Advanced Water Education Workshop July 7-8, 2015

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Speakers (in order of their presentations):

Paul Iñiguez

Paul Iñiguez is the Science & Operations Officer with the NOAA/National Weather Service forecast office in Phoenix, AZ. His responsibilities at the office include training the staff of 15 meteorologists, incorporating new science and technology into operational use, and managing the operational services the office provides. Paul holds a BS in Meteorology (St. Cloud State University, MN) and MA in Geography (Arizona State University, AZ). In his 14 year career with the NWS, Paul worked at five different forecast offices, including in Minnesota (his native state), Arkansas, and California. He previously worked at the NWS Phoenix office from 2006 to 2012, returning this past March, and currently resides in Tempe with his family.

Jeremy Weiss

Jeremy is engaged widely in weather and climate hazards, utilizing geospatial environmental modeling and data development, analysis, and visualization. His research integrates traditional analysis techniques from the atmospheric and related sciences with geospatial data and modeling to assess and anticipate impacts from such hazards as they have played, are playing, and might play out over time. In addition to data development and analysis, Jeremy works on visualizations that enable exploration of weather, climate, and geospatial data from new and potentially powerful perspectives. As part of the University of Arizona Cooperative Extension, problems related to weather and climate hazards in Arizona and the broader southwestern region of North America motivate much of his research and many of his applications. Jeremy's activities also include outreach, helping people put data and knowledge of weather and climate hazards to use.

Jessica Guo

Jessica Guo is a PhD student in Biology at Arizona State University. She studies the coordination between plant carbon and water responses to environmental change on creosote, a desert shrub, and she employs both field instrumentation and Bayesian modeling techniques. Jessica is also dedicated to K-12 science outreach, particularly the integration of data science and statistics with biology and environmental science curriculum.

Michael Conway

Since 2007, Michael Conway has been chief of the Geologic Extension Service of the Arizona Geological Survey (AZGS), Tucson, Arizona. One of his chief tasks is to supervise a staff of five in showcasing and disseminating the geologic products – maps, reports, and bulletins – of the Survey. Prior to joining the AZGS, he was a professor of geosciences at Arizona Western College where he taught meteorology along with a host of geoscience courses. From 1993 to 1997, he worked on young basaltic volcanic systems in North America, the Kamchatka Peninsula, Russia, and Central and South America. In 1993, Michigan Technological University granted Conway a Ph.D. for original research on the eruptive activity and volcanic hazards at Volcan Santa Maria and Volcan Pacaya in the volcanic highlands of Guatemala.

Joél Carrasco

Joél Carrasco currently holds a position as a Village Planner on the Long Range Planning team in the City of Phoenix Planning and Development Department. The village planner's role is to promote the goals of the city and the village for the growth, development and preservation of the land use and character of the village. Prior to this Joél had the opportunity to be part of the Reinvent PHX project team. Reinvent PHX is a collaborative partnership between the City of Phoenix, the U.S. Department of Housing and Urban Development, Arizona State University, St. Luke's Health Initiatives and numerous other organizations committed to developing walkable, opportunity-rich communities connected to light rail.

David Hondula

David Hondula's research examines the societal impacts of weather and climate with an emphasis on extreme weather and health. Recent projects include statistical analysis of health and environmental data sets to improve understanding of the impact of high temperatures on human morbidity and mortality, especially within urban areas. Hondula is also engaged in quantitative and qualitative field work to learn how individuals experience and cope with extreme heat in the Phoenix metropolitan area. Developing research considers how to facilitate effective governance and communication strategies for climate adaptation. These efforts are motivated by the overarching goal of reducing unnecessary weather-related illnesses and deaths through effective mitigation and intervention strategies.

Prior to joining ASU, Hondula received his Ph.D. in Environmental Sciences at the University of Virginia and was a visiting scholar at Umeå University in Umeå, Sweden and Queensland University of Technology in Brisbane, Australia.

Joe Tabor

Dr. Joe Tabor is an expert in valley fever epidemiology and soil science as well as an international consultant in household food security and disaster needs assessments. Dr. Tabor's expertise includes the sampling and analysis of a wide range of spatially dependent factors to predict health outcomes from air borne fungal spores, water borne parasites, and health care services. He has experience in 26 countries mapping natural resources, conducting household surveys and needs assessments, project design, and policy evaluation. He also has extensive laboratory experience that includes working in a BSL-3 laboratory on a biological select agent. His careful analysis of big datasets of spatially dependent factors requires correcting or removing corresponding big errors and large biases. His research has challenged some widely accepted views on the occurrence of valley fever and the pathogenic fungi.