Discussant/Moderator Bios

Jizhong Zhou

Dr. Jizhong Zhou is a George Lynn Cross Research Professor and Director for the Institute for Environmental Genomics, University of Oklahoma, Norman, OK. His expertise is on microbial ecology and genomics in the fields of climate change, groundwater bioremediation, wastewater treatments, bioenergy, and theoretical ecology. He has published > 700 papers, with H index of 135 and total citations of > 65,000 (GS). He was recognized as a top 0.1% globally highly cited researcher by all three major complementary metrics based on Elservier's Scopus, Web of Science, and Google Scholar. He received the 2022 Soil Science Research Award, the 2022 ISME-IWA BioCluster Grand Prize Award, the 2019 ASM Award for Environmental Research, DOE Ernest Orlando Lawrence Award in 2014, and Presidential Early Career Award for Scientists and Engineers in 2001. He is an Editor-in-Chief for mLife, a senior Editor for ISME J, Associate Editor for Microbiome, a former Senior Editor for mBio and a former Editor for Applied and Environmental Microbiology. He is a Fellow of International Water Association, American Academy of Microbiology, Ecological Society of America, and American Association for Advancement of Science. See details at https://www.ou.edu/ieg.

Rosalina Christova

Dr. R. Christova is the Project Director of the Primary Algae Laboratory at California State University San Marcos (CSUSM). The Primary Algae Laboratory is part of the Surface Water Ambient Monitoring Program and is funded by the California Water Resources Control Board. She has pioneered the use of algae as bioindicators of stream water quality in California. Her published research includes 54 peer-reviewed articles — which describe more than 20 new-to-science freshwater and marine algal species — and discuss questions pertaining to species interactions with their aquatic environment, understanding algal responses to global human alterations and climate change. Her current research is centered on benthic toxin-producing cyanobacteria in flowing waters in California, which is ongoing interdisciplinary effort recently funded by the NSF URoL:EN Program. Dr. Christova co-mentored 5 undergraduate NFS REU students and nearly 20 CSUSM students with diverse backgrounds, leading to a peer-reviewed publication with several of them. She is teaching Aquatic Ecology courses at CSUSM. Dr. Christova holds a Ph.D. Degree in Botany/Phycology from Sofia University St Kliment Ohridski, Bulgaria and recently accepted a tenure-track assistant professor of Aquatic Ecology position at George Mason University, Virginia.

Robert W. Thacker

Robert W. Thacker is a Professor in the Department of Ecology and Evolution at Stony Brook University and a Research Associate at the Smithsonian Tropical Research Institute. Bob completed his BS (Zoology) at Duke University. After completing his PhD (Biology) at the University of Michigan Ann Arbor, he worked as a postdoctoral researcher at the University of Guam and the University of Hawaii. Bob was a faculty member of the University of Alabama at Birmingham from 2000 to 2015, then joined Stony Brook University in 2015. He teaches a variety of courses at Stony Brook including Ecology, Statistics, and Molecular Diversity Laboratory. Bob's research program focuses on the evolutionary ecology of sponges and microbial symbionts.

Rebecca Vega Thurber

Dr. Rebecca Vega Thurber is the Pernot Distinguished Professor of Microbiology at Oregon State University (OSU). Her lab investigates the role and dynamics of bacteria and viruses in marine hosts and habitats in order to better understand and mitigate or prevent the proximate causes of marine disease, habitat degradation, and ecosystem alteration. She is currently a Senior Editor of the flagship journal The International Society for Microbial Ecology Journal (ISMEJ). Dr. Vega Thurber is an author on more than 90 scientific publications, including 4 book chapters, and her collective work has been cited over 19,000 times to date. Dr. Vega Thurber has been awarded over $5.3 million dollars in funding, and her lab has trained 11 postdoctoral researchers, 13 PhD students, and 29 undergraduates. Dr. Vega Thurber is committed to communicating science to broader audiences including the production of a multilingual cartoon series and a full-length documentary on coral reef decline entitled, Saving Atlantis. She has spoken on Capitol Hill and has been a featured speaker at national and international meetings. Through these platforms, she seeks to influence the public discourse on marine conservation and its importance to biodiversity, local economies, and cultural preservation. Dr. Vega Thurber graduated from UC Santa Cruz, in 1999, with dual degrees in Marine Biology and Molecular, Cellular, & Developmental Biology. She received her PhD from Stanford University in Biological Sciences in 2005. She conducted her NSF minority Postdoctoral Fellowship (PFRB) at San Diego State University with Dr. Forest Rohwer from 2006 to 2009.

