



1965-2025

# CELEBRATING

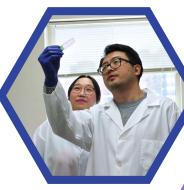
# YEARS

# of INVESTING IN FUTURE SCIENTIFIC LEADERS

Since 1965, the PhRMA Foundation (PhF) has invested in promising researchers and their novel ideas to foster biopharmaceutical innovation and value-driven health care. For 60 years, our grants and fellowships have helped to build and train the scientific workforce, setting the stage for tomorrow's biomedical breakthroughs that could improve patients' lives.









# **Our Impact**

The PhRMA Foundation has provided more than \$110 million in research funding to over 2,700 researchers at hundreds of U.S.-based universities and research institutions.



The PhRMA Foundation is a 501(c)(3) nonprofit organization that fosters biopharmaceutical innovation and value-driven health care by investing in the frontiers of research. The Foundation catalyzes the careers of promising researchers through competitive, peer-reviewed grants and fellowships in the fields of drug delivery, drug discovery, translational medicine, and value assessment and health outcomes research.



A healthier world where all people have access to innovative, life-changing medicines.



**Integrity:** We strive to be scientifically independent and evidence-based in our decision-making.

Innovation: We invest in cutting-edge research and ideas that will improve patient health.

**Collaboration:** We support collaborative research efforts that are diverse and inclusive.

# **Our Supporters**

Since the beginning, the PhRMA Foundation has relied on the generous support of pharmaceutical companies to fund our grantmaking activities.

Some of our very first contributors were Eli Lilly and Co., Johnson & Johnson, Merck & Co., and Pfizer, all of which still support the Foundation in 2025.

Other initial supporters included companies that were the precursors to some of today's large pharma companies: Allergan Pharmaceuticals (acquired by AbbVie), Astra Pharmaceutical Products (now AstraZeneca), Bristol Laboratories (now Bristol Myers Squibb), Geigy Pharmaceuticals (merged with other companies to form Novartis), and Smith Kline & French Laboratories (now GlaxoSmithKline).

Without consistent support from pharmaceutical companies and our parent trade association, the Pharmaceutical Research and Manufacturers of America (PhRMA), the Foundation would not be able to achieve its mission of investing in the frontiers of biomedical research and future generations of scientists.

























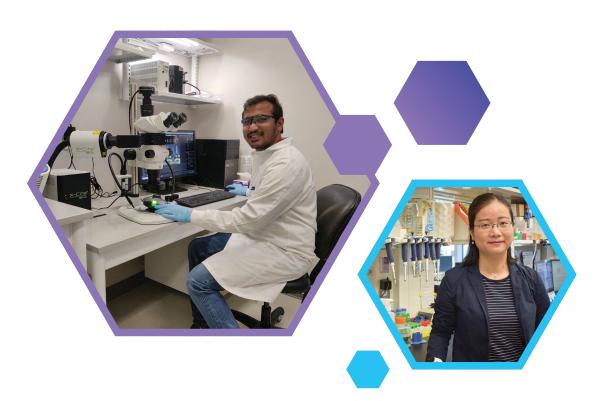




\*Supporters as of 2024

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# **A Brief History**

#### In the Wake of a Tragedy

In the late 1950s and early 1960s, reports emerged of widespread birth defects caused by the drug thalidomide, a treatment given to pregnant women experiencing morning sickness. The drug caused severe birth defects, such as malformed limbs and physical and neurological problems, in thousands of children across multiple countries, including Germany, the UK, Canada, Australia, and others. However, thalidomide had not been approved in the United States because of objections from Dr. Frances Kelsey, a medical officer at the Food and Drug Administration who questioned the drug's safety and delayed its approval.

The thalidomide tragedy led to a major shift in drug approval processes and greater emphasis on drug safety regulations around the world. In the fall of 1962, the Pharmaceutical Manufacturers Association (now PhRMA) established the Commission on Drug Safety to bring together the best available talent to rebuild public trust in medicine. The Commission on Drug Safety operated for 18 months, coordinating U.S. drug safety information, sponsoring conferences on drug safety, and advising the government on the implementation of new drug laws.

