First Annual

EDUFAN-Symposium

Experimenting, Diversifying and Understanding Food, Agriculture and Natural Resources

April 12, 2024 | 9:30 AM - 4:30 PM | SDSU Campus Gold Auditorium at Bioscience Center







EDUFAN Symposium

Experimenting, Diversifying and Understanding Food, Agriculture and Natural Resources





The current food system faces significant **environmental and social challenges**; it is a major contributor to climate change and biodiversity loss and fails to support global food security and dignified agrifood livelihoods. **Regenerative agriculture** aims to mitigate these conditions by actively restoring food and farming systems, using a **holistic framework** to continuously renew the land, improve the overall environment, and support agrifood economies, societies, and cultures. This system of farming principles and food practices focuses on the following areas to **generate resilient systems**:

- soil fertility, nutrient cycling, and health,
- water quality,
- · biodiversity,
- · ecosystem health,
- · carbon sequestration,
- social connections and political participation
- · local economies.

The EDUFAN symposium bridges economic, social, and environmental sciences to identify **sustainable and equitable solutions** to food system and ecosystem challenges.



NextGen Team

Who We Are

An interdisciplinary team of SDSU faculty (from anthropology, biology, business, food and nutrition sciences, food studies, chemistry, geography, and urban studies) working in collaboration with universities in Mexico (Baja and Oaxaca), USDA agencies, and local partners, including farmers, nonprofits, community colleges, and high schools.

Program Schedule

	Masters of Ceremony: Dr. Iana Castro & Dr. Trent Biggs
9:30-9:50	Welcome words and order of the day Presented by Dr. Amy Quandt
9:50-10:30	Plenary Speaker Session: Global Change in Food System Diversity Session and Q&A Presented by Dr. Colin Khoury
10:30-10:45	Student presentation 1: Exploring Flavors of Edible Ants Presented by Selene Alvarado Martinez
10:45-11:00	Student presentation 2: Nourishing Health and Planet with Algae-Enriched Guacamole Presented by Joanna Rockwell
11:00-11:15	Coffee break
11:15-11:30	Student presentation 3: How Farm Acreage and Valuation Vary in San Diego County Presented by Ashton Smith
11:30-11:45	Student presentation 4: Determining the Cause of Coast Live Oak (Quercus agifolia) Mortality and Acorn Decay Presented by Vince Rivas
11:45-12:00	Student presentation 5: Land Access, Gentrification, and Urban Agriculture Opportunities in San Diego Presented by Tyana Ortiz and Esteban Cisneros
12:00-1:00	Lunch
1:00-1:15	Student presentation 6: Climate and Heat Stress in the Imperial Valley Presented by Sam Madonia
1:15-1:30	Student presentation 7: Agroforestry as an innovative tool for CC adaptation in SD County Presented by Abby Ennamorato and Teresa Thomas
1:30-1:45	Student presentation 8: BrightSide Produce - Food Production, Aggregation, and Distribution Approaches Presented by Dane Garrett and Nicholas Portoni
1:45-2:00	Coffee break
2:00-3:00	Career Pathways in Food, Agriculture, and Natural Resources (FAN) Panel Session Featuring Panelists: Dr. Ali Montazar, Kristian Salgado-Jacobo, Monica Winters, Charles Hart, Dr. Andrew Vandegrift Moderated by Karina Cerda
3:00-3:40	Applying to USDA Jobs and Job Opportunities Hosted by Dr. Deborah De La Riva

Poster Presentations

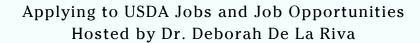
3:40-4:30

About our Speakers

Global Change in Food System Diversity Session Presented by Dr. Colin Khoury

Senior Director of Science and Conservation

Colin Khoury is the Senior Director of Science and Conservation at the San Diego Botanic Garden, a 37-acre garden in Encinitas, California, working to conserve plants and educate people about the wonders of plant life. Colin holds a PhD from Wageningen University in the Netherlands and a Master of Science from the University of Birmingham, UK, and has held posts at academic, nonprofit, industry, government, and international organizations in the US, Europe, and South America. His primary research areas include conservation science, crop diversity, food security, plant genetic resources, and crop wild relatives.



