# Dr. Victor B. Lawrence

*Director*
*Center for Intelligent Networked Systems (iNetS)*
*Stevens Institute of Technology*

Dr. Victor B. Lawrence is the Director of the Center for Intelligent Networked Systems (iNetS), at Stevens Institute of Technology, where he also served as Associate Dean.  In addition, he is a distinguished research professor.

Dr. Lawrence is a member of the U.S. National Academy of Engineering, a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), a Fellow of AT&T Bell Labs, and a Charter Fellow of the National Academy of Inventors. In 2016, he was inducted into the National Inventors Hall of Fame.

Dr. Lawrence has worked in the field of information technology and communications for over forty years. As Executive Vice President of Advanced Communications Technology at AT&T Bell Laboratories, he led the development of technologies for worldwide communications networks, and managed a research and development (R&D) staff of over 500 scientists and engineers and a budget of about $100M annually. His organization was worldwide, with branches in Beijing and Shanghai in China; Hilversum and Twente in the Netherlands; and in four states in the US.

His personal research activities provided major contributions to gigabit photonic and wireless networking, signal processing, modem technology, digital techniques and multimedia communications. His application of digital signal processing to data communications, in the late 1980s and early 1990s, led to many significant advances in high-speed transmission. The pioneering work he performed led to the development of the Studio Encoder, and the receiver chip-set design for the Sirius XM Radio Satellite system. His team developed Bell Labs' high-definition television (HDTV) video encoder and decoder chips.

As a key proponent of R&D globalization, Dr. Lawrence has championed the effort to bring fiber optic connectivity to Africa. He led the technical effort that designed Africa One, the 39,000 Kilometer Submarine Fiber Cable around Africa in 1993. He was a member of South African President Mbeki's International Advisory group on ICT; Chairman of the Broadband Advisory Committee to the South African Government; and a Director of the Board of Telkom South Africa. He also taught at Kumasi University of Science and Technology in Ghana in 1974 before joining Bell Labs.

Dr. Lawrence's academic background underscores both his interest in, and investment in the expansion of technology. After receiving his Bachelor of Science degree, in 1968,  from the University of London, he pursued studies at the University of London's Imperial College, where, in 1969, he earned his Diploma of the Imperial College, an academic certificate awarded to the school's postgraduate students. In 1973, Dr. Lawrence received his Ph.D. in Electrical Engineering from the University of London. *(continued)*

Every year, from 1995 to 2000, Dr. Lawrence taught a short course at the U.S. Industrial College of the Armed Forces. It should also be noted that from 1997 to 2001, he and his staff supported former Tennessee State Senator William H. Frist, and the U.S. Congressional Subcommittee on Science and Technology, providing input to technology bills.

Currently, Dr. Lawrence is a director of the New Jersey Center for Teaching and Learning, which has developed a progressive pedagogy for STEM education for children in urban inner city and challenged communities. He arranged for World Bank financing to extend this pedagogy to developing countries including the Gambia, Lesotho, Ghana and Nigeria. He also co-founded an International Cultural Exchange Center.

Dr. Lawrence co-founded four successful companies: Globespan Semiconductors Incorporated; Elemedia (a Lucent Internet Software business); Lucent Digital Video; and Lucent Digital Radio, which merged to iBiquity Digital. He is the co-author of five books, has published over 70 papers in peer-reviewed journals, and holds 43 U.S. and international patents.

As a result of his many entrepreneurial and professional endeavors, Dr. Lawrence has been recognized via awards, honors and publications. These include the 2007 IEEE Simon Ramo Gold Medal; the 2004 IEEE Award in International Communications; and an Emmy Award for HDTV Standard in 1997. ■