The commission's final report detailed observations and recommendations to improve education and training in toxicology, pharmacology, and experimental therapeutics. Among its recommendations, the commission suggested establishing a foundation for "the promotion of the public health through the study and development of the science of therapeutics."

# On May 31, 1965, the Pharmaceutical Manufacturers Association Foundation (now PhRMA Foundation) was established.



#### **A Unique Funding Organization**

The PhRMA Foundation's founders recognized its unique position in the research funding space compared to government agencies like the National Institutes of Health (NIH). "It hopes to be flexible and adaptable to the changing needs of the fields supported," the 1965 Annual Report states, noting that the Foundation could support risky research ideas that may fail but would make a huge impact if they succeeded.

#### The Foundation's initial activities focused on:

- Supporting fundamental research in toxicology
- Supporting the research and training of personnel in the fields of clinical pharmacology and drug evaluation

These activities included hosting scientific and medical research meetings, collecting and disseminating the results of those meetings, and providing financial aid via grants and fellowships to individuals or institutions for scientific or educational undertakings. The Foundation has never funded research focused on specific drugs but rather invests in the broad field of therapeutics and pioneering new directions.

To this day, the PhRMA Foundation has stayed true to its mission of supporting innovative biomedical research and future generations of researchers.



What is needed, and what the Foundation hopes to provide, is consistent, patient effort, with an element of imagination and boldness in seeking advances of significance.

- 1965 Annual Report

#### **Supporting Early Career Researchers**

PhRMA Foundation awards have helped to launch the careers of thousands of accomplished scientists in academia, industry, government, and beyond. Since its founding, the Foundation has almost exclusively focused on funding young investigators, specifically medical students, graduate students, postdoctoral fellows, and early career faculty members.

For most Foundation-funded researchers, our award is the first independent funding they've ever received. These funding opportunities allow early career researchers to explore areas they are passionate about and boost their ability to attract subsequent research grants.

By focusing its grantmaking activities on funding promising up-and-coming scientists across the U.S., the Foundation has helped to build and train the scientific workforce for 60 years.



The Foundation's focus on scientific disciplines and the careers of young scientists serves a unique purpose that must be preserved and strengthened. We help fledgling scientists when they need it most — at a critical stage in their lives when they are deciding on a career. Our committees have established a remarkable track record in identifying, encouraging, and helping scientists who have gone on to distinguish themselves in research and teaching careers. ... Few other foundations serve the same purpose as the PhRMA Foundation. Our focus on careers and disciplines, rather than a specific disease, product, or other more targeted goal, serves a special role in finding and training tomorrow's leaders.

Board Chairman Robert A. Ingram, CEO, Glaxo Wellcome Inc.
 2000 Annual Report

In recent years, the Foundation has made a concerted effort to encourage applications from young researchers with diverse racial, ethnic, geographic, and cultural backgrounds. The Foundation is one of the only funding organizations that allows non-U.S. citizens to apply as long as they are engaged in research at a U.S.-based institution. Roughly half of recent grantees are women and roughly half are people of color.

PhRMA Foundation grants have supported many successful scientists who have gone on to achieve impressive careers, including:



Susan Band Horwitz, PhD

**DISCOVERED HOW CANCER DRUG TAXOL WORKS** 

### Namandjé Bumpus, PhD

FORMER FDA DEPUTY COMMISSIONER AND CHIEF SCIENTIST

Arthur H. Hayes, MD

FORMER FDA COMMISSIONER

Louis Ignarro, PhD

**NOBEL PRIZE WINNER** 



FORMER FDA DEPUTY COMMISSIONER



SPEARHEADED PRIVATE-SECTOR GROUP THAT MAPPED THE HUMAN GENOME

#### **Fostering New Fields**

The PhRMA Foundation has helped to seed and grow many emerging areas of research. Over the years, the organization has launched and sunset funding programs based on the changing needs of the scientific ecosystem and industry.



