MESSAGE



Dear Friends and Colleagues,

As I reflect on the past year, I am filled with gratitude for the shared commitment of our community to advancing science, fostering innovation, and addressing some of the most pressing challenges of our time. At the Burroughs Wellcome Fund, 2024 has been a year of growth, collaboration, and impact, guided by our mission to serve as a catalyst for discovery and societal progress.

This year, we continued to expand our programmatic focus to address the critical intersection of climate change and human health. The launch of our Climate + Health Excellence (CHEX) Centers awards marks a significant step in supporting interdisciplinary research that explores the profound ways in which a changing climate affects human well-being. By fostering collaborations across diverse fields, we aim to illuminate the pathways through which science can mitigate these impacts and promote resilience in communities worldwide.

In 2024, we also increased our commitment to science communication. Bridging the gap between complex scientific ideas and public understanding is essential in

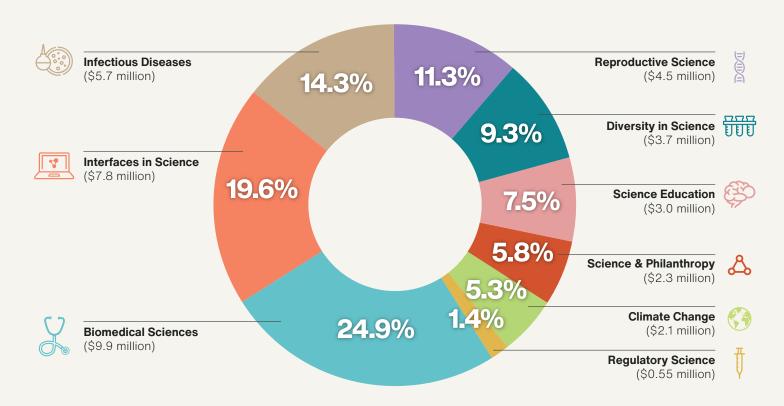
fostering trust and informed decision-making. Through fellowship, programs and partnerships, we have supported initiatives that empower scientists to share their work effectively and elevate public discourse around science and its role in society. Notable is our work to support the growing civic science movement that helps create connections between scientists and communities to address societal challenges. This work bridges the gap between science and society, emphasizing collaboration, inclusivity, and the societal impact of research.

The intersection of science and the arts has remained a source of inspiration and innovation. This year, we have seen remarkable projects that harness the power of storytelling, visual media, and performance to bring scientific concepts to life in ways that resonate deeply with diverse audiences. These collaborations remind us that creativity and imagination are vital components of scientific inquiry and public engagement.

The National Geographic WonderLab is an excellent example. It is an immersive, interactive experience that brings the wonders of science, nature, and exploration to life. Combining cutting-edge technology with National Geographic's iconic storytelling, the WonderLab sparks curiosity, inspires discovery, and fosters a deeper connection to the natural world.

# BWF awarded \$39.8 MILLION in grants

## during fiscal year 2024





#### **Biomedical Sciences**

Career Awards in the Medical Sciences Resident Faculty Scholar



#### Climate Change and Human Health

Climate and Health Interdisciplinary Awards Climate Change and Human Health Seed Grants



#### Diversity in Science

Graduate Diversity Enrichment Program Postdoctoral Diversity Enrichment Program



#### Infectious Diseases

Investigators in Pathogenesis of Infectious Disease



#### Interfaces in Science

Career Award at the Scientific Interface



#### **Regulatory Science**

Innovation in Regulatory Science Awards



#### Reproductive Science

Next Gen Pregnancy Initiative



#### Science and Philanthropy

Science Communication Science and the Arts General Philanthropy



#### Science and Education

Career Award for STEM Teachers Promoting Innovation in Science and Mathematics Student STEM Enrichment Program

For audited financial statements and complete grant listings, visit www.bwfund.org/about/annual-report

We continue to be inspired by the incredible work of our grantees, partners, and the broader scientific community. Your dedication fuels our efforts to champion bold ideas, foster collaboration, and build a brighter future for all.

As we look ahead to 2025, we remain steadfast in our commitment to supporting the people and programs that drive discovery and innovation. Together, we can continue to address the challenges of today while shaping a more equitable and sustainable tomorrow.

Thank you for your unwavering support and partnership. It is an honor to work alongside each of you in advancing our shared vision.

With gratitude,

Januagha I Dela Maria MD PhD

Louis J. Muglia, MD, PhD President and CEO Burroughs Wellcome Fund



# Competitive Grant Programs



**CLIMATE + HEALTH EXCELLENCE CENTERS** 



CAREER AWARDS FOR **MEDICAL SCIENTISTS** 







**CLIMATE CHANGE** AND-V-**HUMAN HEALTH** 

















## Ad Hoc Grants

Some of the greatest discoveries happened because innovators recognized fast-moving opportunities and acted on them. BWF provides ad hoc grants on a one-time basis for specific projects or purposes. These grants are typically not part of a long-term funding plan or renewable unless explicitly stated otherwise. BWF awards these grants for a variety of reasons, including emergency situations, unexpected opportunities, or projects outside of the Fund's regular funding priorities.

Despite being one-time awards, ad hoc grants are an important source of support for organizations and individuals seeking funding for fast-moving projects or purposes. The ad hoc grants are a flexible and responsive funding option to promote innovation, creativity, and problem-solving in wide-ranging fields.

### Career Awards at the Scientific Interface

The intersection of different scientific fields offers exciting potential for discovery. In recognition of the vital role of cross-trained scientists, the Career Awards at the Scientific Interface (CASI) support individuals who have completed a PhD in physical, mathematical, or computational science or engineering, and have transitioned to the biological sciences for postdoctoral work. Proposals must be interdisciplinary and make use of non-biological approaches to investigating biological problems.

This \$500,000 award supports U.S. and Canadian scientists holding PhDs in mathematics, physics, chemistry, computer science, statistics, and engineering to pursue interdisciplinary projects using non-biological

approaches to investigate biological problems. Candidates with PhD degrees in biology, biochemistry or other biological sciences may apply if they demonstrate significant accomplishment in a non-biological field.

Examples of strong CASI proposals include computer simulation or mathematical modeling of physiological processes or biological behavior, development of imaging, screening or diagnostic tools, and application of nanotechnology in treatment of disease. Special consideration will be given to proposals using deep or machine learning applications of artificial intelligence as well as those studying the impact of climate change on human health.

#### **2024 AWARDEES**

Lamiae Abdeladim, PhD

University of California-Berkeley

Lindsey Brown, PhD Princeton University

Gregg Castellucci, PhD

Kate Cavanaugh, PhD

New York University

University of California-San Francisco

Colwyn Headley, PhD Stanford University

Natsumi Komatsu, PhD University of California-Berkeley

Deepak Krishnamurthy, PhD University of California-Berkeley

lain Martyn, PhD

University of California-San Francisco

Harold McNamara, PhD

Princeton University

Aran Nayebi, PhD

Massachusetts Institute of Technology

Luca Rosalia, PhD Stanford University

Shunzhi Wang, PhD

University of Washington

#### **ADVISORY COMMITTEE**

Danielle (Dani) S. Bassett, PhD University of Pennsylvania

Todd Coleman, PhD Stanford University

Polly Fordyce, PhD Stanford University

Loren Frank, PhD

University of California-San Francisco

Daniel Hammer, PhD University of Pennsylvania

P. Imoukhuede, PhD University of Washington Christina Leslie, PhD

Memorial Sloan Kettering Cancer Center

Melissa Lambeth Kemp, PhD

Georgia Institute of Technology and Emory University

Stephanie Palmer, DPhil

The University of Chicago

Liam Paninski, PhD Columbia University

Lulu Qian, PhD

California Institute of Technology

Georg Seelig, PhD

University of Washington

Kandice Tanner, PhD

National Cancer Institute

Matt Thomson, PhD

California Institute of Technology

Shyni Varghese, PhD (Chair)

**Duke University** 

Corey J. Wilson, PhD

Georgia Institute of Technology

Jesse Zalatan, PhD (Co-Chair)

University of Washington

## Career Awards for Medical Scientists

Physician scientists bring a union of clinical and academic perspective to biomedical research and the transition from postdoctoral trainee or fellow can be complex. To support physician scientists (MD, DO, DVM, DDS) committed to research careers, BWF created The Career Awards for Medical Scientists (CAMS).

