American Heart Association

Cardiac Arrest Research Team (CART) Network

Request for Proposals

KEY DATES

RFP Posted:	Thursday, October 16, 2025
Required Pre-Proposal Deadline:	Tuesday, December 16, 2025 (before 3 PM CST)
Invitation to Full Application:	Monday, February 2, 2026
Application Deadline:	Tuesday, March 17, 2026 (before 3 PM CDT)
Notification of Awards:	June 2026
Award Start Date:	Wednesday, July 1, 2026

IMPORTANT NOTES

Proposals must be received no later than 3 p.m. Central Time on the deadline date. Early submission is encouraged. The American Heart Association does not accept late proposal submissions, grant extension requests, or have an appeals process.

- Before beginning an application, see the AHA Application Resources page for requirements that apply to all AHA research awards. Also view AHA's research Policies and Statements.
- Proposals must be submitted electronically via ProposalCentral. The system will open eight weeks prior to the application deadline to complete the proposal and upload required documents. Applicant can create required documents in advance; refer to the AHA Application Instructions (PDF). All submissions require the signature of a designated institutional representative.
- Applicants must be AHA Professional Members at the time of proposal submission. Join or renew when preparing an application in ProposalCentral, or by phone at +1-888-242-2453 or 972-349-5803. Membership processing may take 3-5 days; do not wait until the application deadline to renew or join. The AHA expects all mentors associated with training/mentored research awards to maintain active AHA membership, as well.

OVERVIEW

The American Heart Association ("the Association" or "American Heart") is pleased to announce a coordinated Cardiac Arrest funding initiative with the Heart and Stroke Foundation of Canada ("Heart & Stroke") and its funding partners.

Through this initiative, the Association and Heart & Stroke will establish a cross-border, collaborative research network (the CART Network) to address critical gaps in cardiac

arrest and its consequences. American Heart is committing $3.4 million USD to fund two (2) U.S.-based Cardiac Arrest Research Team ("CART" or "Research Team") grants in the priority research areas described below. Similarly, Heart & Stroke is committing $5 million CAD to fund three (3) Canada-based teams in the same topic areas. The five (5) awarded U.S. and Canadian teams collectively will utilize the CART Network structure to optimize impact though sharing of expertise, resources, and approaches, and will be advised by a common Expert Advisory Panel.

This announcement provides information for U.S.-based investigators to apply for the American Heart funding opportunity.

Pre-Proposals are required and must be submitted electronically via ProposalCentral. Please refer to the pre-proposal instruction section for information.

BACKGROUND

Every year in the United States, approximately 356,000 people experience an out-of-hospital cardiac arrest (OHCA) [1]. In Canada, the number is estimated to be around 60,000 annually [2]. The survival rate for OHCA remains low, at approximately 10%, meaning that 9 out of 10 individuals who suffer an OHCA do not survive [1].

Data for in-hospital cardiac arrest (IHCA) is more limited, but it is estimated that around 292,000 IHCA events occur annually in the U.S., with a survival rate of approximately 25% [1]. Despite decades of research and public health efforts, these survival rates have remained relatively unchanged, underscoring the urgent need for innovative and collaborative research to improve outcomes.

Citations
[1] Bray et al Circulation 150(9), 2024; Grasner et al Resuscitation 201, 2024
[2] Canadian Institute for Health Information. Quick Stats.

PURPOSE

The purpose of this funding opportunity is to establish a cross-border, team-based, network approach (i.e., the CART Network) to address the most pressing questions and evidence gaps in cardiac arrest, with the aim of improving prediction and early detection of cardiac arrest, increasing survival rates, and optimizing survivor health outcomes and quality of life outcomes for all affected.

To achieve this, the Research Teams will focus on one of three priority research areas:

1. Prediction and Early Detection of Cardiac Arrest;
2. Accelerate Response and Increase Survival of Cardiac Arrest; or
3. Optimize Brain Recovery After Cardiac Arrest.