During its first two decades, the Foundation focused primarily on toxicology and pharmacology research, two closely related fields that study how drugs affect the body. These areas were of great interest to industry but were not being addressed by the NIH or other funding bodies at the time. The Foundation sought to fill this gap in research and scientific training.







This field would hardly exist today had it not been for the early and persistent support of the Foundation.

Leon Goldberg, MD, PhD, Chairman, Committee on Clinical Pharmacology
 University of Chicago, "Tracking Twenty" Anniversary Report

1962

PMA (now PhRMA) organizes the Commission on Drug Safety

Commission recommends creating a foundation

1965



1964

PhRMA Foundation established

Some of its first activities included awarding relatively large grants to study adverse drug reactions, animalhuman predictability, and pediatric-fetal pharmacology, as well as hosting numerous workshops and conferences on topics like drug metabolism and comparative pharmacology.

After the first few years, however, the Foundation shifted its focus more toward education and training, moving away from larger research grants to fund awards directly

to individual scientists who showed substantial promise. This started with medical student traineeships and faculty development awards in clinical pharmacology to stimulate teaching, training, and research. One of the first faculty recipients was Arthur H. Hayes, MD, who would later serve as FDA commissioner from 1981-83.

The Foundation continued to expand its awards to include predoctoral fellowships, postdoctoral fellowships, and research starter grants in areas

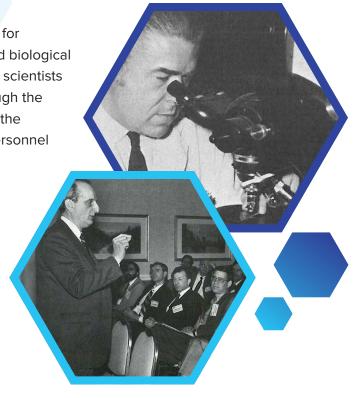
including basic pharmacology, morphology, and drug toxicology throughout the 1970s and 80s. With its unwavering commitment to advancing pharmacology and toxicology research and training, the PhRMA Foundation played a vital role in developing these fields and building scientific rigor around medication safety. The Foundation still funds research in these areas today through its Drug Discovery Program.

First research grants First postdoctoral fellowships in pharmacology in pharmacology 1967 First medical student fellowships and faculty 1966 1968 development awards in clinical pharmacology

#### **Pharmaceutics**

In 1987, the Foundation introduced awards specifically for pharmaceutics, the study of the physical, chemical, and biological properties of drugs and dosage forms. Although some scientists in pharmaceutics had previously received awards though the Foundation's pharmacology and toxicology programs, the Board of Directors identified a shortage of qualified personnel in basic pharmaceutics, biopharmaceutics, and pharmaceutical technology.

The new program allowed the Foundation "to support the disciplines of pharmaceutics in a more direct and expanded manner" and meet the needs of industry by supporting young researchers in these areas. The Foundation has long been one of the only organizations to fund early career academics studying pharmaceutics. The Foundation still funds research in this area today through its Drug Delivery Program.



#### **Pharmacoeconomics**

In the face of widespread concern about rising health care expenditures, in 1995 the Foundation introduced new awards in pharmacoeconomics, an evaluative field that compares the clinical effectiveness of medicines and the costs. The goal was to encourage the development of faculty in this relatively new discipline, so that they could go on to train others to conduct these complex analyses.

The pharmacoeconomics program was the Foundation's first foray into funding non-bench scientists, or those who work mainly with data in an office rather than at a laboratory bench. The Board launched the program despite facing revenue reductions due to economic troubles in industry, and in the 1994 Annual Report, then-PhRMA Chair Charles A. Sanders, MD, called the program "a heroic commitment" given the circumstances. This program was replaced in 2002 by a health outcomes research program.

faculty in pharmacology/toxicology

#### **Informatics and Genomics**

As the new millennium approached, the Foundation sought to stay on the frontiers of science by adding informatics awards in 1997. This program sought to build expertise and infrastructure in this new scientific field and encourage the use of computer technologies and biological databases to advance drug discovery.