CAMS provides \$700,000 over five years to-mid-career U.S or Canadian physician scientists to develop their careers in biomedical research. Proposals must be in the areas of basic science, translational science, or biomedical science. BWF encourages applications in artificial intelligence and machine learning. Two awards will be granted to investigators whose research is at the interface between psychiatry and neuroscience.

#### **2024 AWARDEES**

Alan Baik, MD

University of California-San Francisco

Sagar Bapat, MD, PhD

University of California-San Francisco

Shinnyi Chou, MD, PhD

University of Pittsburgh

Geon Kim, MD

Dana-Farber Cancer Institute

Yonit Lavin, MD, PhD

Memorial Sloan Kettering Cancer Center

June-Koo Lee, MD, PhD

Memorial Sloan Kettering Cancer Center

Salvador Alonso Martinez, MD

Memorial Sloan Kettering Cancer Center

Gunes Parlakgul, MD

University of California-Berkeley

Sydney Ramirez, MD, PhD

University of California-San Diego

Theodore Roth, MD, PhD

Stanford University

Rachel Wolfson, MD, PhD

Massachusetts General Hospital

Peng Wu, MD, PhD

Stanford University

Gloria Yiu, MD, PhD

University of California-Los Angeles

#### **ADVISORY COMMITTEE**

Geoffrey Aguirre, MD, PhD (Co-Chair)

University of Pennsylvania Medical School

Susanne Ahmari, MD, PhD

University of Pittsburgh

Chester W. Brown, MD, PhD

University of Tennessee Health

Science Center

Kathleen H. Burns, MD, PhD

Harvard Medical School

Trevor Burt, MD

Duke University School of Medicine

Jeanine D'Armiento, MD, PhD

Columbia University

Seth Field, MD, PhD

Case Western Reserve University

Nicola Jones, MD, PhD

University of Toronto

Annet Kirabo, DVM, PhD

Vanderbilt University

Wilbur Lam, MD, PhD

Emory University

Heather C. Mefford, MD, PhD (Co-Chair) St. Jude Children's Research Hospital

Upinder Singh, MD

University of Iowa

Barry Sleckman, MD, PhD

University of Alabama-

Birmingham Medical School

Maureen Su, MD

University of California Los Angeles

Alik Widge, MD, PhD

University of Minnesota

### Career Award for STEM Teachers

Future research excellence begins with high school STEM teachers. To enhance the professional development of outstanding public school STEM teachers in North Carolina, BWF created the Career Award for STEM Teachers (CAST). CAST provides \$175,000 over five years to up to licensed North Carolina K-12 STEM public school teachers who demonstrate superior STEM knowledge, excellence in teaching, and innovative leadership. Each awardee receives an annual \$10,000 stipend to supplement their annual salary, \$10,000 for

classroom equipment or supply purchases, and \$10,000 for professional development including travel and conference fees. An additional \$5,000 will be given to the teacher if they remain employed in an NC K-12 public school at the end of the five years.

Special consideration will be given to teachers working in hard-to-staff, economically deprived classrooms in NC, as well as efforts that integrate environmental science and the impact of climate change into the STEM curriculum.

#### **ADVISORY COMMITTEE**

Sonja Brown, PhD North Carolina Department of Public Instruction

**David Marsland** Discovery Education Honorable Bobbie Richardson, EdS North Carolina General Assembly

# Climate and Health Interdisciplinary Award

Please note this program is no longer active.

Temperature, ecological, and population changes caused by shifts in climate have a detrimental impact on human health that cannot be assessed through a single science. The Climate and Health Interdisciplinary Award (CHI) supports new research collaborations investigating the effects of climate change on human health. By creating novel interdisciplinary collaborations between experts from fields that do not typically interact, CHI aims to unlock new breakthroughs in climate science.

CHI provides \$375,000 over 3 years to U.S. and Canadian individual investigators or multi-investigator teams, which may include members outside the U.S. and Canada. Proposals must include a collaboration between biomedical sciences and disciplines outside of biomedical sciences (e.g., field ecology, agricultural sciences, geological and planetary sciences, architecture, or applied social sciences) to assess or mitigate the effects of climate change on human health.

#### 2024 AWARDEES

Andrea Buchwald, PhD University of Maryland-Baltimore Caroline Wegner, PhD McGill University

Katharine Walter, PhD University of Utah

# Climate Change and Human Health Seed Grants

From small seeds, powerful collaborations can grow. To nurture new collaborations between separate fields of research and study the impact of climate change on human health, BWF offers the Climate Change and Human Health Seed Grants (CCHH). These early-stage grants connect researchers in the science/biomedical field with those in ecological, environmental, earth science or in population-based fields (epidemiology, public health, economics, and urban planning).

CCHH awards grant \$2,500-\$50,000 over one year to U.S. and Canadian researchers interested in collaborating across non-profit organizations. We are especially interested in proposals around the development of sustainable health care systems, public education on climate change, and preparation for extreme weather or other crises that would directly affect health or the delivery of health care.

#### **2024 AWARDEES**

#### **Rosalind Reid**

Council for the Advancement of Science Writing (CASW)

#### Sriram Iyengar

University of Arizona

#### Nikhil Malvankar

Yale University

#### Kathrin Schilling

Columbia University

#### Stephanie Carper

Bulletin of the Atomic Scientists

#### Christina Johnson

National Center for Frontier Communities

#### **Brian Wallis**

The Center for Photography at Woodstock

#### Jennifer Runkle

North Carolina State University

#### Carlos Andres Gallegos-Riofrio

The University of Vermont and State Agricultural College

#### Katherine Graham

Georgia Institute of Technology

# Graduate Diversity Enrichment Program

Diversity in the scientific workforce leads to greater innovation and discovery. To support the career development of young scientists who belong to underrepresented minorities. The Graduate Diversity Enrichment Program (GDEP). GDEP empowers diverse graduate students by increasing exposure to professional environments and by making candidates more competitive in academic research careers.

GDEP provides \$5,000 over two years to STEM PhD students at an NC institution of higher education who belong to an underrepresented minority (American Indian or Alaska Native, Black or African American, Hispanic, or Native Hawaiian or other Pacific Islander). Funds support travel and participation in conferences, workshops, courses, training, and networking as well as research equipment and supplies.

# Innovation in Regulatory Science Award

As biomedical science and technology advances, it is critical that accompanying laws and regulations advance in kind. The goal of the Innovation in Regulatory Science Award (IRSA) is to promote a solid scientific foundation for the development of laws and regulations around biomedical science. Drawing on fields like applied physics, medicine, toxicology, and food safety and nutrition, IRSA funds research that explores new approaches in regulatory science that can inform FDA regulatory decisions.

IRSA provides up to \$500,000 over five years to an investigator with an MD, PhD, DVM, DDS, DO, DPhil, PharmD, or MD-PhD who is employed at a non-profit, degree-granting institution in the U.S. or Canada.

BWF encourages applications that support the FDA's priorities: regenerative medicine (including gene therapy), artificial intelligence and machine learning, digital health, reduction of animal testing, and model-informed product development.

#### **ADVISORY COMMITTEE**

Martha Brumfield, PhD Critical Path Institute

Victoria Chiou, MD Tempus Al

Rachele Hendricks-Sturrup, DHSc, MSc, MA Duke-Robert J. Margolis Institute for Health Policy

Lisa LaVange, PhD University of North Carolina-Chapel Hill Wendy R. Sanhai, PhD, MBA **Duke University** 

Christy L. Shaffer, PhD Hatteras Discovery

Ann Taylor, MD National Academies of Science, Engineering, and Medicine

Jonathan Watanabe, PharmD, PhD University of California-San Francisco

Alastair J.J. Wood, M.B., Ch.B, FRCP, FACP (Chair) Vanderbilt University

Joseph Wu, MD, PhD Stanford University

# Investigators in the Pathogenesis of Infectious Diseases

To better understand disease pathogenesis, we need bold researchers to explore new avenues of inquiry across fields. the Investigators in the Pathogenesis of Infectious Diseases (PATH) award supports assistant professors to pursue high-risk, high-reward projects and become innovators in infectious disease research

This competitive award provides \$500,000 over five years to a U.S. or Canadian investigator with an established record of independent research.

BWF encourages multidisciplinary submissions studying all types of pathogens (bacterial, viral, fungal, etc.) and their underlying mechanisms of infection, colonization, or commensalism at the molecular or systemic level. We are especially interested in research examining links between climate change and pathogen-host interactions.

