

AHA's Second Century Implementation Science Award Call for Proposals

Important Notes:

Proposal Submission Deadline: Wednesday, March 1, 2023

- Proposals must be received no later than 3 p.m. Central Time on the deadline date. Early submission is encouraged.
- Before beginning an application, review the [eligibility and requirements](#) that apply to all AHA research awards.
- The AHA believes diversity and inclusion is an essential component to driving its mission and 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.
- All proposals must be [submitted electronically via ProposalCentral](#). The system will open six weeks prior to the application deadline to complete your proposal and upload documents. You can begin to create your documents now; please refer to the AHA Application Instructions. All submissions require a signature from a designated institutional representative.
- Applicants must be [AHA Professional Members](#) at the time of proposal submission. This must be done online. Join or begin the membership process well before the deadline.
- Awards will begin July 1, 2023.

Background and Purpose

As the American Heart Association approaches its 100-year anniversary, the importance of bringing novel approaches to address critical gaps in the health and well-being of all cannot be overstated. In recognition of this pending anniversary and the need to foster solutions in these areas, AHA's Board of Directors allocated additional one-time research funding to support innovative research initiatives to address these gaps. AHA's Second Century Implementation Science Award will support early and mid-career investigators proposing innovative implementation science

studies that align with AHA's mission and provide optimal approaches to improving public health.

According to the [National Institutes of Health \(NIH\)](#), implementation research is "the scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings in order to improve patient outcomes and benefit population health."

The [World Health Organization \(WHO\)](#) describes implementation research as a form of research that "addresses implementation bottlenecks, identifies optimal approaches for a particular setting, and promotes the uptake of research findings: Ultimately, it leads to improved health care and its delivery." The WHO identifies four notable characteristics of implementation research: it is systematic, multidisciplinary, contextual, and complex. More broadly, implementation research has been defined as "the scientific inquiry into questions concerning implementation – the act of carrying an intention into effect, which in health research can be policies, programs, or individual practices (collectively called interventions).

- At the time of proposal submission, the applicant must hold an MD, PhD, DO, DVM, DDS, or equivalent post-baccalaureate doctoral degree.
- An applicant must hold a faculty/staff position up to and including the rank of associate professor (or equivalent).
- Full professors are not eligible to apply.
- The awardee must devote at least 10% effort to this award.

Budget

\$133,333 per year including 10% institutional indirect costs.

The award may be used for salary and fringe benefits of the principal investigator, collaborating investigator(s), and other participants with faculty appointments, consistent with percent effort, and for project-related expenses, such as salaries of technical personnel essential to the conduct of the project, supplies, equipment, computers/electronics, travel (including international travel), volunteer subject costs, data management, and publication costs, etc.

Award Duration: Three years. No-cost extensions are not allowed, and the awards are non-renewable.

Total Award Amount: \$400,000

Restrictions and other award characteristics:

- An applicant may submit only one AHA Second Century Award proposal (either to the AHA's Second Century Implementation Science Award [THIS MECHANISM] OR the AHA's Second Century Early Faculty Independence Award)
- Strategically Focused Research Network and/or Health Equity Research Network personnel may also hold individual AHA awards, including an AHA Second Century Award.
- An awardee of this initiative may also hold an AHA Collaborative Sciences Award, Career Development Award, Innovative Project Award, Transformational Project Award, Established Investigator Award, or AHA Institutional Research Enhancement Award, and may be the program director or sponsor on an AHA Institutional Award for Undergraduate Training.

Peer Review

Peer review for this program will be conducted using a [distributed peer review approach](#) (Merrifield and Saari, *Astronomy and Geophysics*, 50, 4.2, 2009). This is also known as the [Mechanism Design Proposal Review Process](#).

Distributed peer review relies on the principles of a traditional peer review panel: academic integrity, rigor, transparency, and a desire to advance the best science. As opposed to traditional peer review, distributed peer review capitalizes on the expertise of the applicant pool and incentivizes timely review in fairness to all applicants. Additionally, this peer review mechanism exposes applicants to new ideas and could foster new potential collaborations.