Five years later, in 2002, the Foundation announced its first ever Center of Excellence, a three-year, \$1 million grant to support an existing interdisciplinary research center focused on conducting breakthrough science and training researchers. The Center of Excellence for Integration of Genomics and Informatics grant was awarded to Harvard Medical School's Lipper Center for Computational Genetics, under the direction of Dr. George M. Church, a pioneer in personal genomics. This center aimed to address the increasingly complex and sophisticated technologies and skills required for computational exploitation of genome-related data and the consequent need for multidisciplinary training and interdisciplinary research to build careers in this field.

The Foundation offered informatics awards to young investigators until the program sunset in 2020.



1987 Pharmacoeconomics awards introduced 1997

Pharmaceutics awards introduced 1995 Informatics awards introduced

#### **Health Outcomes Research**

In the past 25 years, the Foundation's programs have become increasingly focused on patient health outcomes and patient engagement in research. For instance, the health outcomes research awards, introduced in 2002, took the place of the pharmacoeconomics awards. Health outcomes research looks at the effectiveness of health care interventions in the real world with a focus on clinical and economic outcomes that matter to patients. The program was designed to increase the number of well-trained investigators in this area and strengthen representation of health outcomes in schools of pharmacy, medicine, and public health. This program was combined with the Foundation's Value Assessment Initiative in 2023 and is now called the Value Assessment and Health Outcomes Research Program.

#### **Comparative Effective Research (CER)**

In December 2009, the PhRMA Foundation convened a group of experts from government, industry, and academia to discuss the education and training of students in comparative effectiveness research, the generation and study of evidence that compares the benefits and harms of different health care interventions to determine which work best for which patients. Few formal CER educational programs existed in U.S., so the Foundation wanted to help develop specialized programs to shape the teaching, training, and practice of this increasingly important field of research. The passage of federal legislation in 2010 establishing the Patient Centered Outcomes Research Institute (PCORI) made even clearer the need for CER training programs to meet the growing demand for well-trained researchers.

From 2012-2015, the Foundation awarded Centers of Excellence in Comparative Effective Research grants to six institutions: Johns Hopkins University, University of Washington, University of Utah, Harvard School of Public Health, University of Maryland, and University of Illinois at Chicago. These awards provided \$250,000 over three years to support the development or expansion of CER degregranting programs. In 2014, the Foundation leveraged its position as a trusted convenor to bring together the Agency for Healthcare Research & Quality (AHRQ) and PCORI for the first national meeting, "Curricular Advances for Patient CER" in Washington, D.C.



Health outcomes awards introduced, and first
Centers of Excellence established in clinical
pharmacology and genomics/informatics

2003

First sabbatical fellowships

2002

Board leadership changes from PhRMA member company CEOs to R&D executives

#### **Translational Medicine**

Translational medicine takes a collaborative and iterative approach to drug discovery and development, with vast implications for patient care. In 2013, the Foundation introduced its Translational Medicine Program to support scientists working to bridge the gap between scientific research and clinical practice. The goal is to help bring scientific discoveries and technological



they can be applied to the prevention, diagnosis, and treatment of disease. A key component of the program involves collaborations with clinicians to conduct research that spans non-clinical and clinical domains, potentially involving multiple laboratories, advisers, or

#### **Medication Adherence Improvement**

institutions. This program is still active today.

Proper use of medicine can improve clinical and economic health outcomes, but many patients fail to take their medications as prescribed. In 2013, the PhRMA Foundation began awarding grants and fellowships to young investigators studying medication adherence improvement, defined as the extent to which a patient acts in accordance with the prescribed interval and dose of a treatment regimen. By funding research on the development or evaluation of policies, interventions, or tools for improving medication adherence, the Foundation sought to help close the adherence gap, thus improving the quality of health care, encouraging better chronic care management, and promoting better health outcomes. In 2016, the Foundation also hosted a conference, "Suboptimal Medication Use: A Population Health Perspective," for stakeholders from diverse backgrounds to identify and disseminate effective strategies for improving medication use. This awards program sunset in 2017.

