NATIONAL ACADEMIES Sciences Engineering Medicine

SPEAKER BIOS

New Voices' One Health Webinar Series: Exploring Linkages Among Environmental, Human and Plant Wellbeing

1st Webinar: Approaches to Justice and Equity-Focused Energy and Climate Change Research

January 31, 2023| 3:00 pm -4:15 pm ET

Elena Krieger is the Director of Research at the energy science and policy research institute PSE for Healthy Energy (PSE). She joined PSE in 2013 to launch the organization's clean energy practice area, and now oversees its scientific research efforts. Her current work focuses on accelerating the transition to clean energy resources, and developing transition pathways that realize non-energy co-benefits. She serves as principal investigator on numerous research projects, and simultaneously works closely with community organizations, non-profits, policymakers, and other stakeholders to use science to inform energy and climate policy. Her current research areas include designing solar+storage resilience hubs and deployment strategies, and integration of resilience, health, equity, and environmental metrics into state-level deep decarbonization efforts. She is a member of the Disadvantaged Communities Advisory Group to the California Energy Commission and the California Public Utilities Commission, a member of the National Academies' New Voices in Science, Engineering and Medicine Program 2021 Cohort, and a science advisor to the American Resilience Project. She received her PhD in Mechanical & Aerospace Engineering from Princeton, where her research focused on optimizing energy storage in renewable systems, and holds an AB in Physics and Astronomy & Astrophysics from Harvard.

Omar Isaac Asensio is an Assistant Professor in the School of Public Policy at the Georgia Institute of Technology. He directs the Data Science & Policy Lab at Georgia Tech, where he collaborates with the private sector and city governments on data innovations in policy analysis and impact evaluation. Dr. Asensio's research has been published in leading multidisciplinary journals including Nature Energy, Nature Sustainability and PNAS. His work uses statistical and computational tools to advance our understanding of how large-scale civic data and field experiments can be used to increase participation in civic processes, while addressing pressing resource conservation and environmental sustainability challenges. Dr. Asensio's research also has been featured in policy advisory communications by the European Commission, NSF Public Affairs, and national governments — including the U.K., and the IndiaAI initiative. He is a recipient of the

National Science Foundation CAREER award. He is a National Academies' New Voices in Science, Engineering and Medicine Program 2021 Cohort member. He holds a doctorate in environmental science and engineering, with specialties in economics from UCLA.

Hussam Mahmoud is the George T. Abell Professor in Infrastructure at Colorado State University. Prior to pursuing his Ph.D., he was the manager of the NEES Earthquake Laboratory at the University of Illinois at Urbana-Champaign and a research scientist at Lehigh University. Dr. Mahmoud's research is focused on sustainable and resilient infrastructure and communities with emphasis on developing socio-physical models to capture the recovery of systems as influenced by human behavior and socio-economic policies. He has chaired and served on numerous technical committees, including the ASCE Committees on Fire Protection and on Multi-hazard Mitigation. Dr. Mahmoud is an Excellence in Civil Engineering Education (ExCEED) Fellow of the American Society of Civil Engineers and a Fellow of the Structural Engineering Institute. He is a recipient of various awards, including the Meroney Family Chi Epsilon Teaching Award, the American Institute of Steel Construction early faculty career award, the American Iron and Steel Institute Robert J. Dexter Memorial Lecture award, and the Air Force summer faculty fellowship award. He has been invited to various symposia by the U.S. National Academies, the Royal Academy of Engineering, and the Royal Institute of International Affairs and is a National Academies' New Voices in Science, Engineering and Medicine Program 2021 Cohort member. His research has received media coverage through citations and interviews in numerous venues, including Nature Climate Change, The U.S. National Academy of Engineering, Smithsonian Magazine, and CNN.

The moderator of the panel is **Darshan Karwat**, an Assistant Professor at the School for the Future of Innovation in Society and The Polytechnic School at Arizona State University, where he leads re-Engineered, an interdisciplinary group that centers environmental protection, social justice, and peace in engineering. He is an aerospace engineer, a member of National Academies' New Voices in Science, Engineering and Medicine Program 2021 Cohort, and loves soccer more than pretty much everything.