#### 2024 AWARDEES

#### Kimberly Davis, PhD

Johns Hopkins Bloomberg School of Public Health

#### Tera Levin, PhD

University of Pittsburgh

#### Monica Mugnier, PhD

Johns Hopkins Bloomberg School of Public Health

#### Teresa O'Meara, PhD

University of Michigan

#### Lena Pernas, PhD

University of California-Los Angeles

#### Jeremy Rock, PhD

Rockefeller University

#### Christoph Thaiss, PhD

University of Pennsylvania, Perelman School of Medicine

#### Aaron Whiteley, PhD

University of Colorado Boulder

#### **ADVISORY COMMITTEE**

#### Andrew Alspaugh, MD

**Duke University Medical Center** 

#### Craig E. Cameron, PhD

University of North Carolina-Chapel Hill

#### Sara Cherry, PhD

University of Pennsylvania

#### Joanne Engel, MD, PhD

University of California San Francisco

### Michael Glickman, MD (Co-Chair)

Memorial Sloan Kettering Cancer Center

#### Christopher A. Hunter, PhD (Co-Chair)

University of Pennsylvania School of Veterinary Medicine

#### Manuel Llinas, PhD

Pennsylvania State University

#### Carolina B. López Zalaquett, PhD

Washington University School of Medicine

#### Daniel Mucida, PhD

The Rockefeller University

#### Russell Vance, PhD

University of California-Berkeley

# Next Gen Pregnancy Initiative

To accelerate discovery and encourage collaboration between reproductive scientists and translational scientists, BWF supports the Next Gen Pregnancy Initiative (NGPI). This program funds individual investigators or multi-investigator teams studying the underlying mechanisms of healthy pregnancy and adverse perinatal outcomes.

NGPI provides up to \$500,000 over four years to U.S. or Canadian investigators at career levels ranging from postdoctoral fellow to senior, established investigator.

Research teams are also eligible for this award if at least one member has training or expertise outside of reproductive medicine. Collaborations between institutions are welcome.

BWF encourages applications studying the development of therapeutic interventions as well as new diagnostic, screening, and real time data capture tools. Particular areas of interest include climate change and the environmental impact on pregnancy, complications associated with ART, epigenome-wide association studies, preterm birth risk stratification using Al and machine learning, and biological mechanisms underlying racial disparities in adverse pregnancy outcomes.

#### **2024 AWARDEES**

Jennifer Gaddy, PhD Vanderbilt University

Alison Gernard, PhD, MPH, RD Pennsylvania State University

Nardhy Gomez-Lopez, PhD Washington University in Saint Louis **Lindsay Hayes, PhD**University of Oklahoma Health
Sciences Center

Kieran O'Donnell, PhD Yale University Meghan Riddell, PhD University of Alberta

Marisa Spann, PhD Columbia University

#### **ADVISORY COMMITTEE**

Irina Burd, MD, PhD

University of Maryland School of Medicine

Laura Ensign, PhD
Johns Hopkins University

**Susan Fisher, PhD**University of California–San Francisco

**Tippi C. MacKenzie, MD**University of California–San Francisco

Amy P. Murtha, MD

Rutgers, the State University of New Jersey-New Brunswick

Mana Parast, MD, PhD

University of California-San Diego

**Hyagriv N. Simhan, MD, MS**University of Pittsburgh School of Medicine

Jerome F. Strauss, III, MD, PhD (Chair) Virginia Commonwealth University

# Postdoctoral Diversity Enrichment Program

Innovative and cutting-edge research demands collaboration from a diverse pool of scientific minds especially among early career scientists. The Postdoctoral Diversity Enrichment Program (PDEP) intends to enhance the postdoctoral experience for trainees from an underrepresented minority. PDEP supports researchrelated activities (e.g. workshops, courses, travel, training), the postdoctoral supervisor-trainee relationship (career and research guidance and annual mentor meetings hosted by BWF), and networking with peers.

To fund the next generation of diverse researchers, PDEP provides a total of \$60,000 over three years to up to U.S. and Canadian postdoctoral trainees who belong to an underrepresented minority (American Indian or Alaska Native, Black or African American, Hispanic, or Native Hawaiian or other Pacific Islander). Candidates must be within 5 years of their PhD, in a postdoctoral position with funding, and have no more than 48 months of postdoctoral experience.

#### **2024 AWARDEES**

Mikal Woods Acevedo, PhD University of Pittsburgh

Román Ramos Báez, PhD University of Chicago

Ismary Blanco, PhD Vanderbilt University

Amanda Buch, PhD Weill Medical College of Cornell University

Jasmine Burrell, PhD Morehouse School of Medicine

Christian Cazares, PhD University of California-San Diego

Noele Certain, PhD Yale University

Kevin Muñoz Forti, PhD University of Chicago

Sasha Fulton, PhD Columbia University

Joshua Gills, PhD

New York University Grossman School of Medicine

Aurian P. Garcia Gonzalez, MD, PhD Duke University School of Medicine

Cellas Hayes, PhD Stanford University

Greisha Lee Ortiz Hernandez, PhD City of Hope, Irell & Manella Graduate School of Biological Sciences Affiliate

Victoria Honnell, PhD Boston Children's Hospital, Harvard Medical School Affiliate

Bianca Islam, MD, PhD Case Western Reserve University

Kristine Lyon, PhD

Salk Institute for Biological Studies, University of California San Diego **Affiliate** 

Jordan Moore, PhD Stanford University

Crystal Colón Ortiz, PhD Duke University School of Medicine

Xilal Rima, PhD Ohio State University

Cosette M. Rivera-Cruz, PhD Children's Hospital Medical Center, University of Cincinnati Affiliate

Loranzie Rogers, PhD Harvard University

Joel Encarnacion Rosado, PhD Salk Institute for Biological Studies,

University of California San Diego Affiliate

Ayana Ruffin, PhD **Emory University** 

Amanda Ruiz, PhD Massachusetts General Hospital, Affiliate of Harvard

Stephanie Sandoval-Pistorius, PhD University of California-San Francisco

Elizabeth Sneddon, PhD University of California-San Diego-Health Sciences

Kristina Solorio-Kirpichyan, PhD University of California-San Diego

Claire Stewart, PhD Stanford University

Jared Tangeman, PhD Johns Hopkins University School of Medicine

Chase Webb, PhD Columbia University Irving Medical Center

### **ADVISORY COMMITTEE**

Ishmail Abdus-Saboor, PhD Columbia University

Joey V. Barnett, PhD Vanderbilt University

Markita del Carpio Landry, PhD University of California-Berkeley George M. Langford, PhD Syracuse University

Gina R. Poe, PhD University of California-Los Angeles Crystal D. Rogers, PhD

UC Davis School of Veterinary Medicine

Blanton S. Tolbert, PhD (Chair) Howard Hughes Medical Institute

# Resident Faculty Scholar

Over the course of innovative careers, taking time away from home can be both restorative and inspiring. The Resident Faculty Scholar Grant Program is to support U.S. and Canadian faculty members at all career levels who want to utilize BWF for mini-sabbaticals and project incubation. The nature of the mini sabbaticals/ project

incubation sessions will be quite flexible and is envisioned to support work at the BWF for two to six months. Funding can support travel, lodging, meetings, and faculty salary, and office space, computer access, meeting facilities, and other dry laboratory resources are available on site.

### Science and the Arts

The connection between science and the arts is essential to the advancement of knowledge and creativity. Both fields share the common goal of understanding the world around us and exploring new ideas.

The arts and science connection is crucial for addressing complex societal challenges. For instance, climate change is a complex issue that requires both scientific understanding and creative solutions. Scientists provide data and research to inform policy decisions, while artists use their platforms to communicate the urgency of the issue and inspire action through better storytelling.

In education, integrating science and the arts can enhance student learning and engagement. Interdisciplinary projects that combine science and art can help students develop critical thinking skills and creativity while also fostering a deeper appreciation for both fields.

The adhoc grant funding mechanism supports work in this area.

# Science and Philanthropy

To power discovery in the frontiers of greatest need, the Burroughs Wellcome Fund also supports research activities and career development for scientists outside of our competitive award programs who do work related to our targeted areas.

We prioritize working with nonprofit organizations and government agencies to financially support our targeted areas of research, as well as encouraging other foundations to support biomedical research.

The adhoc grant funding mechanism supports work in this area.

# Science Communication

Science journalism and communications serve a critical role in enabling a scientifically literate society. The Burroughs Wellcome Fund has made science communication an area of strategic focus, awarding noncompetitive adhoc grants (adhocs) for science communication and science in the arts activities.