2012



First Center of Excellence in Comparative Effectiveness Research Translational medicine and medication adherence improvement awards introduced



2013

#### **Value Assessment**

As rising health care costs continue to plague the U.S., the health care system has been shifting to focus on the value of care provided to patients, as opposed to the volume of care. This change requires demonstrating the value of medicines and other health care interventions using robust, reliable, and sound evidence that supports patients' needs and preferences. Building on its previous work in pharmacoeconomics, comparative effectiveness research, and health outcomes research, the PhRMA Foundation in 2017 launched a Value Assessment Initiative to help identify and address challenges in assessing the value of medicines and health care services, with an emphasis on incorporating patient perspectives.

The Value Assessment Initiative included three prongs: Centers of Excellence, Challenge Awards, and research awards. The Foundation provided three-year \$500,000 grants to four institutions to establish Centers of Excellence to promote research, innovation, and the development of tools and partnerships that advance value-driven decision making and patient-centered care models.

- Patient-Driven Values in Healthcare Evaluation (PAVE) PAVE, University of Maryland, Baltimore
- Center for Pharmaceutical Value (pValue), University of Colorado School of Medicine
- Center for Enhanced Value Assessment (CEVA), Tufts' Center for the Evaluation of Value and Risk in Health
- Research Consortium for Health Care Value Assessment, Altarum and VBID Health

The Foundation's Challenge Awards are competitions that award researchers for outstanding manuscripts about pressing questions or topics in health care. For instance, the first Challenge Award asked researchers to respond to the prompt: What are transformative strategies to measure or evaluate value of health interventions that could be implemented to advance a value-driven health care system in the United States?

The largest of these were two \$500,000 Frontier Awards given in 2023 to William Padula, PhD, of the University of Southern California and Surachat Ngorsuraches, PhD, of Auburn University for research applying patient-centered value assessment models to help guide health care decision-making. This program was combined with the Health Outcomes Research Program in 2023 and is now called the Value Assessment and Health Outcomes Research Program.

2016	First Challenge Awards and Centers of Excellence in Value Assessment	2021
Value Assessment Initiative launched	2017	Drug Discovery and Drug Delivery awards introduced

#### **Digital Health Technologies (DHTs)**

In 2020, the COVID-19 pandemic accelerated the adoption of DHTs such as sensors, apps, and wearables in medical research. DHTs allowed for the continuation of health care and clinical trials while minimizing the risk of spreading COVID-19. The PhRMA Foundation recognized the need to enhance diversity in clinical trials and the potential for DHTs to foster more equitable participation in medical research.

In 2023, the Foundation issued a special call for research proposals examining the use of DHTs in populations underrepresented in clinical trials to inform FDA regulatory decision-making. Seven scientists received \$25,000 grants to develop comprehensive research plans, and out of those, the Foundation awarded \$500,000 grants to two researchers — David G. Armstrong, DPM, MD, PhD, of the University of Southern California and Nino Isakadze, MD, MHS, of Johns Hopkins University — to conduct studies using DHTs to improve health equity and health outcomes for patients.

#### **Current Programs**

In recent years, the PhRMA Foundation reorganized its programs to continue to support multidisciplinary projects that span the complex spectrum of drug development. The Foundation currently offers awards in drug discovery (pharmacology/toxicology), drug delivery (pharmaceutics), translational medicine, and value assessment and health outcomes

research. The PhRMA
Foundation will remain
nimble and adaptable
moving forward to invest
in emerging fields of
research and meet the
evolving needs of the
biopharmaceutical industry.



