

Enduring Hearts and AHA Collaborative Science Award

Purpose

These awards provide support for investigators who are **committed to conducting research directly related to improving the life expectancy and quality of life of pediatric heart transplant recipients**. This funding opportunity will further these areas of focus by offering competitive research grants in basic, clinical, population, and/or translational research via **Collaborative Sciences Awards**.

Research Priorities

Improving longevity and quality of post-heart transplant life by reducing/eliminating rejection and Cardiac Allograft Vasculopathy (CAV) by:

1. Integrating accurate non-invasive surveillance methods, technologies and biomarkers for care strategies, technologies, and methods towards EARLIER identification of the onset of acute cellular rejection (ACR), antibody-mediated rejection (AMR) and/or cardiac allograft vasculopathy (CAV)
2. Development of therapeutics and/or therapeutic strategies for acute cellular rejection (ACR), antibody-mediated rejection (AMR) and/or cardiac allograft vasculopathy (CAV)
3. Developing novel immunotherapies, identification of novel targets for immunosuppression, improving methods for monitoring and determining the optimal level of immunosuppression to prevent ACR, AMR, and/or CAV while reducing/eliminating secondary conditions that may arise due to immunosuppression (renal; infectious)
4. Development and validation of better experimental models to study the underlying mechanisms, therapies, and/or prevention of CAV
5. Developing more robust evidence for person-centered post-transplant care guidelines, including nutrition and exercise guidelines, and effective delivery of person-centered care.
6. Development of evidence-based strategies to improve the longevity of adolescent recipients.

Additional consideration will be given to applications that: develop new technologies; include clinical research; include feasible clinical translations(s) to pediatric heart recipients.

Objectives of the Collaborative Sciences Award

To foster innovative, collaborative approaches to research projects that propose novel pairings of investigators from at least two broadly different disciplines and foster collaboration between established and early- or mid-career investigators.

- The proposal must focus on the collaborative relationships, 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. Due to the focus on different science disciplines, **projects must include at least one Co-PI from a field directly related to pediatric heart transplantation and one Co-PI from a field not directly related to clinical pediatric heart transplantation research.**
- This award is also intended to **foster collaborations 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.

Disciplines

Proposals are encouraged from all basic science disciplines as well as epidemiological, behavioral, community and clinical investigations that bear on pediatric heart transplantation. 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, immunology, physiology, etc.) and all health-related professions (physicians, nurses, advanced practice nurses, pharmacists, dentists, physical and occupational therapists, statisticians, nutritionists, behavioral scientists, health attorneys, biomedical engineers, psychologists, etc.). We strongly encourage applications from women, candidates from racial and ethnic groups underrepresented in the sciences, those who have experienced diverse and non-traditional career trajectories, and those whose research has previously been outside of cardiovascular science.

Clinical, translational, population, and basic scientists are encouraged to apply. AHA maintains dedicated Peer Review Committees by award type and subject. The extent to which the focus of the project is related to cardiovascular and/or cerebrovascular diseases is an important factor that will be considered. The applicant is not required to be a part of a cardiovascular/cerebrovascular-oriented laboratory, clinic, or department.

AHA strongly encourages applications by women, underrepresented minorities in the sciences, and those who have experienced varied and non-traditional career trajectories.

Target Audience

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 research directly related to pediatric heart transplantation.**

- **At least one Co-PI must work in a different discipline** (e.g. engineering, computer science, chemistry, mathematics, psychology, health law, genomics/genetics, etc.) and/or without prior focus in clinical pediatric heart transplantation.
- **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 via this mechanism in the past:

- A materials scientist with no previous cardiovascular or stroke-related research collaborating with an interventional pediatric 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 determinants of immunosuppressive medication-mediated renal disease and a basic science researcher also studying genetic kidney diseases.
- 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 MD, PhD, DO, DDS, DVM 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.

Citizenship

Awardees must have one of the following designations:

- U.S. citizen
- Permanent resident
- Pending permanent resident (must have filed Form I-485 for permanent resident status and obtained an I-797C Notice of Action that the application has been received by USCIS and case is pending)
- E-3 Visa - specialty occupation worker
- G-4 Visa - family member of an international organization employee
- H1-B Visa - temporary worker in a specialty occupation
- J-1 Visa - exchange visitor (for non-training awards, you must have obtained an H-1B or equivalent by the award activation date)
- O-1 Visa - temporary worker with extraordinary abilities in the sciences
- TN Visa - NAFTA Professional
- DACA - Deferred Action for Childhood Arrivals

One of the designations listed above must be maintained throughout the duration of the award.

Note: it is acceptable for one Co-PI on the proposal to be a Canadian citizen/resident. However, the primary Co-PI must be a faculty/staff member of a U.S.-based non-profit (and non-federal) eligible institution as stated below.

Eligible Sponsoring Institution

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. The primary Co-PI must be from an institution that fulfills this definition.

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

Up to \$227,273 per year, including 10% institutional indirect costs.

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

Award Duration: Three years

Total Award Amount: \$681,819

Letter of Intent

A letter of intent is required to ensure responsiveness to the novel, collaborative nature of this program and that the applicants meet the above-specified requirements of the Collaborative Science Award. AHA will contact the applicants who will be invited to submit the full application. Only invited applicants will submit a full application.

The responsiveness to this RFA and the research priorities listed, plus the novel relationship and proposed collaboration of investigators from at least two different 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 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.
- A biosketch from each of the proposed Co-Principal Investigators (five-page maximum, each).

The Letter of Intent and biosketches must be submitted before the posted deadline. An applicant may be a Co-Principal Investigator on ONLY ONE Collaborative Sciences Award application.

Letters of Intent (LOIs) are required and must be submitted through [ProposalCentral](#).

For specific Application Instructions, visit the [AHA Application Instructions \(PDF\)](#).

LOI Deadline: Thursday, September 30, 2021, 3 p.m. Central Time

The system will shut down at 3 pm Central Time. Early submission is encouraged.

The applicant has the final responsibility of submitting the completed application in ProposalCentral.