All applicants who submit a proposal will be required to serve as a peer reviewer within this program and will be assigned 6–9 proposals for review. By agreeing to the program terms at the time of proposal submission, the principal investigator is concurrently agreeing to serve as a peer reviewer within this program and meet all peer review expectations and requirements. Principal investigators will declare conflicts of interest and will only be assigned proposals for which they do not have an institutional or individual conflict; PIs (reviewers) are bound by all other requirements associated with peer review. PIs will be provided ~30 days to complete review and scoring of the proposals to which they are assigned.

Only peer reviewers who complete their assigned reviews and record their scores in a timely fashion will in turn have their own proposal evaluated for advancement. Brief written critiques to include bulleted strengths and weaknesses are required. Principal investigators who have not completed their reviews nor submitted their scores by the stated deadline will have their proposals withdrawn and returned as not in compliance with the program announcement, and they will not receive scores should any have been completed for their proposal. Peer review will require submission of scores using ProposalCentral; there will be no peer review panel discussions or meetings. All other [AHA Peer Review](#) processes apply.

Peer Review Scoring Criteria

To judge the merit of the proposal, reviewers will score proposals according to the following criteria. The AHA uses a 1-9 score scale and [AHA Peer Review Guidance \(PDF\)](#). Reviewers are required to provide brief, bulleted written feedback on each proposal reviewed.

Non-Scientist Summary

AHA Mission: *To be a relentless force for a world of longer, healthier lives.*

- How well written is the Non-Scientist Summary in explaining to a non-scientist audience the research proposed and its importance?
- Does the Non-Scientist Summary adequately explain the major health problem being addressed by this study?
- Does it provide specific questions and how the projects will address them?
- Does it provide information on the overall impact of this work and the potential advances in the field?
- Does it relay how the proposal supports the mission of the AHA?

Research Plan

- Investigator and Environment:

Investigator (applicant): Is the investigator appropriately trained, productive, and well suited to carry out this work? Is the work proposed appropriate to the experience level of the principal investigator (applicant) and other researchers? Does the investigative team bring complementary and integrated expertise to the project (if applicable)? Does the investigator have a record of diligence, commitment, and productivity that warrant support?

Environment: Does the environment in which the work will be done contribute to the probability of success? Does the proposal benefit from unique features of the investigative environment or subject populations, or employ useful collaborative arrangements?

- Significance:

Does this study address an important problem in implementation research that is a barrier to a world of longer, healthier lives? Does the science accelerate the discovery, interpretation, and application of scientific knowledge to enhance and treat cardiovascular and brain health? If the aims of the proposal are achieved, how will scientific knowledge or clinical practice be advanced? What will be the effect of these studies on the concepts, methods and technologies that drive this field?

- Approach:

Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, well-reasoned and feasible (as determined by preliminary data) and appropriate to the aims of the proposal? The assessment of preliminary data should be put into perspective so that bold new ideas and risk-taking by investigators are encouraged rather than stymied. Does the applicant acknowledge potential challenges and problem areas and consider alternative tactics and mitigation?

For all proposals that include vertebrate animals or human subjects, applicants must explain how relevant biological variables, such as sex and age, are factored into the research design, analysis, and reporting. Furthermore, strong justification from the scientific literature, preliminary data, or other relevant considerations must be provided for proposals proposing to study only one sex or a specific age group.

- Innovation:

Is the proposal original and innovative? For example: Does the proposal challenge existing paradigms and address an innovative hypothesis or critical barrier to progress in the field? Does the proposal develop or employ novel concepts, approaches, methodologies, tools, or technologies for this area?

- Impact:

How does this proposal ensure that the resulting award will produce significant impact to the field? Proposals for research funding will be assessed for their potential impact on the AHA Mission, and on the applicant's ability to effectively describe the proposal and its potential outcomes to non-scientists.