

Roderic I. Pettigrew, Ph.D., M.D. SU2C Scientific Advisory Committee



Roderic I. Pettigrew, Ph.D., M.D.
Engineering Health & Engineering Medicine
Texas A & M Health Science Center
Emeritus, Stand Up To Cancer Scientific Advisory Committee
Bryan, TX

Roderic Ivan Pettigrew, Ph.D., M.D. is the Robert A. Welch Professor of Medicine, CEO of Engineering Health (EnHealth) and inaugural dean of the School of Engineering Medicine at Texas A&M University which offers the

ENMED program in partnership with Houston Methodist where he is Adjunct Professor of Nanomedicine and Radiology, and Member of the Center for RNA Therapeutics. He was the founding Director of the US National Institute of Biomedical Imaging and Bioengineering (NIBIB) of the NIH [2002-2017], building it into the signature NIH institute for emerging medical technologies. On the 10th anniversary of NIBIB, the U.S. Senate unanimously passed a resolution commending the institute for its leadership and impact in improving the nation's health through technological innovation.

His newest undertaking is EnHealth, the world's first initiative to holistically integrate engineering into all of the colleges of a university that are a part of the health care enterprise. ENMED is the first constituent initiative, creating a new school that integrates engineering into medical training to develop a new kind of innovation-minded physician, or Physicianeer, who invents solutions to healthcare problems. Of note, an invention is required of each ENMED graduate who will earn both M.D. and a Master of Engineering Innovation in Medicine degrees in only 4 years. In May 2023, ENMED graduated its inaugural class as the World's First Class of Physicianeers.

Dr Pettigrew's expertise is in health technologies emerging from the convergence of the life sciences, the physical sciences and engineering. Earning a Morehouse B.S. in Physics as a Merrill Scholar, he is an MIT graduate in Applied Radiation Physics (PhD '77) who finished his medical training in Nuclear Medicine at UCSD ('83) and is known internationally for his pioneering work involving four-dimensional imaging of the cardiovascular system using magnetic resonance (MRI). His current work is on predictive modeling of coronary atheroma and nanomedical strategies for disease inhibition. He is an editor of the recent book Biomechanics of Coronary Atherosclerotic Plaque: From Model to Patient, the first comprehensive text on this topic. He has been elected to membership in the National Academy of Medicine, the National Academy of Engineering, the National Academy of Inventors, the American Academy of Arts and Sciences,

and the National Academy of Sciences, India. Other awards include the Pierre Galletti Award (highest honor) of the American Institute of Medical and Biological Engineering, the Inaugural Gold Medal of the Academy of Radiology Research, the Distinguished Service Medal of the International Society of Magnetic Resonance in Medicine, the Spirit of the Heart Award of the Association of Black Cardiologists, the Pritzker Distinguished Achievement Award of the Biomedical Engineering Society, the Gold Medal of the Radiological Society of North America, the Arthur M. Bueche Award of the National Academy of Engineering, the Vannevar Bush Award (highest honor) of the US National Science Board, and the Distinguished Service Award of the International Electrical, Electronics Engineering's (IEEE) Engineering in Medicine and Biology Society and has been honored in 2023 by the Boston Globe's STATUSList as one of the nation's top 46 Ultimate Leaders in Life Sciences.

Current advisory service includes Board of Directors, Resoundant, Inc, the Medical Advisory Board of Hyperfine, Inc, the Phil and Penny Knight Institute for Accelerating Scientific Impact External Advisory Board, the Society for Science Advisory Board, and the Rensselaer Polytechnic Institute Board of Trustees.