Proposals should be focused on one or more of the following areas: science communication planning and strategy among BWF audiences; science journalism and communication to encourage public engagement with science; strategies to deter misinformation in science communication; and initiatives that advance and inspire the wonder, awe, and promise of science.

The adhoc grant funding mechanism supports work in this area.

# Student STEM Enrichment Program

To nurture the next generation of North Carolina scientists, the Student STEM Enrichment Program (SSEP) supports the creation of science enrichment programs outside of normal school hours. These programs are an effective way to increase K-12 students' understanding and appreciation of STEM and encourage them to pursue research careers.

SSEP awards up to \$180,000 over three years to a non-profit organization in NC that enables students to explore inquiry-based approaches to STEM activities and explore scientific and inquiry-based methods.

#### **2024 AWARDEES**

#### **American Chemical Society** North Carolina Section

Project SEED—Addition of Supplemental Fall and Spring Programs to research "A New Therapy for Sickle Cell Disease"

#### Boys & Girls Club of Henderson Co./ Hendersonville, Inc.

Seeds2STEMs

#### **Duke University**

Ignite: Human-centered engineering design to cultivate STEM identity and build community identity

#### Girls Make Games Scholarship Fund

Girls Make Games Summer Camps: Providing High-Quality STEM Education for Low-Income Girls through Video Game Development

#### North Carolina Agricultural & Technical State University

eLevating the Underrepresented and Marginalized using Experiences iN STEAgM (LUMENS)

#### North Carolina School of Science and Mathematics Foundation

Step Up To STEM-A Catalyst For The Future of STEM Education in Eastern North Carolina

#### OpenDoors of Asheville, Inc.

STEAM Afterschool Enrichment for OpenDoors Students, partnered with RiverLink, Swift App and UNCA STEAM Studio

#### University of North Carolina-Chapel Hill Promoting Innovation and Lifelong Learning in STEM (PILLS) Academy

University of North Carolina-Chapel Hill Communiversity STEM Enrichment

Wake Forest University Health Sciences iSTEM: A Piedmont Triad Initiative

#### Western Carolina University

Our Natural World/Nuestro Mundo Natural: Enhancing Summer STEM learning for Diverse Early Elementary Students in Rural Jackson County

#### **ADVISORY COMMITTEE**

#### Rocio Anderson

North Carolina Society of Hispanic Professionals

#### John E. Burris, PhD

Burroughs Wellcome Fund

#### Yolanda Comedy, Ph.D.

American Association for the Advancement of Science

#### Ed Liebow, PhD

American Anthropological Association

#### Eric D. Packenham

US Department of Education Utah State University

#### Celestine Pea, PhD

STEM Education Consultant

# Report on Finance

The Burroughs Wellcome Fund's investments totaled \$782.7 million at August 31, 2023, the end of our fiscal year. BWF's primary financial goal is to pursue an investment strategy that will support annual spending needs and maintain a constant real level of assets over the long term. To achieve this goal, a high percentage of our investments are placed in strategies that derive the bulk of their returns from exposure to U.S. and international capital markets. Hence, fluctuations in BWF's investment results will be due largely to variability in capital market returns.

BWF's investment policies are developed with the recommendations and review of the Investment Committee, which is appointed by and reports to BWF's Board of Directors. The committee, which meets three times a year, has seven voting members, including five representatives from outside BWF and two representatives of our board. The board's chair, BWF's president, and BWF's vice president for finance also serve on the committee as nonvoting members.

As part of BWF's investment strategy, we have established "allocation targets"--that is, percentages of our total assets to be invested in particular asset classes. Investment managers hired by BWF pursue more focused mandates within each sector. As of the end of the fiscal year, BWF's asset mix and market values were:

- U.S. large capitalization equity assets had a market value of \$135.2 million. The sector's target allocation was 20 percent, and actual holdings stood at 17.3 percent.
- U.S. small capitalization equity assets had a market value of \$143.0 million. The sector's target allocation was 14 percent, and actual holdings stood at 18.3 percent.
- International equity assets had a market value of \$144.1 million. The sector's target allocation was 22 percent, and actual holdings stood at 18.4 percent.
- Fixed income assets had a market value of \$119.2 million. The sector's target allocation was 13 percent, and actual holdings stood at 15.2 percent.
- Cash equivalent assets had a market value of \$10.7 million. The sector's target allocation was 1 percent, and actual holdings stood at 1.4 percent.
- Alternative assets had a market value of \$230.5 million. The sector's target allocation was 30 percent, and actual holdings stood at 24.5 percent.

The total market value of BWF's investments increased by \$14.6 million, or 1.9 percent, from the end of the previous fiscal year. This small increase in assets was due mainly to decent returns for world equities during the fiscal year. BWF's total investment return before investment management fees for the fiscal year was 7.4 percent. The U.S. large capitalization equity sector returned -12.8 percent, the U.S. small capitalization equity sector had a -8.9 percent loss, the international equity sector returned 12.6 percent for the fiscal year, and fixed income produced a 1.1 percent result.

As of August 31, 2023, BWF employed 16 marketable securities investment managers. In the U.S. large capitalization equity sector, the managers were Brown Advisory; LSV Asset Management; and Martingale Asset Management. Columbia Threadneedle, Loomis Sayles, Bridge City Asset Management and Essex Investment Management managed U.S. small capitalization equities. Camden Asset Management; C.S. McKee; Rimrock Capital Management; Barings; and Amundi Pioneer were the fixed income managers. Capital Guardian Trust Company; Hardman Johnston Global Advisors; Acadian Asset Management; and Hansberger Growth Investors managed international equities. BWF also held investments in four venture capital funds: Intersouth Partners VI, Spray Venture Funds I and II and Mission Ventures II. Winston Partners managed a fund of equity oriented hedge funds. Blackrock Alternative Advisors managed a fund of absolute return strategies. Hamilton Lane Advisors managed five funds of private equity strategies and four private debt strategies. Dyal Capital managed two private equity funds. Neuberger Berman managed an insurance linked strategy, a private debt strategy, and a private equity strategy. Harbourvest managed two private equity strategies. Finally, the Fund internally managed a diversified portfolio of mainly passive investments which was named the Tactical Portfolio. The Tactical Portfolio included investments in U.S. equities, international equities and global bonds.

### STATEMENTS OF FINANCIAL POSITION

AUGUST 31, 2024 AND 2023 (all dollar amounts presented in thousands)

	2024	2023
ASSETS		
Cash and cash equivalents	\$ 2,929	\$ 2,085
Investments	837,733	782,659
Accrued interest and dividends receivable	1,521	1,324
Other assets	52	140
Property and equipment, net	5,799	6,119
Total assets	\$ 848,034	\$ 792,327
LIABILITIES AND NET ASSETS		
Transactions payable, net	\$ 1,253	\$ 2,694
Accounts payable and other liabilities	687	842
Excise tax payable	1,374	410
Deferred federal excise taxes	2,344	1,865
Unpaid awards	91,378	97,473
Total liabilities	97,036	103,284
Unrestricted net assets	750,998	689,043
Total liabilities and net assets	\$ 848,034	\$ 792,327

### **STATEMENTS OF FINANCIAL POSITION**

AUGUST 31, 2024 AND 2023 (all dollar amounts presented in thousands)

	2024	2023
REVENUES		
Interest and dividends, less investment expenses of \$3,061 and		
\$2,947 in 2024 and 2023, respectively	\$ 5,372	\$ 6,474
Net realized gain on sale of investments	60,933	16,972
Total revenues and realized gains	\$ 66,305	\$ 23,446
EXPENSES		
Program services	\$ 31,775	\$ 24,579
Management and general	9,474	7,783
Total expenses before net unrealized appreciation		
(depreciation) and deferred federal excise tax	41,249	32,362
Net unrealized appreciation (depreciation) of investments,		
net of provision for deferred federal excise tax (expense)/benefit		
of \$(479) and \$(470) in 2024 and 2023, respectively	36,899	33,110
Change in net assets	61,955	24,194
Net assets at beginning of year	689,043	664,849
Net assets at end of year	\$ 750,998	\$ 689,043

# Grant Awardee Index

BWF makes all grants to nonprofit organizations. For most of the programs, the name of the individual on whose behalf the grant is made is listed first, the title of the award recipient's project is listed second, and the name of the organization that received the money is listed third.

