iFAST: The International Forum on Advanced Environmental Sciences and Technology *A series of distinguished seminars by eminent scientists* 7 p.m. CST; <u>8 p.m. EST</u>; 1 a.m. GMT (Dec. 17); 9 a.m. Beijing (Dec. 17)

Wednesday, Dec. 16, 2020



Peter Kareiva The Aquarium of the Pacific University of California, LA https://www.ioes.ucla.edu/person/peterkareiva/ Peter Kareiva is president and CEO of the Aquarium of the Pacific and an adjunct professor at the University of California, Los Angeles. He previously served as the vice president of science for the Nature Conservancy. His areas of interest include how species and ecosystem dynamics play out across complex landscapes, and the conservation of species as well as conservation in developing nations. He has used mathematical models and field experiments to document the importance of dispersal in insect population dynamics and he has studied the interplay of habitat degradation, hatchery fish and dams in limiting salmon productivity. In his current work, he endeavors to model and quantify the value of ecosystem services; seeks to identify the tradeoffs between major public investments in energy, mining and food production and the sustainability of our ecosystems; examines how people make decisions; and how we can better use our understanding of ecosystems to promote smarter solutions to the challenges of water and energy scarcity and food security. His conservation programs relate to urban and marine conservation and climate science. He has been involved in diverse community outreach efforts, including developing science modules for Title I Los Angeles-area schools. He is a member of the American Academy of Arts and Sciences and the National Academy of Sciences. He was the recipient of a Guggenheim Fellowship and received an Ocean Conservation Award from the Aquarium of the Pacific and an Environmental Hero Award from Groundwork. He is a Julian Simon Fellow and was named as a Highly Cited Researcher by Clarivate Analytics in 2019.

The Science of Science Communication: Dealing with Complexity and Uncertainty

Most (perhaps all) major research universities in the United States now offer graduate courses in science communication. Unfortunately, these courses are largely missing the point – they focus on "message boxes" or staying on message. They fail to address the challenges of the complexity, uncertainty and tradeoffs that are at the heart of global problems such as climate change or the COVID pandemic. Drawing on experience working for a federal science and policy agency (NOAA), for the world's largest environmental NGO (The Nature Conservancy), and for a trusted public institution (The Aquarium of the Pacific), I will discuss lessons learned, and the importance of using a wide variety of channels to do a better job presenting data and models, without misleading the public for the sake of simplicity.



INSTITUTE FOR ENVIRONMENTAL GENOMICS



Register for the Zoom conference at www.ou.edu/ieg/seminars Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; <u>https://www.ou.edu/ieg</u>) Xueduan Liu (Central South University, China)

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