A Strategic Approach to Vital Research

Since 1949, the American Heart Association and American Stroke Association has funded more than $3.5 billion on research to increase knowledge about cardiovascular disease and stroke. In Rhode Island, awards totaling $1,355,475 in value are currently supporting six research scientists at four local institutions.

You are cordially invited to attend the second annual

Rhode Island Research Symposium

Wednesday, March 19, 2014
Warren Alpert Brown Medical School
222 Richmond Street, Providence RI
5:30 p.m. to 7:30 p.m.

Learn about current cardiovascular research in Rhode Island funded by the American Heart Association.

Research Presentation  Cocktail Reception  Poster Session

RSVP by March 3rd to 401-330-1702 or Leeanne.Decarlo@heart.org

Symposium supported by

Are you a member? Are you interested in supporting research or applying for funding?

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February is Heart Health month so it is appropriate that this issue of the *Rhode Island Medical Journal* is devoted to an update on the field of cardiology. Few specialties have seen such explosive growth in knowledge and the ability to modify disease as has cardiology over the last half century. When I was an intern in 1968–1969, coronary angiograms were new and infrequent, having been described by Cleveland Clinic physicians Drs. Sones and Shirey in 1962. Exactly one of my patients that year was referred for a cardiac catheterization. How times have changed. According to the CDC FastStats, about one million people in the United States had cardiac catheterizations/coronary angiograms in 2010 and an additional 500,000 had a coronary artery intervention. In the 1960s patients with myocardial infarction were treated with morphine and bed rest, and the first statin to be approved by the FDA was still some two decades in the future. While the mortality rate from atherosclerotic cardiovascular disease was decreasing, most of the diagnostic modalities, pharmacologic armamentarium and devices we now take for granted were not available to clinicians.

During my cardiology fellowship years in the early 1970s, echocardiography was in its infancy; a patent for the first MRI machine had just been issued; cardiac valve replacement required open heart surgery and placing the patient on cardiopulmonary bypass, diastolic heart failure was not on anyone’s radar screen; Takotsubo Cardiomyopathy had not been named and percutaneous coronary interventions were still in the future – the first occurred in Switzerland in 1977. Gender-specific aspects of cardiovascular disease were not appreciated and, in fact, coronary heart disease was taught as a disease of men.

**CONTRIBUTIONS**

This issue of the *Rhode Island Medical Journal* features articles on various aspects of cardiovascular disease of interest to clinicians. My contribution, “Gender-Specific Aspects of Cardiovascular Disease,” discusses some of the differences in symptoms, risk factors and outcomes between women and men with atherosclerotic cardiovascular disease. In “Takotsubo Cardiomyopathy: A Clinical Review,” *Athena Popas, MD, FACC, FASE* and *Saddam Abisse, MD*, examine this condition, which is increasingly being recognized in patients presenting with an acute coronary syndrome.

*Christopher Lang, MD, and Michael K. Atalay, MD, PhD*, in “Cardiac Magnetic Resonance Imaging and Computed Tomography: State of the Art in Clinical Practice,” review the methodologies of novel MRI and computed tomography modalities, their specific roles in the diagnosis of cardiac pathophysiology, and their utility in outcomes assessment and prognosis for various disease states.

*Euy-Myoung Jeong, PhD, and Samuel C. Dudley, Jr., MD, PhD*, in “New Diagnostic and Therapeutic Possibilities for Diastolic Heart Failure,” discuss symptoms, diagnosis, and therapeutic approaches, along with results of animal research on this condition, which is ongoing in Dr. Dudley’s laboratory.

“Transcatheter Aortic Valve Replacement: A Review of Current Indications and Outcomes” by *William Prabhu, MD*, and *Paul Gordon, MD*, discuss this new technique for replacing stenotic aortic valves and report on the experience with the first fifty-six patients to undergo this procedure at Rhode Island Hospital.

In the last half century our understanding of cardiovascular disease has increased enormously, along with our ability to modify the course of what remains the number one killer of men and women, both in the United States and around the globe. One can only imagine what an issue of the 2054 *Rhode Island Medical Journal* on this same subject would look like.

**Author**

Barbara H. Roberts, MD, FACC, is the Director of The Women’s Cardiac Center at The Miriam Hospital and an Associate Clinical Professor of Medicine at the Warren Alpert Medical School of Brown University. She is the author of *How To Keep From Breaking Your Heart: What Every Woman Needs to Know About Cardiovascular Disease* and *The Truth About Statins: Risks and Alternatives to Cholesterol-Lowering Drugs.*
The **9,655** cardiac procedures we do a year prepare us for yours.

When faced with a cardiac issue, there is nothing more comforting than knowing that the team working to heal you is bringing years of experience and knowledge to your care. With 35 cardiologists and four cardiac surgeons, the Cardiovascular Institute at Rhode Island Hospital, The Miriam Hospital and Newport Hospital offers an unparalleled depth of cardiac experience and the continuum of cardiac care, from state-of-the-art diagnostics to advanced cardiovascular surgery and cardiac rehabilitation—comforting to know, should that day ever come.

[Rhode Island Hospital and The Miriam Hospital are major teaching affiliates of The Warren Alpert Medical School of Brown University.](cviri.org)