Special Digital Health Technologies Grants and Frontier Awards in Value Assessment

2025

2013

60th anniversary

# **Launching Careers for 60 Years**

The PhRMA Foundation achieves a lasting impact through our awardees. By funding young investigators, the Foundation kick-starts their careers and keeps these bright minds on career paths where they can make scientific discoveries and influence policy to improve patient health.

Former awardees work at research universities uncovering biological mechanisms that could be the basis for new drug targets and training the next generation of scientists. They work at pharmaceutical companies designing new treatments and shepherding them through clinical trials. They work at the NIH overseeing government research programs and at the FDA reviewing submissions and guiding policy.

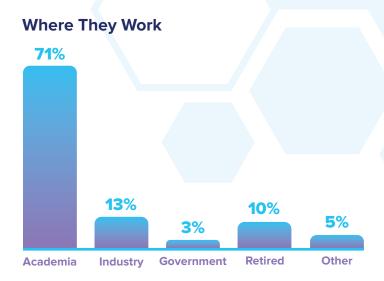


The PhRMA Foundation was indeed pivotal in the launch of my career, providing essential grant support and remarkably introducing me to the field of therapeutics, augmented by the opportunity to meet leaders of the pharmaceutical industry.

> Andre Terzic, MD, PhD, Professor, Mayo Clinic, 1991 Fellowship and 1994 Faculty Development Award Recipient

#### **Award Recipient Survey**

Periodically, the PhRMA Foundation conducts surveys of former awardees to see how they are progressing in their careers and shaping research and health care. In the fall of 2024, the Foundation reached out to 1,375 current and former awardees via email, asking them to complete an online survey. The survey received 517 responses, a 38% response rate. All data was self-reported, and not all respondents answered every question.



The survey results show the PhRMA Foundation

has been successful in selecting scientists who remain committed to research throughout their careers. A large majority of respondents (71%) reported that they currently work in academia, while 13% work in industry and 3% in government. About 10% are now retired, and 5% work in other areas such as nonprofit, law, clinical practice, and consulting.

Interestingly, 19% of respondents reported switching between academia and industry during their careers, and 53% of those not currently employed in industry indicated that they partner with industry for activities such as public-private partnerships, consulting, and funding.

Two-thirds of awardees go on to either work in industry or partner with industry.



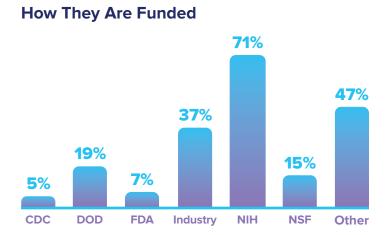
Receiving a PhRMA Foundation fellowship during my graduate studies increased my confidence significantly, and that has resulted in my pursuit of leadership opportunities during my industry career.

Jayna Anderson, PhD, Program Management Lead, General Medicine, Amgen,
 1996 Predoctoral Fellowship Recipient

#### **Making a Difference Through Research**

84% of awardees are involved in research, either full time or part time.

About 71% of those said their current research is in the same general area as their original PhRMA Foundation grant. Of the 16% no longer conducting research, three-quarters received their awards more than 25 years ago, meaning some of them may have retired or transitioned to senior administrative roles.



Foundation awardees have demonstrated great success in attaining research funding during their careers. Approximately 84% secured other funding after their Foundation award, and 71% have been funded by the NIH. Of those who did not report additional funding, 60% received their Foundation award within the past five years and so are still very early in their careers, usually predoctoral students or postdoctoral trainees. Others may have chosen to go directly into industry roles where they did not need to pursue grant funding.

Altogether, awardees estimated they had been awarded more than 5,500 additional grants, and 80% of the 309 respondents who answered this question estimated they had received over \$1 million in funding and 35% estimated over \$10 million in funding.



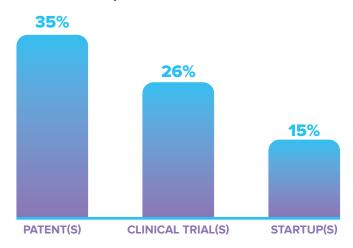


# Many PhRMA Foundation awardees conduct research that pushes their field forward.

A quarter of awardees said their research had resulted in one or more clinical trials, 35% said their research resulted in one or more patents, and 15% said their research led to one or more startup companies.

