UNIVERSITY OF CALIFORNIA Global Health Institute

UC GHI Planetary Health

University of California Global Health Institute
Planetary Health Center of Expertise

Summer Work Experience Program 2024 Report

Photo credit: Elijah Liedeker

Co-developed by:
Woutrina Smith, Martin Smith, Mark Bell, Sam Sandoval Solis, and Terra Kelly

Coordinated by:
UC Global Health Institute Planetary Health Center of Expertise

Summer Work Experience Program
2024 Report

The Summer Work Experience Program, coordinated by the UCGHI Planetary Health Center of Expertise (PHCOE), has partnered with the University of California's Division of Agriculture and Natural Resources (UC ANR) UC Cooperative Extension (UCCE), the California Department of Conservation (DOC), and the California Department of Public Health (CDPH) to support 68 fellowships since 2017. These students gained hands-on experience working in programs involved in conservation, natural resources, agriculture, policy, nutrition, and health. Listed below are the summer fellows, the primary mentors, and a summary of program feedback received from summer fellows.

Summer Fellowship Advisors and Mentors
2017-2024

Kari Arnold, UCCE, Stanislaus County
Kathi Baxter, UCCE, Elkus Ranch
Mark Bell, UC ANR
Keali'i Bright, DOC
Whitney Brim-DeForest, UCCE, Sutter and Yuba Counties
Sonja Brodt, UC ANR, UC Davis
David Bunn, DOC
Roselle Busch, UCCE Sheep and Goat Vet Med Extension Lab, UC Davis
Rachael Callaghan, UC ANR, Sustainable Agriculture Research & Education Program
Federico Castillo, UC Berkeley
Lais Costa, UC ANR Veterinary Medicine Extension, UC Davis
Laura Crothers, UC ANR, Sustainable Agriculture Research & Education Program
Noelia Silva Del Rio, Veterinary Medicine Teaching and Research Center
Jairo Diaz, UC ANR Desert Research & Extension Center
Lucy Diekmann, UCCE, Santa Clara County
Jenny DiStefano, DOC
Kristin Dobbin, UC ANR, UC Berkeley
Luis Espino, UCCE, Butte County
Gail Feenstra, UC ANR, Sustainable Agriculture Research & Education Program
Sandipa Gautam, UC ANR, Lindcove Research & Extension Center
Aparna Gazula, UC ANR, UCCE Santa Clara
David Haviland, UCCE, Kern County Entomology Farm
Christina Hecht, UC ANR, Nutrition Policy Institute
Gregory Ira, UC ANR, California Naturalist Program
Jeremy James, UC ANR, Sierra Foothill Research & Extension Center
Virginia Jameson, DOC
Georgia Kayser, UC San Diego
Faith Kerns, UC ANR, California Institute for Water Resources
Vikram Koundinya, UC ANR, UC Davis
Penny Leff, UCCE, Sustainable Agriculture Research & Education Program

Sarah Light, UCCE, Yuba City
Rubia Branco Lopes, UC ANR CE Tulare
Susana Matias, UC ANR, UC Berkeley
Tammy McMurdo, UC ANR, CalFresh Healthy Living
Eric Middleton, UC ANR San Diego
Meredith Milet, CDPH, Office of Health Equity
Sue Mosbacher, UC ANR, UC Davis
Marissa Neelon, UCCE, Alameda County
Emmanuel Okello, UCCE Tulare VetMed Teaching & Research Center
Jeff Onsted, DOC
Alda Pires, UC ANR, UC Davis
Devii Rao, UC ANR, UCCE San Benito County
Lorrene Ritchie, UC ANR Nutrition and Policy Institute
Nick Schweitzer, UC ANR, Sierra Foothill Research & Extension Center
Martin Smith, UCCE, UC Davis Campus
Woutrina Smith, PHCOE, One Health Institute, UC Davis
Sam Sandoval Solis, UCCE, UC Davis
Jason Vargo, CDPH, Climate Change and Equity Program
Liliana Vega, UCCE, San Luis Obispo
Amber Vinchesi-Vahl, UCCE, Colusa City and Sutter, and Yuba Counties
Monica Zeurcher, UC ANR Nutrition and Policy Institute

Summer Fellows

2017-2024

2024

Hailey Atwood, UC Davis, Sheep and Goat Vet Med Extension Lab; Applied field research with small ruminants
Jocelyn Canty, UC Davis, UC ANR and SVM-PHR; Food safety and biosecurity
Baljot Chahal, UC Irvine, UC ANR and Nutritional Sciences and Toxicology; Healthy eating extension materials
Christian Bernal Cordoba, UC Davis, VMTRC; Bilingual dairy farm communication materials
Andrew Frank, UC San Diego, UCCE San Diego; 4-H youth development
Reena Grewal, UC Davis, UC ANR and SVM-PHR; Food safety and biosecurity
Nicole Kingsley, UC Davis, UC ANR Vet Med Extension; DNA extraction and PCR on horse samples from Costa Rica
Toni Long, UC Davis, Sheep and Goat Vet Med Extension Lab; Ruminant health, survivability, and productivity
Yael Lopes, UC Davis, UC ANR CE Tulare; Bilingual educational tool for animal health
Clare McKeon, UC Davis, Sierra Foothill REC; Blue Oak regeneration
Tessa Pulido, UC Irvine, UC ANR Nutrition Policy Institute; School Lunch Program analysis
Sofia Schnur, UC Davis, Sheep and Goat Vet Med Extension Lab; Improving health and wellbeing of production animals
Mahzabin Tabassum, UC San Diego, UCCE San Diego; 4-H youth development
Allison Tilzey, UC Irvine, UC ANR Vet Med Extension; Vegetation sampling with the Wild Horse Fire Brigade

2023

Peter Bowman, UC Davis, UC ANR & UCCE; Connections between soil health and agronomic practices
Bailey Cohen, UC Davis, UC ANR & Sierra Foothill REC; Phase 2 of The Sierra Foothill Yuba Watershed Restoration Project
Ashley Contreras, UC Davis & UC ANR; Agave mite pesticide trials for ornamental agave plant production
Nuri Flores, UC Davis, UC ANR & UCCE; Prairie restoration methods for enhancing habitat of special status species
Michelle Guerra, UC San Diego, UC ANR & UC Berkeley; Literature review of the public health effects of glyphosate exposure, and the sustainable and safer approaches to reduce glyphosate exposure near residential areas and drinking water sources
Shibani Gupta, UC San Diego & UC ANR DREC; Literature review of the public health implications of agricultural pesticide spray sites in proximity to residents and schools
Moncerrat Hernandez, UC Berkeley & UC ANR; How climate change impacts outdoor agricultural workers and other vulnerable communities
Natalia Pinzon, UC Davis & UC ANR; Climate Actions through Statewide Climate-Smart Agriculture Tools and Resources Development and Delivery: Qualitative analysis of survey and focus group interviews
Isha Poudel, UC Davis & UC ANR NPI**;** U.S National School Lunch and School Breakfast Program: Impacts on schools, students, and families
Martina Sexton, UC Berkeley, UCANR & UCCE; California small farmer interviews
Jannie Xu, UC Davis SVM & UC ANR; Foodborne pathogen dynamics in integrated crop-livestock systems
Yueheng Rellen Zheng, UC Davis, UCCE Santa Clara & UC ANR; Healthy soil in the face of climate change and pesticide use

2022

Trent Baldwin, UC Davis & UCANR; Positive Youth Development, health disparities, and participatory action research
Kareen Barboza, California State University, Fresno & UCANR Lindcove; IMP practices in citrus fruits
Austin Brown, UC Davis & UCCE; Presence of Ovine Progressive Pneumonia in California sheep farms
Paulina Debus, UC Davis & UC ANR; Livestock integrated cropping systems
Erica Garibay, UC Berkely & UCCE; Urban farm outreach
Maya Homsy King, UC Davis; Occupational health survey of Gorilla Doctor's staff, Bwindi Impenetrable National Park
Elizabeth Isenhower, UC Davis & UC ANR, multi-species farms
Skylar Johnson, UC Davis & UCCE; Effects of beaver dam analogues on surface water quality
Ariel Loredo, UC Davis & UCCE; Program management
Alyssa Mandujano, UC Santa Barbara & UCCE; Providing DEI based programs to children from low-income communities
Siqi Wang, UC Davis & Tulare VetMed Teaching and Research Center; Infectious diseases of food animals
Troy Williams, UC Davis & UC ANR; Spreading knowledge on safe food preservation techniques to reduce food waste
Allison Work, UC Berkeley & UCCE San Benito; Impacts of cattle grazing on California lands

2021

Leslie Alfonso, UC Berkeley & UCCE; Experimental harvest data collection in cherries and walnuts
Laurel Denyer, UC Davis & UC ANR; Tracking lead and regulated contaminants in schools, public parks, and public systems; Nutrition education material development
Cole Jenson, UC Davis & DOC; Boundary crossing initiatives with the Division on Land Resource Protection
Elijah Liedeker, UC Santa Cruz & UCCE; California rice cropping systems
Cooper Limon, UC Berkeley & UCCE & UC ANR; Winter crop cover experimentation; Social media and sustainable agriculture
Rory O'Toole, UC Davis & UCCE; Herbicide effects on rice
Karah Pedregosa, UC Irvine & UC ANR; Using social media to engage students in water resource conservation
Monica Quezada, UC Davis & UCCE; Pest management in vegetable crops

