

iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists

8 a.m. CDT; 9 a.m. EDT; 1 p.m. GMT; 9 p.m. Beijing

Wednesday, September 22, 2021



Joan B. Rose
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https://www.canr.msu.edu/people/joan_rose

J. B. ROSE holds the Homer Nowlin Chair in Water Research at Michigan State University. She is a member of the National Academy of Engineering (2011) and the winner of the 2016 Stockholm Water Prize. She is an international expert in water microbiology, water quality and public health safety. She has published more than 300 manuscripts. She led the International Water Associations Task Force on COVID-19 in 2020. She is also in charge of the Global Water Pathogens Project (www.waterpathogens.org). She is a member of the IWA Board of Directors (2016-current). Rose earned her Ph.D. in microbiology from the University of Arizona, Tucson, and master's degree from the University of Wyoming. She is currently collaborating with the State of Michigan on the Statewide program on Wastewater Surveillance for COVID-19.

The World of Environmental Virology

Since the era of waterborne jaundice and polio, diseases spread by viruses were present prior to our understanding of these unique biological entities. Environmental virology attempts to understand the disease risk through the monitoring of viruses in wastewater, fresh and marine waters. The advent of molecular tools and high throughput sequencing technologies coupled with metagenomics has offered the opportunity to identify human viral pathogens, including global spread of diseases such as COVID-19. We now have the ability to monitor community health via the surveillance of our wastewater thus, addressing global grand challenges including the implementation of world-wide vaccination programs.



INSTITUTE FOR ENVIRONMENTAL GENOMICS
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Zoom webinar ID: 934 8142 2012 (<https://zoom.us/j/93481422012>)

More details and previous iFAST seminar videos are available on <https://www.ou.edu/ieg/seminars>.

Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; <https://www.ou.edu/ieg>)
Xueduan Liu (Central South University, China)

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