

# iFAST Symposium Microbial Ecology

*To celebrate Professor James Tiedje's 80th birthday and honor his outstanding contributions to microbial ecology*

Professor James Tiedje is University Distinguished Professor Emeritus of Microbiology and Molecular Genetics and of Plant, Soil and Microbial Sciences at Michigan State University, and was director of the Center for Microbial Ecology for 30 years. His contributions have been on microbial ecology, physiology and diversity, especially regarding the nitrogen cycle, biodegradation of pollutants and on the use of genomics and metagenomics to understand speciation, community structure and functions. He served as editor-in-chief of *Applied and Environmental Microbiology* and editor of *Microbial and Molecular Biology Reviews* and *mBio*. He served on the Board on Life Sciences of the National Research Council, EPA's Science Advisory Panel and on DOE's Biological and Environmental Research Advisory Committee. He was president of the American Society for Microbiology and the International Society of Microbial Ecology. He has received numerous awards, including UNESCO's Carlos J. Finlay Prize in microbiology and ASM's Applied and Environmental Research Award. He is a member of the U.S. National Academy of Sciences and a Fellow of the AAAS, the American Academy of Microbiology, the Ecological Society of America, and the Soil Science Society of America.



**Mon** Apr 4

**Tue** Apr 5

**Wed** Apr 6

10 a.m. – 12:30 p.m. EDT  
2 – 4:30 p.m. GMT  
10 p.m. – 12:30 a.m. China

## Microbial Ecology

Niels Peter Revsbech  
Yoichi Kamagata  
Fengping Wang  
Andreas Schramm  
Ederson Jesus  
Daliang Ning  
Maggie Yuan  
Vincent Deneff

## Environ. Microbiol. & Ecosystem

Joshua Schimel  
Gupta Vadakattu  
Claudia Etchebehere  
Tong Zhang  
Jianzhong He  
Jennifer Pett-Ridge  
Marius Vital  
Konny Smalla

## Comput. Biol. & Engagement

Philip Robertson  
Patrick Chain  
Kostas Konstantanidis  
Ruonan Wu  
Arturo Massol  
Mary Beth Leigh  
James Tiedje

Speakers

## Organizing committee



Mary Firestone Philip Robertson Charles Rice Janet Jansson Jizhong Zhou Kristian Brandt Adina Howe

Zoom Link - <https://zoom.us/j/93481422012>

Symposium website - <https://www.ou.edu/ieg/seminars/ifast2204>

iFAST series chair: Jizhong Zhou (University of Oklahoma, USA), Xueduan Liu (Central South University, China)

The University of Oklahoma is an equal opportunity institution. [www.ou.edu/eoo](http://www.ou.edu/eoo)

# iFAST Symposium Microbial Ecology

*To celebrate Professor James Tiedje's 80th birthday and honor his outstanding contributions to microbial ecology*

**Apr  
4**

## Microbial Ecology

10 a.m.	Introduction: <b>Mary Firestone</b>	University of California, Berkeley
10:10 a.m.	Keynote: <b>Niels Peter Revsbech</b>	Aarhus University, Denmark
	<b>How Measurements at High Spatial Resolution Have Improved Our Understanding of the Nitrogen Cycle</b>	
10:40 a.m.	<b>Yoichi Kamagata</b>	Hokkaido University, Japan
	<b>What I Learnt from Syntrophy</b>	
10:55 a.m.	<b>Fengping Wang</b>	Shanghai Jiao Tong University, China
	<b>Ecological Roles and Life Strategy of Archaea in Marine Sediments</b>	
11:10 a.m.	<b>Andreas Schramm</b>	Aarhus University, Denmark
	<b>Electrically Conductive Cable Bacteria in Nitrogen Cycling</b>	
11:25 a.m.	5-minute break	
11:30 a.m.	<b>Ederson Jesus</b>	Embrapa, Rio de Janeiro, Brazil
	<b>Bacterial Diversity in the Amazon Forest Floor: from Basics to Applied</b>	
11:45 a.m.	<b>Daliang Ning</b>	University of Oklahoma
	<b>Reasons and Chance: Quantifying Microbial Community Assembly Mechanisms</b>	
Noon	<b>Maggie Yuan</b>	University of California, Berkeley
	<b>Microbial Mediation of Grassland C Cycle: Stories from in the Field</b>	
12:15 p.m.	<b>Vincent Denef</b>	University of Michigan
	<b>Algal Microbiomes Alter Competitive Interactions between Their Hosts</b>	

U.S. Eastern Time



INSTITUTE FOR ENVIRONMENTAL GENOMICS  
The UNIVERSITY of OKLAHOMA



中南大學  
CENTRAL SOUTH UNIVERSITY

Zoom Link - <https://zoom.us/j/93481422012>

Symposium website - <https://www.ou.edu/ieg/seminars/ifast2204>

iFAST series chair: **Jizhong Zhou** (University of Oklahoma, USA), **Xueduan Liu** (Central South University, China)

The University of Oklahoma is an equal opportunity institution. [www.ou.edu/eoo](http://www.ou.edu/eoo)