2020

Helaine Berris, UC Davis & UCCE; Agronomic crop production and soil health
Vanshika Desai, UC Davis & UCCE; Community-based research about Micro Enterprise Home Kitchen Operations
Marieke Fenton, UC Davis & DOC; Analyzing drivers of land use change in the San Joaquin Valley
Kelsey Haydon, UC Davis & UCCE; Material development for UC Climate Stewards
Maria Valenzuela, UC Irvine & UCCE; Rice entomology and the effects of insecticide & fungicide application

2019

Elise Ellwood, UC Davis & DOC; Reporting requirements for Regional Forest and Fire Capacity Program
Khurshid Iranpur, UC Davis & UCCE; Poultry welfare curriculum development
Brittany Theilen, UC Santa Barbara & DOC; Mapping landslide hazards
Lucy Zheng, UC Davis & UCCE; Assessing impacts of the California Expanded Food and Nutrition Education Program

2018

Holly Beitch, UC Davis & CDPH; Climate change and health vulnerability indicators
Serena Bhagirath, UC Davis & UCCE; Rice farming practices and resource utilization
Kyle Cheung, UC Davis & UCCE; Evaluation of wireless mesh sensor network for rangeland
Marisa Donnelly, UC Davis & CDPH; Health risks associated with extreme weather events
Anna Grotjahn, UC Davis & UCCE; Summer youth education programs addressing foodwebs
Hannah Lepsch, UC Davis & UCCE; Rice producer survey and healthy soils outreach
Eryn McKinney, UC Davis & UCCE; Integrated pest management to benefit agriculture
Christina Murillo-Barrick, UC Davis & DOC; California land conservation and easement programs
Erica Orcutt, UC Davis & DOC; Land use mapping and planning for conservation in California
Landon Smith, UC Davis & UCCE; Fire and emergency preparedness for community resilience

2017

Ivana Andrade, UC Riverside & DOC; Outreach and policy on natural resource conservation
Landon Smith, UC Davis & UCCE; Impacts of heat on agricultural workers and policies to protect agricultural workers

2024 Fellows

Hailey Atwood

Major: Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Doctor of Veterinary Medicine
Campus: UC Davis
Host Site and Mentor: Dr. Roselle Busch, Sheep and Goat Vet Med Extension Lab

Hailey will be finishing up her second year as veterinary student at the UC Davis School of Veterinary Medicine. She obtained her bachelor's degree in Dairy Science from Cal Poly San Luis Obispo in 2021 before moving to Davis, CA to pursue a career in veterinary medicine. She grew up in the Central Valley of California, where she showed cattle for over ten years. She is passionate about improving livestock husbandry and making connections with people in the food animal industry. This summer, Hailey worked with livestock practices across the state, as well as conducting applied field research with small ruminants and delivering extension workshops with Dr. Busche.

Jocelyn Canty

Major: Public Health
Department: Department of Public Health Sciences
Level of Study: Masters
Campus: UC Davis
Host Site and Mentor: Dr. Alda Pires, SVM-PHR and UCANR

Jocelyn's introduction to public health occurred after learning about One Health concepts during her undergraduate studies at University of California, Davis. With a diverse background, her interests surround the intersections between food systems, land stewardship and animal-human health. She is particularly focused on how these factors contribute to accessibility to healthy and culturally appropriate foods, in addition to their impacts on community wellness. This summer, Jocelyn assisted the Pires Lab team with a literature review on pathogen contamination pathways in organic produce for the OREI and CPS projects, focusing on wildlife contamination. This involved extracting and visualizing data in a scenario tree format, conducting focus groups with stakeholders for qualitative insights, and reflecting on research methods to improve engagement. Additionally, she collected and processed compost samples from various California sites to assess pathogen contamination, engaging with stakeholders and shadowing wet lab procedures.

Baljot Chahal

Major: Public Health
Department: Department of Public Health
Level of Study: Masters
Campus: UC Irvine
Host Site and Mentor: Dr. Susana Matias, Nutritional Sciences and Toxicology, UCANR

Baljot Chahal is a first year Master of Public Health student at UC Irvine. Her research interests include understanding the different health outcomes various environmental exposures have on maternal and child health. She is also interested in the effects of environmental exposures on reproductive health. In the past she has worked on research studies that focus on pesticide exposure effects and how to offer protections to migrant farmworkers from these exposure events. This summer, Baljot worked alongside Dr. Susan Matias in projects that bridge nutrition to maternal and child health. These projects aimed to create resources to educate physicians as well as community members on breastfeeding and the importance of breastmilk. By encouraging breastfeeding, children will have increased positive health outcomes as well as lower incidence of childhood obesity.

Christian Bernal Cordoba

Major: Animal Biology
Department: College of Agriculture and Environmental Sciences
Level of Study: PhD
Campus: UC Davis
Host Site and Mentor: Dr. Noelia Silva-del-Rio, VMTRC

Christian Bernal-Córdoba is a veterinarian and a third-year Ph.D. candidate in Animal Biology at UC Davis. His research focuses on developing strategies to bridge the gap between regulatory policies on antimicrobial use (AMU) and actual on-farm practices. Using research synthesis methods, he assesses the efficacy of antimicrobial drugs in controlling and treating infectious diseases in cattle. Christian's work also includes applying machine learning techniques for disease diagnosis and developing user-friendly treatment algorithms to improve AMU practices, reduce treatment costs, and mitigate antimicrobial resistance on farms. This summer Christian worked with Dr. Silva-del-Rio, visiting dairy farms, documenting management practices, identifying critical points for improvement, and developing bilingual extension materials (in both Spanish and English) for dairy farm workers and producers. These materials aimed to address challenges in judicious AMU in livestock, including language barriers, a lack of worker training, difficulties in identifying sick animals, and gaps in communication between veterinarians, farm owners, and workers.

Andrew Frank

Major: Global Health and Comparative Politics
Department: Global Health
Level of Study: Bachelor's
Campus: UC San Diego
Host Site and Mentor: Liliana Vega, UCCE San Diego

Andrew is a third-year student at UC San Diego, majoring in Global Health and Comparative Politics. He has previously been involved with research on a variety of topics, including food insecurity awareness and the relationship between work and political control in prisons. He is passionate about community outreach and bridging accessibility barriers to promote intersectionality and facilitate equitable access and inclusion. This summer, he worked under Liliana Vega to better develop, assess, and implement 4-H educational enrichment programs for youth across the state.

Reena Grewal

Major: Animal Science
Department: College of Agricultural and Environmental Sciences
Level of Study: Bachelor's of Science
Campus: UC Davis
Host Site and Mentor: Dr. Alda Pires, UC Davis School of Veterinary Medicine

Reena Grewal is a first-year student at UC Davis pursuing a major in Animal Science with a minor in Global Disease Biology. Her passion for agricultural and animal science industries started in her hometown of Livingston, CA where she was exposed to a predominantly agricultural community. Her interests include applied research, epidemiology, livestock, wildlife, and applying the One Health concept in order to support farmers and ranchers as well as their animals. This summer Reena explored the One Health approach by working with Dr. Alda Pires as well as postdoctoral scholar Dr. Joanna Rothwell to optimize current experimental techniques to analyze soil contamination. She conducted a literature review, developed lab methodology, and learned important concepts in microbiology research, especially related to foodborne pathogens.

Nicole Kingsley

Major: Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Doctoral
Campus: UC Davis
Host Site and Mentor: Dr. Lais Costa, UC ANR Veterinary Medicine Cooperative Extension

Nicole is a DVM student with a special interest in global health and animal welfare. Her research prior to entering veterinary school focused on characterizing the genetic underpinning of equine recurrent uveitis, an inflammatory disease that is the leading cause of complete blindness for horses.

This summer, she worked with Dr. Lais Costa to develop protocols for an equine welfare project in Costa Rica, focusing on the feasibility of using various blood sample preparations on filter paper to identify acute and chronic infections of three tick-borne pathogens: *Theileria equi*, *Babesia caballi*, and *Anaplasma spp*.

Toni Long

Major: Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Doctoral
Campus: UC Davis
Host Site and Mentor: Dr. Roselle Busch, Sheep and Goat Vet Med Extension Lab

Toni is a current 2nd year veterinary student at UC Davis School of Veterinary Medicine tracking large animal medicine. This summer, she worked under Dr. Rosie Busch and Dr. Fauna Smith in their lab focused on small ruminant population health, collecting samples from various goat herds and sheep flocks for an ongoing Johne's disease diagnostics project. She also learned about the use of goat herds for wildfire prevention and assisted in gathering data for a project on the efficacy of a vaccine against Pasteurellosis in sheep, making valuable connections and deepening her understanding of small ruminant health.

Yael Lopes

Major: Animal Biology
Department: College of Agriculture and Environmental Sciences
Level of Study: PhD
Campus: UC Davis
Host Site and Mentor: Dr. Rubia Branco Lopes, UCANR CE Tulare

Yael Alonso-López is a first-year Ph.D. student in Animal Biology at UC Davis. She obtained her DVM from the National University of Colombia (UNAL) and developed a keen interest in bridging the gap between academic research and common spaces. This summer she collaborated with Dr. Rubia Branco Lopes to develop Spanish and English educational materials for dairy and beef ranches. These materials aimed to facilitate communication and education for farm workers from different backgrounds, focusing on the importance of newborn care and strategies for reducing antimicrobial use.

