

LAY VOLUNTEERS IN SCIENCE

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STRATEGICALLY FOCUSED RESEARCH

SURVIVOR SUDDEN CARDIAC ARREST



DIANA LEE

"I am so thankful for everything available to me that day to give me back my life."

I was in the right place at the right time. But why me and why then?

Arrhythmias and Sudden Cardiac Death

The AHA is currently funding ten research Networks – ASA/AHA/Bugher Centers for Excellence in Stroke Research and nine Strategically Focused Research Networks (SFRN) with concentrations on Prevention, Hypertension, Disparities, Go Red for Women, Heart Failure, Obesity, Children, Vascular Disease and Atrial Fibrillation.

The newest SFRN on Arrhythmias and Sudden Cardiac Death will move into the first phase of peer review in April. The highest scoring centers will proceed to second and final phase in May.

Why Study This Topic?

More than 15-20% of all deaths are associated with sudden cardiac death.

What is Sudden Cardiac Death?

Sudden cardiac arrest differs from a heart attack. However, a heart attack can sometimes trigger an electrical disturbance that leads to sudden cardiac arrest.

Sudden cardiac arrest is the abrupt loss of heart function, breathing and consciousness. The condition usually results from an electrical disturbance in the heart called an arrhythmia. The term arrhythmia comes from the Greek a-, loss + rhythmos, rhythm = loss of rhythm. The abnormal rhythm disrupts the heart's pumping action, stopping blood flow to the body.



The type of arrhythmia that leads to sudden death results in the loss of contraction of the heart with successive lack of blood supply to vital organs like the brain. If not treated immediately, sudden cardiac arrest can lead to death. With fast, appropriate medical care, survival is possible. Giving cardiopulmonary resuscitation (CPR), using a defibrillator — or even just giving compressions to the chest — can improve the chances of survival until emergency workers arrive.

Lay Reviewer's Sudden Cardiac Arrest Experience

Individuals affected with sudden death are basically those with cardiac diseases, like coronary artery disease, dilated or hypertrophic myocardiopathy, arrhythmogenic right ventricular dysplasia and others. In these people the most important way to prevent sudden death is to recognize the disease and treat it accordingly. Some of these individuals have, however, a much higher risk of sudden death compared to others. The risk is especially important if they have already presented with ventricular arrhythmias or have a very poor ventricular function.

Diana Lee a Volunteer Lay Reviewer experienced a sudden death event and lived to tell her story. A video was created from an interview with Diana describing her sudden cardiac arrest. The video was shown at a Go Red for Women Event.

Video Part 1: Diana Lee's Story Video Part 2: Diana Lee

Diana was one of a handful of American Heart Association volunteers to attend a special White House briefing on cardiovascular disease and stroke – helping to advise our country's leaders about the remaining challenges we face in our fight and helping to shape future policy.

Diana's message to researchers - Let these questions drive your research - "I was in the right place at the right time. But why me and why then?

Peer Review - Arrhythmias and Sudden Cardiac Death SFRN

A leading priority of the AHA is to fund research that increases an understanding of the etiology, pathophysiology, treatment and prevention of cardiovascular diseases and stroke. The intent of this initiative is to support a collaboration of basic, clinical and population researchers from different disciplines whose collective efforts will lead to new approaches to study arrhythmias and sudden cardiac death (SCD). This Strategically Focused Research Network provides the AHA with a mechanism to advance the understanding of the causes, pathophysiology, risk factors, epidemiology, prevention and treatment of arrhythmias and SCD. Applicants are requested to focus on areas that could have an extraordinary impact on cardiovascular disease and stroke outcomes.

If you are interested in serving on the upcoming SFRN Peer Review

Contact Elizabeth.Cooper@heart.org or Angela.McCarty@heart.org

AMERICAN HEART ASSOCIATION / ALLEN INITIATIVE IN BRAIN HEALTH AND COGNITIVE IMPAIRMENT

Three teams, headquartered at the Salk Institute for Biological Studies in La Jolla, CA, Stanford University School of Medicine in Stanford, CA and University Hospitals Cleveland Medical Center in Cleveland, OH, respectively, will work to develop new solutions to the urgent problem of age-related cognitive decline. As people live longer in many parts of the world, Alzheimer's and other age-related dementias are on the rise, projected to reach more than 75 million people worldwide by 2030. To date, no effective therapy has been developed for these disorders, which are not only deadly, but also exact a high financial and emotional toll on society.

To Learn More: Institutions Selected by AHA to Study Healthy Brain Aging



Volunteers with a passion for research are welcome to contact Lay Stakeholder Initiative staff <u>Elizabeth.Cooper@heart.org</u> or <u>Angela.McCarty@heart.org</u> for more information on how their personal or community advocacy experience with heart disease or stroke, such as survivorship, a family experience, or being a caregiver, can add a voice to research projects.

The volunteer stakeholder is an individual without formal training as a scientist or health professional but who has a strong interest in advancing the prevention and/or management of heart diseases and stroke.