2025 Collaborative Sciences Award

Key Dates

RFP posted:	July 2, 2024
ProposalCentral open:	July 29, 2024
Pre-proposal deadline:	Thur., Oct. 3, 2024
Invitation to submit full proposal:	Nov. 2024
Invited full proposal deadline:	Thur., Jan 9, 2025
Award notification:	March 2025
Award start:	**April 1, 2025**

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 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. 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.
  Within this award, additional collaboration money has been designated through the AHA/VIVA Physician Research Award and by the California Walnut Commission. See co-funded opportunities details.

Eligibility

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

All co-PIs must be AHA Professional Members at the time of pre-proposal submission.

- 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

- Award Duration: Three years
- Total Award Amount: $1,000,000
- 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.
- Indirect costs are limited to 10 percent of the annual award total
- AHA does **not** require use of the NIH salary cap.

Required Pre-proposal

A pre-proposal is required to ensure responsiveness to the novel, collaborative nature of this program (see below for instructions). 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. See AHA biosketch instructions for additional information that the AHA requires. Each biosketch has a 5-page limit.

Pre-proposal Instructions:

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:

- **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 a sponsor on an AHA Institutional Award for Undergraduate Student Training.
- 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.

Peer Review Criteria

An applicant is prohibited from contacting AHA peer reviewers. This is a form of scientific misconduct and will result in the removal of the application from funding consideration and institutional notification of misconduct.

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 (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, non-disclosure, and conflict of interest).

The AHA reserves the right to an initial triage, whereby a minimum of half of the submissions may be triaged.

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

The proposal must expand on the pre-proposal 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.