

Jizhong Zhou, Ph.D.

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Dr. Jizhong Zhou is a George Lynn Cross Research Professor in the Department of Microbiology and Plant Biology, Director of the Institute for Environmental Genomics, and an Adjunct Professor at School of Civil Engineering and Environmental Sciences, University of Oklahoma. Dr. Zhou received a B.S. in Plant Pathology and Entomology in 1981 and an M.S. in Insect Mathematical Ecology in 1984 from Hunan Agricultural University, China. He received a Ph.D. in Molecular Genetics and Cell Biology in 1993 from Washington State University. Before he came to the U.S. in 1989, he studied theoretical ecology and ecosystem modeling under the guidance of Dr. Shijun Ma for three years at the Research Center for Eco-Environmental Sciences (RCEES), Chinese Academy of Sciences, Beijing, China. He worked at the Center for Microbial Ecology, Michigan State University, from 1993 to 1995 as a Postdoctoral Research Associate under the guidance of Dr. James M. Tiedje. Before moving to OU in 2005, he worked at Oak Ridge National Laboratory as a Hollaender Fellow, Staff Scientist, Senior Staff Scientist, and then Distinguished Staff Scientist for 10 years. His major achievements include: (i) transformational leadership in developing a revolutionary high throughput genomic technologies for establishing linkages of microbial biodiversity to ecosystem functions; (ii) pioneering advances in developing computational technologies for network construction and community assembly mechanisms (iii) pioneering demonstrations of groundwater microbiome diversity, distribution, succession, activities stability, and their underlying mechanisms in response to heavy metals and bioremediation treatments; (iv) ground-breaking discoveries in understanding the feedbacks, mechanisms and principles of microbial systems in response to climate changes, (v) pathbreaking advancements in theoretical ecology of microbial systems. He has authored numerous publications, with total citations of > 53,000 and H-index of 121, on microbial genomics, genomic technologies, molecular biology, molecular evolution, microbial ecology, bioremediation, bioenergy, global change, bioinformatics, systems biology, and theoretical ecology. One of his papers, published in 1996, is among the 20 most cited papers (>3,600 times) in the history of Applied and Environmental Microbiology. Another paper published in ISME J was among the 5 top-cited articles since the journal first published in 2007. He was recognized as a global influential researcher by all three major complementary metrics: (i) 2018, 2019, 2020, Global Highly Cited Researcher (top 0.1%) in Cross Field and/or microbiology, (ii) 2020 World's most cited researcher (99.9% percentile) across all science & engineering fields, and (iii) most highly cited researcher (H-index > 100) according to Google Scholar Citations.

Dr. Zhou has received numerous awards and honors, including the 2019 ASM Award for Environmental Research for recognizing an outstanding scientist with distinguished research achievements in microbial ecology and environmental microbiology, Ernest Orlando Lawrence Award in 2014 – DOE's scientific award established by President Dwight Eisenhower in 1959, R&D 100 Award in 2009 as one of 100 most innovative scientific and technological breakthroughs, Federal Laboratory Consortium (Southeast) Award for Excellence in Technology Transfer, 2005, and Presidential Early Career Award for Scientists and Engineers in 2001 - the highest honor for young scientists and engineers in US, an Environmental Sciences Division Distinguished Scientific Achievement Award in 2001, as well as an Alexander Hollaender Distinguished Postdoctoral Fellowship. He was a former Editor for mBio (2009-2019) and for Applied and Environmental Microbiology (2003 to 2013). He is currently an Editor-in-Chief for mLife, an Editor for ISME J and Microbiome. He has chaired three International Conferences on Microbial Genomes and has served on numerous grants, fellowship, and award review panels for DOE, NSF, NIH, and ASM. He was an Advisory Committee Member for NASA GeneLabs, and a Committee member for Microbiomes of the Built Environment by the National Academies of Sciences, Engineering, and Medicine. He is an US Ambassador to the International Society of Microbial Ecology. He is also a Member of ASM Environmental Microbiology Committee. He is a Fellow of the American Academy of Microbiology (AAM), Ecological Society of Ecology (ESA), International Water Association (IWA), and the American Association for the Advancement of Science (AAAS).