



AMERICAN HEART ASSOCIATION RESEARCH FACTS FY 2019-2020

DRIVING INNOVATION

Funding research is a cornerstone of the American Heart Association's lifesaving mission -- a pillar upon which the AHA was founded and a key to our future. The AHA is the largest not-for-profit funding source for cardiovascular and cerebrovascular disease research next to the federal government.

- AHA has invested \$4.6 billion in research since 1949.
- Current AHA-funded research projects total \$462 million and support 1,641 awardees.
- Funding from AHA helped to launch the careers of many of this country's most prominent cardiovascular and brain scientists, including 14 Nobel prize winners.

Over the past five years, the AHA has funded:

- \$458 million in support of Early Career Investigators
- \$536 million in Basic Science research
- \$208 million in Clinical and Population Health research
- \$60 million to investigators from Underrepresented Racial and Ethnic Groups
- \$280 million to Female investigators

The AHA does not conduct research - we fund it and facilitate it through awards that go to the brightest minds in cardiovascular and stroke research. New knowledge resulting from AHA funding benefits millions of lives through:

- Translation into medical advancements
- Updated guidelines for healthcare providers to treat patients and improve their well-being
- Building careers in science and research

AHA Research Operations work is done under the guidance and direction of our volunteer committees, which are comprised of industry leaders, future stars, and lay stakeholders. A progressive focus of our research funding is on how cardiovascular and cerebrovascular diseases and brain health affects all systems throughout the body.

Photo: AHA Research Committee Chair Joseph C. Wu, MD, PhD, FAHA



Our bold research vision is guided by [12 Essential Elements](#) to ensure AHA is at the forefront of global changes, emphasizes collaborative and team research, accelerates discovery, and drives groundbreaking research outcomes. The AHA Research program has three driving forces:

- Expand Research Capacity to ensure a continuous supply of appropriately trained CV/stroke investigators to support future discoveries;
- Support Knowledge Generation by speeding the discovery, interpretation, and delivery of new knowledge;
- Fund the "Best" Research, setting and following industry best practices for evaluating ideas presented for funding.

The Need for More is Evident

Each year, more and more investigators look to the AHA to fund their advancements, but the pool of dollars is not large enough to accommodate every idea. In FY 2019-2020, the AHA received 3,555 more applications, totaling \$817.7 million, that we could not fund. This means many scientific projects were shelved, and the knowledge that would result from them deferred.

A Relentless Force for Addressing Critical Issues

The AHA offers research awards to meet the needs of the modern science community, respond to the current scientific landscape, and focus on the AHA's mission and strategic goals. In addition to funding the basic science ideas of individual researchers, sometimes an issue is so immediate, so prevalent, that the organization feels compelled to address it.

End Nicotine Addiction in Children and Teens (ENACT)



The rapid pace of e-cigarette products entering the market without provision of essential safety information requires an equally rapid, ambitious, comprehensive response on the part of the research/scientific community. The AHA seeks to accelerate desperately needed answers about the health effects of e-cigarettes and other novel nicotine delivery devices and how to prevent and/or reverse the developing epidemic of nicotine addiction, among children and youth (15-24 years of age) by investing nearly \$17 million in scientific research being led by scientists from Boston University, The Ohio State University and Yale University. This is the latest in a multipronged, ongoing commitment to [End Nicotine Addiction in Children and Teens \(ENACT\)](#).

Rapid Research Grants on COVID-19 and its Cardiovascular Impact

In March 2020, the American Heart Association put out an unprecedented rapid response call for cardiovascular/cerebrovascular research proposals to address the growing crisis of the COVID-19 pandemic. Because of the urgency of this issue, the focus was on innovative, highly impactful short-term proposals (9-12 months) that can show progress within the period of this award. The AHA funded 17 of awards of \$100,000 each and a nationwide Coordinating Center.



[Read more about the funded projects.](#)

The AHA also allocated \$800,000 for supplemental, short-term special projects to be conducted by the four centers in its Health Technologies & Innovation Strategically Focused Research Network. This funding is in addition to their original grants and will focus on rapid technology solutions to address the COVID-19 pandemic crisis.