In addition to the research projects, three required core activities ("cores") have been identified in this funding opportunity to support collaboration and leveraging of resources among the funded Research Teams and across the CART Network: (1) Data Sharing & Management; (2) Knowledge Mobilization; and (3) Training & Capacity Development (details below).

The CART Network teams are expected to bring together multi-institutional, multi-sectoral, and multi-disciplinary health research teams (e.g., researchers, clinicians, health care providers, people with lived experience (PWLE), policy makers, nonprofit organizations, and/or industry) to create and mobilize knowledge that will improve survival and optimize recovery of individuals who experience a cardiac arrest, their families and caregivers. The specific objectives of this funding opportunity are to:

- Drive research and innovation to improve the prediction and detection of cardiac arrest.
- Develop sustainable and effective knowledge mobilization of current evidence and new research results into practice to improve cardiac arrest response and survival rates.
- Optimize rehabilitation and recovery of cardiac arrest survivors by prioritizing neurological, neurocognitive and/or mental health needs along with physical function using best and wise practices to bridge the gaps between research results, better health outcomes, and equitable access to care.
- Build, foster and strengthen a health research workforce focused on cardiac arrest through high-quality, multidisciplinary training, experiential learning, career development and mentoring environments that actively engage trainees and researchers at all career stages.

The Heart Association believes that including individuals of all backgrounds is an essential component to driving its mission. We strongly encourage applications by individuals who have faced special challenges or obstacles to their careers and those who have experienced varied and non-traditional career trajectories.

The Association encourages applications from institutions that are AREA eligible (as defined by the NIH) or to partner with an AREA-eligible institution or another non-research-intensive institution.

Minimizing systemic barriers and improving our understanding of cardiac arrest is essential. This ensures that all individuals have timely and equitable access to new advances in cardiac arrest prediction and detection, appropriate and personalized interventions, and long-term holistic care and rehabilitation. Meaningful engagement of PWLE, along with the inclusion of social determinants and broader contexts for those who experience a cardiac arrest, is expected to support more impactful research. This will optimize health outcomes and improve knowledge use, helping to ensure equity in health, healthcare and rehabilitation for cardiac arrest survivors, as well as their family and caregivers.

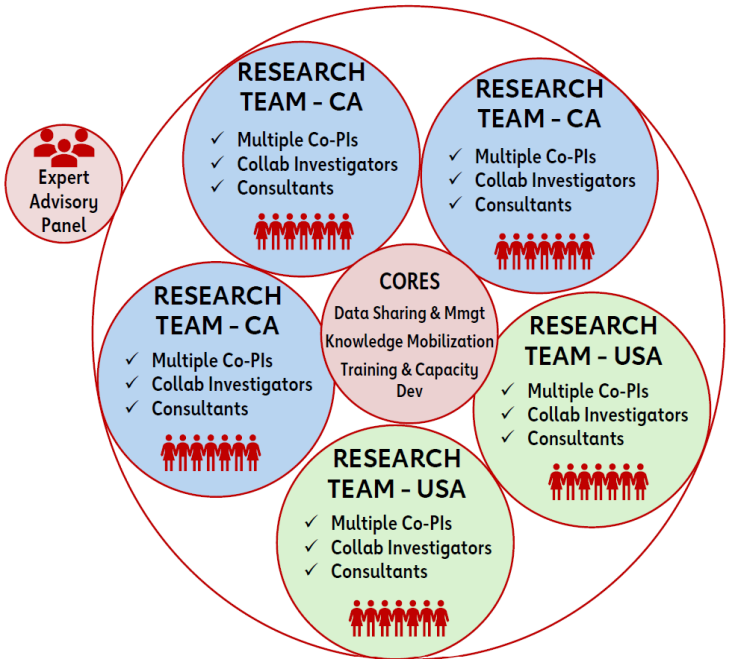

Figure 1. Visual representation of the CART network, which will include all Heart Association-funded US research teams and cores and all Heart & Stroke-funded Canadian research teams and cores, facilitated by an Expert Advisory Panel.