In addition, 87% of awardees reported that their Foundation-funded research project resulted in a publication. The Foundation helps awardees promote publications and presentations funded by their awards, sharing the information on our website, newsletter, and social media.

#### **Research Impact**





PhRMA Foundation funding was the basis for some of my most creative work because I could pursue my own ideas and had the freedom to disseminate widely to multiple audiences.

 Julia Slejko, PhD, Associate Professor, University of Maryland School of Pharmacy, 2010 Predoctoral Fellowship and 2016 Research Starter Grant Recipient

#### **Awardee Achievements**

When asked about their biggest career achievements, PhRMA Foundation award recipients described accomplishments ranging from basic scientific discoveries to FDA approvals of new treatments. These are highlights of their impressive work.



#### **Making a Difference Through Mentorship**

Not only are PhRMA Foundation awardees influencing science through their research activities, but they are also training the next generation of researchers.

#### More than three-quarters said that they mentor young scientists.

Awardees who pursued careers in academia estimated that they had trained more than 11,000 students and postdocs combined. More than 60% said they "frequently" or "sometimes" encourage early career researchers to apply for the Foundation's awards.



This award has made all of my subsequent research possible and resulted in the direct training of nearly 100 mentees.

 Eden Tanner, DPhil, Assistant Professor, University of Mississippi, 2021 Faculty Starter Grant Recipient

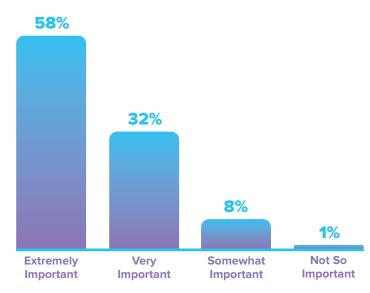


#### **A Springboard to Success for Young Scientists**

Award recipients overwhelmingly agreed that PhRMA Foundation grants are important for early career researchers. Securing research funding is especially challenging at the beginning of a scientist's career, as they are often forced to compete against more established scientists. The Foundation's focus on awards for early career researchers helps to fill this critical need in the research community.

PhRMA Foundation grants play a pivotal role in awardees' career development, with 91% saying the award was extremely or very importantt.

For most award recipients, the Foundation grant is the first independent research funding that they've Importance of Foundation Award to Career Development



earned. Not only does it boost their confidence, but it helps them secure additional funding in the future.

97% of respondents agreed receiving a PhRMA Foundation award increased their confidence and their research potential.



It took me three tries to obtain my first NIH grant. I think my career would have been over before it started without the PhRMA Foundation award.

Michael Thomas Eadon, MD, Associate Professor, Indiana University,
 2014 Faculty Development Award Recipient

About 86% of respondents agreed or strongly agreed that receiving the Foundation award improved their understanding of the grant application process and enhanced the quality of their subsequent grant applications. While similar in many ways to the NIH grant application process, the PhRMA Foundation process is more streamlined and less onerous, making it a great learning experience for early career applicants. In addition, over the past few years, the Foundation has hosted free, public webinars featuring review committee members providing guidance on the dos and don'ts of grant writing.



## **Meeting the Moment**

Throughout our 60-year history, the PhRMA Foundation has continually adapted to meet the moment and respond to the evolving needs of the biopharmaceutical industry. At our genesis, we helped ensure the safety and effectiveness of new medicines by rapidly expanding the fields of toxicology and pharmacology. Over the decades, the Foundation has consistently met the moment by focusing our grantmaking to address industry's interest in informatics, genetics, regulatory science, digital health tools, and more.

We've achieved all this while staying true to our core mission: funding future leaders who conduct innovative research that may fail, but with success could fundamentally change human health care. Our awardees are our fiercest champions — 99% said the Foundation is meeting or exceeding expectations in fulfilling its mission.

