Objectives
The student research program encourages promising students, including women and members of minority groups underrepresented in the sciences, from all disciplines to consider research careers while supporting the highest quality scientific investigation broadly related to cardiovascular disease and stroke. The research opportunity will allow students to work for 8, 10 or 12 weeks with a faculty/staff member on any project broadly related to cardiovascular disease/function or stroke. The goal is to encourage students to consider a future academic career in this area.

Science Focus
Research broadly related to cardiovascular function or disease and stroke, or to related clinical, basic science bioengineering or biotechnology and public health problems, including multidisciplinary efforts.

Disciplines
Proposals are encouraged from all disciplines, including multidisciplinary efforts, as well epidemiological, behavioral, community and clinical investigations that bear on cardiovascular and stroke problems.

Target Audience
This program is intended for full-time students (within the affiliate's geographic boundaries) who have not yet obtained an MD but are enrolled in an MD program, Healthcare professionals with doctoral degrees, Ph.D., D.O., D.D.S., Pharm.D. and D.V.M. (or equivalent) in an MD program who seek research training with a sponsor/mentor prior to embarking on a research career.

Sponsor
It is important for the medical student to receive wise counsel and direction from an established investigator interested in the conduct and progress of the research project during the research-training period. Each medical student must have a sponsor.

Citizenship
At the time of application, must have one of the following designations:

- U.S. citizen
- Permanent resident
- Pending permanent resident. Applicants 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 United States (having filed an Application for Employment Form I-765).
- J-1 Visa -- exchange visitor
- E-3 Visa -- specialty occupation worker
- H1-B Visa -- temporary worker in a specialty occupation
- TN Visa - NAFTA professional
- O-1 Visa - temporary worker with extraordinary abilities in the sciences
- F-1 Visa - student visa

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

Applicants are not required to reside in the United States for any period of time before applying for American Heart Association funding.

Location of Work
The award may be completed at any accredited institution in California, Nevada, Utah, Alaska, Arizona, Hawaii, Idaho, Montana, Oregon, or Washington.
American Heart Association research awards are limited to non-profit institutions. Such institutions include medical, osteopathic and dental schools, veterinary schools, schools of public health, pharmacy schools, nursing schools, universities and colleges, public and voluntary hospitals and other non-profit institutions 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 the Veterans Administration employees.

Funding is prohibited for awards at non-U.S. institutions.

**Program Structure**
The Sponsor of the medical student awardee must ensure that each student completes the following:

- **Student** is required to give an oral presentation at the conclusion of his/her research experience at a roundtable discussion meeting as scheduled by the institution/sponsor. The oral presentation serves as the capstone session for the program and, therefore, is a requirement for program completion.
- In August, towards the end of the summer program, Awardees present their summer work to an audience of their peers.

**Budget - Western States Affiliate**

**Trainee Stipend/Salary**: Award recipients will receive a stipend of $600/week for the short-term research experience.

Stipends will be distributed by the institution.

**Project Support**: $500 (per awardee)

Project support funds may be used by the institution for supplies, publicaitons, and/or other expenses associated with the student's research experience (e.g. weekly meetings for students and mentors, roundtable or poster sessions, etc.)

**Award Amount**: $4,800 - $7,200 for student stipend ($600/week)

**Award Period for Student**: 8, 10 or 12 weeks

**Award Duration to the Institution**: June through May

Grants are generally intended for summer work, but are not limited to this time period if another block of time is preferred.

**Peer Review Criteria**
To judge the merit of the application, reviewers will comment on the following criteria. Please be sure to address these in your proposal. Each criterion will account for one-third of the overall score. Student (1/3), Sponsor and Environment (1/3) and Project (1/3).

**Criterion 1 - Evaluation of the Student Investigator**
Does the trainee have potential for a research career?

1. Are the trainee's career plans specified in the application?
2. Is this supported by the trainee's academic record and the assessment provided by the three letters of reference (one of which must be from the sponsor)?
3. Does the trainee have prior research experience and/or publications?
4. What is the sponsor's assessment of the applicant?

**Criterion 2 - Sponsor/Training Plan and Environment**

**Sponsor/Training Plan**
1. Is the mentor an independent investigator?
2. Does the mentor have the experience to direct the proposed research training, as evidenced by their track record regarding productivity, funding and prior trainees?
3. Does the mentor have adequate current funding to support the fellow's project?
4. Does the mentor provide a comprehensive training plan that will facilitate the applicant's progress towards his/her research career goals?
5. Does the mentor provide a description of the student selection and monitoring process?

Environment

1. Does the scientific environment in which the work will be done contribute to the probability of success for the training experience?
2. Is there evidence of institutional commitment?

Criterion 3 - Evaluation of the Proposal

1. **Significance**: Does this study address an important problem broadly related to cardiovascular disease or stroke? What will be the effect of these studies on the concepts, methods and technologies that drive this field?

2. **Approach**: A new fellow may not have had adequate time to generate preliminary data. Applicants can present preliminary data generated by the sponsor. The assessment of preliminary data, whether generated by the sponsor or the applicant, should be put into perspective so that bold new ideas and risk taking by beginning investigators are encouraged rather than stymied.

   What are the specific goals of the project and are they achievable in the time frame proposed? What new skills or research techniques will the applicant learn during the course of the project?

   Are the conceptual framework, design, methods and analyses adequately developed, well integrated, well reasoned, feasible (as determined by preliminary data or the expertise available in the mentor's and/or collaborator's laboratories) and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics?

3. **Innovation**: Is the project original?

   Applicants should never contact reviewers regarding their applications. Discussing scientific content of an application or attempting to influence review outcome will constitute a conflict of interest in the review. Reviewers must notify the AHA if an applicant contacts them.

Restrictions

- This award is not intended for individuals of faculty/staff rank.
- Awardee must devote a minimum of 75% full-time effort to research or activities directly related to their development into independent researchers, as opposed to patient care or teaching responsibilities.
- Student may participate in the research program at any time during medical school except before the first summer.
- An applicant may submit only one affiliate Medical Student Research Program application per deadline.
- The student cannot hold a comparable award as a source of supplementation.
- A lab can support only 2 student trainees at one time if they show that the projects are individualized and there will be sufficient time and personnel for supervision and mentoring.
- Fellowships are not to support individuals while they are completing their course work or studying for their qualifying examination or for individuals who already have a science-based Ph.D.
Selection Process and Notification
The applications are submitted by the Medical Student applicant and his/her Grants Officer through Grants@Heart and assigned to the Student Peer Review Committee. After receiving the peer review results and deciding which applications to fund, the research committee notifies the applicant of the awarded research outcome.

Successful applicants and sponsors will be notified by e-mail.