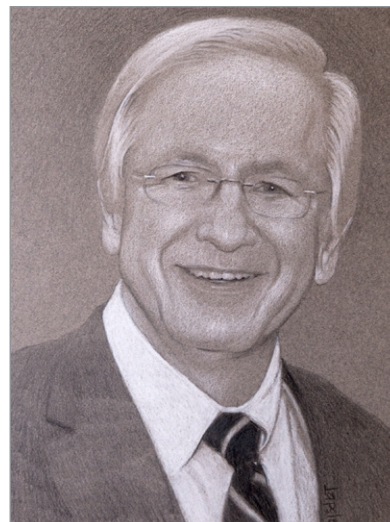


# Texas Heart Institute Medal and the Ray C. Fish Award for Scientific Achievement in Cardiovascular Diseases

**R**ay 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, 37 other highly deserving recipients have been so honored by the Institute. The complete Roll of Recipients appears on the next page.



Joseph S. Coselli, MD

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The 2017 Fish Award recipient is Joseph S. Coselli, MD, the world's most experienced aortic surgeon. Of his more than 10,000 aortic repairs, at least 3,500 attest to his preeminence in thoracoabdominal aortic aneurysm repair. Dr. Coselli is a worldwide leader in complex aortic operations such as the Bentall procedure, ascending aorta replacement in patients with acute aortic dissection, and total transverse aortic arch replacement, including those repairs performed in a minimally invasive fashion through a ministernotomy. He expertly performs valve-sparing aortic root replacement, the preferred approach in patients with Marfan syndrome and other heritable thoracic aortic diseases. In randomized clinical trials, he has investigated the usefulness of adjunctive protection during aortic repair, including that afforded by cold renal perfusion and cerebrospinal fluid drainage.

Dr. Coselli's illustrious career began with an opportunity at THI. During summer vacation from college at the University of Notre Dame, the young Coselli met Dr. Denton A. Cooley, who gave him a job on Charles Reed's perfusion team. There, he observed and assisted with the operations. This experience cemented his desire to become a cardiothoracic surgeon. After earning his medical degree from the University of Texas Medical Branch at Galveston in only 3 years, he returned to the Texas Medical Center and joined Michael E. DeBakey's general surgery residency program at the Baylor College of Medicine (BCM). During the 4th year of his residency, Dr. Coselli was asked to join DeBakey's thoracic surgery program.

At age 31, after completing this residency, Dr. Coselli became a junior associate in the Department of Surgery with E. Stanley Crawford's service, which focused on aortic repairs. Dr. Crawford was the surgeon at the epicenter of aortic surgery, and he ceaselessly explored techniques to reduce postoperative morbidity rates. After Crawford's death in 1991, Dr. Coselli took the baton.

At BCM, Dr. Coselli is vice chair of the Michael E. DeBakey Department of Surgery, holds the Cullen Foundation endowed chair, and is professor and chief of the Division of Cardiothoracic Surgery. He serves as chief of Adult Cardiac Surgery at THI and as associate chief of the Cardiovascular Service at Baylor–St. Luke's Medical Center. He is the program director of Thoracic Surgery Residency at THI/BCM and directs the Aortic Fellowship program there.

Dr. Coselli seeks advances in aortic surgery that will improve patient outcomes. He explores the use of endovascular technology to treat limited aortic aneurysms, as well as hybrid repair strategies, which combine open surgical debranching with stent-graft use for high-risk patients who have substantial comorbidities. The most difficult aortic operations typically involve failed repairs; Dr. Coselli is an expert in these complex aortic reoperations, including the extraction of failed stent-grafts and treating endocarditis, graft infection, and mycotic aneurysm.

Dr. Coselli is principal investigator of 10 ongoing clinical trials. For more than a decade, he has led the prospective Aortic Valve Operative Outcomes in Marfan Patients (AVOMP) study, an international registry comparing results of valve-sparing and valve-replacing aortic root operations. He participates in the National Registry of Genetically Triggered Thoracic Aortic Aneurysms and Cardiovascular Conditions (GenTAC) and the International Registry of Acute Aortic Dissection (IRAD), the latter of which is a research consortium that evaluates the current management and outcomes of acute aortic dissection.

At BCM, Dr. Coselli's resource-laden Division of Cardiothoracic Surgery maintains an extensive, well-catalogued aortic tissue bank, as well as a clinical database that supports endeavors to identify risk factors for poor outcomes after aortic surgery. His multiple research grants fund his studies of cellular mechanisms underlying aortic aneurysm and dissection.