This current opportunity seeks to fund two (2) Research Teams, each within one of the identified priority research areas: Prediction and Early Detection of Cardiac Arrest, Accelerated Response and Increased Survival of Cardiac Arrest, and Optimization of Brain Recovery After Cardiac Arrest. Three additional Research Teams will be funded by the Heart and Stroke Foundation of Canada to establish the CART Network (Figure 1).

Three required "cores" will link the Research Teams together to support collaboration and leveraging of resources. Each Research Team must be interdisciplinary and include:

- an initiating Co-Principal Investigator (who is on faculty or staff at the sponsoring institution),
- a minimum of one (1) and maximum of three (3) additional Co-Principal Investigators, and
- a "Core Lead" for each of the three designated cores (Note that the designated Core Leads may also serve as co-principal investigators or collaborating investigators.)

Collaborating investigators and consultants may also be included on the Research Team, as appropriate.

The three (3) cores, each with a designated Lead, include: Data Sharing & Management; Knowledge Mobilization; and Training & Capacity Development (below).

Additional considerations for Research Teams include a PWLE-centered approach and/or a lifespan approach (below).

This competition seeks to fund two (2) interdisciplinary team grants with a total funding commitment of $3,400,000 USD (up to $1.7 million per awarded team). The maximum amount per team grant is $425,000 USD per year for a maximum of four (4) years.

Team Grant proposals will have a primary focus on one of the following priority research areas:

1. PREDICTION AND EARLY DETECTION OF CARDIAC ARREST: To advance the ability to better predict and/or support early detection of cardiac arrest in the community or within a hospital setting through advancing our understanding of the underlying causes and/or biological mechanisms;

2. ACCELERATE RESPONSE AND INCREASE SURVIVAL OF CARDIAC ARREST: To accelerate response and increase survival through the development of sustainable approaches that address the know-do gap for evidence use as well as the incorporation of new evidence to inform effective out-of-hospital and in-hospital cardiac arrest response (including neuroprotection and care standards); or,

3. OPTIMIZE BRAIN RECOVERY AFTER CARDIAC ARREST: To develop and implement evidence-based, equitable approaches to care, rehabilitation and recovery for cardiac arrest survivors that specifically address neurological, neurocognitive, and/or mental health outcomes. This approach will prioritize brain recovery as a core component of survivorship, while also supporting whole-body rehabilitation. A holistic approach that includes the needs of survivors, families, caregivers, and communities to improve long-term health outcomes and quality of life after a cardiac arrest is encouraged.

As part of the full proposal each Research Team will be expected to develop plans for each of the three cores noted above. The funded Research Teams are expected to collaborate and leverage the developed resources related to each core.

Data Sharing & Management: Team Grant applicants are required to develop a *Data Sharing and Management Plan* that coordinates the collection, standardization, use, sharing, linkage, and management of data within and across funded Research Teams. The Data Sharing and Management Plan is to include standardized data collection methods for cardiac arrest and resuscitation (*e.g.* Utstein style definitions[1]) and leverage existing provincial, national and/or international data registries and platforms. The Data Sharing and Management Plan should use the FAIR principles (Findable, Accessible, Interoperable, Reusable). Additional requirements related to data sharing are described below.

Knowledge Mobilization (KM): Team Grant applicants are required to develop a *KM Plan* detailing the proposed activities and including relevant involved groups and individuals (e.g., researchers, clinicians, health care providers, PWLE, policy makers, nonprofit organizations, industry). KM activities should aim to mobilize existing knowledge and co-create new knowledge into better care policies, practices, procedures, products and services for cardiac arrest survivors, their families and caregivers. Applicants are also encouraged to incorporate strategies to support knowledge sharing with the other funded Cardiac Arrest Research Teams. Applicants are encouraged to detail their use of evidence-based KM planning templates and tools in their application.