Clare McKeon

Major: Community Development
Department: Community Development Graduate Group
Level of Study: Masters
Campus: UC Davis
Host Site and Mentor: Nikolai Schweitzer, Sierra Foothill REC

Clare McKeon grew up on a cattle ranch in Oakdale, California, where she developed a deep connection to agriculture and land stewardship at an early age, which she has carried through her academic and career endeavors. During her undergraduate studies at UC Davis, she earned a degree in International Agricultural Development, focusing on rural communities with an emphasis on women and disadvantaged groups in agriculture. Her academic pursuits also led her to delve into crop production and plant breeding, engaging in research projects targeting pollinators, sunflowers, and corn. Clare has since advanced to pursuing a Master's degree in Community Development, where her research has concentrated on agricultural social networks within California. This work involves analyzing how these networks facilitate the dissemination of knowledge and resources, especially in light of the escalating challenges posed by climate change. Claire was matched with the Sierra Foothill Research and Extension Center under mentor Nikolia Schweitzer this summer. She played a key role in oak restoration research, collected data on saplings, assisted with invasive plant studies, and contributed to field preparations for a compost application project, all while enjoying the beautiful landscape.

Tessa Pulido

Major: Public Health
Department: Public Health
Level of Study: PhD
Campus: UC Irvine
Host Site and Mentor: Dr. Dania Orta-Aleman, UCANR, Nutritional Policy Institute

Tessa Pulido is a PhD student in Public Health at UC Irvine where she also completed her B.A. in Public Health Policy and Education Sciences, and her Master's in Public Health (MPH). Her research examines the impact of gentrification on food insecurity using a structural determinants of health perspective and community-based participatory research approach. As a Center for Liberation, Anti-Racism, and Belonging graduate student fellow, she receives funding to use participatory mapping to explore food access and the built environment for low-income Latiné residents in Orange County. For SWEP, Tessa matched with Dr. Lorrene Ritchie at the Nutrition Policy Institute. She conducted qualitative analysis on the impact of the universal free school meals program implemented during the COVID-19 pandemic, interviewing students from Texas and California to explore perceptions of school meals and stigma. Her findings showed overwhelming support for the program in both states, despite students reporting stigmatizing experiences, leading her to research how to accurately measure stigma and continue collaborating with Dr. Ritchie.

Sofia Schnur

Major: Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Doctor of Veterinary Medicine
Campus: UC Davis
Host Site and Mentor: Dr. Roselle Busch, Sheep and Goat Vet Med Extension Lab

Sofia is a first-year veterinary student with an interest in rural veterinary medicine. She is especially interested in food animal medicine, theriogenology, and the interface between production animals and human health– more specifically with food safety and epidemiology. This summer, she worked with Dr. Roselle Busch, a livestock veterinarian, to improve the health and wellbeing of production animals in California and Washington. Through this opportunity she strengthened her professional network, gained clinical skills such as rectal palpation and blood draws, and deepened her understanding of what it means to be a large animal veterinarian

Mahzabin Tabassum

Major: Epidemiology
Department: Public Health
Level of Study: Master's degree
Campus: UC San Diego
Host Site and Mentor: Liliana Vega, UCCE San Diego

Mahzabin graduated in 2020 with a medical degree (Bachelor of Medicine & Bachelor of Surgery, MBBS) and is now finishing her Master of Public Health degree, concentrating in Epidemiology, at UC San Diego. Mahzabin is currently working on her thesis on *Maternal Health Lifestyle Medicine Education- A Community Needs Assessment* for San Diego Family Care. She also works as a Project Coordinator for SLIM (Supervised Lifestyle and Integrative Medicine) Weight Loss Program for UC San Diego Health. This summer, she worked with her mentor, Liliana Vega, on the 4-H Youth Development program for the University of California Cooperative Extension in San Diego and Orange County. She conducted a comprehensive needs assessment for the 4-H STEAM program, focusing on BIPOC youth and researching existing initiatives in California, such as the EmpowHer Institute's E-STEAM program and the San Diego Coastkeeper's BIPOC Youth Science Program. She developed assessment tools to better understand the needs and barriers faced by these communities, improved the Workforce Development Adult/Life Readiness Needs Assessment survey for enhanced usability, and contributed to the National LGBTQ+ Study by conducting a literature review on youth-serving professionals' support for LGBTQ+ youth in Puerto Rico and Latine/Latinx communities.

Allison Tilzey

Major: Environmental Engineering
Department: Environmental Engineering
Level of Study: Bachelor's
Campus: UC Irvine
Host Site and Mentor: Dr. Lais Costa, UC ANR Vet Med Extension

Allison is a fourth-year undergraduate student in the UC Irvine Environmental Engineering department, entering the graduate program at UCI in the fall of 2024. Her research focuses on water contamination related to extreme events exacerbated by climate change, such as wildfires. She is passionate about implementing community-based techniques and an environmental justice focus in her research. This summer, Allison worked with Dr. Lais Costa of UC Agriculture and Natural Resources Veterinary Medical Extension in collaboration with CSU Sacramento's Dr. Wayne Linklater and Wild Horse Fire Brigade Ranch. There, she assisted in the development and execution of research projects regarding the potential of wild horses to aid in wildfire fuel mitigation and reseeding of the landscape.

2023 Fellows

Peter Bowman

Major: International Agriculture Development
Department: One Health Institute & Graduate Group in International Agriculture Development
Level of Study: Master's degree
Campus: UC Davis
Host Site and Mentor: UC ANR & UCCE, Sarah Light

Peter is a second-year master's student studying International Agriculture Development at UC Davis. His research focuses on community perceptions of animal disease and preventive veterinary care in rural Sierra Leone. This summer, Peter is working with Sarah Light of UC Cooperative Extension Sutter-Yuba on various projects related to soil health and agronomy. He is especially excited to explore the connections between soil health and specific agronomic practices, like grazing, through lab and field work.

Bailey Cohen

Major: Animal Science and Asian American Studies
Department: College of Agricultural and Environmental Sciences
Level of Study: Bachelor's degree
Campus: UC Davis
Host Site and Mentor: Sierra Foothill REC, Nikolas Schweitzer

Bailey Cohen is a fourth year at UC Davis majoring in Animal Science with a minor in Asian American Studies. She will be starting her Master's of Public Health the summer of 2023. She is passionate about the One Health approach and fighting health disparities within healthcare. She has worked with Knights Landing One Health Clinic, a clinic that provides free

veterinary, medical, and dental care for lower-income communities. Bailey looks forward to developing Phase 2 of The Sierra Foothill Yuba Watershed Restoration Project, participating in data collection for the Red Oak Tree Project, and shadowing the veterinarian leading the cattle conjunctivitis intranasal vaccine trial at Sierra Foothill REC.

Ashley Contreras

Major: Ecology, Evolution & Biology
Department: College of Biological Sciences
Level of Study: Bachelor's degree
Campus: UC Davis
Host Site and Mentor: UC ANR, Eric Middleton

Ashley Contreras is a senior at UC Davis pursuing a bachelor's degree in Ecology, Evolution & Biology with a minor in Public Health. They have a research background in plant, fish, and mammal health. Ashley's current research at the UC Davis One Health Institute involves understanding infectious diseases, where she is exploring the interface of animals, people, plants, and the environment to solve complex problems that impact health and conservation around the world. She aspires to become an epidemiologist specializing in marine ecosystems to contribute to the understanding and management of infectious diseases in this critical and fragile environment. Ashley was matched with Eric Middleton of UC ANR to conduct trials and experiments on Agave mites, which are significant pests in commercial nursery production in San Diego County. The study aims to understand the spread of diseases caused by these mites and their impact on agave. She is excited to continue her academic and research pursuits and hopes to make a positive impact on global health and conservation efforts.

Nuri Flores

Major: Preventative Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Master's degree
Campus: UC Davis
Host Site and Mentor: UC ANR & UCCE, Devii Rao

Nuri obtained her DVM from the National Autonomous University of Mexico (UNAM). She is pursuing her Master's in Preventive Veterinary Medicine at UC Davis. Her research interests include studying interactions at the human, domestic animal, and wildlife interface, along with ecosystem conservation. This summer, Nuri will work with Devii Rao on a prairie restoration experiment to enhance the habitat for special status species at Pinnacles National Park.

Michelle Guerra

Major: Health Behavior
Department: Public Health
Level of Study: Master's degree
Campus: UC San Diego
Host Site and Mentor: UC ANR, Kristin Dobbin and Georgia Kayser

Michelle is a second year Master of Public Health student at UC San Diego, with a Bachelor of Science in Neurology, Physiology, and Behavior from UC Davis. Michelle has practicum experience promoting public awareness of endocrine-

disrupting chemical exposure from personal care products and cosmetics to high school students in the Pasadena Unified School District. She is currently working on her thesis about the association between perfluoroalkyl substance (PFAS) and serum lipid levels in Ecuadorian adolescents. This summer, Michelle will compile a comprehensive literature review on the adverse effects of glyphosate and potential interventions to reduce exposure near residential areas, campgrounds, and water sources. She also plans to formulate a commentary and issue brief on the forestation process in US National Forests and Parks.

Shibani Gupta

Major: Health and Behavior
Department: Public Health
Level of Study: Master's degree
Campus: UC San Diego
Host Site and Mentor: UC ANR & DREC, Jairo Diaz and Georgia Kayser

Shibani Gupta is a Master of Public Health student at the University of California San Diego. She previously worked with neonicotinoid pesticides and their effect on non-target populations. This summer she is working with Dr. Jairo Diaz of UCANR and Dr. Georgia Kayser of UCSD on a literature review outlining the effectiveness of buffer sites around residential areas and schools in reducing pesticide exposure.

