

Texas Heart Institute Medal and the Ray C. Fish Award for Scientific Achievement in Cardiovascular Diseases

Ray C. Fish (1902–1962) was a leading figure in Houston's natural gas industry and a philanthropist. He believed in the American dream of "opportunity for success." The Ray C. Fish Foundation was established so that others might be encouraged to broaden man's self-knowledge and to keep the American dream alive. After its founder's death from heart disease, the Fish Foundation granted \$5 million to make the Texas Heart Institute a reality. For this reason, the Institute's highest professional award is given in honor of this extraordinary man. The award recognizes those whose innovations have made significant contributions to cardiovascular medicine and surgery.

The first Texas Heart Institute Medal and Ray C. Fish Award for Scientific Achievement in Cardiovascular Diseases were presented in 1972 to Dr. Norman Shumway. Since 1972, 39 other highly deserving recipients have been so honored by the Institute. The complete Roll of Recipients begins on the next page.



Christine E. Seidman, MD

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The 2020 Fish Award recipient is Christine Edry Seidman, MD. She is the 40th person and the first woman to receive the Texas Heart Institute's highest honor.

Dr. Seidman directs the Cardiovascular Genetics Program at Brigham and Women's Hospital in Boston, and she is the Thomas W. Smith Professor of Medicine and Genetics at Harvard Medical School. Specializing in determining molecular mechanisms underlying cardiovascular disease, she was the first to discover a genetic origin of congenital cardiac malformations. From almost the beginning of her research career through the present, she has described the roles of genes and their mutations in familial hypertrophic and dilated cardiomyopathy, and she has expanded this investigation into the causes of many other conditions. She also has board certifications in cardiovascular disease and internal medicine, and she continuously applies her scientific findings toward precise diagnostic approaches, improved clinical management, and effective therapies. She is a prolific author and coauthor, with more than 400 peer-reviewed publications.

Dr. Seidman earned her medical degree from the George Washington School of Medicine and Health Sciences (1978). She completed her internal medicine residency at The Johns Hopkins Hospital (1981) and cardiology fellowship at Massachusetts General Hospital (1986). She became a full professor at Harvard Medical School in 1997.

Dr. Seidman has been elected to the American Society for Clinical Investigation (1992), National Academy of Medicine (1999), American Academy of Arts and

Sciences (1999), and National Academy of Sciences (2005). Prominent among her numerous honors are the American Heart Association's Distinguished Scientist Award, and the Bristol-Myers Squibb Award for Distinguished Achievement in Cardiovascular Research.

In his comments, James T. Willerson, MD, President Emeritus of the Texas Heart Institute, noted, "We are honoring Dr. Seidman for her tremendous work in

identifying molecular mechanisms involved in the development of hypertrophic cardiomyopathy and other heart diseases, and, more recently, her research into small molecules that inhibit the development of cardiomyopathies in patients."

In summary, Dr. Seidman's pioneering discoveries in cardiovascular genetics will continue to facilitate deeper knowledge and effective therapies.

ROLL OF RECIPIENTS

*of the Texas Heart Institute Medal and the Ray C. Fish Award
for Scientific Achievement in Cardiovascular Diseases*

