



Roderic I. Pettigrew, PhD, MD
SU2C Scientific Advisory Committee



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Engineering Health & Engineering Medicine

Texas A & M Health Science Center

Member, Stand Up To Cancer Scientific Advisory Committee

Bryan, TX

Roderic Ivan Pettigrew, PhD, MD, serves as CEO of Engineering Health (EnHealth) and executive dean for Engineering Medicine (EnMed) at Texas A&M and Houston Methodist Hospital. He was the founding Director of the US National Institute of Biomedical Imaging and Bioengineering (NIBIB) of the NIH (2002-2017), oversaw \$5 billion in research investments, and is credited with building it into the signature NIH institute for emerging medical technologies. Under Pettigrew's leadership, NIBIB produced more patents per appropriated dollar than any other institute or federal agency, returning \$30 per each \$1 invested in research, or 3,000% (five times the already remarkable NIH average of 600%).

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 engineering-minded physician who invents solutions to healthcare problems. An invention is required of each EnMed graduate, who will earn both MD and MEng degrees in four years.

Pettigrew's expertise is in health technologies emerging from the convergence of the life sciences, the physical sciences, and engineering. An MIT graduate (PhD 1977) who finished his medical training at UCSD (1983), he is known internationally for his pioneering work involving four-dimensional imaging of the cardiovascular system using magnetic resonance (MRI). His current knowledge base also includes nanotechnology, regenerative medicine, and point-of-care technologies. He has been elected to membership in the National Academy of Medicine, the National Academy of Engineering, the National Academy of Inventors 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, and the Gold Medal of the Radiological Society of North America.