Moncerrat Hernandez

Major: Environmental Sciences
Department: Environmental Science, Policy, and Management
Level of Study: Bachelor's degree
Campus: UC Berkeley
Host Site and Mentor: UC ANR, Susana Matias and Federico Castillo

Moncerrat (she/her) is a second-year undergraduate student at UC Berkeley from Oxnard, California. Growing up in an agricultural city, she engaged with matters impacting farmworkers' health. Her interests include the intersection between environmental justice, technology, and medicine. This summer she will be a part of a collective effort that analyzes the socio economic and health impacts of heat waves on agricultural outdoor labor.

Natalia Pinzon

Major: Geography
Department: Geography
Level of Study: Doctoral
Campus: UC Davis
Host Site and Mentor: UC ANR, Vikram Koundinya

Natalia is a doctoral student in Geography and specializes in the agroecology as a means to reduce on-farm and global climate risk. Her doctoral research focuses on how California farmers are preparing for, responding to and recovering from wildfires. Her action-research project is a multi-sector collaboration. This summer she will be working with Dr. Koundinya on the Climate Actions through Statewide Climate-Smart Agriculture Tools and Resources Development and Delivery Project.

Isha Poudel

Major: International Agricultural Development
Department: Plant Sciences
Level of Study: Master's degree
Campus: UC Davis
Host Site and Mentor: UC ANR NPI, Lorrene Ritchie and Monica Zuercher

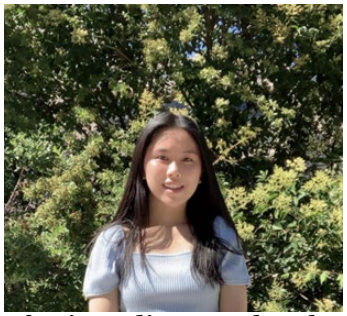
Isha is finishing her Master's in International Agricultural Development this summer and advancing to PhD in Geography beginning in Fall 2023 with an emphasis on community nutrition and feminist studies. She's interested in agriculture development with the intersection of food security and disaster resilience among vulnerable populations. This summer Isha will be working with her mentors on a policy-level research project to assess the challenges and successes of California's school meals after pandemic-related federal funding for universal school meals ended in June 2022.

Martina Sexton

Major: Conservation and Resource Studies
Department: Environmental Science, Policy, and Management
Level of Study: Bachelor's degree
Campus: UC Berkeley
Host Site and Mentor: UCCE Santa Clara, Lucy Diekmann and Aparna Gazula

Martina is a senior at UC Berkeley majoring in Conservation and Resource Studies with an interest in social justice and sustainable development. She is passionate about building community resilience and advocating for disadvantaged communities that have endured environmental injustices. She believes that urban farming is a key factor to building more sustainable cities. This summer she will be conducting small farmer interviews, creating educational materials in Spanish, and managing the Bay Area Urban Agriculture Map.

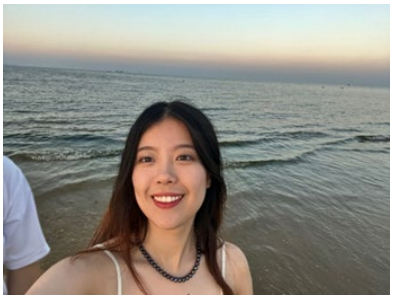
Jannie Xu



Major: Biochemistry and Molecular Biology
Department: Biological Sciences
Level of Study: Bachelor's degree
Campus: UC Davis
Host Site and Mentor: SVM and UC ANR, Alda Pires

Jannie Xu is a fourth-year undergraduate student at the University of California, Davis majoring in Biochemistry and Molecular Biology. Her research interest is in infectious disease. She plans to work in research before attending graduate school in the near future. This summer she will work with Dr. Pires in the UC Davis School of Veterinary Medicine Department of Population, Health, and Reproduction on the Integrated Crop-Livestock Farms Project. The project focuses on the dynamics of foodborne pathogens in integrated crop-livestock systems involving grazing in orchards.

Yueheng Zheng



Major: Preventative Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Master's degree
Campus: UC Davis
Host Site and Mentor: UCCE Santa Clara, Aparna Gazula

Yueheng is a first-year master's student in Preventative Veterinary Medicine. She obtained her degree in veterinary medicine in China and found her interest in interdisciplinary approaches in public health. Apart from monitoring animal health, she is passionate about improving public health by tracking risk factors of diseases and identifying association. She expects to communicate with farmers from different backgrounds and explore valuable suggestions with her knowledge. Her goal is to prevent zoonoses and improve public health. This summer she will be working with her mentors to investigate food safety and soil health in the face climate change and pesticide use.

2022 Fellows

Trent Baldwin

Major: Community Development
Department: Graduate Group of Community Development
Level of Study: Master's Degree
Campus: UC Davis
Host Site and Mentor: UC ANR UCCE, Liliana Vega

Trent is a second year Master's Student within the Community Development Graduate Group at UC Davis. Their research focuses on Positive Youth Development, health disparities, and participatory action research. Trent worked with Liliana, Ana, and Lucy to deliver STEM programming in San Luis Obispo and Santa Barbara counties, assisting with development of youth curriculum on Ethnic and Racial Identity and Computer Science, and developed a program model and evaluation plan for a California Parks Dept. funded outdoor equity program that aims to increase youth and community access to outdoor spaces and recreation activities in underserved communities.

Kareena Barboza

Major: Plant Sciences
Department: Plant Science
Level of Study: Bachelor's Degree
Campus: California State University, Fresno
Host Site and Mentor: UC ANR Lindcove, Sandipa Gautam

Kareena is an undergraduate student in the Plant Science department at the California State University, Fresno. This summer, she is working with Sandipa Gautam of the UC ANR Lindcove focusing on the IMP practices in Citrus. She is actively working with PCAs, collecting traps, and interpreting data. Kareen is also spending tie working with Ping Gu to help with multiple running projects for Sandipa.

Austin Brown

Major: Animal Biology
Department: Animal Biology Group
Level of Study: Master's Degree
Campus: UC Davis
Host Site and Mentor: UC Davis, Roselle Busch

Austin is a M.S. student in the Animal Biology Group at UC Davis where he works in Dr. AlisonVan Eenennaam`s lab. For his fellowship he helped collect and organize a survey and examination of the presence of Ovine Progressive Pneumonia to better understand the impacts of mastitis and early culling of ewes in California sheep flocks. This involved a lot of traveling across California to collect blood samples and offered amazing opportunities to interact with sheep producers from across the country.

Paulina DeBus

Major: Organic Agriculture
Department: Agriculture
Level of Study: Master's Degree
Campus: Wageningen University and Research
Host Site and Mentor: UC ANR, Sonja Brodt

Paulina is a second year Masters of Organic Agriculture student at Wageningen University and Research, with a Bachelors of Sustainable Agriculture and Food Systems from UC Davis. She is completing the last section of her studies, a four-month long internship, at Hopland Research and Extension Center where she is working on the cattle lease project and a webinar and symposium planning and outreach project on livestock integrated cropping systems for SAREP. She is looking forward to connecting with farmers in the area and creating meaningful outreach.

Erica Garibay

Major: Conservation and Resources
Department: Environmental Science, Policy, and Management
Level of Study: Undergraduate Degree
Campus: UC Berkeley
Host Site and Mentor: UCCE Santa Clara, Lucy Diekmann

Erica Garibay is a senior at UC Berkeley majoring in Conservation and Resources with an area of interest in sustainable agri-food systems. She is passionate about agroecological practices that build ecosystem health and increase resilience within local food systems. She also hopes to empower marginalized communities throughout her future career. This summer, Erica worked with Urban Agriculture and Small Farms teams at UCCE Santa Clara where she engaged with diverse stakeholders, including Spanish-speaking small farmers, profiled a local university's student garden, researched and outreached to urban farms in the region, and translated summaries relating to organic management methods into Spanish.

Maya Homsy King

Major: Public Health
Department: Global Health and Environment
Level of Study: Master's Degree
Campus: UC Davis
Host Site and Mentor: UC Davis SVM, Kirsten Gilardi

Maya Homsy King is an MPH student in Global Health and Environment at UC Berkeley. She is interested in health at the human-wildlife interface and is especially interested in the borders between communities and national parks, and the ways in which we can prevent zoonotic disease spillover and promote healthy ecosystems in both areas. This summer, she is working with Gorilla Doctors at Bwindi Impenetrable National Park to carry out an occupational health survey of park staff. She will be providing recommendations in the form of a report to the Uganda Wildlife Authority, Gorilla Doctors, and Bwindi Community Hospital on how best to improve health services for staff.

Elizabeth Isenhower

Major: Animal Science
Department: Department of Animal Science
Level of Study: Bachelor's Degree
Campus: UC Davis
Host Site and Mentor: UC Davis SVM, Alda Pires

Elizabeth Isenhower is a fourth-year undergraduate student at the University of California, Davis majoring in Animal Science. She is interested in veterinary public health and outreach. She hopes to work towards a DVM following graduation and wants to pursue a career in large animal veterinary medicine. This summer she worked with Dr. Pires in the UC Davis School of Veterinary Medicine Department of Population, Health, and Reproduction to develop biosecurity plans for small, mostly organic, multi-species farms. The project mainly focused on adapting biosecurity programs meant for commercial operations into practices that could be implemented by smaller farms.

