Mechanical Engineering
Academy of Distinguished Alumni

Richard W. Smalling, BSASE, MSME, M.D., Ph.D., FACC, MSCAI

Charter Member

BSASE, The University of Texas at Austin, 1970
MSME, The Unviersity of Texas at Austin, 1972
MD, University of Texas-Houston Medical School, 1975
Ph.D., The University of Texas Graduate School of Biomedical Sciences, Houston, 1977

James D. Woods Distinguished Chair and Director
The University of Texas Medical School at Houston
and the Memorial Hermann Heart Vascular Institute
Adjunct Professor in Biomedical Engineering
The University of Texas at Austin

Dr. Richard Smalling is a native Texan who received his BS in aerospace engineering and MSME in biomedical engineering from UT Austin, and his Ph.D. from the UTHealth School of Biomedical Sciences. He is an AOA graduate of UTHealth/McGovern Medical School, and did his residency training and cardiology fellowship at UCSD. Board-certified in internal medicine, cardiovascular medicine, and interventional cardiology, he is past president of the American Heart Association, Texas Affiliate, and past president of the Medical Staff of Memorial Hermann Hospital, where he was also named a Distinguished Physician. He has been honored as a Distinguished Alumnus of both UTHeath/McGovern Medical School and the Cockrell School of Engineering at The University Texas at Austin.

Named an America's Top Doctor for the past fifteen years, Dr. Smalling received the Distinguished Service Award from the American Heart Association Texas Affiliate in 1990. He is on the editorial boards of Catheterization and Cardiovascular Interventions, The Journal of Interventional Cardiology, and Journal of the American College of Cardiology- Interventions and is a past associate editor for Circulation. In 2016 he was named a Master in the Society of Catheterization and Cardiovascular Interventions. In addition, he holds six patents and co-founded Windmill Cardiovascular Systems to produce a new implantable Left Ventricular Assist Device (LVAD). His team has developed the first valveless, pulsatile flow LVAD which pumps in synchrony with the cardiac cycle and automatically changes its pumping function to optimize cardiac function. Their new artificial heart promises to drastically reduce the serious complications, including bleeding and stroke, associated with all currently-available LVADs

Dr. Smalling is the James D. Woods Distinguished Chair in Cardiovascular Medicine and the director of Interventional Cardiovascular Medicine in the Division of Cardiology at the UT Medical School in Houston and the Hermann Heart and Vascular Institute. He specializes in the treatment of valvular heart disease and adult congenital heart disease percutaneously. Additionally, he has significant expertise in treatment of coronary and peripheral vascular disease with non-surgical techniques. His team has been active in the role of utilizing left ventricular assist devices to support high-risk coronary angioplasty and complicated valve treatment procedures.

His research interests include advanced imaging procedures for structural heart disease, development of 3-D, fluoroscopically guided structural heart interventions, and reduction of reperfusion injury by mechanical LV unloading and endothelin inhibition. Clinically, his team is actively pursuing the role of very early treatment of patients with acute myocardial infarction and evaluating new percutaneous methodologies for treating valvular heart disease.

Dr. Smalling is the author of over 250 peer-reviewed articles, 25 book chapters, 2 books, and more than 15 web-based CME articles. He and his wife Sharon have 3 children, Geoffrey, Elizabeth and Stephanie, and 2 grandchildren. They enjoy cooking, cycling, skiing and traveling together.