2024 Collaborative Sciences Award

Important Notes:

- 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 at AHA Application Resources page.
- All proposals must be submitted electronically via ProposalCentral. The system will open eight 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 (PDF). All submissions require a signature from a designated institutional representative.
- Applicants must be AHA Professional Members at the time of application. This must be done online. Join or begin the membership process well before the deadline.

Deadline for Required Pre-proposal:

Wednesday, October 4, 2023

Full applications by invitation only are due by Wednesday, January 10, 2024 Award Start Date: April 1, 2024

Purpose

To foster innovative collaborative approaches to research projects that propose novel pairings of investigators from at least two broadly disparate disciplines. The proposal must focus on the collaborative relationship, such that the scientific objectives could not be achieved without the efforts of at least two coprincipal investigators and their respective disciplines.

The combination and integration of studies may be inclusive of basic, clinical, population, behavioral, and/or translational research. Projects must include at least one Co-PI from a field outside cardiovascular and cerebrovascular disease.

This award is also intended to foster collaboration between established and early- or mid-career investigators.

Applications by existing collaborators are permitted, provided that the proposal is for a new and novel idea or approach that has not been funded before.

Eligibility

An application must be submitted jointly by at least two co-principal investigators, but no more than four.

- At least one Co-PI must work in cardiovascular or cerebrovascular-related research.
- At least one Co-PI must work in a divergent/disparate discipline (e.g. engineering, computer science, chemistry, mathematics, psychology, health law, etc.) and/or without prior focus in cardiovascular or cerebrovascular-related research.
- At least one Co-PI must be an early-career (assistant professor or equivalent) or mid-career (associate professor or equivalent) investigator.
- Co-PIs must each hold faculty/staff appointments.
- Co-PIs must be independent researchers (i.e. must meet their institutions' eligibility to apply for independent awards). This award is not intended for individuals in research training or fellowship positions.
- Co-PIs may be from the same institution, or from different institutions.
- Co-PIs must be from different disciplines and/or areas of expertise. For example: A collaboration between a clinician and a basic scientist or other collaboration that would not arise otherwise (organically).
- Examples of partnerships that have been funded:
 - A materials scientist with no previous cardiovascular or cerebrovascular-related research collaborating with an interventional cardiac electrophysiologist;
 - A synthetic biologist collaborating with a cardiac biologist;
 - A chemist specializing in RNA molecular biology collaborating with a practicing neonatologist with research in cell signaling, hemostasis and thrombosis;
 - A kidney disease/ciliopathy researcher collaborating with a clinical researcher in genetic causes of bicuspid aortic valve disease and a basic science researcher also studying genetic valvular diseases.
- The applicants should adequately convey that they are of equal stature in the project.
- If more than three co-PIs are proposed, the applicants should provide clear evidence that they are equal co-PIs. If this will not be the case, then the

applicants should classify additional personnel as collaborating investigators or consultants.

- Each Co-PI must hold an M.D., Ph.D., D.O., D.D.S., D.V.M. or equivalent post-baccalaureate terminal (highest-level) degree in his/her discipline.
- One of the Co-PIs' institutions must be designated as the institution of record, agreeing to sponsor the application and accept award payments and ensuring that annual progress reports and expenditure reports are submitted to AHA.

Percent Effort

While no minimum percent effort is specified, the Co-PIs must demonstrate that adequate time will be devoted to ensuring the successful completion of the proposed project.

Budget

\$250,000 per year, including 10% institutional indirect costs.

The award may be used for salary and fringe benefits of the Co-principal investigators, 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

Total Award Amount: \$750,000

Required Pre-proposal

A pre-proposal (letter of intent) is required to ensure responsiveness to the novel, collaborative nature of this program. Only applicants who are invited by the AHA will submit a full proposal.

Applicants to the Collaborative Sciences Award program will submit one application jointly.

• Applicants must determine which of their respective institutions will administer the project (if applicants are from more than one institution).