Skylar Johnson

Major: Veterinary Medicine
Department: The Royal School of Veterinary Studies
Level of Study: Doctoral Degree
Campus: University of Edinburgh, Scotland
Host Site and Mentor: UCCE, Samuel Sandoval Solis

Skylar is a veterinary medicine student at the University of Edinburgh in Scotland. They have a background in global disease biology and epidemiology. This past summer, they partnered with Dr. Ariel Loredo and Dr. Samuel Sandoval Solis in studying the effects of beaver dam analogues on surface water quality and their efficacy in reducing the burden of *Cryptosporidium parvum* and *Giardia duodenalis*. I assisted my colleagues with study design, field work and laboratory processing. During the fellowship, they were able to improve their wet lab and field skills, as well as learned about hydrology, something that they had no previous experience with. Skylar hopes to use these new skills to be a better, more well-rounded veterinarian in the future.

Ariel Loredo

Major: Wildlife Epidemiology
Department: Graduate Group in Epidemiology
Level of Study: Doctoral Degree
Campus: UC Davis
Host Site and Mentor: UCCE, Martin Smith

Ariel Loredo is a graduate student in the UC Davis Epidemiology program in the labs of Dr. Woutrina Smith and Dr. Brian Bird. She is studying zoonotic disease dynamics in a wet meadow restoration and fire recovery in the northern Sierra Nevada. She is interested in working at the intersection of wildlife, zoonotic disease and the environment in an academic or government position in the future. As part of the SWEP program, she is paired with Dr. Martin Smith to help teach her the skills of managing application cycles for a complex program.

Alyssa Mandujano

Major: Global Studies
Department: Department of Global Studies
Level of Study: Bachelor's Degree
Campus: UC Santa Barbara
Host Site and Mentor: Santa Barbara County 4-H Youth Development Program, Liliana Vega

Alyssa Mandujano is a senior at UC Santa Barbara, receiving her bachelor's degree in Global Studies, minoring in Poverty, Inequality, & Social Justice. After studying abroad in Barbados for the 2021/22 school year, Alyssa is passionate about social justice related work and back at UCSB studying to receive her Intersectional Justice Certificate. Alyssa is working with the Santa Barbara County 4-H Youth Development Program under Liliana Vega and is currently assisting with the development of the "Aventuras Afuera" program - seeking to provide quality, community based, outdoor education, environmental justice, identity development, Justice, Equity, Diversity & Inclusion based programs to children from diverse and low-income communities in Santa Barbara County. Alyssa hopes to actively dismantle the psychological perpetuation of injustice and positively contribute to the lives of others by working to unearth the beauty, agency, and unique identities within young people across all cultures.

Siqi Wang

Major: Preventative Veterinary Medicine
Department: School of Veterinary Medicine
Level of Study: Master's Degree
Campus: UC Davis
Host Site and Mentor: Tulare VetMed Teaching & Research Center, Emmanuel Okello

Siqi Wang is a MPVM student at the School of Veterinary Medicine, University of California, Davis, interested in emerging infectious diseases. Her professional goal is to become an epidemiologist in the Conservation Medicine and One Health framework. This is a fantastic career path that

merges her interests in medicine, conservation, and the population health of all species. This summer, she is working with Dr. Emmanuel Okello on Infectious diseases of food animals at VetMed Teaching & Research Center, Tulare, CA. She is willing to get the hands-on working experience in infectious diseases with researchers, policy-makers, and dairy producers and gain insight into how professional connections are made and sustained.

Troy Williams

Major: Environmental Science and Plant Science
Department: College of Agriculture and Environmental Sciences
Level of Study: Bachelor's Degree
Campus: UC Davis
Host Site and Mentor: UC ANR, Sue Mosbacher

Troy Williams is a Senior at UC Davis, completing a double major in Environmental Science and Plant Science, with a focus on crop-atmosphere interactions. Throughout his career, he hopes to use his skills to improve the sustainability, and the nutritional value of America's food systems. Additionally, he hopes to contribute to increasing resiliency and food security in the face of a changing global climate. Troy has worked with multiple labs on the UCD campus and has recently partnered with the Master Food Preservers program to update a variety of web-based resources through the UC ANR website; spreading access to knowledge that will enable people all over the country to safely preserve foods in their home kitchens. This comprehensive and publicly available online resource can empower home gardeners to safely make their harvest last all year and cut down on food waste.

Allison Work

Major: Public Health
Department: Environmental Health Sciences
Level of Study: Master's Degree
Campus: UC Berkeley
Host Site and Mentor: UCCE San Benito, Devii Rao

Allison is an MPH student in the Environmental Health Sciences department at University of California, Berkeley interested in the relationship between land use and the health of the planet's ecosystems and the people in them. This summer, she is working with Devii Rao of UCCE San Benito County on two projects relating to the impacts of cattle grazing on California lands: one focused on grazing's role in improving habitat for special status species at a prairie restoration site in Pinnacles National Park, and another related to changes in grazing over time across the state and associated impacts on wildfire fuels.

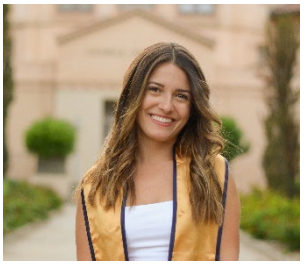
2021 Fellows

Leslie Alfonso

Major: Society & Environment; Minor in food systems
Department: College of Natural Resources
Level of study: Bachelor's Degree
Campus: UC Berkeley
Host site and mentor: UC ANR UCCE, Kari Arnold

I had the pleasure of being taken under the wing of Dr. Kari Arnold in Stanislaus County. Beyond obtaining technical skills from working with experimental harvest data collection in cherries/walnuts, studying irrigation, stem water potential data collection, pruning practices in fruit trees, and other agricultural research projects, I was introduced to other brilliant individuals, which created a space in which we could have meaningful conversations regarding the large implications that policy, public misconceptions, and funding can have in agricultural research and production. I gained my desired experience of developing a deeper understanding of the agricultural industry through hands-on field work research that will enable me to better discern and implement the policies and regulations within my future career.

Laurel Denyer



Major: Global Disease Biology
Department: Plant Pathology
Level of study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: UC ANR, Christina Hecht & Tammy McMurdo

With the Nutrition Policy Institute, Laurel improved a GIS interactive water quality map tracking lead and regulated contaminants in schools, public parks, and public systems. She developed a tracking system for water contaminant article research as well as water policies nationwide. The tool now has over 235 new map points and can be used for citizen science. With CalFresh Healthy Living, UC, she developed flexible materials for in-person and virtual delivery of evidence-based nutrition education about MyPlate health benefits. These will be used statewide during the pandemic as well as to reach rural communities.

Rory O'Toole

Major: Environmental Science and Management with a focus in Climate Change and Atmospheric Science
Department: Environmental Sciences
Level of study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: UC ANR UCCE, Whitney Brim-DeForest

As a fellow with the UCANR program, Rory worked at the Yuba County office helping with various research projects. Focused on herbicide effects on rice, she assisted in data collection and greenhouse maintenance as well as getting to go on field calls. The main takeaway from this experience was that she wants to continue in field research by going on to graduate school.

Cole Jenson

Major: Environmental Policy and Management
Department: Environmental Policy and Management
Level of study: Master's Degree
Campus: UC Davis
Host site and mentor: DOC, Keali'i Bright & Jenny DiStefano

In the interest of becoming familiar with a wider variety of environmental sectors, Cole assisted with multiple boundary crossing initiatives with the Division on Land Resource Protection. His work included interviewing block grantees and other stakeholders for the Regional Forest and Fire Capacity Grant Program in order to provide recommendations for a new system of metrics and feedback, as well as providing coordination and facilitation for a series of multi-agency workshops focused on aligning Conservation and Housing work in the state.

Elijah Liedeker

Major: Community Studies
Department: Social Sciences
Level of study: Bachelor's Degree
Campus: UC Santa Cruz
Host site and mentor: UC ANR UCCE, Whitney Brim-DeForest

As a summer fellow with the University of California's Cooperative Extension program in Sutter and Yuba Counties, Elijah learned from and assisted Farm Advisors mainly focusing in rice, under Whitney Brim-DeForest. Elijah gained in experience in lab work, focusing on a comprehensive Weedy Rice study, as well as fieldwork and aiding in research and greenhouse studies. Elijah gained knowledge about the field of Weed Sciences and the intersection between gender, herbicides, and international agriculture in addition to novel perspectives on domestic agriculture and what can be understood as 'Mass Method'-Farming, in the words of John Steinbeck.

Cooper Limon

Major: Environmental Policy / Public Policy
Department: Environmental Science, Policy, and Management
Level of study: Bachelor's Degree
Campus: UC Berkeley
Host site and mentor: UC ANR UCCE & SAREP, Sarah Light, Rachael Callaghan, and Laura Crothers

Cooper worked with UC ANR cooperative extension soil health researcher, Sarah Light, and Rachael Callahan and Laura Crothers from UC SAREP. He was tasked with synthesizing and organizing data and pictures from a winter cover crop experiment into a cohesive document, planning for the Spring 2022 Cover Crop Conference, and handling other projects for Sarah Light. With UC SAREP, he helped clean up the old website, establish a strong social media presence, complete independent research about aspects of sustainable agriculture, and write several blog posts. Cooper's interests

in environmental science, policy, and management were in complete alignment with his fellowship experience and both of his fellowships explored into areas of the Planetary Health field of concentration.