For programs that may have coaward recipients, the award recipients and their organizations are listed first, followed by the project title. For grants made directly to organizations and not on behalf of an individual, the name of the organization is listed first, followed by the title of the project or a brief description of the activity being supported.

In addition to making competitive awards, BWF makes noncompetitive grants—Ad Hocs—for activities that are closely related to our major focus areas. These grants are intended to enhance the general environment for research in the targeted areas.

For full audited financials visit bwfund.org/annualreport

### **PROGRAM SUMMARY**

AUGUST 31, 2024

	Awarded Net of Cancelled	Aı	mount Paid	Percentage of Total Paid
BIOMEDICAL SCIENCES				
Career Awards in the Medical Sciences	\$ 8,819,688	\$	6,607,500	
Physician-Scientist Institutional Award	-		2,750,000	
Resident Faculty Scholars	175,000		125,000	
Ad Hoc	680,100		450,100	
Total	\$ 9,674,788	\$	9,932,600	29.0%
CLIMATE CHANGE AND HUMAN HEALTH				
Climate and Health Interdisciplinary Award	\$ 750,000		187,500	
Climate Change and Human Health Seed Grants	\$ 407,260		358,086	
Total	\$ 1,157,260	\$	545,586	1.6%
DIVERSITY IN SCIENCE				
Graduate Diversity Enrichment Program	\$ 40,000	\$	27,500	
Postdoctoral Diversity Enrichment Program	1,517,838		952,918	
Ad Hoc	635,757		1,286,897	
Total	\$ 2,193,595	\$	2,264,397	6.6%
INFECTIOUS DISEASES				
Career Guidance for Trainees	\$ 107,128	\$	87,500	
Investigators in Pathogenesis of Infectious Disease	4,533,489		5,033,490	
Ad Hoc	803,525		944,525	
Total	\$ 5,444,142	\$	6,065,515	17.7%
INTERFACES IN SCIENCE				
Career Award at the Scientific Interface	\$ 4,511,391	\$	4,390,793	
Ad Hoc	362,563		986,775	
Total	\$ 4,873,954	\$	5,377,568	15.7%

### **PROGRAM SUMMARY**

AUGUST 31, 2023

		Awarded Net of Cancelled		mount Paid	Percentage of Total Paid
POPULATION SCIENCES					
Institutional Program Unifying Population					
and Laboratory-based Sciences		_		166,632	
Total	\$	_	\$	166,632	0.5%
REGULATORY SCIENCE					
Innovation in Regulatory Science Awards	\$	2,500,000	\$	1,420,000	
Ad Hoc		427,337		417,337	
Total	\$	2,927,337	\$	1,837,337	5.4%
REPRODUCTIVE SCIENCES					
Next Gen Pregnancy Initiative	\$	3,494,676	Ś	2,874,335	
Ad Hoc	\$	317,158	\$	376,458	
Total	\$	3,811,834		3,250,793	9.5%
SCIENCE AND PHILANTHROPY					
Ad Hoc	Ċ	1 600 557	Ċ	1 470 557	
Total	\$ \$	1,608,557 1,608,557		1,473,557 1,473,557	4.3%
		· · ·			
SCIENCE EDUCATION					
Career Award for STEM Teachers	\$	700,000	\$	300,000	
Promoting Innovation in Science and Mathematics		3,702		3,702	
Student STEM Enrichment Program		86,540		1,588,023	
Ad Hoc		1,137,150		1,394,650	
Total	\$	\$1,927,392	\$	3,286,375	9.6%
GRAND TOTAL	\$	33,618,859	\$3	34,200,360	100%

For full audited financials visit **bwfund.org/annualreport** 

#### BIOMEDICAL SCIENCES

#### **American Physician Scientists** Association (APSA)

Support for the American Physician Scientists Association initiatives and joint meeting for 2022-2023

#### **American Physician Scientists** Association (APSA)

The American Physician Scientists Association: Empowering Physician Scientists in Training

#### American Society for Cell Biology

Support for the Cell Bio 2022 Annual Meeting, December 3-7, 2022

#### **American Society for Clinical** Investigation

Support for ASCI/AAIM/BWF Research Pathway Directors Annual Workshop

#### Association for Clinical and **Translational Science**

Support for Translational Science 2023: Innovating Translational Science for Research

#### Children's Hospital Los Angeles

Support for the Children's Hospital Los Angeles Stepping Stone Program for Pediatric Scientists

#### Clinician Investigator Trainee Association of Canada (CITAC-ACCFC)

Support for CITAC-CSCI Annual Joint Meeting 2022

#### **Duke University**

Support for RSDP Meeting Support 2022-2023

#### **Gordon Research Conferences**

Support for Germinal Stem Cell Biology

#### **Indiana University**

Support for the Medical Physician Engineers, Scientists, and Clinicians Preparatory Program [MPESC-Prep]

#### Johns Hopkins University School of Medicine

Support for Johns Hopkins Initiative for Careers in Science and Medicine: Summer Academic Research Experience

#### Keystone Symposia

Support for Keystone Symposia Diversity Initiatives 2023

### McLean Hospital

(The McLean Hospital Corp.)

Support for McLean Mental Health Research Summer Program

#### Northwestern University

Support for Chicago Biomedical Consortium: BIPOC in Biotech

#### Partners In Health

Support for Developing Research Capacity in Sierra Leone

#### **Physician-Scientist Support Foundation**

Support for PSSF Medical Scholars Research Fellowship

#### Society for Neuroscience

Support for the SfN Trainee Professional Development Award

#### Society for Neuroscience

Support for Supporting Early-Career Neuroscientists: Trainee Professional Development Award (TPDA) Program 2023-2025

#### The Regents of the University of California, San Diego

Support for San Diego Glycobiology Symposium

#### DIVERSITY IN SCIENCE

#### American Association for the Advancement of Science

Support for 2023 AAAS Annual Meeting

#### American Society for Cell Biology PAIR-UP Gift from Dr. Tolbert

#### American Society for Microbiology Future Leaders Mentoring Fellowship

#### **Bennett College**

Bennett College Teacher Residency Program

#### Center for Racial Equity in Education

The 2022 NC10 HBCU Conference -Partners in Progress

#### **Community Partners**

Creation of a Diversity Postdoc Leadership Retreat

#### **Consortium of Universities** for Global Health

Co-Sponsorship 20th Anniversary NIH Fogarty Global Health Fellows

#### **ECPS Educational Foundation**

Burroughs Wellcome Fund Scholar Teacher Scholarship

#### **Health Effects Institute**

HEI Summer Fellowship Award

#### Livingstone College

Ad Hoc Grant

#### **National Humanities Center**

S.E.E.D. Fellows Cohort III

#### North Carolina Agricultural & Technical State University

Recruiting and Retaining a Diverse and Culturally Responsive Teacher Workforce

#### North Carolina Central University

North Carolina Teacher Residencies

#### North Carolina Community Foundation Invest Early NC

### Partners for Environmental Justice

Our Creeks. Our Communities Festival

#### Region O Council for the Advancement of Minorities in Engineering (ROCAME)

**Drone Aviation Camp** 

#### **Renewed Covenant Outreach Foundation**

MANiFest - Fuquay Varina

#### Saint Augustine's College

NC10 Teacher Residency Initiative

#### Shaw University

North Carolina Teacher Residency Recruitment

#### The Board of Trustees of the Leland Stanford Junior University

Advancing Health Equity and Diversity

#### The Community Music School **URM Scholarship**

The University of North Carolina at

#### Chapel Hill MPSC Equity in STEM Convening Meeting - 2023

#### The University of North Carolina at **Chapel Hill**

Promoting Environmental Justice and Health Equity in Perinatal Health Research

#### **Trustees of Boston University**

Boston University BEAMS Summer Biomedical Research Internship Program 2023

#### University of Florida

Postdoctoral Diversity Enrichment Program Transition to Faculty Award

#### University of Florida

Travel Grant, 2023 SACNAS Conference

#### **University of Washington**

Postdoctoral Diversity Enrichment Program Transition to Faculty Award

#### West Virginia University Research Corporation

Postdoctoral Diversity Enrichment Program Transition to Faculty Award

#### **Working To Extend Anti-Racist** Education

Cohorting With Educators of Color:Supporting the Teacher Pipeline

#### Yale University School of Medicine

Postdoctoral Diversity Enrichment Program Transition to Faculty Award

#### GENERAL PHILANTHROPY

#### Association for Women in Science

Support for AWIS mission to champion the interests of women in science across all disciplines and employment sectors