Training & Capacity Development: Team Grant applicants are required to develop an interdisciplinary *Training & Capacity Development Plan* that includes cohesive training, mentoring, capacity building, and experiential learning opportunities. The plan must consider barriers and challenges faced by trainees and researchers across all career stages and provide activities for how to address them. Where appropriate, inclusion of cross-border internships and training opportunities with the funded cardiac arrest research teams in Canada is encouraged.

Additional Considerations:

PWLE-Centered Approach: Applicants are encouraged to consider an approach which recognizes that cardiac arrest survivors, their caregivers and families have needs that change over time and extend beyond healthcare to all other aspects of life including functional, emotional, cultural, spiritual, educational, vocational, environmental and support needs. Understanding these changing needs, the values and goals of cardiac arrest survivors will be essential to improving overall outcomes and enhancing quality of life.

Lifespan Approach: Applicants are encouraged to consider a lifespan approach in the research design, methods, analysis and interpretation, and/or dissemination of findings where appropriate. As age, life stage, transitions and intergenerational factors have an impact on cardiac arrest survival and outcomes, a lifespan approach can provide insight to the wide variations of those affected by cardiac arrest and inform individualized care.

Research Teams, Roles and Responsibilities

Each Team Grant must be interdisciplinary and include:

- an initiating Co-Principal Investigator (who is on faculty or staff at the sponsoring institution),
- a minimum of one (1) and maximum of three (3) additional Co-Principal Investigators, and
- a Core Lead for each of the three designated cores. (Note that the designated Core Leads may also serve as co-principal investigators.)

Collaborating investigators and consultants may also be included on the Research Team, as appropriate.

The initiating Co-PI will facilitate activities of the Research Team, program, objectives and budget. The initiating Co-PI is also responsible for:

- Leading completion of all the required scientific reports
- Collaborating with the additional Co-PIs and core Leads (roles defined below) to:
    - Allocate funding across Team Grant research activities;
    - Integrate core themes within the selected Team Grant and co-develop core plans; and

    - Leverage developed core resources across Team Grants once funded.
- Organizing the co-hosted meetings with the other funded Research Team Co-PIs
- Attending a CART Network 'Mid-Term Meeting' and an 'End-of-Grant Knowledge Mobilization Meeting'

The Co-PIs will jointly provide leadership to undertake innovative and impactful research projects and knowledge exchange in collaboration with all relevant involved groups and individuals, and partners as described in the Application. The Co-PIs are also responsible for:

- Collaborating with the core Leads in the development of core plans and resources.
- Collaborating with the initiating PI to provide project-specific budgetary and scientific reporting to the funders.
- Establishing a rich learning environment for all trainees and Research Team members, especially early career investigators, as appropriate.
- Attending a CART network 'Mid-Term Meeting' and an 'End-of-Grant Knowledge Mobilization Meeting'

The Core Leads will lead the development of the Core Plans (Data Sharing & Management; Knowledge Mobilization (KM); Training & Capacity Development). Core Leads may also be Co-PIs or collaborating investigators. Each core theme must be led by a different Research Team member. The core Leads will also be responsible for:

- Collaborating with Research Team members to co-develop core plans and resources.
- Liaising with the Co-PIs in their Research Team and with other core Leads across the CART network to leverage core plans and resources developed by CART Network awardees.

Collaborating investigators and Consultants: Research Teams should engage, as appropriate, a broad spectrum of collaborating investigators and consultants such as researchers, clinicians, PWLE, health care providers, policy makers, nonprofit organizations, and/or industry investigators/leaders.

Eligibility

For an application to be eligible:

- All Co-Principals must be independent researchers with a faculty or staff appointment at an eligible sponsoring institution in the U.S. American Heart Association research awards are limited to U.S.-based nonprofit 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. An investigator may be allowed to request approval to conduct work outside the United States temporarily. 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.

Applicants can be a Co-PI for one Research Team only; however, Co-PIs may be involved in different capacities in other Research Teams.

