

BURROUGHS  
WELLCOME  
FUND 

# Grant Programs

## BIOMEDICAL SCIENCES

### **Career Awards for Medical Scientists:**

Five-year awards for physician-scientists provide \$700,000 to bridge advanced postdoctoral/fellowship training and the early years of faculty service. This award addresses the ongoing challenge of increasing the number of physician-scientists and will help facilitate the transition to a career in research.

### **Resident Faculty Scholar Program:**

Provides up to \$125,000 in support to faculty level academic scientists at U.S. or Canadian institutions to utilize BWF as a site for mini-sabbaticals/project incubation allowing dedicated time to initiate or accelerate their work as aligned with BWF priorities and goals.

## CLIMATE CHANGE AND HUMAN HEALTH

### **Climate Change and Human Health Seed Grant:**

Provides up to \$50,000 to stimulate the growth of new connections between scholars working in largely disconnected fields who might together change the course of climate change's impact on human health.

### **Climate and Health Interdisciplinary Awards:**

Provides \$375,000 to support for collaborative exploratory work that opens new ground for comprehensively assessing or mitigating the impacts of climate change on human health.

## DIVERSITY IN SCIENCE

### **Graduate Diversity Enrichment Program:**

Provides \$5,000 over two years to provide underrepresented minority PhD students (enrolled in NC Institutions of Higher Education) with opportunities for greater science and research enrichment experiences.

### **Postdoctoral Diversity Enrichment Program:**

Provides \$60,000 over three years to support the development of underrepresented minority postdoctoral fellows in biomedical research.

## INFECTIOUS DISEASES

### **Investigators in the Pathogenesis of Infectious Disease:**

Five-year awards provide \$500,000 to support accomplished investigators at the assistant professor level in the study of infectious disease pathogenesis, with a focus on the intersection of human and microbial biology. The program aims to improve our understanding of how human hosts handle infectious challenges.

## INTERFACES IN SCIENCE

### **Career Awards at the Scientific Interface:**

Five-year awards provide \$500,000 to bridge advanced postdoctoral training and the early years of faculty service. These awards are intended to foster the early career development of researchers with backgrounds in the physical/mathematical/computational/engineering sciences whose work addresses biological questions.

## REGULATORY SCIENCE

### **Innovation in Regulatory Science Awards:**

Provides up to \$500,000 over five years to academic investigators developing new methodologies or innovative approaches in regulatory science that will ultimately inform regulatory decisions.

## REPRODUCTIVE SCIENCE

### **Next Gen Pregnancy Initiative:**

Provides up to \$500,000 over a four-year period to stimulate both creative individual scientists and multi-investigator teams to approach healthy and adverse pregnancy outcomes using creative basic and translation science methods.

## SCIENCE EDUCATION

### **Career Awards for STEM Teachers:**

Five-year awards provide \$175,000 each to eligible science or mathematics teachers in North Carolina's public primary and secondary public schools. This award recognizes teachers who have demonstrated solid knowledge of science or mathematics content and have outstanding performance records in educating children. The award is a partnership between the North Carolina State Board of Education and BWF.

### **Student STEM Enrichment Program:**

Three-year awards provide up to \$180,000 to North Carolina nonprofit organizations, including public/private schools, universities, colleges, and museums. This program supports creative inquiry-based STEM enrichment activities that occur outside the typical school day for K-12 students. The program's goals are to nurture students' enthusiasm for science and mathematics, expose them to the excitement of scientific discovery, and interest them in pursuing careers in research or other science-related areas.

### **Promoting Innovation in Science and Mathematics:**

Awards up to \$4,500 provide teachers with funding for materials, equipment, and training to conduct hands-on, inquiry-based science and mathematics projects in the North Carolina public schools.

For complete program information, including deadlines, please visit [bwfund.org](http://bwfund.org)



“AS WE ENTER 2022... WE HAVE LEARNED TO BE FLEXIBLE, RESILIENT, AND MORE APPRECIATIVE OF THE BENEFITS OF A HOLISTICALLY HUMANISTIC WORKSPACE. WE WILL LEVERAGE THIS NEW FOUNDATION FOR CREATIVE ENGAGEMENT AMONG SCIENTISTS, EDUCATORS, ARTISTS, JOURNALISTS, AND THE PUBLIC TO SOLVE THE SOCIETAL CHALLENGES OF TODAY AND TOMORROW.”