Driving Quality Improvement and Research in the COVID-19 Era

The American Heart Association is working to ensure optimal care for patients with cardiovascular disease who contract coronavirus (COVID-19). Patients with underlying cardiovascular diseases appear to have an increased risk for adverse outcomes with COVID-19. [COVID-19 Content: An AHA Compendium](#) contains helpful resources for health systems, clinics, care providers, patients and the public.



To better understand the COVID-19 pandemic, the American Heart Association has developed a new registry for hospitals and health systems caring for COVID-19 patients. [The American Heart Association COVID-19 CVD Registry powered by Get With The Guidelines®](#) (GWTG)

builds on 20 years of successful hospital quality improvement efforts. The no-cost registry will help inform the larger medical community, and the aggregated, deidentified data set will be available to researchers through the Association's [Institute for Precision Cardiovascular Medicine](#).

For more information about AHA's research program, please visit <https://www.professional.heart.org/research>

Diversity, Equity, and Inclusion in AHA Research

AHA strongly encourages applications by women, underrepresented racial and ethnic groups in the sciences, military veterans, people with disabilities, members of the LGBTQ community, and those who have experienced varied and non-traditional career trajectories.

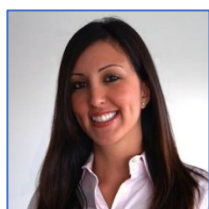


Working Group on Diversity & Inclusion

Under the direction of the AHA Research Committee, a Working Group on Diversity and Inclusion has been formed to analyze data and make recommendations to increase AHA's research commitment to underrepresented racial and ethnic groups (UREGs) and women in the biomedical sciences. The Task Force will consider opportunities for additional investment to secure a more diverse population of applicants and ultimately, research awardees.

2019-20 AHA/AMFDP Scholars

A partnership between the AHA and Harold Amos Medical Faculty Development Program of The Robert Wood Johnson Foundation supports scholars with academic and research appointments in cardiology and stroke who come from historically disadvantaged backgrounds. Awardees commit to developing careers in academic medicine and serving as role models for students and faculty of similar backgrounds.



Fatima Rodriguez, MD, MPH, FACC, FAHA, Stanford University

Cardiovascular Disease Prevention for Minority Populations - "Although heart disease is the leading cause of death for racial/ethnic minority groups in the U.S., adequate risk prediction tools to guide treatment decisions are lacking. This project seeks to improve how we prevent and treat heart disease in understudied populations in clinical settings."



Mabel P. Toribio, MD, Massachusetts General Hospital

Metabolic and Cardiovascular Effects of Gender-Affirming Hormonal Therapy among Transgender Women with HIV - "Gender-affirming hormone therapy forms an important part of gender-affirming care among transgender women. While transgender women with HIV face heightened risk of heart disease and diabetes due to their HIV infection and anti-retroviral therapy, little is known about the effects of hormone therapy on the heart and metabolic health of this vulnerable patient population."

Undergraduate Research Internships for College Students

In 2017, the AHA commissioned the RAND Corporation to explore program options to inspire and support the careers of underrepresented students in science and research. As a result, the AHA is piloting the Summer Undergraduate Research Experience (SURE). In this second year, the program went virtual with a class of 16 students, guided by AHA awardees. In addition to these summer interns, the AHA Southeast Region funds student scholars who gain research experience in laboratories during the academic school year.

Research Goes Red: Fostering Research on Women's Cardiovascular Health



Cardiovascular disease claims 1 in 3 women's lives, punctuating the need to understand women's risk and outcomes. The AHA's Institute for Precision Cardiovascular Medicine has partnered with Verily (formerly Google Life Sciences) to develop Research Goes Red, empowering women to contribute to health research. The platform is becoming an exceptional resource for research on women's cardiovascular health. This collaboration unites American Heart Association heart health experts, patients, loved ones, and Verily, with its leading tools and technologies.