Entomologist (Identifier) USDA APHIS PPQ

Dr. Deborah De La Riva is an entomologist working for the United States Department of Agriculture (USDA) in the Animal and Plant Inspection Service (APHIS) agency. She works at the San Diego Plant Inspection Station, which is located at a port of entry on the California-Mexico border. Her main duties at the inspection station are to identify insect pests arriving in agriculture cargo at the land border and seaport, as well as pests intercepted in baggage from travelers coming through the airport or land border.

Deborah took her first entomology course at the community college in her hometown. She transferred to the University of California, Riverside where she completed her B.S. in Entomology in 2011. Deborah returned to UCR for graduate school and obtained her PhD in Entomology in 2016 for her research investigating the impacts of habitat pollution on ant communities. Following graduation, she worked with San Diego County Department of Agriculture for two years. Deborah has been in her current federal position with USDA since 2018. Outside of work, she enjoys hiking, camping, spending time with her dogs and goats, and teaching others about the fascinating world of insects.





Panelists

Ali Montazar, PhD

Irrigation and Water Management Advisor at the University of California Division of Agriculture and Natural Resources

University of California Cooperative Extension – Imperial, Riverside, and San Diego Counties



Dr. Ali Montazar has a PhD in Irrigation and Drainage and is currently an Irrigation and Water Management Advisor with the University of California Division of Agriculture and Natural Resources in Imperial, Riverside, and San Diego Counties. He has more than 20 years of research, extension, and teaching experience. He has a well-developed research and training program in southern California with a focus on irrigation water management and sensor techniques, water conservation tools and technologies, best irrigation and nitrogen management strategies, and salinity management and control practices. He has been conducting several studies on alfalfa, carrots, date palms, lettuce, onions, spinach, artichoke, sugar beets, Klein grass, sunflowers, wheat, avocados, and grapes.

Monica Winters

Department of Agriculture, Weights and Measures Supervising Agricultural Standards Inspector



Monica Winters started her career with the County of San Diego Department of Agriculture in Pest Detection in 2014 before joining the Ag Standards Division in 2016. In 2020, Monica became the Supervisor of the Ag Standards Division where she currently oversees the County of San Diego's Organic Program, Farmers' Market Program, Industrial Hemp Program, and Standardization Program. Monica works with a team of four inspectors to ensure your oranges are sweet, your avocados creamy, organic integrity from farm to store, and an equitable marketplace for California farmers.





Charles J. Hart is an entomologist working for the United States Department of Agriculture (USDA) in the Animal and Plant Inspection Service (APHIS) agency. Currently, he works at the San Diego Plant Inspection Station as a port identifier. His primary role is to identify insect pests arriving in agriculture cargo at the land border (USA-Mexico), seaport, and airport as well as pests intercepted in baggage from international travelers.



Kristian Salgado-Jacobo

Community Education Specialist 2 - UC Master Gardener Program

In 2019, Kristian Salgado-Jacob began her career with the University of California Agriculture and Natural Resources (UCANR) at the UCCE-Imperial County office as a Community Education Specialist (CES) for the Climate Smart Ag program. In that role, she actively engages with ranchers and farmers in her area to discuss possible projects that would qualify for state funds. In 2022, Kristian became the first University of California Master Gardener Coordinator hired to manage the UC MG Program in Imperial County training the first cohort of 30 UC MG Volunteers. Kristian graduated from Cal Poly Humboldt in 2018 with a Master of Arts Degree in Social Science as part of an interdisciplinary program called Environment and the Community. Kristian is an SDSU Alum where she double majored in Psychology and Environmental Studies with a minor in Counseling and Social Change.



Andrew Vandegrift

USDA Plant Pathologist



Dr. Vandegrift is a queer scientist and illustrator. He received his doctorate in mycology (the study of fungi) from the University of Oregon in 2016, doing much of his dissertation work on the ecology of plant-associated fungi in the montane cloud forests of Ecuador. He has published peer-reviewed research in internationally acclaimed journals such as Microbiome, Biotropica, and the Journal of Tropical Conservation Science. In 2018, he was awarded a National Geographic Explorer grant to coordinate a multidisciplinary, international biodiversity expedition at the Los Cedros Biological Reserve in Ecuador. He joined the USDA in 2021 as a Plant Pathologist at the Miami Plant Inspection Station, and after several years there is very happy to be back on the West Coast. In his free time, he plays bass guitar and reads science fiction.

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