Looking forward, the PhRMA Foundation will continue to meet the moment and adjust our operations to support foundational biomedical research and cultivate future generations of researchers. As always, we remain extremely grateful to our funders and our volunteers who make this work possible. Thank you for your support.

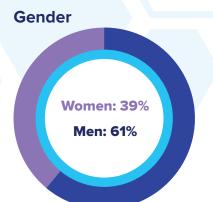


Receiving the PhRMA Foundation grant meant the world to me. I sincerely believe that it gave me momentum, status, and courage in my research and subsequent career that I wouldn't have had without it. I'm so grateful to this day.

Laurie A. Hanson, DVM, PhD, pharmaceutical consultant, formerly at Pfizer,
 1989 Predoctoral Fellowship Recipient

# **Appendix: Survey Respondent Demographics**

The PhRMA Foundation reached out to 1,375 award recipients via email, and 517 responded, a 38% response rate. All data is self-reported, and not all respondents answered every question.

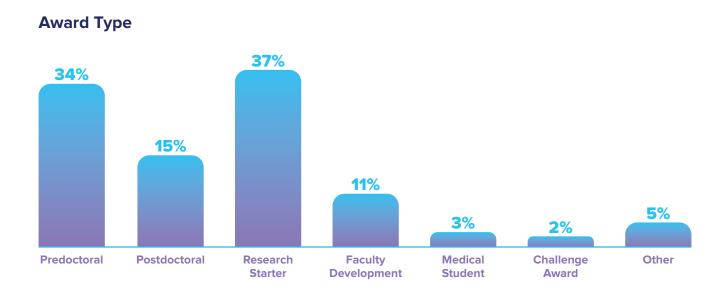


About 61% of survey respondents were men and 39% were women. Approximately 71% were white, 18% Asian, 3% Black, 2% Hispanic/Latino, and 1% American Indian and Alaska Native. Only 1% identified as multiple races and 3% selected other.

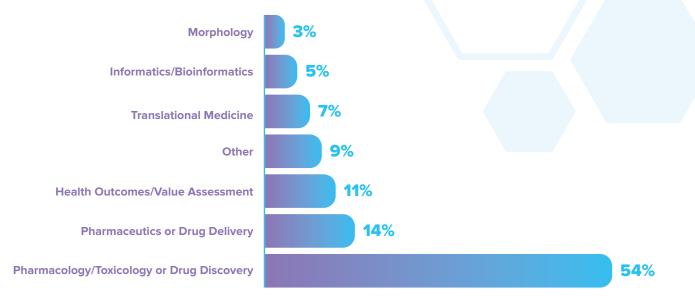
The demographic makeup of the awardee survey respondents is not unexpected given the historical representation of women and people of color in scientific fields in the U.S. over the Foundation's 60-year history.

According to a 2005 paper by the National Bureau of Economic Research, in 1966, U.S.-born white males received 71% of science and engineering (S&E) doctorates, U.S.-born females received 6%, and foreign-born students received 23%. At that time, U.S. citizens who were Asian, Black, and Hispanic earned fewer than 3% of all PhDs (not just S&E). In 2023, they accounted for over 30% of S&E doctorates and women were 45%.

The Foundation's award recipients reflect these changing trends. In recent years, about half of awardees have been women and half people of color. In addition, 4% of survey respondents identified as a person living with a disability, 5% identified as a member of the LGBTQ+ community, and 2% identified as a U.S. veteran.



#### Research Area



Awardee respondents spanned the entire history of the Foundation, from 1968 to 2024. About 21% received their award in the past five years, while 45% received their award before 2000.

Unsurprisingly, most respondents received predoctoral fellowships, postdoctoral fellowships, or faculty/research starter grants, which are the core awards distributed by the Foundation.

More than 50% earned awards in pharmacology/toxicology (drug discovery), which has been the Foundation's main research focus since its founding, followed by pharmaceutics (drug delivery) at 14%, and health outcomes/value assessment research at 11%.