#### Association of Public and **Land-grant Universities**

Support for "Creating a Pathway for Implementation to Modernize Scholarship for the Public Good"

#### Candid

Support for "Connecting Nonprofits to the Resources They Need to Thrive"

#### Ciencia Puerto Rico, Inc.

Support for Emergency Fund for Ciencia Puerto Rico

#### Hopewell Fund

Support for "Science in Society Funder Collaborative"

#### **Media Impact Funders**

Support for one year organizational membership with Media Impact Funders

#### **National Humanities Center**

Support for Humanities, Science & Technology Fellowship

#### **New Venture Fund**

Support for the Open Research Funders Group

#### North Carolina Biotechnology Center: **Triangle Women in STEM**

Support for 2023 Triangle Women in STEM Signature Speaker Event

#### North Carolina Community Foundation Support for 2023 NCNG Annual Meeting

and Conference: Better Together

#### North Carolina Community Foundation

Support for Communications Initiative Training 2023

#### PEAK Grantmaking, Inc.

Support for 2022-2023 Membership Dues

#### **Triangle Community Foundation**

Support for "Celebrating 40 Years of Impact in the Triangle with Triangle Community Foundation"

#### SCIENCE + ART

#### National Geographic Society

Support for a planning Grant for Álvaro Laiz Project, The Giant Silence

#### The University of Texas at Austin

Support for Arts-Science Landscape Assessment Project

#### **Tufts University** (Archived)

Support for a symposium to be held at BWF in September 2023 to develop an Art-Science Institute

#### Women Make Movies

Support for "Six Degrees From Science" documentary film

#### SCIENCE COMMUNICATIONS

#### Aspen Institute

Support for "What's Next in Bioinnovation?"

#### **Association of Science Communicators** (formerly Science Talk)

Support for professional development for science communicators

#### Catholic University of America

Support for the "Beauty in Science 2023" Meeting

#### Center for Excellence in Health Care Journalism

Support for Journalism Core Curriculum on Infectious Disease

#### Center for Excellence in Health Care Journalism

Support for Health Journalism 2023 Annual Conference held March 9-12 in St. Louis, MO

#### Ciencia Puerto Rico, Inc.

Support for "Reflexivity Workbook: A Tool for Inclusive and Equitable Civic Science and Public Engagement"

#### **Community Initiatives**

Support for ComSciCon-Flagship 2023 conference on science communication for graduate students

#### **EducationNC**

Support for General Operating Support: EducationNC's Focus on STEM

#### Food and Environment Reporting Network

Support for Coverage of Biomedical Research & Science Communication Training

#### **Future Kings**

Support for The National Public Health Media Campaign to promote wellness and reduce health disparities through community partnerships and a national media outreach program

#### North Carolina Biotechnology Center

Support for a 2023 NASW/SCONC Summer Science Communication Internship

#### North Carolina State University

Support for three year NC STEM Policy Fellows program (2023-2025)

#### Research!America

Support for Burroughs Wellcome Fund Science Policy and Communications Internship Program

#### ScienceCounts Inc.

Support for ScienceCounts

#### The Henry J. Kaiser Family Foundation Support for KFF Health News's Public

Health Podcasting

#### The Open Notebook, Inc.

Support for Early-Career Science Journalism Fellowship Program

#### INFECTIOUS DISEASE

#### **American Association of Veterinary Medical Colleges**

Becoming Faculty Workshop, Aug 3-5, 2023

#### American Society for Microbiology

ASM Career & Professional Development Initiatives for Trainees

#### American Society for Virology

42nd Annual Meeting of the American Society for Virology, June 24-28, 2023

#### **American Society of Tropical Medicine** and Hygiene

Support for the ASTMH 71st Annual Meeting held in Seattle, WA, October 30 - November 3, 2022

#### **American Society of Tropical** Medicine and Hygiene

ACMCIP Scientific Sessions, ASTMH 2023 Annual Meeting, October 18-22

#### **Bacterial Locomotion and** Signal Transduction

Trainee Scholarships to Attend BLAST XVII Meeting, January, 2023

#### Canadian Association of **Postdoctoral Administrators**

National Conference of the Canadian Association of Postdoctoral Administrators, Oct 31-Nov 1, 2022

#### Center for Open Science

Support for the Center for Open Science in Charlottesville, VA in lieu of 2023 honoraria to Dr. Maryrose Franko for BWF CGT Advisory Committee service

#### Cornell University

7th National Colloquium for Combined DVM-PhD Biomedical Scientists, Aug 2-3, 2023

#### **Cornell University**

Burroughs Wellcome Fund "Becoming Faculty" Workshop, Aug 3-5, 2023

#### **Dalhousie University**

72nd Annual Conference of the Canadian Society of Microbiologists. June 25-28, 2023

#### **Dana-Farber Cancer Institute**

Sponsorship of the 2023 Symposium on the Immune System of Bacteria, Feb 23-Mar 3, 2023

#### **Duke University**

Support for PATH awardee Dr. Nan Yan to present a seminar at Duke, hosted by PATH awardee Jorn Coers, May 17-29, 2023

#### **FASEB Journal**

Microbial Pathogenesis: Mechanisms of Infectious Disease, July 9-13, 2023

#### **Genetics Society of America**

Registration and Travel Awards for GSA Conferences

#### **Gordon Research Conferences**

Conference on Salmonella Biology and Pathogenesis, July 23-27, 2023

#### **Gordon Research Conferences**

Conference on Neuroimmune Communication in health and disease, Jan 22-27, 2023

#### **Gordon Research Conferences**

Conference on Molecular and Cellular Diversity in Host Defense and Inflammation, June 4-9, 2023

#### **Gordon Research Conferences**

Conference on "Reinvigorating Malaria Control, Prevention and Treatment: From Bench to Bedside to Bednets", May 28-June 2, 2023

#### **Gordon Research Conferences**

Conference on the Immunology of Fungal Infection, January 21-27, 2023

#### **Gordon Research Conferences**

Conference on Microbial Adhesion and Stress Response, July 15-21, 2023

#### **Graduate Career Consortium**

2023 Annual Conference Funding

#### Johns Hopkins University School of Medicine

Support for CAMS awardee Josephine Thinwa to present a seminar at Johns Hopkins, hosted by PATH awardee Arturo Casadevall on May 18, 2023

#### Marine Biological Laboratory

Support for Biology of Parasitism: Modern Approaches Advanced Research Training Course Renewal for 3 years (2023-2025)

#### Midwinter Conference of Immunologists

61st Midwinter Conference of Immunologists, Jan 28-31, 2023

#### Morgridge Institute for Research

Molecular Helminthology: from fundamental biology to practical applications, June 26-29, 2023

#### Northwestern University

29th Annual Midwest Microbial Pathogenesis Conference (MMPC), Oct 20-22, 2023

#### Sena Institute of Technology Foundation

Imaging Cellular and chromosome dynamics Conference, 2023

#### Stanford University School of Medicine

Department of Microbiology and Immunology Wednesday Seminar Series: Manuel Llinas (host by John Boothroyd), May 24, 2023

#### Stanford University School of Medicine

Department of Microbiology and Immunology Wednesday Seminar Series: Nels Elde (host by Jan Carette), April 12, 2023

#### Stanford University School of Medicine

Department of Microbiology and Immunology Wednesday Seminar Series: Sophie Helaine (host by Denise Monack), February 22, 2023

#### Stanford University School of Medicine

Department of Microbiology and Immunology Wednesday Seminar Series: Gretchen Diehl (host by Justin Sonnenburg), November 9, 2022

#### The Board of Trustees of the University of Illinois-Chicago

8th International Conference on Gram Positive Pathogens, Oct 9-12, 2022

#### The Board of Trustees of the University of Illinois Urbana-Champaign

Midwest Neglected Infectious Diseases (MNID) meeting, Aug 11-12, 2023

#### The Pennsylvania State University

The Pennsylvania Parasitology Conference, July 20-21, 2023

#### The Regents of the University of California-San Francisco

Bay Area Microbial Pathogenesis Symposium, March 25, 2023

#### The Trustees of the University of Pennsylvania

26th annual Woods Hole Immunoparasitology (WHIP) Meeting, April 20-23, 2023

#### The University of North Carolina at Chapel Hill

12th Mid-Atlantic Microbial Pathogenesis Meeting, Feb 5-7, 2023

#### The University of Texas Medical Branch at Galveston

Support for PATH awardee Matthew Evans to present a seminar at UTSW, hosted by PATH awardee Vineet Menachery, May 2, 2023

