

Jizhong Zhou, Ph.D

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Dr. Zhou is a George Lynn Cross Research Professor and Presidential Professor in School of Biological Sciences, Director of the Institute for Environmental Genomics, and an Adjunct Professor at School of Civil Engineering, and Environmental Sciences, and School of Computer Sciences, University of Oklahoma. He is also an Adjunct Senior Scientist at Earth and Environmental Sciences, Lawrence Berkeley National Laboratory, and an Adjunct Professor at School of Environment, Tsinghua University, Beijing.

Dr. Zhou is an international leader in microbial ecology. His major achievements include: (i) groundbreaking discoveries in understanding the feedbacks, mechanisms and principles of microbial systems in response to climate change, (ii) pioneering demonstrations of groundwater microbiome diversity, distribution, succession, activities, stability, and their underlying mechanisms in response to heavy metals and bioremediation treatments; (iii) pathbreaking advancements in theoretical ecology of microbial systems, (iv) transformational leadership in developing a revolutionary high throughput genomic technologies for establishing linkages of microbial biodiversity to ecosystem functions; (v) pioneering advances in developing computational technologies for network analysis and community assembly mechanisms. He has authored numerous publications, with total citations of > 87,000 and H-index of 155 (GS), on microbial genomics, genomic technologies, bioinformatics, systems biology, molecular evolution, microbial ecology, and/or theoretical ecology. He is recognized as a top 0.1% globally highly cited researcher by all three major complementary approaches based on Elsevier's Scopus, Web of Science, and Google Scholar. Research.com ranked him at top **#30** worldwide and **#14** in US in the area of Ecology & Evolution, and top **#38** worldwide and **#20** in US in the field of Microbiology, and was the only microbiologist among the 2021 Reuters List of World's Top 1000 Climate Scientists. His seminal work has been instrumental to the revolution of microbial ecology over the past two decades.

Dr. Zhou has received numerous prestigious awards and honors, such as Distinguished Scientist Award by Southeastern Universities Research Association (SURA) for recognizing scientists who are performing world-leading research in 2024, the ISME-IWA BioCluster Grand Prize Award for recognizing the importance and impact of interdisciplinary research at the interface of microbial ecology and water/wastewater treatment in 2022, the 2022 Soil Science Research Award for recognizing outstanding research contributions in soil science, the 2019 ASM Award for Environmental Research for recognizing an outstanding scientist with distinguished research achievements in microbial ecology and environmental microbiology, DOE's Ernest Orlando Lawrence Award in 2014 (also received U.S. Congressional recognition) – one of the highest honors presented by the U.S. government in science, R&D 100 Award in 2009 as one of 100 most innovative scientific and technological breakthroughs, and Presidential Early Career Award for Scientists and Engineers in 2001 - the highest honor for young scientists and engineers in US. He is a member of American Academy of Arts and Sciences (AAA&S), a foreign Member of Academia Europaea (MAE), and a Fellow of the American Academy of Microbiology (AAM), Ecological Society of Ecology (ESA), Soil Science Society of America (SSSA), International Water Association (IWA), and the American Association for the Advancement of Science (AAAS).

Dr. Zhou was a Senior Editor for ISME J, mBio, and Editor for Applied and Environmental Microbiology. He is currently an Editor-in-Chief for mLife, and an Associate Editor for Microbiome/Environmental Microbiome. He has served on numerous grants, fellowship, and award review panels for DOE, NSF, NIH, and USDA, and has been Committee Members for various national and international organizations. To promote public awareness of environmental sciences and technologies, during Covid-19 pandemic, he has organized the influential online seminar series, International Forum on Advanced Environmental Sciences and Technology (iFAST), drawing global attention with participants from > 90 countries and > 300,000 views of the talks on his website. His innovative computational pipelines for community assembly and network analysis have been extensively used worldwide, greatly enabling non-computational researchers in applying sophisticated mathematical and statistical methods to explore frontier ecological questions.

Dr. Zhou is an Honorary Director of Chinese Association of Microbial Ecology (CAME) – a major professional organization for microbial ecology in China. To honor his contributions, CAME established an award under his name in 2017 to recognize Outstanding Microbial Ecologists. Also, he established three Fellowships at Tsinghua University (2015), University of Oklahoma (2017), and Lanzhou University (2019), respectively, for awarding excellent undergraduates, graduates, and/or postdocs.