

Michael J. Sadowsky, University of Minnesota

Distinguished McKnight University Professor, Department of Soil, Water and Climate Director, The BioTechnology Institute St. Paul, MN 55108 (W) 612-624-2706 <u>http://www.bti.umn.edu/faculty/biosadowsky.html</u> <u>http://www.swac.umn.edu/directory/faculty/michael-sadowsky</u> http://www.cbs.umn.edu/research/labs/minnesota-mississippi-metagenome-project

Dr. Sadowsky has had a distinguished career in industry, government and academia. He studied at the Department of Bacteriology at the University of Wisconsin-Madison, and received his Ph.D. in Microbiology from the University of Hawaii in 1983. Between 1983 and 1985, he did postdoctoral research at the McGill University in the plant-microbe interactions group. He worked shortly for Allied Corporation as a Molecular Biologist and then worked for the USDA in Beltsville Maryland for several years in the Nitrogen Fixation and Soybean Genetics Laboratory. Sadowsky joined the faculty at the University of Minnesota in 1989, where he is a member of 7 graduate faculties. He has authored or coauthored more than 210 articles in scientific journals and books, was elected fellow of the American Academy of Microbiology in 1999 and fellow of the American Association for the Advancement of Science in 2008. His research efforts are directed towards the metagenomic analysis of bacteria in soils, water and human intestines. He has been using metagenomic approaches of the human GI tract, done using new DNA sequencing and computational methods, to provide valuable insights into host-microbe interactions, the microbial ecology of this complex ecosystem, and practical knowledge about how human GI tract microorganism are related to human health. He is also interested in the identification and characterization of bacterial genes and metabolic pathways involved in the biodegradation of chlorinated herbicides such as atrazine. His research efforts are also directed toward the identification and examination of bacterial genes involved in the early periods of legume-microbe symbioses. He is specifically interested in studying Rhizobium and Bradyrhizobium genes that play a prominent role in host/microbe recognition and in the establishment of symbiotic, nitrogen-fixing nodules. He is actively involved in developing molecular tools to determine sources of fecal bacteria in the environment, including the use of metagenome studies and is actively involved in The Minnesota Mississippi Metagenome Project (M3P). Sadowsky's funding has been provided through grants from the National Science Foundation, the USDA, USEPA, USGS, and the National Institutes of Health.