#### The University of Texas Southwestern **Medical Center**

Support for PATH awardee Matthew Daugherty to present a seminar at UTSW, hosted by PATH awardee Julie Pfeiffer, Oct 18, 2022

#### The University of Texas Southwestern **Medical Center**

Support for PATH awardee Sunny Shin to present a seminar at UTSW, hosted by PATH awardee Kim Orth, March 14, 2023

#### The University of Texas Southwestern **Medical Center**

Funding for meeting: Parasitic Helminths: New Perspectives in Biology and Infection, Sept 3-7, 2023

#### The University of Texas Southwestern **Medical Center**

Support for PATH awardee David Veesler to present a seminar at UTSW, hosted by PATH awardees Jim Collins and Michael Reese, April 13, 2023

#### University of Pittsburgh

Second Pittsburgh Rust Belt Microbiome Meeting, Nov 3-4, 2022

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

Support for PATH awardee Denise Monack to present a seminar at University of Wisconsin-Madison, hosted by PATH awardee Vanessa Sperandio, April 28, 2023

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

Dr. Daniel Jay to present a seminar at University of Wisconsin-Madison, hosted by Dr. Christina Hull, April 14, 2023

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

PATH awardee Gianna Hammer to present a seminar at University of Wisconsin-Madison, hosted by PATH awardee JD Sauer, Feb 17, 2023.

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

PATH Awardee Dr. Dan Stetson to present a seminar at University of Wisconsin-Madison, hosted by Dr. Andrew Mehle, May 5, 2023

#### Washington University, School of Medicine

Gordon Research Conference on Staphylococcal Diseases: New Insights into Staphylococcal Biology, Disease Mechanisms and Treatment, July 30-Aug 4, 2023

#### Weill Medical College of **Cornell University**

Supporting PATH research and interactions at the Tri-Institutional Immunology & Microbial Pathogenesis Graduate Group Retreat, Oct 20-21

#### INTERFACES IN SCIENCE

#### **American Institute of Chemical Engineers**

Support for the the Rockstars of Regenerative Engineering, Synthetic Biology, Evolution, Engineering & Design (SEED), AfroBiotech, and the AIChE **Annual Meeting** 

#### **Biophysical Society**

Support for the Biophysical Society 67th Annual Meeting, February 18-22, 2023

#### **Computational and Systems** Neuroscience (Cosyne)

Support for the 2023 Computational and Systems Neuroscience meeting

#### Georgia Institute of Technology

QBioS Hands-On Modeling Workshop - Modeling and Analyzing Viral Dynamics at the Atomistic Scale

#### **Gordon Research Conferences**

Support for the 2023 Nitric Oxide Gordon Research Seminar

#### International Society for Stem Cell Research

Support for the ISSCR Stem Cell Standards Initiative

#### Northwestern University

Support for the first Quantitative Biology Symposium, June 8, 2023

#### Society for Biomaterials

Support for the BWF BioInterfaces Rising Star Award, April 19-22, 2023

#### Society of Toxicology

Support for the SOT Annual Meeting, March 19-23, 2023

#### Society of Women Engineers

Support for the Academic Leadership for Women in Engineering Conference

#### The Regents of the University of California-San Diego

Support for the 10th Annual Winter Q-Bio Meeting

#### The University of Chicago

Support for the SEE-Diversity Workshop, August 2023

#### Tissue Engineering & Regenerative Medicine International Society (TERMIS)-Americas

Support for the TERMIS-AM Annual Conference (Platinum Level Sponsorship), April 2023

#### University of North Texas Health Science Center at Fort Worth

So, You Got a PhD...What's Next? Career Seminar Series

#### University of Texas Health Science Center at San Antonio

Support for the National IRACDA Conference, June 2023

#### University of Utah

Support for the Rising Stars Postdoc Symposium to Support Faculty Diversity in Biochemistry

#### University of Washington

Support for the BRAINS Cross-Cohort Symposium in Fall 2023

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

Support for the 2022 Central US Synthetic Biology Workshop

#### INTERFACES IN SCIENCE

#### **American Institute of Chemical Engineers**

Support for the the Rockstars of Regenerative Engineering, Synthetic Biology, Evolution, Engineering & Design (SEED), AfroBiotech, and the AIChE **Annual Meeting** 

#### **Biophysical Society**

Support for the Biophysical Society 67th Annual Meeting, February 18-22, 2023

#### Computational and Systems Neuroscience (Cosyne)

Support for the 2023 Computational and Systems Neuroscience meeting

#### Georgia Institute of Technology

QBioS Hands-On Modeling Workshop - Modeling and Analyzing Viral Dynamics at the Atomistic Scale

#### **Gordon Research Conferences**

Support for the 2023 Nitric Oxide Gordon Research Seminar

#### International Society for Stem Cell Research

Support for the ISSCR Stem Cell Standards Initiative

#### Northwestern University

Support for the first Quantitative Biology Symposium, June 8, 2023

#### Society for Biomaterials

Support for the BWF BioInterfaces Rising Star Award, April 19-22, 2023

#### Society of Toxicology

Support for the SOT Annual Meeting, March 19-23, 2023

#### Society of Women Engineers

Support for the Academic Leadership for Women in Engineering Conference

#### The Regents of the University of California-San Diego

Support for the 10th Annual Winter Q-Bio Meeting

#### The University of Chicago

Support for the SEE-Diversity Workshop August 2023

#### Tissue Engineering & Regenerative **Medicine International Society** (TERMIS)-Americas

Support for the TERMIS-AM Annual Conference (Platinum Level Sponsorship Support), April 2023

#### University of North Texas Health Science Center at Fort Worth

So, You Got a PhD...What's Next? Career Seminar Series

#### University of Texas Health Science Center at San Antonio

Support for the 2023 National IRACDA Conference, June 2023

#### University of Utah

Support for the Rising Stars Postdoc Symposium to Support Faculty Diversity in Biochemistry

#### University of Washington

Support for the BRAINS Cross-Cohort Symposium in Fall 2023

#### University of Wisconsin-Madison (Board of Regents University of Wisconsin System)

Support for the 2022 Central US Synthetic Biology Workshop

### REGULATORY SCIENCES

#### Advancium Health Network Inc.

Support for the continuation of CARAT (Center for Animal Research and Alternative Technologies)

#### **American Cancer Society**

Support for the Diversity in Cancer Research Internship Program

#### American Society of Gene Therapy

Support for ASGCT's DEI Awards and **Underrepresented Population Travel** Awards

#### **EveryLife Foundation for Rare Diseases**

Support for the Diversity Inclusion Initiative of the Foundation

#### Federation of American Societies for **Experimental Biology**

Support for the FASEB Scientific Research Conference on Hematological Malignancies, August 2023

#### Foundation for Food and Agriculture Research

Support for the Kirchner Food Fellowship **HBCU Cohort** 

#### Health Research Alliance, Inc.

Support for 2023

#### International Society for Cell & Gene Therapy

Support for the ISCT-ASTCT Cell Therapy Training Course, October 23-27, 2023

#### International Society for Stem Cell Research

Support for the ISSCR 2023 Annual Meeting & ISSCR Next Generation Organoids Digital Series

#### Massive Analysis and Quality **Control Society**

Support Emerging Technologies and Al for Regulatory Science Application

#### National Academy of Sciences

Support for the Forum on Drug Discovery, Development, and Translation

#### New York Stem Cell Foundation, Inc.

Support for the NYSCF Conference, October 18-19, 2022

#### Partnership for Cures dba Cures Within Reach

Support of Community-Based Engagement within Clinical Repurposing to Impact Diversity, Equity and Inclusion

#### Phages For Global Health

Support Developing Guidelines for Phage Banks: A Vital Tool Against Antimicrobial Resistance

#### Project Data Sphere

Support for follow-up activities of the Burroughs Wellcome Fund and the CEO Roundtable's Project Data Sphere Salon on Immunotherapy-Related Adverse

#### Reagan Udall Foundation for the FDA

Support for the Fellowships in Regulatory Science, Innovation, and Health Equity

#### The University of North Carolina at **Chapel Hill**

Support for Annual Scholarships for Enrollment in Regulatory Science Educational Offerings

#### REPRODUCTIVE SCIENCE

#### American Society for Reproductive **Immunology**

Support for 42nd Annual Meeting of the American Society for Reproductive Immunology ("ASRI 2023")