Karah Pedregosa

Major: Psychological Sciences and Criminology
Department: School of Social Ecology
Level of study: Bachelor's Degree
Campus: UC Irvine
Host site and mentor: UC ANR, Faith Kerns

I am a Psychology and Criminology double major interested in the intersections between social justice and sustainability issues, and hope to inspire students to become involved with sustainability efforts on their campus and beyond. I shadowed Faith Kearns, the Academic Coordinator for the UC ANR Water Resources Department. My responsibilities included attending meetings with the rest of Faith's department and creating infographics for the UC ANR Instagram to make information about ongoing science issues more engaging and accessible for college students.

Monica Quezada

Major: International Agriculture Development
Department: Plant Sciences
Level of study: Master's Degree
Campus: UC Davis
Host site and mentor: UC ANR UCCE, Amber Vinchesi-Vahl

During her summer PHCOE fellowship, Monica helped with various fieldwork activities and learned more about the many responsibilities a farm advisor has through shadowing Amber Vinchesi-Vahl, Vegetable Crops Advisor for Yuba, Sutter and Colusa counties. She participated in fieldwork for a few projects looking at the impact of applying compost on tomato yield and quality and the incidence of weeds using mechancial and automated within row cultivators. For a trial on the effectiveness of pheromones and floral lures in attracting western striped cucumber beetle in melons, she assisted with plot setup and data collection. She also worked on her science communication skills by writing newsletter articles on how organic management improves plant nutrition, yield and plant resistance to pests, managing water in a drought year for processing tomatoes, and new developments in disease detection on tomatoes in Florida using drones.

2020 Fellows

Helaine Berris

Major: International Agricultural Development and Hydrologic Sciences
Department: Plant Sciences
Level of study: Master's Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE, Sarah Light

To get a feel for what a career as a farm adviser looks like, Helaine contributed to a number of projects during her time as a fellow. She went on farm calls with her mentor, assisted with field work, and analyzed data. One ongoing project she enjoyed was developing outreach materials for Spanish speakers about how to conduct on site soil nitrate tests. She also helped conduct and compile grower interviews for a cost study that will aid growers in understanding associated costs with implementing cover crops on their farms.

Vanshika Desai

Major: Global Disease Biology
Department: Plant Pathology
Level of study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE, Gail Feenstra & Penny Leff

As a summer fellow for UC SAREP, Vanshika conducted research and data analysis for UC Sustainable Agriculture and Research Education Program (UC SAREP) and Cook Alliance, a non-profit organization that legalized the sale of home cooked food by passing two California laws. She also helped plan and co-host a statewide convention to bring together activists, educators, entrepreneurial home cooks, and policy makers. Spending the majority of her life outdoors, she has gained a massive appreciation for the environment and hopes to pursue a career in the future that works towards preserving the Earth's beauty while also maintaining her interests in biology and medicine.

Marieke Fenton

Major: Agricultural and Resource Economics (ARE)
Department: Agricultural and Resource Economics (ARE)
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: DOC, Virginia Jameson

Mari spent the summer analyzing drivers of land use change in the San Joaquin Valley. Her project used biennial maps generated by the DOC Farmland Mapping and Monitoring Program to look at trends visually and with econometric analysis. The project focused on conversion of land from farmland to urban or otherwise built up area, and conversion of land from grazing or other lands to farmland. Identified patterns can be used to prioritize locations for conservation of farmland.

Kelsey Haydon

Major: Geography
Department: Graduate Group of Geography
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE, Gregory Ira

Kelsey is a first year PhD student with the Graduate Group of Geography at UC Davis, where her work focuses on climate change policy and environmental justice. She spent the summer of 2020 with UC ANR and the Climate Stewards program. Her specific deliverables included accessibility work on the Climate Stewards pilot courses, securing copyright permissions for course materials, and contributing to the instructor manual.

Maria Valenzuela

Major: Earth System Science
Department: Physical Sciences
Level of study: Bachelor's Degree
Campus: UC Irvine
Host site and mentor: UCANR UCCE, Luis Espino

At the UC Cooperative Extension Butte County, Maria took the lead on a research project that analyzed arthropod diversity in rice fields to see the effect of early insecticide applications on natural enemies of armyworms. She also collaborated in other projects such as the use of fungicides to manage rice disease, armyworm insecticide trials, rice yield contests, and more. During this fellowship, she was able to learn about farming practices and research methods that aim for better productivity and sustainability, which will help her in her research and career.

2019 Fellows

Elise Elwood

Major: Population Biology
Department: Population Biology Graduate Group / Evolution and Ecology Department
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: DOC, Jeffery Onstead

At the California Department of Conservation, Elise drafted a report and presented recommendations to the Department of Conservation on reporting requirements during the grant cycle for the Regional Forest and Fire Capacity Program (RFFCP). states where there are high fuel loads creating fire risks that threaten humans and ecosystems alike. The RFFCP seeks to build regional capacity in order to treat forests and reduce this risk at an increased pace and scale across the state. She interviewed grant recipients through and conducted a literature review to identify successful initiatives for

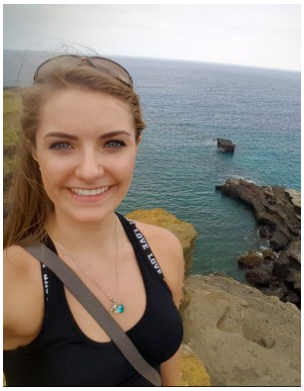
reporting for state grant programs.

Khurshid Iranpur

Major: Animal Science
Department: Animal Science
Level of study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE, Martin Smith

Khurshid is an Animal Science student interested in veterinary public health and outreach. For her fellowship program Khurshid conducted research on poultry welfare and contributed to the development of a course module on poultry health and welfare for 4-H participants. This module is designed to provide youth with knowledge and skills associated with raising and caring for backyard poultry.

Brittany Theilen



Major: Environmental Science
Department: Environmental Studies
Level of study: Master's Degree
Campus: UC Santa Barbara
Host site and mentor: DOC, Jeffery Onstead

Brittany applied her geological skills and interest in educating the public on climate change related hazards in her work with the California Department of Conservation where she mapped landslide hazards in the West Walker River Gorge. She contributed to research evaluating the implications of landslides that have the potential to dam the West Walker River.

Lucy Zheng

Major: Psychology
Department: Psychology
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE, Marissa Neelon

Lucy worked with UCANR to assist with data analyses aimed at evaluating the impacts of interventions in the California Expanded Food and Nutrition Education Program (EFNEP). The EFNEP assists limited-resource families gain the knowledge, skills, attitudes, and changed behavior necessary to choose nutritionally sound diets and improve their well-being.

2018 Fellows

Holly Beitch

Major: Public Health
Department: Public Health
Level of study: Master's Degree
Campus: UC Davis
Host site and mentor: California Department of Public Health, Office of Health Equity; Meredith Milet

At the California Department of Public Health, Holly assisted with calculating updated climate change and health vulnerability indicators. Her interest in planetary health began when she took a series of classes in her Master's curriculum highlighting how the health of the environment is inextricably linked to the health of humans and animals. Holly is interested in the effects of developed environments on human health and the relationships between climate change and health equity.

Serena Bhagirath

Major: Public Health
Department: Public Health
Level of study: Master's Degree
Campus: UC Davis
Host site and mentor: UCANR UCCE; Whitney Brim- DeForest

After completing coursework for a Master's Degree in Public Health, Serena realized how aspects of science, public policy, and social services can be integrated to solve local and global health problems. As a Yuba City native, Serena returned to her hometown this summer to work with the UC Cooperative Extension field program. She designed and implemented a survey to gather data and provide the extension service with an assessment of the resource utilization and different farming practices used by rice growers in Northern California.

Kyle Cheung

Major: Biological Systems Engineering
Department: Biological and Agricultural Engineering
Level of study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: Sierra Foothill Research & Extension Center; Dr. Jeremy James

Kyle assisted in the design and implementation of a wireless mesh sensor network and automation of field equipment at the Sierra Foothill Research and Extension Center (SFREC) in Browns Valley, CA. Kyle's research focused on overcoming the challenges posed by the hilly terrain at the center that decreases the functionality of field equipment. His research also focused on automation techniques that reduce maintenance for field equipment placed in difficult to access locations.

Marisa Donnelly

Major: Epidemiology
Department: Epidemiology Graduate Group
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: California Department of Public Health (CDPH), Climate Change and Equity Program; Jason Vargo

Applying her background in statistical and epidemiological modeling, Marisa investigated the human morbidity and mortality burden attributed to ambient temperature and extreme heat and cold events in California. Her work focused on future scenarios of excess temperature-related morbidity and mortality in California populations using climate change scenarios and general circulation models.

Anna Grotjahn

Major: Wildlife and Conservation Biology

Department: Wildlife, Fish and Conservation Biology
Level of study: Bachelors Degree
Campus: UC Davis
Host site and mentor: Elkus Ranch, Kathi Baxter

Anna was stationed at UCCE Elkus Ranch Environmental Education Center where she assisted with their science summer camp program. Anna is interested in conservation science and ecology, and was involved in adapting and implementing youth summer camp education modules to enhance the diversity of curriculum offerings related to food web dynamics and climate change topics in a watershed context.

