

# Collaborative Sciences Award

## Program Description, Eligibility and Peer Review Criteria

**Letter of Intent Due: November 1, 2017**

**Full Application Due\*: February 5, 2018**

Award Activation: July 1, 2018

*\* Only applicants who submit a Letter of Intent and are invited to apply may submit a full application. The AHA anticipates funding up to six Collaborative Sciences Awards in 2018.*

*Applications must be received no later than 5 p.m. CDT on the deadline date. The system will shut down at 5 p.m. CDT. Early submission is encouraged. Your institutional Grants Officer (GO) has the final responsibility of submitting your completed application to the American Heart Association. Check with your GO for his/her internal deadline.*

### Statement of 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 disease and stroke.**

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.

### Science Focus

Multidisciplinary research broadly related to cardiovascular function, cardiovascular disease, and stroke, or to related clinical, basic science, bioengineering, biotechnology, or public health problems.

### Disciplines

Proposals are encouraged from all basic science disciplines as well as epidemiological, behavioral, community and clinical investigations that bear on cardiovascular and stroke problems.

AHA awards are open to the array of academic and health professionals. This includes but is not limited to all academic disciplines (biology, chemistry, engineering, mathematics, technology,

physics, etc.) and all health-related professions (physicians, nurses, advanced practice nurses, pharmacists, dentists, physical and occupational therapists, statisticians, nutritionists, behavioral scientists, health attorneys, engineers, etc.).

AHA maintains dedicated Peer Review Committees by program type and subject.

AHA strongly encourages applications by women, underrepresented minorities in the sciences, those who have experienced diverse and non-traditional career trajectories, and those whose research has previously been outside of cardiovascular science.

## Target Audience

An application must be submitted jointly by at least two co-principal investigators.

- **At least one Co-PI must work in cardiovascular or stroke-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 stroke-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 stroke-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 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 a 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 successful completion of the proposed project.

## Citizenship

At the *time of application*, each co-PI must have one of the following designations:

- U.S. citizen
- Permanent resident
- Pending permanent resident. Applicant must have applied for permanent residency and have filed form I-485 with the U.S. Citizenship and Immigration Services and have received authorization to legally remain in the U.S. (having filed an Application for Employment form I-765)
- E-3 Visa - specialty occupation worker
- H1-B Visa - temporary worker in a specialty occupation
- F-1 - Student Visa - temporary worker in a specialty occupation
- J-1 Visa - exchange visitor
- O-1 Visa - temporary worker with extraordinary abilities in the sciences
- TN Visa - NAFTA Professional
- G-4 Visa - family member of employee of international organizations and NATO

Awardee must meet American Heart Association citizenship criteria throughout the duration of the award.

## Eligible Sponsoring Institution

American Heart Association 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.

Applications will not be accepted for work with funding to be administered through any federal institution or work to be performed by a federal employee, except for Veterans Administration employees.

## 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, and publication costs, etc.

**Award Duration:** Three years

**Total Award Amount:** \$750,000

## Letter of Intent (LOI) - Required

**A letter of intent is required to ensure responsiveness to the novel, collaborative nature of this program.** AHA will contact the applicants with permission to submit the full application. Only invited applicants will submit a full application.

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

### Required Documents for the Letter of Intent:

- A letter (five pages maximum) describing an innovative, collaborative approach to research which 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.
- A biosketch from each of the proposed Co-Principal Investigators.

The Letter of Intent and biosketches must be submitted via Grants@Heart before the posted deadline. Each Co-Principal Investigator must join the application and complete the Advanced Profile section of the application. An applicant may be a Co-Principal Investigator on **ONLY ONE** Collaborative Sciences Award application.

## Peer Review Criteria (for invited applicants)

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. Please be sure that you fully address these in your proposal.

- The proposal must expand on the 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 and expertise. 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 scientific objectives could not be reached without the efforts of both principal investigators and both (or al) disciplines? Does the effort of each Co-PI reflect proper equity in the project?
  2. **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 (may not be directly related to cardiovascular disease or stroke) strengthen and ensure the project's success?
  3. **Significance:** Does this study address an important problem broadly related to cardiovascular disease or stroke? 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 project? 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 project original and innovative? For example: Does the project 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. **Environment:** Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed studies benefit from unique features of the scientific environment, or subject populations, or employ useful collaborative arrangements? Is there evidence of institutional support?
7. **Impact:** How does this project relate to and support the mission of the American Heart Association to building healthier lives, free of cardiovascular diseases and stroke?

## Restrictions

- An applicant may be the Co-PI on only one Collaborative Sciences Award application per deadline.
- A Collaborative Sciences awardee may also apply for or hold another AHA research award (e.g., Established Investigator Award, Innovative Project Award or Transformational Project Award, or Career Development Award), and may be the program director or sponsor on an AHA Institutional Research Enhancement Award (AIREA).
- Strategically Focused Research Network personnel may hold individual AHA awards, including a Collaborative Sciences Award.
- A Fellow-to-Faculty Transition Award recipient may apply for and receive a Collaborative Science Award during the faculty phase. The awardee may request only project support from the Collaborative Science Award, since the Fellow-to-Faculty Transition Award provides significant salary support.
- 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.

## Supporting Documentation for Invited Full Application to Collaborative Sciences Award

### Principal Investigator

- Research Plan (12 pages)
- Biosketch/Bibliography (5 pages per Co-PI)
- Research Project Environment - Word template (2 pages per Co-PI)
- Budget Justification - Word template (2 pages)
- Literature Cited (no page limit)
- Publications or Abstracts (3 per Co-PI)

## Third Party Personnel

- Collaborating Investigator Biosketch/Bibliography
- Collaborating Investigator's Letter
- Consultant's Letter