## President's Message



The Burroughs Wellcome Fund community continues to weather the storm that the pandemic created. From the personal to the professional, we have all been challenged. Here in Research Triangle Park, we are determined and dedicated to move

forward and ensure that our mission to serve society continues unabated. We see potential silver linings to the grey clouds of the last two years.

Our staff, for the most part, has worked virtually during this time and we have used this time to enhance our infrastructure and upgrade many of our systems. We are increasing our global connectivity and engagement by enhancing our in-house virtual technology so that we may emerge from the pandemic as a greener foundation. I am extremely proud of the effective way the entire BWF community has come together to

ensure efficient, seamless operations of our programs. I am inspired by the innovation that has not only overcome challenges but opened new doorways into the future.

We are fortunate the stock market has remained strong, and our endowment allows us to provide room for philanthropic experiments and to take “risks” in our portfolio. The pandemic has provided an opportunity to be creative in our grantmaking portfolio. We have expanded our Science + Arts funding as well as increased our Science Communication budget. As a result of increased funding capacity, we have been able to provide more awards and enhance our new focus area of Climate Change and Human Health.

Additionally, we have helped support our network of awardees by providing flexible funding and no-cost extensions.

During this past year we have undertaken a vigorous and exciting strategic planning effort that continues into the early part of 2022. We will communicate more about this later in 2022 as plans begin to solidify.

A few highlights:

### **Diversity in Science**

Ensuring that we are receiving applications and distributing grants to a broad and diverse audience is critical to the mission of the Fund. We have expanded funding in several grant programs and are continually seeking strategies that consider diversity, equity and inclusion through every mechanism within the Fund.