Hannah Lepsch

Major: International Agricultural Development
Department: Soils and Biogeochemistry Graduate Group
Level of Study: Master's Degree
Campus: UC Davis
Host site and mentor: UCANR: Yuba City; Whitney Brim-DeForest

Hannah conducted a rice farm survey and supported farmer outreach and education events at the Yuba City UC Agriculture and Natural Resources (ANR) division. Hannah is particularly interested in farmer outreach as it relates to soil health and communicating the value of healthy soil for environmental, biological, human and agroecosystem health.

Eryn McKinney

Major: Entomology and Nematology
Department: Entomology and Nematology
Level of Study: Bachelor's Degree
Campus: UC Davis
Host site and mentor: Kern County Entomology Farm; David Haviland

Eryn collected data from pesticide research trials that use pesticides to combat common agricultural pests, including spider mites, grapevine mealy bugs, and sugarcane aphids. Eryn enjoys working in this area because she benefits from laboratory and field experiences and also learns first-hand how integrated pest management can benefit the producer and the environment. Eryn is interested in environmentally friendly pesticide practices and their impacts on fauna and hopes to enter the apiarian industry.

Christina Murillo

Major: Community Development and Geography
Department: Human Ecology
Level of study: Masters Degree
Campus: UC Davis
Host site and mentor: California Department of Conservation; Dr. Jeff Onsted

Through her summer fellowship, Cristina focused on examining land conservation and easement programs in California. She researched and analyzed Department of Conservation programs focusing on community engagement, empowerment and environmental justice. Cristina's graduate research focuses on conservation and community engagement in Central America. She has experience working with the US government, international conservation NGOs, and National Parks in the US and Costa Rica.

Erica Orcutt

Major: Geography
Department: Geography Graduate Group
Level of study: PhD Degree
Campus: UC Davis
Host site and mentor: California Department of Conservation; Dr. Jeff Onsted

During her summer work experience with California Department of Conservation, Erica spent time in Sacramento working on the Sustainable Agricultural Lands Conservation Program, assisting with land use planning and mapping. As a native Californian, Erica has made it her mission to contribute to resource conservation in the state. Her PhD research includes habitat mapping and analysis for the Mohave Ground Squirrel, a California listed species.

Landon Smith

Major: International Political Economics
Department: International Political Economics
Level of study: Bachelor's Degree
Campus: University of Puget Sound
Host site and mentor: Planetary Health Center of Expertise, One Health Institute, UC Davis; Woutrina Smith

Landon's summer fellowship focused on the recent wildfires in Sonoma County and the effects they had on wineries. He worked with UC Cooperative Extension Specialists to research farming practices of the wineries and how they implement worker safety to protect them from future extreme weather. Landon hopes that this research will help raise awareness on the dangers of outdoor laborers during extreme weather events, and will help to identify what interventions or practices can be implemented to increase worker safety. Interestingly, both direct infrastructure and indirect operational factors were recognized as barriers to community resilience when talking with the winegrowing industry.

2024 Summer Work Experience Program
Student Evaluations

All Fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the program, of which 13/14 submitted response. Overall, fellows rated their work experience as 'Excellent' (median rating of 3 on a scale of 0 to 3, with 0 as 'Needs improvement' and 3 as 'Excellent'; Table 1). Overall, they found the fellowship enriching, providing both practical applications of their education and valuable networking opportunities. Specifically, Fellows felt the experience strengthened practical skills related to veterinary medicine, data analysis, wet lab, and science communication that they can use in their careers going forward.

When asked what they liked most about their experience, Fellows said they valued the opportunity to work on a variety of projects, particularly those that had a tangible impact on animal and human health. Many highlighted the importance of mentorship and teamwork in developing their research and leadership skills, as well as the hands-on experience gained through working directly with dairy farm workers, veterinarians, and lab scientists. Additionally, fellows agreed this was a great career building opportunity as they were able to conduct research, learn how to analyze data, produce deliverables, and connect with professionals in the field. As such, fellows indicated the fellowship significantly contributed to their career goals (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2).

When asked what they felt was their greatest contribution during the fellowship, they felt they bridged communication gaps between scientists and communities such as farm workers, mothers, and Latinx communities. Key contributions included data analysis for school meal projects, establishing new research protocols, and overseeing pilot studies on wildfire mitigation. The Fellows suggested improving the program through better communication with mentors and networking opportunities with other Fellows. Not surprisingly, fellows indicated a very high likelihood of recommending the fellowship to other students (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2).

Table 1. Summary of responses from thirteen 2024 Summer Work Experience Fellows regarding their fellowship work experience (median values are reported). Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3
Level of responsibility	3
Workload assigned	3
Overall rating of work experience	3

Gained knowledge that will benefit your career development	3
Improved skills that will benefit your career development	3
Increased your access to professional development opportunities	3
Met other professionals who contributed to my professional growth	3
Facilitated connections with mentors or collaborators working in your field	3
Overall rating of professional development and learning experience	3

Table 2. Summary of responses from thirteen 2024 Summer Work Experience Fellows regarding their overall fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5 (median values are reported).

Experience Questions	Summary of Responses
What did you like most about your fellowship program?	Several Fellows commented that they appreciated being exposed to multiple projects and professionals over the summer, indicating an appreciation for growing their professional networks. Fellows were also happy that the work seemed applicable to their careers and will use the skills gained going forward. One Fellow commented that working with undergrads allowed them to gain leadership skills.
What did you like the least about your fellowship program?	Some students left this section blank or put “none”. A few students indicated the onboarding process was slow or unclear, while others encountered a steep learning curve upon starting their experience. Among those working in farm settings, several indicated they wished they had more time over the summer to collect more data.
What do you think was the greatest impact/contribution of your participation in the fellowship program?	Fellows contributed broadly across their placements, expressing pride in their ability to connect science-backed implementation and education to communities, ranging in topics from agriculture and livestock practices to breast feeding. Fellows were also proud of their ability to use their skills in data collection and analysis, public health, and veterinary medicine in their work. Because of this, they felt they made meaningful contributions to their teams.
Do you have any other comments and/or suggestions to improve the fellowship program?	Several fellows left this blank; however, answers provided varied quite a bit and were not repetitive. One fellow would have like to meet other Fellows, one did not like the video assignment, and a couple

	mentioned they wish they had better communication with their mentor around their project and/or deliverables.
How likely are you to recommend the fellowship to a fellow student?	5
How well did the fellowship contribute to your career goals?	5

2023 Summer Work Experience Program Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the program, of which 10 submitted response. Overall, fellows rated their work experience as 'Excellent' (median rating of 3 on a scale of 0 to 3, with 0 as 'Needs improvement' and 3 as 'Excellent'; Table 1). Most notably, fellows underscored the welcoming learning environment their mentors created, with one student even commenting that the program felt catered specifically for their growth. Several fellows also indicated that the program was a nicely structured opportunity for them to learn about research methods and needs or gaps in their respective fields.

When asked what they liked most about their experience, fellows responded that they valued the opportunity to use their native language in a working environment and appreciated the opportunity to work closely with local communities. Additionally, fellows agreed this was a great career building opportunity as they were able to conduct research, learn how to analyze data, produce deliverables, and connect with professionals in the field. As such, fellows indicated the fellowship significantly contributed to their career goals (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2).

When asked what they felt was their greatest contribution during the fellowship, fellows indicated they felt their greatest contributions were their deliverables, such as curated data sets, analyzed data, and translated documents, or their lasting impacts such as helping communities and informing policy. As critique, one fellow commented that the logistics for traveling to field sites were at times complicated, while another fellow's only complaint was they wished the fellowship could have been longer. Not surprisingly, fellows indicated a very high likelihood of recommending the fellowship to a fellow student (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2).

Table 1. Summary of responses from ten 2023 Summer Work Experience Fellows regarding their fellowship work experience (median values are reported). Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3
Level of responsibility	3
Workload assigned	3
Overall rating of work experience	3
Gained knowledge that will benefit your career development	3
Improved skills that will benefit your career development	3
Increased your access to professional development opportunities	3
Met other professionals who contributed to my professional growth	3
Facilitated connections with mentors or collaborators working in your field	3
Overall rating of professional development and learning experience	3

Table 2. Summary of responses from ten 2023 Summer Work Experience Fellows regarding their overall fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5 (median values are reported).

Experience Questions	Summary of Responses
What did you like most about your fellowship program?	Fellows enjoyed learning about research methods in their respective fields and expressed appreciation for the programs flexibility in offering remote work, dry lab, and wet lab/field experience. Fellows also enjoyed working with communities and expressed gratitude for the mentorship they received from their hosts.
What did you like the least about your fellowship program?	Several fellows left this section blank, but those that did respond indicated some logistical issues with location of their fellowship, logistical issues with field work, or wishing the fellowship was longer. One fellow disliked the short summary video requirement.
What do you think was the greatest impact/contribution of your participation in the fellowship program?	Fellows contributed broadly across their placements, expressing pride in their products that ranged from translated pamphlets for immigrant farmers, research analysis for informing policy, and data analysis for informing next steps in research projects. Fellows were also proud of the relationships they forged with local communities and the professional networks they built for future collaboration.

Do you have any other comments and/or suggestions to improve the fellowship program?	Most fellows left this blank; however, one fellow commented that a mental health check-in might have helped them to work more closely with their mentor and one fellow said it would have been helpful to understand location logistics before choosing a placement.
How likely are you to recommend the fellowship to a fellow student?	5
How well did the fellowship contribute to your career goals?	5

2022 Summer Work Experience Program
Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the program. Overall, fellows rated their work experience as 'Excellent' in all categories (median rating of 3 on a scale of 0 to 3, with 0 as 'Needs improvement' and 3 as 'Excellent'; Table 1). Most notably, fellows expressed how this experience uncovered niches and career paths in their respective fields and provided them with learning opportunities unobtainable in the classroom. As well, fellows believed this experience was an excellent professional development opportunity, as they gained valuable knowledge and skills that benefitted their career development. Fellows also indicated a very high likelihood of recommending the fellowship to fellow students (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2), noting that broader advertising of the program could potentially increase the number of applicants.