Jose Cerrato

Dr. Cerrato's research interest is related to biogeochemical processes at the interface of water and energy that affect the cycle of metals and radionuclides in the environment. He leads the E-H2O Research Group which applies spectroscopy, microscopy, aqueous chemistry, and molecular biology tools for the study of complex environmental interactions. Dr. Cerrato was a Postdoctoral Research Associate at Washington University in St. Louis. He has been a recipient of the OAS-LASPAU-Fulbright Scholarship, National Science Foundation (NSF) Integrative Graduate Education Research Traineeship (IGERT), Oak Ridge Associated Universities Ralph E. Powe Junior Faculty Enhancement Award, the University of New Mexico Faculty of Color Research Award, and the NSF CAREER Award.

Eric Allen

Eric Allen is a Professor of Marine Microbiology at the Scripps Institution of Oceanography, UC San Diego and holds a joint appointment with the Department of Molecular Biology in the School of Biological Sciences. Research in the Allen lab centers upon the microbiota associated with diverse marine organisms, including fish, invertebrates, and seagrasses. Current projects, including an on-going NSF URoL award, seek to develop robust cultivation systems to propagate marine host-associated microbiota under controlled laboratory conditions to explore the form and function of these specialized communities via integrated metagenomic, metatranscriptomic, and metabolomic experiments. Efforts are also underway to develop the California sea hare, Aplysia californica, as a model organism to investigate microbiome dynamics in an experimentally tractable marine animal.

Jo Handelsman

Dr. Jo Handelsman is the Director of the Wisconsin Institute for Discovery at the University of Wisconsin-Madison, a Vilas Research Professor, and Howard Hughes Medical Institute Professor. She previously

served as a science advisor to President Barack Obama as the Associate Director for Science at the White House Office of Science and Technology Policy (OSTP) where she served for three years until January 2017, and was on the faculty at the University of Wisconsin and Yale University before that. She received her Ph.D. at the University of Wisconsin–Madison in Molecular Biology and has since authored over 200 scientific research publications, 30 editorials, and 29 essays. She is responsible for groundbreaking studies in microbial communication and metagenomics. She is also widely recognized for her contributions to science education and diversity in science. She has authored numerous articles about classroom methods and mentoring and she is co-author of six books about teaching, including Entering Mentoring and Scientific Teaching. She received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring from President Obama in 2011 and was inducted into the American Academy of Arts and Sciences in 2019.

Jennifer Martiny

Jennifer Martiny is a Professor of Ecology and Evolutionary Biology at University of California Irvine (UCI) and co-Director of UCI's Center for Microbiome Science. She is a founder and the current lead of the Microbiome Centers Consortium, a national network of 40+ academic centers whose research crosscuts medical, environmental, agricultural, and engineered microbiomes. She is also a member of the Scientific Advisory Board of the National Microbiome Data Collaborative, an effort to make microbiome data more FAIR (findable, accessible, interoperable, and reusable). Her own research aims to develop and test conceptual theory for microbial communities, with a particular focus on the response of soil microbiomes to global change. This work applies methods ranging from multi-omic to culturing approaches along with fieldwork and meta-analysis. Dr. Martiny is a fellow of the Ecological Society of America, the American Academy of Microbiology, and the American Association for the Advancement of Science. She received her PhD in biological sciences at Stanford University.

Margaret McFall-Ngai

Margaret McFall-Ngai is the inaugural Director of Biosphere Sciences and Engineering, a new division at the Carnegie Institution for Science, California Institute of Technology. She previously held tenured positions at University of Southern California, University of Hawaii at Manoa, and the University of Wisconsin-Madison. Her research interests include the role of beneficial bacteria in health; the study of nested ecosystems of animals and their microbial partners; the mechanisms underlying the establishment and maintenance of persistent animal-bacterial interactions; and the convergent evolution of the eyes and light organs of animals. Dr. McFall-Ngai served as organizer of the National Microbiome Initiative with OSTP in the Obama White House from 2014-2016. She was elected member of the National Academy of Sciences in 2014, the American Academy of Arts and Sciences in 2012, and the American Academy of Microbiology in 2002. She received her Ph.D. in Biology from UCLA in 1983. She has served on several NAS committees, including the Committee on a New Biology for the 21st Century: Ensuring that the United States Leads the Coming Biology Revolution and the Forum on Microbial Threats.