- The named Co-PIs may not change between the pre-proposal submission and the full Application.
- The Co-PIs must include early and mid-career researchers. An 'early-career researcher' is within the first six (6) years of their first faculty appointment at the Assistant or Clinical Assistant Professor level, or equivalent, at the time of submission. A mid-career researcher is between 6 and 15 years since their first faculty appointment at the Associate or Clinical Associate Professor level, or equivalent, at the time of submission.
- The Sponsoring Institution is the institution or organization that is responsible for receiving and administering the Team Grant on behalf of the recipient. It will be the Sponsoring Institution of the initiating Co-PI. Documentation of support for the initiating Co-PI and the application by the Sponsoring Institution shall be required as part of the full application process. If funded, the named sponsoring institution will be the recipient of all award payments from the American Heart Association. Any payments made to other institutions will be via subcontract between the sponsoring institution and the subcontractor.

Co-Principal Investigators and Collaborating Investigators:

- Must possess an MD, PhD, DO, DDS, DVM or equivalent doctoral degree at time of application.
- Must have a faculty or staff appointment.
- May hold another American Heart Association award simultaneously.
- Must demonstrate a 10% minimum effort requirement for each Co-PI of proposed projects.

Must have one of the following designations at the time of full proposal submission:

- U.S. citizen
- Permanent Resident
- Pending Permanent Resident (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
- 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

Fellows and Other Trainees (Note: Fellows/trainees need not be named at time of application)

Each fellow must have one of the following designations.

- U.S. citizen
- Permanent Resident
- Pending Permanent Resident (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
- O-1 Visa – temporary worker with extraordinary abilities in the sciences
- TN Visa – NAFTA professional
- J-1 Visa – exchange visitor
- F-1 Visa – student
- G-4 Visa - family member of employee of international organizations and NATO

A fellow/trainee may not hold another comparable fellowship award, although the institution may provide supplemental funding. Fellows may not hold a faculty or staff appointment, except for MD or MD/PhD trainees who also maintain clinical responsibilities. These fellows may hold the title of instructor or similar due to their patient care responsibilities but must devote at least 75% effort to research training.

*All awardees must meet the citizenship/visa criteria throughout the duration of the award.

AWARD DETAILS

Award Duration: Four (4) years maximum

Number of Awards: The American Heart Association anticipates awarding two (2) Team Grants in one of the three identified priority research areas, with a total funding commitment of approximately $3.4 million USD across both awarded teams.

Awardees will be selected based on scientific merit and how each team aligns with the Association's mission to be a relentless force for a world of longer, healthier lives.

Award Amount: The maximum budget amount a research team may request is $1.7 million USD.

The Heart Association reserves the right to determine the final award amount for competitive projects based on need and potential impact.

Appropriate Budget Items:

- Salary and fringe benefits for the Co-PIs, collaborating investigator(s), consultants, fellows/trainees, or other participating research staff or faculty, commensurate with percent effort to the grant.

- Project-related expenses, such as salaries of technical personnel essential to the conduct of the project, supplies, equipment, travel, subject recruitment costs,

and publication costs in accordance with institutional and Heart Association policies.

- Teams should use award dollars to pay for travel to co-host with the other Research Teams at least one cross-border symposium of all funded Research Teams from Canada and the USA funded research teams.
- All Research Teams (including the Co-PIs and Leads for the cores) must attend an 'End-of-Grant Knowledge Mobilization Meeting' to be held during the last year of the CART network. Details on the 'End-of Grant Knowledge Mobilization Meeting' will be provided by the funders no later than 12 months prior to the CART network end date. Award dollars should be used to cover these travel costs.
- Institutional indirect costs for operating expenses may be charged up to ten percent (10%) of the total expenditures each year on awards at the sponsoring institution. Any subcontract awardee institution (if applicable) is allowed institutional indirect costs up to ten percent (10%) of the total expenditures of the subcontract. The awardee institution may not charge indirect costs on the direct costs of a subcontract.