Dr. Coselli has published more than 500 medical papers and given more than 750 presentations in 27 countries. He has served as president of the American Association for Thoracic Surgery, the Southern Thoracic Surgical Association, and other surgical societies. His career follows the legacy of his esteemed mentors from BCM and the Texas Heart Institute, notably Drs. Cooley, DeBakey, and Crawford.

## ROLL OF RECIPIENTS

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

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|------|---|------|---|
| 1972 | <b>Norman E. Shumway</b><br>Cardiovascular Surgery ( <i>Heart Transplantation</i> )   | 1981 | <b>Paul M. Zoll</b><br>Cardiology ( <i>Pacemaking</i> )   |
| 1973 | <b>F. Mason Sones, Jr.</b><br>Cardiology ( <i>Coronary Angiography</i> )  | 1983 | <b>Andreas R. Grüntzig</b><br>Cardiology ( <i>Percutaneous Transluminal Coronary Angioplasty</i> )  |
| 1974 | <b>Eugene E. Braunwald</b><br>Physiology ( <i>Myocardial Preservation</i> )   | 1984 | <b>Hein J.J. Wellens and Douglas P. Zipes</b><br>(co-recipients)<br>Cardiology ( <i>Diagnosis and Management of Pediatric Cardiac Arrhythmias</i> )                 |
| 1975 | <b>Willem J. Kolff</b><br>Cardiovascular Surgery ( <i>Artificial Organs</i> )   | 1985 | <b>Denton A. Cooley</b><br>Cardiovascular Surgery ( <i>Surgery for Congenital Heart Disease, Aneurysms of the Aorta, and Implantation of the Artificial Heart</i> ) |
| 1976 | <b>Harvey Feigenbaum</b><br>Cardiology ( <i>Echocardiography</i> )  | 1986 | <b>William J. Rashkind</b><br>Pediatric Cardiology ( <i>Nonsurgical Treatment of Congenital Heart Disease</i> )   |
| 1977 | <b>John W. Kirklin</b><br>Cardiovascular Surgery ( <i>Heart-Lung Machines</i> )   | 1987 | <b>Dwight E. Harken</b><br>Cardiovascular Surgery ( <i>Intracardiac Surgery</i> )   |
| 1978 | <b>Bernard Lown</b><br>Cardiology ( <i>Cardiac Arrhythmias</i> )  | 1988 | <b>J. Willis Hurst</b><br>Cardiology ( <i>Writing and Teaching</i> )  |
| 1979 | <b>John J. Gallagher and William C. Sealy</b><br>(co-recipients)<br>Cardiology and Cardiovascular Surgery ( <i>Surgery for Pre-Excitation</i> ) |      |   |
| 1980 | <b>W. Proctor Harvey</b><br>Cardiology ( <i>Clinical Practice and Teaching</i> )  |      |   |

- 1989 **Robert J. Hall**  
Cardiology (*Clinical Practice and Teaching*)
- 1990 **Sol Sherry**  
Cardiology (*Thrombolytic Therapy*)
- 1992 **Arthur S. Keats**  
Cardiovascular Anesthesiology
- 1997 **Aldo R. Castañeda**  
Pediatric Cardiovascular Surgery
- 1997 **Julio C. Palmaz**  
Radiology (*Endovascular Stents*)
- 1998 **Magdi Yacoub**  
Cardiovascular Surgery (*Heart-Lung Transplantation*)
- 1999 **Thomas J. Fogarty**  
Cardiovascular Surgery (*Medical and Surgical Devices*)
- 2004 **James L. Cox**  
Cardiovascular Surgery (*Surgery for Atrial Fibrillation*)
- 2004 **Stephen Westaby**  
Cardiovascular Surgery (*First Clinical Trial of Axial-Flow Devices for Destination Therapy and Significant Contributions to the Surgical Literature*)
- 2007 **Charles E. Mullins**  
Pediatric Cardiology (*Teaching and Pioneering Work in Interventional Techniques for Congenital Heart Disease*)
- 2008 **O.H. Frazier**  
Cardiovascular Surgery (*Heart Transplantation and Research and Development of the Left Ventricular Assist Device*)
- 2009 **James T. Willerson**  
Cardiology (*Pioneering Work in Unstable Atherosclerotic Plaques, Acute Coronary Syndromes, and Cardiac Stem Cells*)
- 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*)
- 2017 **Joseph S. Coselli**  
Cardiovascular Surgery (*Knowledge of and Exceptional Technical Expertise in Thoracoabdominal Aortic Aneurysm Repair*)