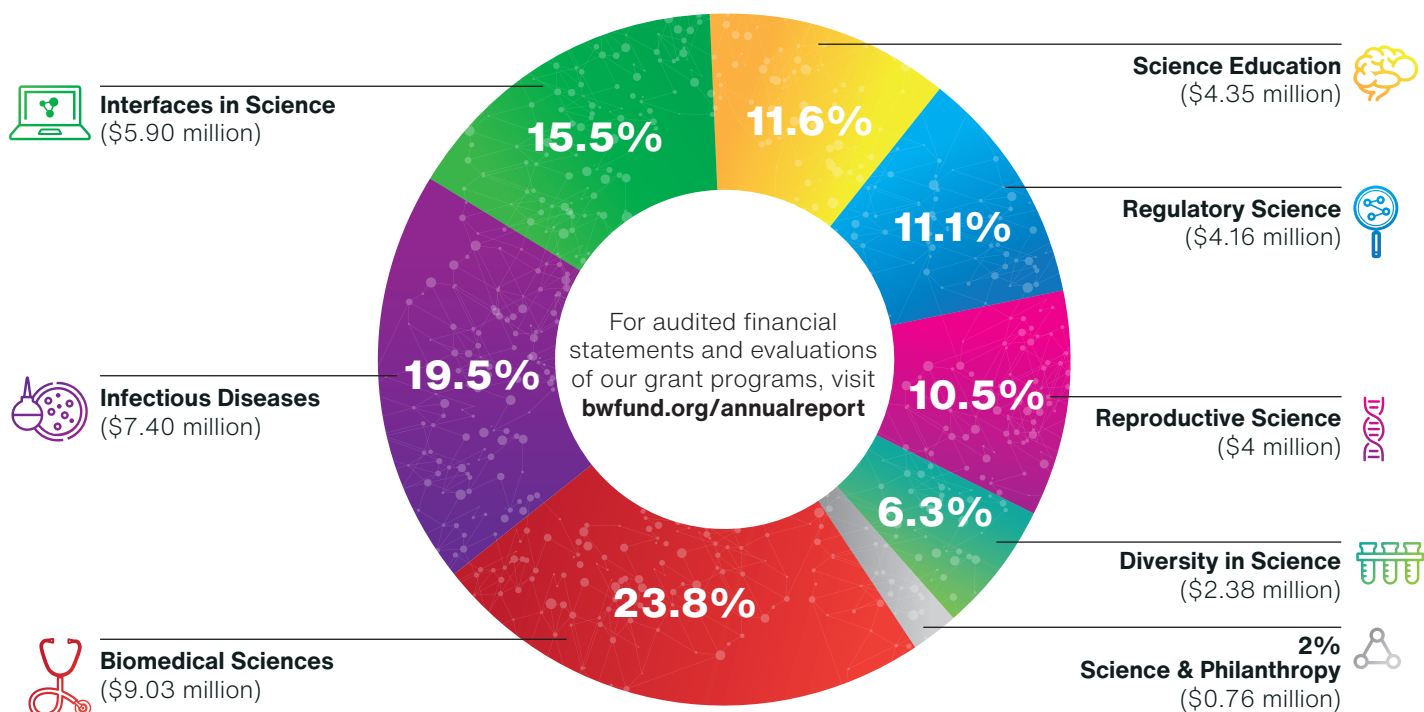
### **Climate Change and Human Health**

Since 2020, we have partnered with the National Academies of Medicine to help fully develop and realize BWF's role in funding climate change and human health. We have funded pilot grants through the academies and have established an ongoing series of ad hoc grants dedicated to fostering new partnerships among those working in this area.

### **Science Communication and Arts**

We have expanded our outreach in Science Communication and Science + Arts. We have contributed funding towards films, theater, an artist-in-residence program, and several

## BWF awarded more than \$36 million in grants during fiscal year 2021



audiocast series. We have partnered with *National Geographic* to fund two incredible science communicators, Álvaro Laiz and Anand Varma.

### Power of Partnerships

We have partnered with The Doris Duke Charitable Foundation and others to support physician-scientists across the United States. During the past year we have established several partnerships with other foundations to reach our goals more effectively. Our involvement with the Science Philanthropy Alliance and the Health Research Alliance have enabled

conversations among many science philanthropies and to encourage collaboration and best practices in the field.

As we enter 2022, may we be guided and encouraged by new normal – expanding reach, inclusiveness, and partnerships for engagement, research success and lifelong learning. We have learned to be flexible, resilient, and more appreciative of the benefits of a holistically humanistic workspace. We will leverage this new foundation for creative engagement among scientists, educators, artists,

journalists, and the public to solve the societal challenges of today and tomorrow.

Thank you.

