Creating a Vision

2019 ANNUAL REPORT
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 on-going challenge of increasing the number of physician-scientists and will help facilitate the transition to a career in research.

Collaborative Research Travel Grant: Provides up to $15,000 in support for interdisciplinary biomedical researchers from degree-granting institutions to travel to a laboratory to acquire a new research technique or to facilitate collaboration.

Physician-Scientist Institutional Program: Supports institutional programs designed to increase the number of MD’s who enter careers in research (physician-scientists). Up to 10 institutions will receive awards of $2.5 million ($500,000/year over 5 years) to institute their proposed activities.

Career Guidance
Career Guidance for Trainees: Provides up to $50,000 over a one-year period to support demonstration project that will model affordable approaches to improving trainees’ readiness for stable, fulfilling careers.

Diversity in Science
Postdoctoral 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
Preterm Birth Initiative: Provides $500,000 over a four-year period to bring together a diverse interdisciplinary group within the more traditional areas of parturition research to address the myriad questions related to preterm birth.

Science Education
Career Awards for Science and Mathematics 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
It is with the greatest enthusiasm and appreciation that I begin my tenure as president and CEO of the Burroughs Wellcome Fund. The Fund has an extraordinary reputation and aura of prestige that has been fostered by the very successful efforts of the past presidents, Drs. Enriqueta Bond and John Burris, the staff, Board of Directors, and Advisory Committee Members.

I now have the privilege and mandate of asking what is next for us as a foundation? This will enable us to think innovatively and critically about assessing our approach to grant-making. It allows us to determine how we can have the greatest impact on biomedicine and society as a whole with available resources. More than providing competitive philanthropic support, we create a community through the Burroughs Wellcome Fund among our awardees and staff. We also provide opportunities to help create and develop networks among others in biomedical research and STEM education. We will explore opportunities for those audiences and stakeholders seeking excellence, innovation and societal impact.

In 2020, we will initiate a strategic terrain mapping exercise in which we evaluate our funding program areas and determine whether or not they are having the impact that we desire. Are we funding the best science and research? Are we recognizing the best educational programs? We hope to support talented programs, not just the best known ones, because talent is everywhere and comes in many different forms.
Moreover, I have a vision of the Burroughs Wellcome Fund headquarters in Research Triangle Park becoming a hub of intellectual activity for regional and national areas of interest. We hope to host more events and gatherings to discuss the important scientific topics of our time. We have an opportunity to engage in creative and constructive dialogue. This dialogue is the bridge to connect society and science to address social issues.

To help keep you informed, we will undertake a stronger social media presence to allow you to better understand the mission of the Fund’s work and its many collaborations. A recent example is our partnership with the National Academies of Science to address the connection between human health and climate change. This convening may well instigate new funding areas at the Fund.

I ask that you visit the full annual report on our website at bwfund.org/annualreport. We provide an overview of our programmatic funding and pose several questions that we ask you to consider. Please share your feedback and thoughts with us as we undergo our strategic planning efforts. Reach out to us let us know what your ideas and concerns and help us become the best foundation that we can possibly be not just now but for the future and for the future of our society.

Thank you.

Louis J. Muglia, MD, PhD
President and CEO
Burroughs Wellcome Fund
FISCAL YEAR 2019

Major Competitive Grant Awardees

Career Award at the Scientific Interface
Steven Mark Banik, PhD
Stanford University
Jennifer Ann Noelani Brophy, PhD
Stanford University
Fei Chen, PhD
Massachusetts Institute of Technology
Víctor García-López, PhD
Rice University
Livnat Jerby, PhD
Massachusetts Institute of Technology
Christina K. Kim, PhD
Stanford University
Joseph William Larkin, PhD
University of California-San Diego
Jeffrey E. Markowitz, PhD
Harvard Medical School
Sergey D. Stavisky, PhD
Stanford University
Jeffrey Robert Tithof, PhD
University of Rochester
Mark Wagner, PhD
Stanford University

Career Awards for Medical Scientists
Jonathan R Brestoff, MD, PhD
Washington University
Gaurav Das Gaiha, DPhil, MD
Harvard Medical School
Karuna Gaiha, MD, PhD
Memorial Sloan-Kettering Cancer Center
Wei Gu, MD, PhD
University of California-San Francisco
Marie A Guerraty, MD, PhD
University of Pennsylvania
Rodney Infante, MD, PhD
University of Texas Southwestern Medical Center-Dallas
Michael George Kattah, MD, PhD
University of California-San Francisco
Corey Keller, MD, PhD
Stanford University
Robert M Samstein, MD, PhD
Memorial Sloan-Kettering Cancer Center
Ashley Steed, MD, PhD
Washington University
Santosha A. Vardhana, MD, PhD
Memorial Sloan-Kettering Cancer Center
Andrew Sean Venteicher, MD, PhD
University of Pittsburgh
Doris Du Wang, MD, PhD
University of California-San Francisco
Isaac M. Chiu, PhD
Harvard Medical School
Jun R. Huh, PhD
Harvard Medical School
Ivaylo Ivanov, PhD
Columbia University
Leigh Knodler, PhD
Washington State University
Kristin N. Parent, PhD
Michigan State University
John W. Schoggins, PhD
University of Texas Southwestern Medical Center-Dallas
Kimberley D. Seed, PhD
University of California-Berkeley
Randy Stockbridge, PhD
University of Michigan-Ann Arbor
Ellen Yeh, MD, PhD
Stanford University

Career Guidance for Trainees
American Society for Pharmacology and Experimental Therapeutics
Boston University
Clemson University
Iowa State University
Ohio State University
Western University
Vanderbilt University

Investigators in the Pathogenesis of Infectious Disease
Theresa Alenghat, DVM., PhD
University of Cincinnati
Francis Alonzo, PhD
Loyola University-Chicago

Postdoctoral Enrichment Program
Osama M Ahmed, PhD
Princeton University
Cierra A Birch, PhD
University of California-San Diego
Korey Brownstein, PhD
University of Chicago
Alex J Guseman, PhD
University of Pittsburgh
Nadia Herrera, PhD
University of California-San Francisco
Barbara Juarez, PhD
University of Washington
Andrew Kekupa’a Knutson, PhD
University of Hawaii
Laramie Denise Lemon, PhD
Emory University
David Rafael Martinez, PhD
University of North Carolina-Chapel Hill

Physician Scientist Institutional Award
Texas A&M University
University of California-Los Angeles
University of Chicago
Washington University
Weill Cornell Medicine
Physician-Scientist Academia

Student STEM Enrichment Program
Aurora Fossil Museum
Communities In Schools of Cape Fear
Duke University
McCIntock Partners In Education (McPIE)
North Carolina State University
UNC Institute for the Environment
Wake County Public School System
Western Carolina University

Michaelle Ntala Mayalu, PhD
California Institute of Technology
Aaron Lavel Moye, PhD
Harvard University
Diane LaVern-Lygette Nelson, PhD
Carnegie Mellon University
Nancy Padilla Coreano, PhD
Massachusetts Institute of Technology
Brittany Louise Taylor, PhD
University of Pennsylvania
The Burroughs Wellcome Fund is an independent private foundation dedicated to advancing the biomedical sciences by supporting research and other scientific and educational activities. Within this broad mission, BWF seeks to accomplish two primary goals—to help scientists early in their careers develop as independent investigators and to advance fields in the basic biomedical sciences that are undervalued or in need of particular encouragement.

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.