4-YEAR SAMPLE BUDGET (**provided as a general guideline)**	Annual amount	Total Budget
Project costs (includes personnel and other expenses as described above)	$374,364	$1,497,455
Required face-to-face scientific meetings as described above • Cross-border symposium of all funded Research Teams • End-of-Grant Knowledge Mobilization Meeting *Sample assumes 7 travelers per meeting per team x avg of $3,000 per person x two trips each during term of award, PLUS other travel (up to $6,000 over the life of the award) as needed to scientific conferences.* Note that travel costs may vary depending upon needs of the team.	$12,000	$48,000
Direct Costs (Total) Research Dollars	$386,364	$1,545,455
Indirect Costs The American Heart Association policy allows for a maximum of 10% for indirect costs.	$38,636	$154,545
Total	$425,000	$1,700,000

The Co-PIs will be required to undertake the following activities (virtual and/or in-person), with associated costs to be covered within the Team Grant budget:

- Participate in occasional CART Network teleconferences organized by The Heart Association and/or the Heart & Stroke Foundation of Canada as requested and appropriate.
- Co-host with the other Network Teams an annual engagement of all funded Network Teams and other relevant involved groups and individuals to share and mobilize knowledge.
- Co-host with the other Research Teams at least one cross-border symposium of all funded CART Network Teams.
- Participate in a virtual mid-point 'Reporting and Advisory Sessions' following the provision of the year two report. An external advisory panel may be established and comprised of international and national experts who will assess the progress of the Research Teams against the objectives of this funding opportunity and provide constructive written and verbal feedback in response to progress reports and presentations by the Research Teams Co-PIs during the session.
- All Research Teams (at least four members, including the Co-PIs) must attend an 'End-of-Network Knowledge Mobilization Meeting' to be held during the last year of the CART Network. Details on the 'End-of Network Knowledge Mobilization Meeting' will be provided by the funders no later than 12 months prior to the Team Grant end date.

Other Funding Requirements:

Submit annual scientific progress reports and annual consolidated financial reports to The American Heart Association. Report templates will be made available each year of the Team Grant funding period and will be submitted via the ProposalCentral system.

Research Teams are expected to contribute to the monitoring, review and evaluation of this funding program, policies and processes by participating in evaluation studies, surveys, workshops, audits, and by providing data or reports as required for the purpose of collecting information to assess progress and results.

Required Pre-proposal

A pre-proposal is required to ensure responsiveness this RFP. Only applicants who are invited by the Heart Association will submit a full proposal. Co-PI applicants will submit one proposal jointly.

The Co-PIs must determine which of their respective institutions will administer the project (if applicants are from more than one institution).

The Co-PI from the institution that will administer the award should initiate the proposal process. The investigator who initiates the proposal will be considered the initiating Co-PI on the proposal.

The Co-PI who initiates the proposal in ProposalCentral must add the names of the other Co-Principal Investigator(s) in the proposal. The investigative team is limited to a max of four Co-PIs.

Each Co-PI will receive an email invitation to join the proposal. This email is specific to the receiving investigator and should not be shared. A Co-PI who does not receive an email from ProposalCentral should call 214-360-6107 (option 1). Once joined to the proposal, each Co-PI must review and update their own Advanced Profile and upload a biosketch. See the Heart Association's biosketch instructions for additional information that the Heart Association requires. Each biosketch has a 5-page limit.

Pre-proposal Instructions:

Pre-proposal Uploads

- Pre-proposal / letter of intent (3 pages)
- Biosketch from each proposed Co-Principal Investigator (5 pages per Co-PI)

The initiating Co-PI will upload a pre-proposal (three pages maximum) describing an innovative, collaborative approach to research addressing one of the three identified priority research areas in this RFP. 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 Proposal Central:

- 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 pre-proposal 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 proposed project and the mission of the American Heart Association.

Required Pre-Proposal Review

Only applicants who submit a pre-proposal will be eligible to be considered for invitation to full proposal.