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



## FISCAL YEAR 2021

# Major Competitive Grant Awardees

### Career Award at the Scientific Interface

**Kevin Dalton, PhD**  
Harvard University

**Rebecca Donegan, PhD**  
Georgia Institute of Technology

**Anne Draelos, PhD**  
Duke University

**Rogelio Hernandez-Lopez, PhD**  
University of California-San Francisco

**Antentor Hinton, PhD**  
University of Iowa Carver College of Medicine

**Christina Hueschen, PhD**  
Stanford University

**Vira Kravets, PhD**  
University of Colorado-Denver

**Ruth Marisol Herrera Perez, PhD**  
Columbia University

**Rebecca Sherbo, PhD**  
Harvard University

**Charlotte Strandkvist, PhD**  
Harvard Medical School

**Longzhi Tan, PhD**  
Stanford University

### Career Awards for Medical Scientists

**Serine Avagyan, MD, PhD**  
Dana-Farber | Boston Children's Hospital Cancer and Blood Disorders Center

**David Benjamin Beck, MD, PhD**  
National Institutes of Health (NIH)\*

**Silvia Bernardi, MD**  
Columbia University

**Jeeyeon Monica Cha, MD, PhD**  
Vanderbilt University

**Raghu Ram Chivukula, MD, PhD**  
Massachusetts Institute of Technology

**Carlos Antonio Diaz-Balzac, MD, PhD**  
University of Rochester

**Neir Eshel, MD, PhD**  
Stanford University

**Russell Paul Goodman, MD, DPhil**  
Massachusetts General Hospital

**Brian Christopher Miller, MD, PhD**  
Dana-Farber Cancer Institute

**Rachel Niec, MD, PhD**  
Rockefeller University

**Celestine N. Wanjalla, MD, PhD**  
Vanderbilt University

**Kevin Wei, MD, PhD**  
Brigham and Women's Hospital

### Career Guidance for Trainees

**American Society for Cell Biology**

**BioKansas**

**Drexel University**

**Harvard University**

**Sena Institute of Technology Foundation**

**University of Nevada-Reno**

**University of North Carolina-Chapel Hill School of Pharmacy**

**University of Pittsburgh**

**University of Tennessee Health Science Center**

**Yale University School of Medicine**

### Graduate Diversity Enrichment Program

**Ashley Michelle Aguiard**  
University of North Carolina-Chapel Hill

**David Aponte Diaz**  
University of North Carolina-Chapel Hill

**Danielle Marie Brathwaite**  
University of North Carolina-Chapel Hill

**Danielle Leigh Chappell**  
University of North Carolina-Chapel Hill

**Jeliyah Shaquan Clark**  
University of North Carolina-Chapel Hill

**Marta Cristina Cruz Cisneros**  
University of North Carolina-Chapel Hill

**Austin Ogechukwu Maduka**  
Duke University

**Carmen A Marable**  
University of North Carolina-Chapel Hill

**Jamshaid Shahir**  
University of North Carolina-Chapel Hill

**Ellysa Vogt**  
University of North Carolina-Chapel Hill

**Shunafrica White**  
North Carolina A&T State University

### Innovation in Regulatory Science Award

**Amrita Basu, PhD**  
University of California-San Francisco

**John F P Bridges, PhD**  
Ohio State University College of Medicine and Public Health

**Abraham Joy, PhD**  
University of Akron

**Laine Thomas, PhD**  
Duke University

**Carole Yauk, PhD**  
University of Ottawa

**Meredith Zozus, PhD**  
University of Texas Health Science Center-San Antonio

### Investigators in the Pathogenesis of Infectious Disease

**Matthew D. Daugherty, PhD**  
University of California-San Diego

**Lawrence A. David, PhD**  
Duke University

**Elizabeth S. Egan, MD, PhD**  
Stanford University School of Medicine

**Gianna E. Hammer, PhD**  
Duke University

**Timothy W. Hand, PhD**  
University of Pittsburgh

**Nicholas S. Heaton, PhD**  
Duke University School of Medicine

**Helen M. Lazear, PhD**  
University of North Carolina-Chapel Hill

**Sebastian Lourido, PhD**  
Massachusetts Institute of Technology

**Laura-Isobel McCall, PhD**  
University of Oklahoma

**Jakob von Moltke, PhD**  
University of Washington School of Medicine

**John Whitney, PhD**  
McMaster University

### Next Gen Pregnancy Initiative

**Vikki M Abrahams, PhD**  
Yale University

**William Lee Kraus, PhD**  
University of Texas Southwestern Medical Center-Dallas

**Diana Monsivais, PhD**  
Baylor College of Medicine

**Katy Patras, PhD**  
Baylor College of Medicine

**Joan T. Price, MD**  
University of North Carolina-Chapel Hill

**Mijo Simunovic, PhD**  
Columbia University

**Tamara Tilburgs, PhD**  
University of Cincinnati

**Yong Wang, PhD**  
Washington University

### Postdoctoral Enrichment Program

**Ismail Abd Al Azim Ahmed, PhD**  
New York University

**Sada M Boyd, PhD**  
University of California-Los Angeles

**Simone Andrea Douglas-Green, PhD**  
Massachusetts Institute of Technology

**Daniel Luis Gonzales, PhD**  
Purdue University

**Keisha Nicole Hardeman, PhD**  
University of Texas Southwestern Medical Center-Dallas

**Corine M. Jackman, PhD**  
Carnegie Mellon University

**Alberto Jose Lopez, PhD**  
Vanderbilt University

**Nikea Pittman, PhD**  
University of North Carolina-Chapel Hill

**Maureen McGuirk Sampson, PhD**  
Emory University

**Ninecia Scott, PhD**  
University of Alabama-Birmingham

**Kaela S. Singleton, PhD**  
Emory University

**Dylan James Suvlu, PhD**  
Massachusetts Institute of Technology

**Tigist Tamir, PhD**  
Massachusetts Institute of Technology

**Christine Vazquez, PhD**  
University of Pennsylvania

**Junior West, PhD**  
Johns Hopkins University School of Medicine

\*Funding will be received by faculty institute TBD

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

BWF's financial support is channeled primarily through competitive peer-reviewed award programs to degree-granting institutions in the U.S. and Canada on behalf of individual researchers. To complement these competitive award programs, BWF also makes grants to nonprofit organizations conducting activities intended to improve the general environment for science.

BWF believes that a diverse scientific workforce is essential to the process and advancement of research innovation, academic discovery, and public service.

Governed by a Board of Directors composed of distinguished scientists and business leaders, BWF was founded in 1955 as the corporate foundation of the pharmaceutical firm Burroughs Wellcome Co. In 1993, a generous gift from the Wellcome Trust, enabled BWF to become fully independent from the company, which was acquired by Glaxo in 1995.

## Executive Staff

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