

*Editorial*

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

**R**ay C. Fish (1902-1962) was a philanthropist and a leading figure in Houston's natural gas industry. 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 self-knowledge and keep the American dream alive. After its founder died 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 Texas Heart Institute Medal and Ray C. Fish Award for Scientific Achievement in Cardiovascular Diseases were first presented in 1972 to Dr Norman Shumway. Since 1972, 40 other highly deserving recipients have been so honored by the Institute. The complete Roll of Recipients appears at the end of this editorial.

### **Tirone E. David, MD**

The 2023 Ray C. Fish Award recipient is Tirone E. David, MD, a leading cardiovascular surgeon at the forefront of modern surgical practice. Dr David is professor of surgery at the University of Toronto and holds the Melanie Munk Chair of Cardiovascular Surgery at the Peter Munk Cardiac Centre. During the past 4 decades, Dr David has developed several operative procedures for treating patients with heart valve disease, complications of myocardial infarction, and thoracic aortic aneurysms. He is most well-known for introducing the eponymous David procedure—an aortic valve-sparing operation for patients with aortic incompetence and aneurysm of the ascending aorta. The David procedure is widely used and has excellent results. In addition, Dr David has made substantial contributions related to the ventricular septal defect repair after myocardial infarction, mitral valve repair, and the Ross procedure, and he has played a key role in developing the stentless aortic prosthesis (Toronto Stentless Porcine Valve; St. Jude Medical).

Born in Ribeirão Claro, Brazil, Dr David received his medical degree from The Federal University of Paraná in 1968. It was during medical school that he discovered his passion for surgery. Dr David was a surgical intern at the State University of New York at the Downstate Medical Center, completed his general surgery residency at the Cleveland Clinic, and completed his thoracic surgery residency at the University of Toronto. In 1977, Dr David began his career as a staff cardiovascular surgeon in the Division of Cardiovascular Surgery at Toronto General Hospital. Shortly thereafter, Dr David was appointed as chief of cardiovascular surgery at Toronto Western Hospital. In 1989, when Toronto Western and Toronto General merged to form the Toronto Hospital, Dr David became the head of the new Division of Cardiovascular Surgery for the combined hospitals and served in this role until 2011.

The prestigious awards and distinctions bestowed on Dr David reflect the profound impact of his contributions on the field of cardiovascular surgery as well as his patients. Dr David received the Order of Ontario in 1993 and the Order of Canada in 1996, which is the highest honor given to citizens in Canada. In 2004, he received the Antoine Marfan Award for innovative and outstanding contributions to the development of cardiovascular surgery and the surgical care of people with Marfan syndrome. Also in 2004, Dr David was elected university professor, the highest honor the University of Toronto confers on its professors. In 2013, Dr David



*Tirone E. David, MD*

became an honorary member of the Brazilian National Academy of Medicine. He was also presented with the Order of Rio Branco from the Brazilian government in 2018. The American Association for Thoracic Surgery awarded him the Scientific Achievement Award in 2016 and the Lifetime Achievement Award in 2020.

Throughout his productive career, Dr David has devoted a great deal of time to education and service in the field of cardiovascular surgery and is well respected by his students and patients alike. Dr David has trained more than 100 cardiac surgeons, many of whom have become prominent leaders in the field. He has published more than 400 scientific papers in peer-reviewed

journals and nearly 40 chapters in medical textbooks, as well as 5 surgical textbooks for which he was editor or co-editor. Dr David has served as an editorial board member for several highly esteemed medical journals. In addition to his memberships and honorary memberships to numerous surgical and medical societies, Dr David served as the 85th president of the American Association for Thoracic Surgery.

In summary, Dr David's leadership as a heart valve disease expert and his innovative contributions as a master of cardiovascular surgical techniques have transformed surgical practice and will continue to improve treatment for countless patients.

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## Roll of Recipients

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

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|------|---|------|--|
| 2023 | <p><b>Tirone E. David</b><br/>Cardiovascular Surgeon (<i>World Renowned for Pioneering Surgical Innovation and Procedures to Treat Patients With Heart Valve Disease, Complications of Myocardial Infarction, and Diseases of the Thoracic Aorta</i>)</p> | 2014 | <p><b>Terence English</b><br/>Cardiovascular Surgery (<i>Establishing a Heart Transplantation Program in England</i>)</p>  |
| 2020 | <p><b>Christine E. Seidman</b><br/>Cardiovascular Genetics (<i>Research in Molecular Mechanisms of Cardiomyopathy and Other Heart Diseases</i>)</p>   | 2013 | <p><b>Alain G. Cribier</b><br/>Interventional Cardiology (<i>First Balloon Dilation of Aortic Valve for Calcific Aortic Stenosis, 1985; and First Implantation of a Prosthetic Aortic Valve via Cardiac Catheterization, 2002</i>)</p> |
| 2019 | <p><b>Emerson C. Perin</b><br/>Interventional Cardiology (<i>Research in Regenerative Medicine and Stem Cells, and Development of Novel Stem Cell Treatments for Patients</i>)</p>  | 2012 | <p><b>George J. Reul</b><br/>Cardiac and Vascular Surgery (<i>Development of an Accredited Vascular Lab at SLEFH; Leader in Quality Measures</i>)</p>  |
| 2018 | <p><b>Joseph S. Coselli</b><br/>Cardiovascular Surgery (<i>Knowledge of and Exceptional Technical Expertise in Thoracoabdominal Aortic Aneurysm Repair</i>)</p>   | 2011 | <p><b>Patrick W. Serruys</b><br/>Interventional Cardiology (<i>Major Contributions to Interventional Cardiology, Including in the Development of Both Bare-Metal and Drug-Eluting Stents</i>)</p>                                      |
| 2016 | <p><b>David A. Ott</b><br/>Cardiovascular Surgery (<i>Knowledge of and Exceptional Technical Expertise in Cardiovascular Surgery</i>)</p>   | 2010 | <p><b>Charles D. Fraser, Jr</b><br/>Cardiovascular Surgery (<i>Development of a Program Known for Its Effectiveness in Correcting Congenital Cardiovascular Disease in Children</i>)</p>   |
| 2015 | <p><b>Delos M. Cosgrove</b><br/>Cardiovascular Surgery (<i>Significant Contributions to Cardiac Valve Repair</i>)</p>   | 2009 | <p><b>James T. Willerson</b><br/>Cardiology (<i>Pioneering Work in Unstable Atherosclerotic Plaques, Acute Coronary Syndromes, and Cardiac Stem Cells</i>)</p>   |

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

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