

2025 Implementation Science Award

Key Dates

RFP posted: ProposalCentral open: Proposal deadline: Awards notification **Award start date:** Nov. 5, 2024 Nov. 11, 2024 Wed., Feb. 5, 2025 March 2025 **April 1, 2025**

Background and Purpose

AHA's 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. Implementation science uses evidence-based theories and frameworks to identify strategies that facilitate the uptake of evidence to improve health. Implementation science studies can use qualitative studies, mixed-methods, quasi-experimental designs, randomized controlled trials, and community-based participatory research (Brownson, RC, Colditz, GA, Proctor, EK. Dissemination and Implementation Research in Health: Translating Science to Practice. Oxford University Press; 2012 https://doi.org/10.1093/acprof:oso/9780199751877.001.0001).

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).

Applicants are encouraged to review the journal Implementation Science for

additional examples and projects in practice.

Implementation science is not basic science research, preclinical/translational research, and/or studies involving animal models. It is also not dissemination research or quality improvement. Projects should consider the full range on influences on clinical practices as well as strategies used to implement evidence-based practices.

Only proposed projects that utilize implementation science strategies noted above will be accepted.

Eligibility

- 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 a maximum of one Implementation Science Award per deadline.
- Strategically Focused Research Network and/or Health Equity Research Network personnel may also hold individual AHA awards.
- Applicants to this program may also submit proposals for other AHA research award programs; an applicant may submit only one investigator-based application (Career Development Award, Established Investigator Award, or AHA Institutional Research Enhancement Award) per fiscal year.
- 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. However, the projects must have clearly distinct aims, with no scientific or budgetary overlap.

Peer Review Criteria

Peer review for this program will be conducted using a distributed peer review approach (PDF) (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 agrees concurrently to serve as a peer reviewer within this program and meet all peer review expectations and requirements. Principal investigators must 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:

The American Heart Association DOES NOT permit the use of a large language model (LLM – e.g. ChatGPT) or an artificial intelligence tool to generate and/or edit content in peer review critiques. Uploading of any portion of a research proposal into a large language model or an artificial intelligence tool to assist in writing a critique of the proposal is explicitly prohibited as it is a violation of the AHA's Peer Reviewer Certification Statement (PDF) (to include confidentiality, non-disclosure, and conflict of interest).

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. 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 nonscientist 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 project 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?

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? All applicants (excluding fellows) are to include a statement in the Personal Statement section of their biographical sketch that explicitly states how they contribute to a safe, inclusive, and diverse work environment.

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 application of scientific knowledge to enhance and treat cardiovascular and/or 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? Does the applicant acknowledge potential challenges and problem areas and consider alternative tactics and mitigation?

Innovation:

Is the proposal original and innovative? Per the NIH definition of implementation science, does the project have the potential to improve patient outcomes and benefit population health? 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 nonscientists.

Required Documents

Applicant:

- 1. Proposed Research Plan (8 pages)
- 2. Applicant Biosketch (5 pages)
- 3. Research Project Environment Form (DOC) (2 pages)

- 4. Budget Justification Form (DOC) (2 pages)
- 5. Literature Cited (4 pages)
- 6. Vertebrate Animal Subjects (if applicable, no page limit)

Third Party Personnel:

- 1. Collaborating Investigator's Biosketch (5 pages)
- 2. Collaborating Investigator's Letter (5 pages)
- 3. Consultant's Letter (5 pages)

Proposals will also require the following items to be entered into form fields in ProposalCentral. They are listed here for applicant awareness:

- Abstract
- Non-Scientist Summary
- Budget