For the required pre-proposal submission, the Association will perform an asynchronous peer review with scientific volunteer experts to assess the eligibility of the applicants

and the relevance of their submissions to the competition's purpose, objectives, and research areas.

Pre-proposals that do not align with the competition guidelines will be withdrawn. Please note that there is no formal appeal process once decisions are made.

Invited Full Proposal Required Documents, Eligibility, Relevance and Review Process

Invited Full Proposal Initiating PI

- Research Plan (10 pages)
- Biosketch (5 pages)
- Budget Justification Form (DOCX) (2 pages)
- Literature Cited (4 pages)
- Research Project Environment (DOCX) (2 pages)
- Vertebrate Animal Subjects, if applicable (no page limit)
- Resubmission Modifications (if applicable, 2 pages)

Additional Co-PIs

- Biosketch (5 pages)
- Research Project Environment (DOCX) (2 pages)

Other Third Party Personnel (if applicable)

- Collaborating Investigator's Biosketch (5 pages)
- Collaborating Investigator's Letter (5 pages)
- Consultant's Letter (5 pages)

Unless the "Leads" are also Co-PIs, proposals must list the "lead" for each core as a Collaborating Investigator.

Applicants are also required to complete the following sections in Proposal Central:

- 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 pre-proposal 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 proposed project and the mission of the American Heart Association.

Peer Review Criteria for Proposals

Proposals will undergo peer review by a grant review panel ("Review Panel"), convened and overseen by the Heart Association.

The Review Panel will include expert scientific reviewers and patient engagement volunteers. Expert reviewers may include international members as well as reviewers from the USA. Additional ad-hoc reviewers may be obtained to bring additional expertise to support the review process. The Review Panel may meet in person or virtually at the discretion of the American Heart Association.

Applicants are prohibited from contacting American Heart Association peer reviewers. This is a form of scientific misconduct and will result in the removal of the proposal from funding consideration and institutional notification of misconduct.

Peer Reviewers: 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 American Heart Association's Peer Reviewer Certification Statement (to include confidentiality, non-disclosure, and conflict of interest).

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

Proposed Projects will be evaluated on the potential impact on research in the field of cardiac arrest; strengths of applicant investigators (qualifications, expertise and productivity); collaboration; scientific content; background; preliminary studies; detailed specific aims; approach detail; analytical plan; sample size; data management; significance; innovation; individual project scientific merit; and total project coordination. Projects will be rated in the following areas:

- Collaboration: It is incumbent upon the applicants to convey the novel and collaborative nature of their relationship. 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 all the Co-PIs? Are "leads" for the Cores identified?
- 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? Is the project scope likely to be completed within the award period? Does the applicant acknowledge potential problem areas and consider alternative tactics?

  - *NOTE: Applicants must explain how relevant biological variables, such as sex, are factored into the research design, analysis, and reporting. Furthermore, very strong justification from the scientific literature must be provided for proposals proposing to study only one sex.*

- 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? Does the project foster or employ novel concepts, approaches, methodologies, tools or technologies for this area?

- Investigator(s): Does the investigative team bring 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 Co-PIs and other researchers? How does the investigators' previous work strengthen and ensure the project's success? Co-PIs must dedicate at least 10% to the project.

- Significance: Does this study address an important problem related to sudden cardiac arrest? Does the proposed study address one of the three priority research areas of this RFP? 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?

- 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?

- Impact: How does the project relate to and support the mission of the American Heart Association – *To be a relentless force for a world of longer, healthier lives*? Proposals for research funding will be assessed for their potential impact on the Association's 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.

- Lay Summary/Summary for Non-Scientists: How well written is the lay summary in explaining to a non-scientist audience the research proposed and importance? Does the Lay 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 American Heart Association?

Research Type Designations

The proposed research should fall under one or more of the following categories:

Basic Biomedical Research is conducted to increase understanding of fundamental life processes, such as discovering the molecular structure of deoxyribonucleic acid (DNA) — one-half of the genetic code of life — or investigating the genetics of lipid disease. The American Heart Association funds this type of research.