The Co-Principal Investigator from the institution that will administer the award should initiate the application process. The investigator who initiates the application will be considered the administrative Co-Principal Investigator on the application.

- The Co-Principal Investigator who initiates the application in ProposalCentral must add the names of the other Co-Principal Investigator(s) in the application. The Collaborative Sciences Team is limited to four Co-Principal Investigators.
- Each Co-Principal Investigator will receive an email invitation to join the application. This email is specific to the receiving investigator and should not be shared. A Co-Principal Investigator who does not receive an email from ProposalCentral should call 214-360-6107 (option 1).
- Once joined to the application, each Co-Principal Investigator must review and update their own Advanced Profile and upload a biosketch. Each biosketch has a 5-page limit.
- The initiating Co-PI will upload a pre-proposal (three pages maximum) describing an innovative, collaborative approach to research that incorporates a novel grouping of investigators from at least two widely disparate disciplines and/or areas of expertise. The written summary must focus on the collaborative relationship of the investigators, such that the scientific objectives cannot be achieved without the efforts of at least two co-principal investigators and their respective disciplines and expertise. The combination and integration of studies may be inclusive of basic, clinical, population, behavioral, and/or translational research.

The novel relationship and proposed collaboration of investigators from at least two widely disparate disciplines will be given the most weight in evaluating the pre-proposal to determine which teams will be invited to submit full applications.

Pre-proposals to the Collaborative Sciences Award will be assigned to a group of multidisciplinary reviewers and may be reviewed by someone working in a related area and/or experts directly related to an applicant's science area. The pre-proposal should be appropriate for reviewers who have a broad knowledge of the scientific area.

Applicants are also required to complete the following sections in ProposalCentral:

- Project Summary Write a concise description or abstract describing the work proposed. This should be as brief as possible, since you also will be required to upload a separate LOI document. Note: This field will not accept any special characters or keystrokes (e.g., β, π, etc.).
- Non-Scientist Summary Enter a description of the project that is written to be understood by non-scientists. This information may be reviewed by people who do not have scientific or medical backgrounds. Be clear and avoid technical and scientific terms, when possible. When formulating your lay summary, it might help to imagine that you are explaining your work to a new acquaintance who does not work in the science field. NOTE: It is incumbent upon the applicant to make a clear link between the project and the mission of the AHA.

Restrictions

- An applicant may be the Co-PI on only one Collaborative Sciences Award proposal per deadline.
- A Collaborative Sciences awardee may also apply for or hold another AHA research award (e.g., Established Investigator Award, Innovative Project Award, Transformational Project Award, AHA Institutional Research Enhancement Award, or Career Development Award) and may be the program director or sponsor on an AHA Institutional Undergraduate Fellowship Program award.
- Strategically Focused Research Network personnel may hold individual AHA awards, including a Collaborative Sciences Award.
- Awards are not intended to supplement or duplicate currently funded work. Rather, it is expected that submitted applications will describe projects that are clearly distinct from ongoing research activities. Minor variations from existing research projects are not sufficient to constitute independent and distinct projects.

International Applicants - Did you know?

For ALL research programs – including fellowships – applicants are not required to reside in the United States for any period before applying for AHA funding. However, AHA research awards are limited to U.S.-based non-profit institutions, including medical, osteopathic, and dental schools, veterinary schools, schools of public health, pharmacy schools, nursing schools, universities and colleges, public and voluntary hospitals and others that can demonstrate the ability to conduct the proposed research. Acceptable visa types and additional information may be found <u>here</u>.

Use of Large Language Models and Generative AI in Proposals & Peer Review

Applicants:

The AHA permits the use of a large language model (LLM – e.g. ChatGPT) or a generative artificial intelligence tool to create and/or edit content in research proposals submitted for funding. This information must be disclosed at the time of submission. Disclosure of this information does not impact peer review. Should this information not be disclosed accurately, and use of these tools is identified, the proposal may be administratively withdrawn.

