



SYIS – STUDENT MEET MENTOR

Robert Nerem

Robert Nerem has been active in bioengineering for more than thirty-five years. His initial interest was motivated by the possible role of fluid dynamics in atherosclerosis, and he has conducted fundamental research on problems in cardiovascular fluid dynamics. In 1981 he established a cell culture laboratory and began to study the influence of physical forces on anchorage-dependent mammalian cells, with much of this work focusing on the cells which make up a blood vessel. This work led to his interest in tissue engineering, and he now is director of the Georgia Tech/Emory Center for the Engineering of Living Tissues (GTEC), an Engineering Research Center established in 1998 and funded by the National Science Foundation.

Since 1995, Dr. Nerem has served as the director of the Parker H. Petit Institute for Bioengineering and Bioscience (IBB), a research institute whose mission is to integrate engineering, information technology, and the life sciences in the conduct of biomedical research. In addition, he served on a part-time basis from 2003 to 2006 as the senior advisor for bioengineering in the National Institute of Health's (NIH) newest institute, the National Institute for Biomedical Imaging and Bioengineering.

In recognition of his work, he was elected to the National Academy of Engineering in 1988 and to the Institute of Medicine of the National Academy of Sciences in 1992. He was elected a fellow of the American Academy of Arts and Sciences in 1998. Nerem is past president of the International Federation for Medical and Biological Engineering and past president of the International Union for Physical and Engineering Sciences in Medicine. He was also the founding president of the American Institute of Medical and Biological Engineering and he served on the Science Board of the Food and Drug Administration from 2000 to 2003. In 2008 he received the Founders Award from the National Academy of Engineering.

Dr. Nerem came to Georgia Tech in the winter of 1987 as a professor in the School of Mechanical Engineering and as the Parker H. Petit Distinguished Chair for Engineering in Medicine. He also has an appointment in the School of Chemical & Biomolecular Engineering. Prior to coming to Georgia Tech, he was a professor and chairman in the Department of Mechanical Engineering at the University of Houston from 1979 to 1986 and on the faculty at the Ohio State University from 1964 to 1979.