

STATE of the SCIENCE

IMPACTS OF CLIMATE EVENTS ON
AGRICULTURAL HEALTH AND SAFETY

March 6-7, 2023 | Gainesville, FL

www.sccaahs.org



AGENDA

Breakfast

8:00 a.m.

Welcome to SOS 2023

Tracy Irani

9:00 a.m.

Keynote Message

Saqib Mukhtar

9:10 a.m.

Research Presentations

Pablo Mendez-Lazaro | David Zierden

9:30 a.m.

Break

10:30 a.m.

Research Presentations

Clyde Fraise | Christopher Vulpe

10:40 a.m.

Lunch

11:40 a.m.

Research Presentation

Steve McNulty

12:40 p.m.

Policy Implications

Danny Munch

1:10 p.m.

Break

1:40 p.m.

National Grant Opportunities

Liam O'Fallon

1:45 p.m.

Regional Grant Opportunities

Farah Arosemena-Murfee

2:15 p.m.

Community Collaborations

Angela Lindsey

2:45 p.m.

Closing Remarks and Distinguished Poster Award

3:15 p.m.

WELCOME MESSAGE

On behalf of the Southeastern Coastal Center for Agricultural Health and Safety, we welcome you to beautiful Gainesville, Florida, for the 5th Annual State of the Science meeting! We are so excited to be back in person this year after meeting virtually for the past two years. This year's meeting focuses on the important topic of climate events and the impact on agricultural health and safety. We have put together an esteemed slate of speakers from a variety of disciplines, including health science, agricultural science, engineering, and meteorology, to provide a well-rounded perspective of the topic. We are also excited to have speakers representing some of our federal partners to share with you how other agencies are addressing climate impacts.



We hope this event leads to responsive and innovative solutions to the unique challenges in agricultural health and safety, as well as valuable collaborations in your work.

Sincerely,

Glenn Morris

SCCAHS Director

OPENING SPEAKERS



Tracy Irani

Tracy Irani leads the Outreach Core for the Southeastern Coastal Center for Agricultural Health and Safety. Irani is also a professor and the department chair for the Department of Family, Youth and Community Sciences at the University of Florida.



Saqib Mukhtar

Saqib Mukhtar is the Associate Dean for Extension, Agriculture and Natural Resources Program Leader at the University of Florida Institute of Food and Agricultural Sciences. Mukhtar is also a professor of agricultural and biological engineering and serves on the SCCAHS community stakeholder advisory board.

MEET THE SPEAKERS

Building a Climate Resilience Capacity in the U.S Caribbean

Pablo Mendez-Lazaro is currently one of the supervisors for Climate Science at the Office of Sustainability and Climate at the Forest Service in Puerto Rico. He has been an Associate Professor at the Department of Environmental Health at the University of Puerto Rico, Graduate School of Public Health for the last 13 years, along with teaching and working on multiple research projects including working with NASA and NOAA. He serves on the Puerto Rico Climate Change Council. He has been nominated by the Governor of Puerto Rico to serve on the Committee for the Climate Change Adaptation Plan.



Pablo Mendez-Lazaro

Climate Trends and Variability - Applications to Agriculture in the Southeast

David Zierden earned his Bachelor of Science degree in Meteorology in 1996 at Florida State University followed by Master of Science in Meteorology. Following graduation, Mr. Zierden served under Dr. James J. O'Brien, a recognized world leader in ocean modeling and climate application studies, as the Assistant State Climatologist from 1998 through 2005. In 2006, Mr. Zierden was appointed State Climatologist and has served that role ever since.



David Zierden

AgroClimate: Tools for managing climate risk in agriculture

Clyde Fraisse is a professor and Extension Specialist at the University of Florida Agricultural and Biological Engineering Department and leads the AgroClimate program (<http://agroclimate.org/>). His extension and applied research program focus on developing and providing climate information and decision support tools to help the agriculture industry better cope with risks associated with climate variability and change.



Clyde Fraisse



Chronic Kidney Disease of Unknown Etiology: Biomarkers of Kidney Damage in Farmworkers



Christopher Vulpe

Christopher Vulpe is a professor at the University of Florida College of Veterinary Medicine in the Department of Physiological Sciences. Vulpe leads collaborative research teams for the Southeastern Coastal Center for Agricultural Health and Safety and the Center for Environmental and Human Toxicology. Vulpe's research program focuses on understanding how environmental stressors impact health. Vulpe received his Ph.D. in Genetics and his M.D., both at the University of California.