1972	Norman E. Shumway Cardiovascular Surgery (<i>Heart Transplantation</i>)	1988	J. Willis Hurst Cardiology (<i>Writing and Teaching</i>)
1973	F. Mason Sones, Jr. Cardiology (<i>Coronary Angiography</i>)	1989	Robert J. Hall Cardiology (<i>Clinical Practice and Teaching</i>)
1974	Eugene E. Braunwald Physiology (<i>Myocardial Preservation</i>)	1990	Sol Sherry Cardiology (<i>Thrombolytic Therapy</i>)
1975	Willem J. Kolff Cardiovascular Surgery (<i>Artificial Organs</i>)	1992	Arthur S. Keats Cardiovascular Anesthesiology
1976	Harvey Feigenbaum Cardiology (<i>Echocardiography</i>)	1997	Aldo R. Castañeda Pediatric Cardiovascular Surgery
1977	John W. Kirklin Cardiovascular Surgery (<i>Heart-Lung Machines</i>)	1997	Julio C. Palmaz Radiology (<i>Endovascular Stents</i>)
1978	Bernard Lown Cardiology (<i>Cardiac Arrhythmias</i>)	1998	Magdi Yacoub Cardiovascular Surgery (<i>Heart-Lung Transplantation</i>)
1979	John J. Gallagher and William C. Sealy (co-recipients) Cardiology and Cardiovascular Surgery (<i>Surgery for Pre-Excitation</i>)	1999	Thomas J. Fogarty Cardiovascular Surgery (<i>Medical and Surgical Devices</i>)
1980	W. Proctor Harvey Cardiology (<i>Clinical Practice and Teaching</i>)	2004	James L. Cox Cardiovascular Surgery (<i>Surgery for Atrial Fibrillation</i>)
1981	Paul M. Zoll Cardiology (<i>Pacemaking</i>)	2004	Stephen Westaby Cardiovascular Surgery (<i>First Clinical Trial of Axial-Flow Devices for Destination Therapy and Significant Contributions to the Surgical Literature</i>)
1983	Andreas R. Grüntzig Cardiology (<i>Percutaneous Transluminal Coronary Angioplasty</i>)	2007	Charles E. Mullins Pediatric Cardiology (<i>Teaching and Pioneering Work in Interventional Techniques for Congenital Heart Disease</i>)
1984	Hein J.J. Wellens and Douglas P. Zipes (co-recipients) Cardiology (<i>Diagnosis and Management of Pediatric Cardiac Arrhythmias</i>)	2008	O.H. Frazier Cardiovascular Surgery (<i>Heart Transplantation and Research and Development of the Left Ventricular Assist Device</i>)
1985	Denton A. Cooley Cardiovascular Surgery (<i>Surgery for Congenital Heart Disease, Aneurysms of the Aorta, and Implantation of the Artificial Heart</i>)	2009	James T. Willerson Cardiology (<i>Pioneering Work in Unstable Atherosclerotic Plaques, Acute Coronary Syndromes, and Cardiac Stem Cells</i>)
1986	William J. Rashkind Pediatric Cardiology (<i>Nonsurgical Treatment of Congenital Heart Disease</i>)		
1987	Dwight E. Harken Cardiovascular Surgery (<i>Intracardiac Surgery</i>)		

- 2010 **Charles D. Fraser, Jr.**
Cardiovascular Surgery (*Development of a Program Known for Its Effectiveness in Correcting Congenital Cardiovascular Disease in Children*)
- 2011 **Patrick W. Serruys**
Interventional Cardiology (*Major Contributions to Interventional Cardiology, Including Those to the Development of Both Bare-Metal and Drug-Eluting Stents*)
- 2012 **George J. Reul**
Cardiac and Vascular Surgery (*Development of an Accredited Vascular Lab at SLEH; Leader in Quality Measures*)
- 2013 **Alain G. Cribier**
Interventional Cardiology (*First Balloon Dilation of Aortic Valve for Calcific Aortic Stenosis, 1985; and First Implantation of a Prosthetic Aortic Valve via Cardiac Catheterization, 2002*)
- 2014 **Terence English**
Cardiovascular Surgery (*Establishing Heart Transplantation Program in England*)
- 2015 **Delos M. Cosgrove**
Cardiovascular Surgery (*Significant Contributions to Cardiac Valve Repair*)
- 2016 **David A. Ott**
Cardiovascular Surgery (*Knowledge of and Exceptional Technical Expertise in Cardiovascular Surgery*)
- 2018 **Joseph S. Coselli**
Cardiovascular Surgery (*Knowledge of and Exceptional Technical Expertise in Thoracoabdominal Aortic Aneurysm Repair*)
- 2019 **Emerson C. Perin**
Interventional Cardiology (*Research in Regenerative Medicine and Stem Cells, and Development of Novel Stem Cell Treatments for Patients*)
- 2020 **Christine E. Seidman**
Cardiovascular Genetics (*Research in Molecular Mechanisms of Cardiomyopathy and Other Heart Diseases*)