

iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists

7 p.m. CST, 8 p.m. EST, Wednesday, March 1, 2023
1 a.m. GMT, 9 a.m. China, Thursday, March 2, 2023



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J. Martiny is a professor of ecology and evolutionary biology at the University of California, Irvine. Martiny's research aims to uncover fundamental principles of the generation and maintenance of diversity in microbial communities by bringing together perspectives from microbiology, ecology, and evolutionary biology. She co-directs the UCI Center for Microbiome Science and leads the Microbiome Centers Consortium, a national network of academic microbiome centers. She is a fellow of the Ecological Society of America, the American Academy of Microbiology, and the American Association for the Advancement of Science.

Investigating the ecology and evolution of wild microbial communities

Microbial communities provide an excellent study system to explore the integration of ecology and evolution. At one end of the spectrum, the composition of microbial communities (assessed at broad taxonomic levels) dramatically shifts in response to environmental changes. At the other end, laboratory studies demonstrate the potential for rapid evolution in response to the similar environmental changes. In between these two extremes, very closely related bacterial and fungal strains coexist in natural communities and this standing variation results in allele frequency shifts within microbial taxa. New advances in microbial population genomics allow us to investigate these blurry eco-evo boundaries. I will present our recent approaches to investigate ecological and evolutionary processes simultaneously in soil microbial communities and solicit feedback about new directions.



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Zoom webinar ID: 934 8142 2012 (zoom.us/j/93481422012)

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Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; www.ou.edu/ieg)
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