Identification, Mitigation, and Adaptation of Forest, Range, and Agricultural Lands to Sea-Level Rise and Storm Surge



Steve McNulty

Steven McNulty has a Ph.D. in Natural Resources, and he has published over 300 papers related to climate environmental stress impacts on forests, agriculture, and rangelands (i.e., working lands). He has served as the director of the USDA Climate Hub since 2014. The hub's mission is to translate research findings into practical tools for increasing the resiliency of working lands to climate change and variability.

Past and Present: Tracking Disaster Assistance Programs for Farmers in a More Volatile World



Danny Munch

Danny Munch currently works as an economist within American Farm Bureau Federation's public affairs department with a profile that covers issues including dairy policy and markets, transportation and infrastructure, disaster assistance, endangered and invasive species, public lands, and specialty crop markets. A native of Connecticut, Mr. Munch attended the University of Connecticut and Cornell University for his bachelor's and master's degrees in agricultural and food economics. Prior to joining the AFBF, Mr. Munch worked as a protein market commodity analyst for media company, Urner Barry, focusing on protein markets.

National Institute of Environmental Health Sciences: Efforts in Community Engagement and Climate Change

Liam O'Fallon joined the Division of Extramural Research and Training in 1999. He has been actively involved in research programs at the National Institute of Environmental Health Sciences that support community participation. Mr. O'Fallon leads the Partnerships for Environmental Public Health program at NIEHS, which fosters interactions among projects from different NIEHS-funded programs with a focus on community engagement and a commitment to public health action. He directs the Community Engagement Cores that are a part of the network of Environmental Health Science Core Centers. He is also the program officer for the Research to Action Program that requires projects to use community-engaged research methods to conduct and to translate research findings into public health action.



Liam O'Fallon

Southeastern Coastal Center for Agricultural Health and Safety: Pilot Grant Opportunities

Farah Arosemena-Murfee is an assistant scientist and program manager for the Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) at the University of Florida, a center engaged in transdisciplinary occupational health research across the Southeast and U.S. Caribbean regions. She provides strategic, tactical, and operational leadership of research portfolios across multiple academic institutions and brings a diverse educational and professional background. Her research interests include exploring the biopsychosocial aspects of disease and disaster and the role of place, race, and ethnicity on health outcomes.



Farah Arosemena-Murfee

Community Collaborations with Extension Before, During, and After Major Weather Events

Angela B. Lindsey is an associate professor in the University of Florida's Department of Family, Youth, and Community Sciences, working within the UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center). Angie currently serves as the Point of Contact for the Extension Disaster Education Network (EDEN) for UF/IFAS. Her research and Extension work focuses on disaster preparedness and recovery within communities, particularly looking at crisis communication efforts before, during, and after disasters.



Angela Lindsey

POSTERS



A Social Ecological Model of On-Farm Heat Safety

Martin, M. C., Perez, J., Xuihtecutli, N., Morera, M., Tovar, A., Roka, F., & Monaghan, P.

An Educational Intervention Aimed to Mitigate Risk and Hazards Related to Occupational Dust Exposure and Heat-Related Illness for Crop Farmworkers in Florida

Manrique, A. F., Milletich, S., Irani, T., & Sabo-Attwood, T.

An Implementation Science Approach for Preparing for an Intervention Study for Low Back Pain in Horticulture

Dunleavy, K., Gurka, K., Radunovich, H., Hu, B., & Beneciuk, J.

Citrus County 4-H Progressive Agriculture Foundation Safety Day

Ward, M., & Serap Gorucu

Community-Based Research to Understand Impacts of Non-fatal Injuries on Coastal Gulf Seafood Workers

Kane, A., Brooks, R., Coker, E., Dunleavy, K., Gorucu, S., Durborow, R., & Myers, M.

Farm Labor Transport-Related Crashes in Florida: 2013-2021

Moore, M., Gorucu, S., & Bliznyuk, N.

Feasibility of Using Smart Watches to Collect Daily Pain Data for Participants in Physically Demanding Agricultural Occupations

Estavillo, T., & Dunleavy, K.

