Gary S. Sayler, Ph.D.

Dr. Gary S. Sayler is Distinguished Professor of Microbiology, and Ecology and Evolutionary Biology at the University of Tennessee. He received his B.S. in Bacteriology (1971) from North Dakota State University and his Ph.D. (1974) in Bacteriology and Biochemistry from the University of Idaho where he conducted research of heterotrophic turnover of organic matter in freshwater environments. This was followed by postdoctoral training in Marine Microbiology and Biodegradation at the University of Maryland after which he joined the faculty of the University of Tennessee in 1975. He is the Founding Director (1986) of the Center for Environmental Biotechnology, a recently designated Research Center-of-Excellence, and is current Director of the State Center-of-Excellence, the Waste Management Research and Education Institute. Over his career he has directed approximately $30,000,000 in environmental, biodegradation, and molecular ecological research for numerous federal, state, and industrial sponsors. He has directed the graduate programs of approximately 40 Ph.D. and 15 Master's students in Microbiology, Ecology, and Evolutionary Biology. He has edited five books and contributed 276 publications in broad areas of molecular biology, environmental microbiology, biodegradation, and biotechnology, and holds nine patents on environmental gene probing, genetic engineering for bioremediation and bioelectronic sensor technology. His work has included molecular and environmental aspects of PCB, PAH, BTEX and TCE metabolism. He has given invited presentations at over 300 national and international meetings in the broad area of biotechnology and the environment. He has served on and/or chaired numerous panels and advisory review committees for ORNL, LBNL, ANL, BNL, NSF, NIH, DOE, EPA, and four different NAS/NRC subcommittees. During his career, he has been awarded a NIEHS' Research Career Development Award (1980-1985); was named by *Science Digest* Top 100 Innovators in Science in 1985, he received the American Society for Microbiology, Procter and Gamble Award for Environmental Microbiology (1994), the Distinguished Alumni Award of the University of Idaho (1995) and the DOW Chemical Foundation SPHERE Award (1998-2000). He was elected to the American Academy of Microbiology in 1991 and is a lifetime member. He has served in an editorial capacity for six journals and is currently an associate editor for *Environmental Science and Technology*. Professional memberships include AAAS, ASM, ACS, SIM, SETAC and SPIEE. Dr. Sayler served as a member of the Water Environment Research Foundation, Research Council from 1999 to 2001. Recent research support is from NIH, NASA, DARPA, NSF, USDA, US Army, and DOE in areas integrating Bioluminescent Bioreporter Integrated Circuit technology, nucleic acid environmental diagnostics and biosensing gene expression, and monitoring in complex system analysis. Areas of research expertise include microbiology, genetic engineering, molecular biology in biodegradation and bioremediation; PAH, PCB soils, sediments, and water; molecular ecology in biological waste treatment, PCR-gene probes, biosensors for bioavailable pollutants including endocrine disruptors, nanotechnology, and carbon nanofibers in microbial biofilms. He has recently served (2003-2004) on a NAS/NRC review subcommittee on standoff explosives detection and was a member of a DOE Committee of Visitors (2004) examining OBER's grant solicitation and review process. He is currently a member of EPA's Science Advisory Board Drinking Water Committee and is an executive committee member of the Board of Scientific Counselors for EPA's Office of Research and Development.