



NAU NORTHERN ARIZONA
UNIVERSITY

Center for Health Equity Research

Strategic Priorities for Developing
Health Research Capacity
along the Yuma County/SLRC Sonora Border Region:

*Updates and Future Efforts for 2020-2021 amid the
COVID-19 Crisis*

June 17th, 2020

9:00 a.m.- 10:30 a.m. MST

Speaker Bios



Diana Gomez, MPH, Director/ Chief Health Officer, Yuma County Public Health Services District

Diana has worked in public health for over 20 years and has served on various local, state, and national committees and workgroups to build and sustain collaborative partnerships that promote safe, healthy, and resilient communities. Diana is a member of President of Arizona Local Health Officers Association and the Arizona Department of Homeland Security Regional Advisory Council (Southern Region). She is a Flinn-Brown Fellow, Co-President of the Binational Health and Environmental Council and was recently recognized by the Kresge Foundation as an Emerging Leader in Public Health.



Talima Pearson, PhD, Project Co-Leader Assistant Research Professor, Department of Biological Sciences, Center for Microbial Genetics and Genomics, Northern Arizona University

Dr. Pearson grew up in Ghana, New Mexico, and Swaziland. In 1996, he received a BA degree from Earlham College in Richmond Indiana. He received a MSc degree in 2002 and a PhD in 2009 from NAU in Flagstaff. He is currently an Associate Research Professor in the Department of Biological Science at NAU. Dr. Pearson's research is focused on the identification, dispersal, transmission, and evolution of microbial pathogens using molecular and genomic tools.



Frank Von Hippel, PhD, Professor of Ecotoxicology, Department of Biological Sciences, Northern Arizona University

Frank's research incorporates molecular, organismal, and ecological approaches to solve problems in ecotoxicology and environmental health. A critical component of several of Frank's projects is community-based participatory research with indigenous peoples. He has projects in Alaska, Arizona, California, Australia, Ecuador, Guatemala, and Israel, with active grants from the National Institutes of Health, the Flinn Foundation, the U.S. Fish and Wildlife Service, and the Australian Research Council. Frank's research has been widely covered in the

press, including *The New York Times*, National Public Radio, *The Economist*, the BBC, and many other media outlets. Frank serves on the editorial board of the journal *Environmental Pollution*, hosts the Science History Podcast (<http://sciencehistory.libsyn.com/website>), and serves on the board of the Science Communication Network. His forthcoming book from the University of Chicago Press is entitled *The Chemical Age*.



Loren Buck, PhD, Professor, Department of Biological Sciences, Northern Arizona University

“I am driven by questions of organismal physiology; specifically, adaptations of animals to extreme environments and organismal responses to changing environments. Most projects are highly collaborative, interdisciplinary and consist of both field and laboratory components. Current field research projects are being conducted in Arctic Alaska, the Bering Strait Region, the Gulf of Alaska, Peninsula Valdez, the high Andes and desert regions of NW Argentina, the Atlantic Forest of Brazil, and various locales of Arizona. In this site, you can find information about my lab’s current and past projects as well as information on how to contact me regarding research or education opportunities.”



Crystal Hepp, PhD, Assistant Professor of Informatics, School of Informatics, Computing, and Cyber Systems and the Pathogen and Microbiome Institute, Northern Arizona University

Dr. Hepp received her Ph.D. in Molecular and Cellular Biology from Arizona State University in 2013. Her research team focuses on using genomics and associated metadata to understand how pathogens move over time and space. Hepp’s research over the past few years has focused heavily on West Nile Virus and St. Louis Encephalitis Virus circulation throughout the southwestern United States, with considerable attention to outbreaks in Arizona.

Agenda

9:00-9:15 Welcome: *Robert T. Trotter, II; Julie A. Baldwin; Amanda Aguirre*

9:15-9:30: Diana Gomez: Views from the County Health District: On-going research outside of COVID-19

Current Projects: Progress and Promise

9:30-9:45 Talima Pearson: The social and genomic elements of *S. aureus* carriage in the Yuma (Yuma, Somerton, San Luis) region. This will be a report on data from Years 1-3, including both social contact and genomic data on carriage.

9:45-10:00 Frank von Hippel and Loren Buck: Current results from community-engaged protocol for evaluating environmental toxicants in a U.S. border community: health impacts of perchlorate and pesticide exposure in Yuma County, AZ.

10:00-10:15 Crystal Hepp: Here to stay? West Nile Virus and St. Louis Encephalitis Virus maintenance in Yuma County, AZ

10:15-10:30 Wrap-up and Future Plans: Amanda Aguirre and Julie Baldwin

- Discussion of on-going seminar series, including COVID-19 efforts and pending research projects.
 - Discussion of on-going work by the Yuma Health Research Working Group
 - Closing remarks
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