#### **Baylor College of Medicine**

Support for 30 Years of (Re)Productive Biology: A Symposium Honoring Professor Martin M. Matzuk, MD, PhD

#### Curators of the University of Missouri Support for BWF/RSDP Scholar

#### **Gordon Research Conferences**

Support for the Conference: Fertilization and the Activation of Development

#### International Federation of Placenta Associations

Support for 2023

#### National Academy of Sciences

Support for a Workshop on In Vitro Derived Human Gametes as a Reproductive Technology: Scientific, Ethical, and Regulatory Implications

#### Perinatal Research Society

Support for Perinatal Research Society **Annual Meeting** 

#### Society for Reproductive Investigation

Support for the SRI 70th Annual Scientific Meeting

#### Society for the Study of Reproduction

Support for SSR 56th Annual Meeting - Reproductive Sciences: From Innovation to Impact

#### The University of Texas at Arlington

Support for 2023 Black Maternal and Reproductive Health Summit

#### Yale University

Support for A Cell Interaction Atlas of the Three Species Model for Menstruation Biology

#### SCIENCE EDUCATION

#### **Afterschool Alliance**

Collective for Youth Engagement in STEM & Society (CYESS): Innovation Pilot Groundwork - Identifying Models

#### Apex Friendship High School

Professional Development; 2023 CASMT Finalist

#### Association of Science-Technology **Centers Incorporated**

ASTC 2023 Annual Conference - DAIEJ Track Sponsorship

#### **Dillard Drive Magnet Middle School**

Professional Development; 2023 CASMT Finalist

### **Envision Excellence in STEM Education**

Ideate. Innovate. Implement: STEM Learning Ecosystems Convening 2023

### **Gates County Community Partnership**

Gates County Youth Enrichment Initiative

#### **Grantmakers for Education**

Launch of the Equity & Grantmaking Impact Group

#### **Grassroots Science Museums** Collaborative (North Carolina Science Network)

North Carolina Science Network Annual Meeting and Jim Warren Memorial Fund

#### Holly Springs High School

Professional Development; 2023 CASMT Finalist

#### Kenan Fellows Program

Diversity in Leadership Fellowships

#### Kidzu Children's Museum

The Questioneers

#### **McDowell County Schools**

Support for the Singapore Math Project: Building a Strong Math Foundation Through Constructing, Drawing, and Solving, a proposal by Eastfield Global Magnet School, McDowell County Schools (Phase VI)

#### **Movement Strategy Center**

Ensuring DEIA in Science Education -Representation Matters

#### Nash Community College

SSEP rural areas program development, 2023-2024

#### **National Association of Academies** of Science

American Junior Academy of Science

#### NC Tennis Foundation, Inc.

NC Tennis Foundation 3rd Virtual Tennis "Ball" & Auction Gold Ball Sponsorship to Fund Poe Center Health Science Academic Programming for statewide National Junior Tennis & Learning Chapters

#### **New York University**

High School Bioethics Project, 2023

#### North Carolina Agricultural & Technical State University

NC Piedmont K-12 STEM Ecosystem Planning Project (SSEP Pilot Program) - Year 2

#### North Carolina Department of Public Instruction

NC Teacher of the Year Regional Participation in the Educational Policy and Fellowship Program

#### **North Carolina Science Teachers** Association

Engaging Diverse Learners in Science

#### North Carolina Society of **Hispanic Professionals**

Tu Portal STEM

#### North Carolina State University

Reach for the Stars! Be a Star!

#### Orange High School

Daring to Listen: The Practice of Intergenerational Storytelling

#### Public School Forum of North Carolina

NC Center for Afterschool Programs -STEM Programming & Resources

#### **Public School Forum of North Carolina**

Jay Robinson Education Leadership Gala Sponsorship

#### **Public Schools of Robeson County**

Robeson County Rolling with STEAM Van

#### Rea Farms STEAM Academy

Professional Development; 2023 CASMT Finalist

#### Social and Environmental Entrepreneurs

A Journey from program participant to program advocate & advisor

#### SCIENCE EDUCATION - CONT'D

#### **STEM Next Opportunity Fund**

Building a Federal STEM and Tech Equity Fellowship Network

#### STEM West, Inc.

2023 STEM West: Building Networks!

#### The Development Foundation of the North Carolina Center for the Advancement of Teaching, Inc.

NCCAT Beginning Teacher of the Year Program

#### The University of North Carolina at Chapel Hill

North Carolina DNA Day and STEM Unity

#### **Tides Center**

Proposal to reduce the STEM teacher shortage with equity and belonging

#### **University of Mount Olive**

UMO 5th Annual STEM on the Green featuring UMObile Laboratory - 2023

#### University of North Carolina at Asheville

Science on the Move: a summer program on a college campus (presentation at the National Migrant Education Conference in Albuquerque, NM)

#### University of North Carolina Wilmington

Support for the Singapore Math Program in Cumberland County schools, including Alderman Road Elementary School, Gray's Creek Elementary School and Gallberry Farm Elementary School

University of North Carolina Wilmington Support for the STEM SENC Singapore Summit Collaboration, 2023

#### SCIENCE, MATH, AND TECHNOLOGY SCIENCE CHAMPION

#### Morehead Planetarium and Science Center

Student Science Exploration - Growing New Researchers (NC International Science Challenge)

#### North Carolina Alliance for School Leadership Development

Superintendent Executive Leadership Program Cohort X

#### North Carolina Alliance for School Leadership Development

Aspiring Superintendent Program Cohort VII

#### North Carolina Association for Career and Technical Education (NCACTE)

NC STEM Schools of Distinction

#### North Carolina Chamber

Education & Workforce Conference

#### North Carolina School of Science and Math

American Junior Academy of Science and AAAS

#### North Carolina Science Fair Foundation

2023 North Carolina Science and Engineering Fair Foundation

#### **Smithsonian Institution**

Smithsonian Science STEAM Schools of Distinction for Sustainable Development

Successful Practices Network, Inc. Learning 2025

University of North Carolina at Charlotte Annual K-12 STEM Conference

University of North Carolina Wilmington **CESTEM Education Conference** 

### **STAFF**

**Daniel Baroff** 

Ken Browndorf

Paige Cooper Byas, PhD

**Russ Campbell** 

Jennifer Caraballo

Sammy Caraballo

Tammy Collins, PhD

**Brent Epps** 

Barbara Evans

Glenda H. Gilbert

Lori Hedrick

**Wendell Jones** 

Darcy Lewandowski

**Alfred Mays** 

Victoria McGovern, PhD

Samantha Moore

Louis J. Muglia, MD, PhD

**Scott Schoedler** 

**Melanie Scott** 

Mandeep K. Sekhon

**Betsy Stewart** 

# **BOARD OF DIRECTORS**

Brenda Andrews, PhD

**Deborah Blum** 

Brian Druker, MD

Kafui Dzirasa, MD, PhD

Michael Giarla

Paula T. Hammond, PhD

Robert J. Lefkowitz, MD, PhD

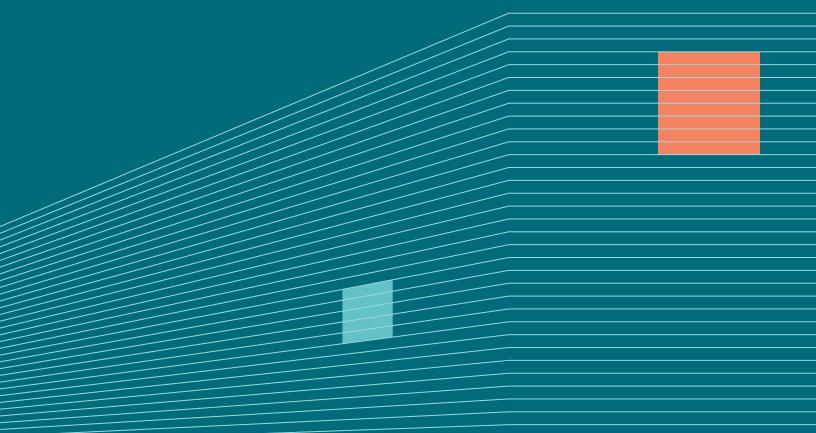
Wendell Lim, PhD

Harmit Malik, PhD

Louis J. Muglia, MD, PhD

Christine Seidman, MD

Jenny Ting, PhD (Chair)





21 T. W. Alexander Drive
P. O. Box 13901
Research Triangle Park, NC 27709-3901
919.991.5100
@bwfund
www.bwfund.org