

President's Council of Advisors on Science and Technology (PCAST)

Invited Speaker Biographies

December 1, 2023

Dr. Upmanu Lall

Dr. Upmanu Lall is the Director of the Columbia Water Center, and the Alan and Carol Silberstein Professor of Engineering at Columbia University. He is a Fellow of the AGU, and of the AAAS. He has received the Henry Darcy Award from EGU, and the Arid Lands Hydraulic Engineering, and the Ven Te Chow awards from the ASCE, and presented the AGU Langbein and Borland lectures. He has led projects on all major continents on water and climate sustainability, risk analysis and mitigation, infrastructure, and financial instruments. His work ranges from basic research on hydroclimatology and data science to systems design and optimization, policy analysis and innovation, and financial strategies for climate risk mitigation. He has developed the "America's Water Initiative" since 2014 for comprehensive national water, energy, and agriculture planning informed by climate.

Dr. Jay Famiglietti

Jay Famiglietti is a hydrologist and Global Futures Professor at Arizona State University, and Executive Director Emeritus of the Global Institute for Water Security at the University of Saskatchewan, where he held the Canada 150 Research Chair in Hydrology and Remote Sensing. Before moving to ASU, Famiglietti was founding Chief Scientist of the Silicon Valley tech startup, Waterplan; he was Senior Water Scientist at NASA's Jet Propulsion Laboratory; he was appointed to the California State Water Boards by Governor Jerry Brown; and he held faculty positions at UC Irvine and UT Austin. His research group uses satellites to track how freshwater availability is changing around the globe, and they pioneered the methods to detect groundwater depletion from space. A fellow of the American Geophysical Union, Geological Society of America, and recipient of AGU's Hydrological Sciences Award, he is committed to science communication, and to cross-sectoral advising on water security issues.

Dr. Bridget Scanlon

Bridget Scanlon is a Senior Research Scientist at the Bureau of Economic Geology, Jackson School of Geosciences, University of Texas at Austin. Her degrees are in Geology with a focus on hydrogeology. She has worked at the University of Texas since 1987. Her current research focuses on various aspects of water resources, including global assessments using satellites and modeling, management related to climate extremes, and water energy interdependence. She has authored or co-authored ~190 publications. Dr. Scanlon is a Fellow of the American Geophysical Union and a member of the National Academy of Engineering.