# iFAST Symposium Microbial Ecology

*To celebrate Professor James Tiedje's 80th birthday and honor his outstanding contributions to microbial ecology*

**Apr  
5**

## Environmental Microbiology & Ecosystem

10 a.m.	Introduction: <b>Charles Rice</b>	Kansas State University
10:10 a.m.	Keynote: <b>Joshua Schimel</b>	University California, Santa Barbara
	<b>The Democracy of Dirt: Relating Micro-Scale Dynamics to Macro-Scale Ecosystem Function</b>	
10:40 a.m.	<b>Gupta Vadakattu</b>	CSIRO, Australia
	<b>Disease Suppression: Composition, Complexity or Functional Capacity of Soil Microbiomes</b>	
10:55 a.m.	<b>Claudia Etchebehere</b>	Biological Research Institute Clemente Estable, Uruguay
	<b>Chloroflexi in Wastewater Treatment Systems: Threats or Guardians of the Ecosystem?</b>	
11:10 a.m.	<b>Tong Zhang</b>	Hong Kong University, China
	<b>Antibiotics Resistance Genes as Emerging Pollutants from Wastewater Treatment Plants</b>	
11:25 a.m.	5-minute break	
11:30 a.m.	<b>Jianzhong He</b>	National University of Singapore
	<b>Microplastic Hotspots for Microbial Reductive Dehalogenation</b>	
11:45 a.m.	<b>Jennifer Pett-Ridge</b>	Lawrence Livermore National Laboratory; University of California, Merced
	<b>Fungi and Friends: the Role of Fungal-Bacterial Interactions in Rhizosphere Biogeochemistry</b>	
Noon	<b>Marius Vital</b>	Hannover Medical School, Hannover, Germany
	<b>The Good, the Bad and the Neutral of Human Gut Microbiota</b>	
12:15 p.m.	<b>Kornelia Smalla</b>	Institute for Epidemiology and Pathogen Diagnostics, Germany
	<b>Antibiotic Resistance Genes and Mobile Genetic Elements in Soil and Plant Bacteria</b>	

U.S. Eastern Time



INSTITUTE FOR ENVIRONMENTAL GENOMICS  
The UNIVERSITY of OKLAHOMA



中南大學  
CENTRAL SOUTH UNIVERSITY

Zoom Link - <https://zoom.us/j/93481422012>

Symposium website - <https://www.ou.edu/ieg/seminars/ifast2204>

iFAST series chair: **Jizhong Zhou** (University of Oklahoma, USA), **Xueduan Liu** (Central South University, China)

The University of Oklahoma is an equal opportunity institution. [www.ou.edu/eoo](http://www.ou.edu/eoo)

# iFAST Symposium Microbial Ecology

*To celebrate Professor James Tiedje's 80th birthday and honor his outstanding contributions to microbial ecology*

## Computational Biology & Engagement

Apr  
6

10 a.m.	Introduction: <b>Janet Jansson</b>	Pacific Northwest National Laboratory
10:10 a.m.	Keynote: <b>G. Philip Robertson</b>	Michigan State University
	<b>When Push Comes to Shove: Scaling Microbial Processes</b>	
10:40 a.m.	<b>Patrick Chain</b>	Los Alamos National Laboratory
	<b>Diving Deep into Microbial Genomic Data – Big Findings in Small Fungi, Bacteria, and Viruses</b>	
10:55 a.m.	<b>Kostas Konstantinidis</b>	Georgia Institute of Technology
	<b>The Quest for What a Species Is: from the CME Time to Present</b>	
11:10 a.m.	<b>Ruonan Wu</b>	Pacific Northwest National Laboratory
	<b>Unearthing Soil Viruses</b>	
11:25 a.m.	5-minute break	
11:30 a.m.	<b>Arturo Massol</b>	University of Puerto Rico, Mayaguez
	<b>Science for Constructive Insurgency in Times of Climate Change</b>	
11:45 a.m.	<b>Mary Beth Leigh</b>	University of Alaska Fairbanks
	<b>The Art of Microbiology: Community Engagement Through Art-Science Integration</b>	
Noon	<b>Adina Howe</b>	Iowa State University
	<b>Kristian Koefoed Brandt</b>	University of Copenhagen, Denmark
	<b>Photo show</b>	
12:15 p.m.	<b>James Tiedje</b>	Michigan State University
	<b>Transitioning Through Time: me and ME</b>	
	Adjourning: <b>Jizhong Zhou</b>	University of Oklahoma

U.S. Eastern Time



INSTITUTE FOR ENVIRONMENTAL GENOMICS  
The UNIVERSITY of OKLAHOMA



中南大學  
CENTRAL SOUTH UNIVERSITY

Zoom Link - <https://zoom.us/j/93481422012>

Symposium website - <https://www.ou.edu/ieg/seminars/ifast2204>

iFAST series chair: **Jizhong Zhou** (University of Oklahoma, USA), **Xueduan Liu** (Central South University, China)

The University of Oklahoma is an equal opportunity institution. [www.ou.edu/eoo](http://www.ou.edu/eoo)