Clinical Research addresses important questions of normal function and disease using human subjects.

Population Health Research is the science and art of studying the distribution and determinants of health status as influenced by social, economic and physical environments, human biology, health policy and services and of preventing disease, prolonging life and promoting health at the population levels.

AWARD SELECTION - Final funding decisions are subject to approval by The American Heart Association.

RELEVANT POLICIES AND REQUIREMENTS

Policies and Standards Governing American Heart Association Research Awards

Institutional Eligibility / Location of Work: American Heart Association 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. Proposals 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 Administrations employees.

The Precision Medicine Platform: Applicants are encouraged to make use of the Heart Association's Precision Medicine Platform (PMP), powered by Amazon Web Services.

- PMP supports cloud computing in a secure and private workspace and enables investigators to collaborate and analyze data securely. The Heart Association will provide each project with workspace and the use of cloud credits for all funded proposals.
- Data analysis is enabled in secure workspaces by a friendly web user interface that allows researchers to code in various languages, including R and Python and use statistical software including but not limited to SAS and R studio. The most up-to-date machine learning and artificial intelligence software available from Amazon Web Services is also included. For a full list of the analytical tools available, please see https://pmp.heart.org/tools. Researchers are also able to upload their own tools.
- To learn more about the Precision Medicine Platform and how it can enable your research, please access this PMP overview video. Additional questions can be

answered on the American Heart Association Proposal Resources page under the Precision Medicine Platform Header.

- The PMP is HIPAA and FedRAMP compliant.

Interim Assessment: Awardees must submit progress reports on a minimum annual (once per year) basis. Progress assessments take the form of required written reports in addition to periodic video conferencing, phone calls, and/or face-to-face visits.

Links and References to Relevant American Heart Association Policies

- Public Access: The American Heart Association requires that all journal articles resulting from American Heart Association funding be made freely available in PubMed Central (PMC) and linked to an Association award within 12 months of publication. It is the responsibility of the awardee to ensure journal articles are deposited into PMC and that all necessary rights are retained in order to do so.

- Open Data: The American Heart Association 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 Association-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. Recipients of the following early-career awards are exempt from this policy: American Heart Association Predoctoral Fellowships, American Heart Association Postdoctoral Fellowships, and Institutional Undergraduate Student Fellowship Program. Additional information regarding the Association's Open Science Policies is available at Open Science Policy Statements for American Heart Association Funded Research.

- Preregistration: The American Heart Association requires preregistration for funded clinical trials and encourages preregistration for any studies that make an inferential claim from a sampled group or population, as well as studies that are reporting and testing hypotheses. After a project is completed, protocols and preregistration analysis plans can be used in conjunction with the final study and analysis by researchers seeking to replicate, reproduce, and build upon findings.

  Preregistration of studies involves registering the study design, variables, and treatment conditions prior to conducting the research. Preregistration should address the study protocol (how a study or experiment will be conducted), as well as the analysis plan (how the collected data will be organized and evaluated).

  There are a limited number of established public repositories. For clinical trials of health-related interventions, NIH's ClinicalTrials.gov is the default system. Within the pre-clinical sciences, the Open Science Framework is becoming a default registry. Some public repositories tend to be disciplinarily focused.

The Center for Open Science provides multiple resources on how to preregister studies and analytic plans, including templates.

- Other: The projects described can have no scientific or budgetary overlap with other funded work. Any inventions, intellectual property, and patents resulting from this funding are governed by the American Heart Association Intellectual Property Policy for Research Funding EXCEPT to the extent modified by specific Intellectual Property terms for this award mechanism, including financial terms, which will be communicated to awardees following the review process. The applicant/awardee and institution are responsible for compliance with all Heart Association research award policies and guidelines for the duration of any awards they may receive. Visit the Research Programs Awards Policies page for more information on this topic: Heart Association Policies Governing All Research Awards.