Peer Reviewers:

The AHA 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 any portion of a research proposal into a large language model (LLM – e.g. ChatGPT) 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 (to include confidentiality, nondisclosure, and conflict of interest).

Biosketch Addition: Inclusive, safe, diverse environment

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. In addition, mentors on Fellowships, Career Development Awards, and Diversity Supplements should complete recognized training specific to sexual and gender-based harassment.

Change to AHA Open Data Policy

For awards beginning in FY 23-24, the AHA has modified its Open Data Policy to align with the NIH's new timeline for data sharing, effective for proposals submitted to the AHA after July 1, 2023. More on AHA Open Science Policies can be found <u>here</u>.

Revised AHA Open Data Policy: *The AHA requires certain applicants to include a data sharing plan with the proposal. Any factual data that is needed for independent verification of research results must be made freely and publicly available in an AHA-approved repository as soon as possible, and no later than*

the time of an associated publication or the end of the award period (and any no-cost extension), whichever comes first.

* Existing awards are subject to the policy in place when the award agreement was signed. If a new award agreement is required (e.g., change of PI, change of institution) award is subject to policies in place at the time the agreement is signed.

Supporting Rheumatic Heart Disease Research

The AHA is helping to support a broader approach to research funding focused on Rheumatic Heart Disease. To that effect, the AHA is committing to funding research in this specific area across all scientific disciplines (basic, clinical, and population) within any current AHA programs. No additional pre-proposal or proposal materials are necessary outside of individual AHA program criteria; awardees will be designated from the existing applicant pool within each program.

Peer Review Criteria for the Collaborative Sciences Award (invited full proposals)

Contacting AHA peer reviewers concerning your application is deemed a form of scientific misconduct and will result in the removal of your application from funding consideration and institutional notification of ethical concerns.

To judge the merit of the application, reviewers will comment on the following criteria.

The proposal must expand on the pre-proposal (letter of intent) detailing the collaborative relationship, such that the scientific objectives cannot be achieved without the efforts of at least two co-principal investigators and their respective disciplines. The combination and integration of studies may be inclusive of basic, clinical, population, behavioral, and/or translational research.

1. Collaboration: It is incumbent upon the applicants to convey the highly novel nature of their relationship. Are the investigators from at least two widely disparate disciplines and/or areas of expertise? How does the proposed collaborative relationship strengthen or weaken the proposal? Does the proposal focus on the collaborative relationship, such that the proposed objectives could not be reached without the efforts of both principal

investigators and both (or all) disciplines? Does the effort of each Co-PI reflect proper equity in the project?

2. Investigators and Environment:

Investigators: Does the investigative team bring diverse, complementary, and integrated expertise to the project? Are the investigators appropriately trained and well suited to carry out this work? Is the work proposed appropriate to the experience levels of the principal investigators and other researchers? How does the investigators' previous work (which is not required to be directly related to cardiovascular or cerebrovascular disease) strengthen and ensure the project's success?

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(s), or subject populations, or employ useful collaborative arrangements?

3. Significance: Does this study address an important problem broadly related to cardiovascular or cerebrovascular disease? If the aims of the application 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?

4. Approach: Are the conceptual framework, design, methods and analyses adequately developed, well-integrated, well-reasoned, feasible (as determined by preliminary data), and appropriate to the aims of the proposal? Is the project scope likely to be completed within the award period? Does the applicant acknowledge potential problem areas and consider alternative tactics?

5. 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? Will the project foster or employ novel concepts, approaches, methodologies, tools or technologies for this area? How does the diversity of disciplines and/or expertise of the collaborators make the innovation possible?

6. Impact: Applications 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. This potential impact assessment will be based primarily on the Summary for Non-scientists. This

assessment will be factored into the Impact peer review criterion, which will account for 5-10% of the overall priority score.