Is Stress on Island Time? An Examination of Mental Health of U.S. Virgin Islands Agriculturalists and Available Services

Dyment, M., McLeod-Morin, A., & Anderson, S.

Leveraging a Team's Approach for Emergency Preparedness in Georgia

Bowie, M., Moore, S., Greene, R., Davis, T., Brown, V., Martin, M., Golson, A., Post, K., Fielder, K., Griner, A., Turner, P., Dunn, J., Virk, S., Knox, P., Pittman, G., & MacAllister, C.

Occupational Hazard Identification for Cattle Stunning Activities – A Case Study

Ospina, C., Gorucu, S., & Hofstetter, D.

Public Perceptions of Climate Change Impacts on Agricultural Worker Health and Safety

Hopf, A., Manrique, A., & Pappo, E.

Relevance and Accuracy in Baseline Data Collection for Estimating Direct Agricultural Damage and Loss of Hazard Events: Florida and Tropical Cyclones

Qiao, X., Court, C. D., Grubestic, T. H., Helderop, E., & Lecours, V.

SPOT Sun Safety Practices for Outdoor Workers

Massey, L., Allen, K., Vilaro, M., Lynch, W., Shenkman, EA., & Gutter, M.

Studying the Effect of Repeated Pesticides and Heat Exposure on the Development of Chronic Kidney Disease of Unknown Etiology (CKDu) in the Rat Model

Zhou, J., Verdugo, D., Roberts, J, Denslow, N.D., Manrique, A., Alli, A., Roberts, S., Butler-Dawson, J, Vulpe, C.

Supporting the Health and Wellbeing of LGBTQIA+ Agricultural Workers

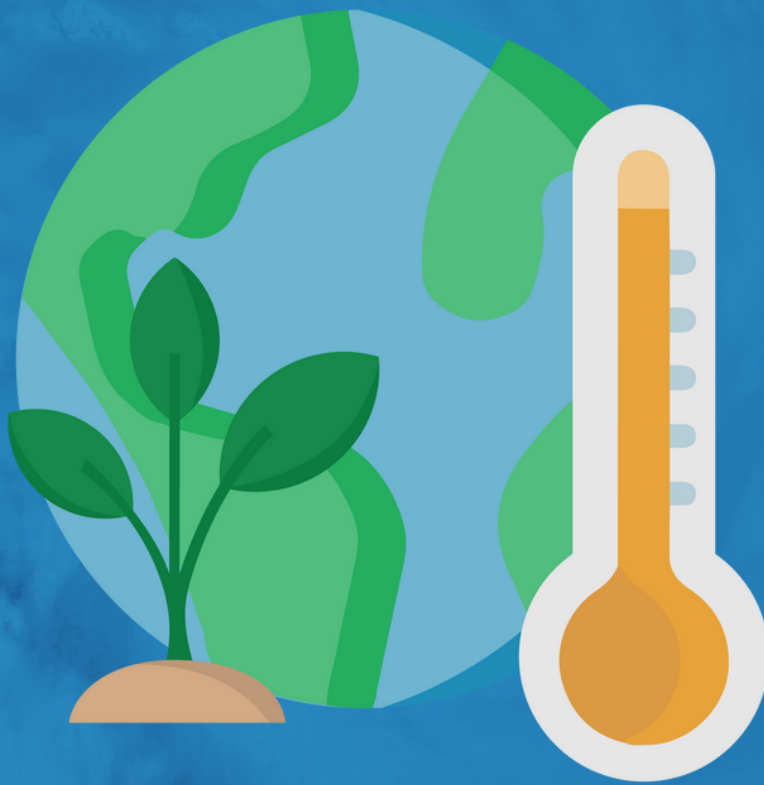
Michael, A., Anderson, R., Pierre, B., & Irani, T.

Tweet Tweet Tick: A Quantitative Content Analysis of Risk Communication About Ticks on Twitter

Yang, C., & Baker, L. M.

What Influences Healthy Eating? Evidence From a Cross-Sectional Study Across the Southern United States

Joshi, A., Kalauni, D., Warner, L., Galindo, S., McLeod-Morin, A., & Anderson, S.



For more information:



@ashleynmcleod@ufl.edu



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