When asked what they liked most about their experience, fellows repeatedly acknowledged the superb mentorship received throughout their program. Additionally, fellows agreed this was a great career-building opportunity as they were able to conduct applied research, develop new technical skills, and develop products that would positively impact students, the community, and the reach of the host agencies. As such, fellows indicated that the fellowships significantly contributed to their career goals (median rating of 5 on a scale of: 1 = Not at All, 5 = Highly; Table 2), and perceived it as a valuable opportunity to learn about their field of study and the agencies in which they were interning. It was suggested that the experience could be improved in future years by hosting an exit meeting where fellows could learn about each other's experiences through presentations. Moreover, although fellows frequently stated an appreciation for hybrid-style work, these same students also expressed their desire for more face-to-face experiences.

Table 1. Summary of responses from the eight 2021 Summer Work Experience Fellows regarding their fellowship work experience (median values are reported). Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2,

Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	2.9
Level of responsibility	2.8
Workload assigned	2.7
Overall rating of work experience	2.8
Gained knowledge that will benefit your career development	2.6
Improved skills that will benefit your career development	2.9
Increased your access to professional development opportunities	2.7
Met other professionals who contributed to my professional growth	2.6
Facilitated connections with mentors or collaborators in your field	2.6
Overall rating of professional development and learning experience	2.9

Table 2. Summary of responses from the eight 2021 Summer Work Experience Fellows regarding their overall fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5 (median values are reported).

Experience Questions	Summary of Responses
What did you like *most* about your fellowship program?	Fellows appreciated the flexibility and support of their mentors throughout their fellowships. As well, many highlighted the applicability of their fellowships to their future careers and enjoyed the breadth of exposure to different agencies and types of work, especially areas in which the fellows had no previous exposure.
What did you like the *least* about your fellowship program?	Students overwhelmingly indicated that although they appreciated the flexibility of hybrid-style internships, they would have appreciated more in-person work opportunities. Two students also noted they were faced with difficult decision making during their fellowships, however valuable.
What was the *greatest impact or contribution* of your participation in the fellowship program?	Delivering useful and engaging products and outputs, such as informational videos, updated curriculum, reports, analyses, and other materials were perceived as valuable contributions of the fellows to their hosts and host agencies. As well, many expanded their technical and professional skillsets by improving their data collection, field research, communication, and coordination skills.

Comments and/or suggestions to improve the fellowship program?	Fellows expressed interest in networking opportunities, specifically, one student suggested an exit meeting to learn about other fellows' projects. Another student pointed out that the program could be advertised more broadly.
How likely are you to recommend the fellowship to a fellow student?	5
How well did the fellowship contribute to your career goals?	4

2021 Summer Work Experience Program
Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the program. Overall, fellows rated their work experience as 'Excellent' in most categories (median rating of 3 on a scale of 0 to 3, with 0 as 'Needs improvement' and 3 as 'Excellent'; Table 1). Most notably, fellows highlighted the supportive and encouraging role of their mentors throughout this program and appreciated their guidance and flexibility in crafting personally applicable summer work experiences – a fellow noted that clearly communicating their expected goals and outcomes with their host was a beneficial in this regard. As well, fellows believed this experience was an excellent professional development opportunity, as they gained valuable knowledge and skills that benefitted their career development. Fellows also indicated a very high likelihood of recommending the fellowship to a fellow student (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2), noting that students from a broader range of UC campuses, as well as from other planetary health disciplines, would benefit from such an experience.

When asked what they liked most about their experience, above all fellows responded that they valued the flexibility, openness, and willingness of their mentors to help and craft an experience that would be suitable to their interests. Specifically, mentors enabled fellows to participate in a breadth of opportunities, helping them learn about other programs within the agency. Additionally, fellows agreed this was a great career-building opportunity as they were able to conduct applied research, develop new technical skills, and develop products that would positively impact students, the community, and the reach of the host agencies. Thus, fellows indicated that the fellowships significantly contributed to their career goals (median rating of 4 on a scale of: 1 = not at all, 5 = highly; Table 2), and perceived it as a valuable opportunity to see how much work goes into being a farm advisor, for example. It was suggested that the experience could be improved in future years by hosting additional networking opportunities for students and mentors and broadening the host agencies that participate in the program, as these aspects could open additional doors to career opportunities for fellows.

Table 1. Summary of responses from the eight 2021 Summer Work Experience Fellows regarding their fellowship work experience (median values are reported). Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3

Level of responsibility	2.75
Workload assigned	3
Overall rating of work experience	3
Gained knowledge that will benefit your career development	3
Improved skills that will benefit your career development	3
Increased your access to professional development opportunities	2
Met other professionals who contributed to my professional growth	2.5
Facilitated connections with mentors or collaborators in your field	3
Overall rating of professional development and learning experience	3

Table 2. Summary of responses from the eight 2021 Summer Work Experience Fellows regarding their overall fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5 (median values are reported).

Experience Questions	Summary of Responses
What did you like *most* about your fellowship program?	Fellows appreciated the flexibility and support of their mentors throughout their fellowships. As well, many highlighted the applicability of their fellowships to their future careers and enjoyed the breadth of exposure to different agencies and types of work.
What did you like the *least* about your fellowship program?	Largely, fellows would have preferred in-person internships, as many were conducted virtually due to COVID-19 restrictions. In addition, fellows noted their desire for the internship to be longer, or to be more appropriately timed to intersect with their harvest season. Depending on the host organization, onboarding and administration logistics were somewhat time-consuming.
What was the *greatest impact or contribution* of your participation in the fellowship program?	Delivering useful and engaging products and outputs, such as maps, infographics, social media posts, and newsletters were perceived as valuable contributions of the fellows to their hosts and host agencies. As well, many expanded their technical and professional skillsets by improving their data collection, field research, communication, and coordination skills.
Comments and/or suggestions to improve the fellowship program?	In addition to the summer kick-off event, fellows expressed interest in another networking event among fellows and mentors during the program. As well, broadening this program to include students and mentors within other planetary health disciplines would be impactful.

How likely are you to recommend the fellowship to a fellow student?	5
How well did the fellowship contribute to your career goals?	4

2020 Summer Work Experience Program
Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the program. Overall, fellows rated their work experience as 'Excellent' (median rating of 3 on a scale of 0 to 3, with 0 as 'Needs improvement' and 3 as 'Excellent'; Table 1). Most notably, fellows highlighted the role of their mentors throughout this program, and believed this experience was an excellent professional development opportunity, as they gained valuable knowledge and skills that benefitted their career development. Fellows also indicated a very high likelihood of recommending the fellowship to a fellow student (median rating of 5 on a scale of: 1 = not at all, 5 = highly; Table 2).

When asked what they liked most about their experience, fellows responded that they valued the flexibility, openness, and willingness of their mentors to help. Additionally, fellows agreed this was a great career-building opportunity as they were able to conduct applied research, develop new technical skills, and conduct outreach. Fellows indicated the fellowship significantly contributed to their career goals (median rating of 4 on a scale of: 1 = not at all, 5 = highly; Table 2). When asked about their contributions during the fellowship, fellows indicated they made contributions to research projects by compiling and collecting data, generating products such as maps, and conducting statistical analyses on project data. It was suggested that the experience could be improved in future years by coordinating informal meetings prior to the start of project implementation to help with defining research projects within this limited summer timeframe.

Table 1. Summary of responses from the five 2020 Summer Work Experience Fellows regarding their fellowship work experience (median values are reported). Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3
Level of responsibility	3
Workload assigned	3
Overall rating of work experience	3
Gained knowledge that will benefit your career development	3
Improved skills that will benefit your career development	3
Increased your access to professional development opportunities	3

Met other professionals who contributed to my professional growth	3
Facilitated connections with mentors or collaborators in your field	3
Overall rating of professional development and learning experience	3

Experience Questions	Summary of Responses
What did you like *most* about your fellowship program?	Fellows highlighted the role of their mentors and were appreciative of their flexibility, openness, and willingness to help. Additionally, fellows agreed this was a great career-building opportunity.
What did you like the *least* about your fellowship program?	The virtual format (due to the COVID-19 pandemic) and short, summer timeframe of the fellowship made it more difficult (e.g. defining projects and completing analyses).
What was the *greatest impact or contribution* of your participation in the fellowship program?	The greatest contributions of the fellows were to their research projects, which included data compilation and the delivery of helpful and informational products and analyses.
Comments and/or suggestions to improve the fellowship program?	Being able to offer financial compensation is appreciated by the fellows. In addition, coordinating informal meetings prior to the start of projects would help with defining research projects in a short timeframe.
How likely are you to recommend the fellowship to a fellow student?	5
How well did the fellowship contribute to your career goals?	4

2019 Summer Work Experience Program
Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the summer. Overall, fellows rated their experience as excellent (median rating of 3 (on a scale of 0 = needs improvement to 3 = excellent); Table 1) with the highest rankings for mentorship received, knowledge and skills gained that will benefit them in their career development, and meeting other professionals in the field who contributed to their professional growth. Fellows also indicated a very high likelihood of recommending the fellowship to a fellow student (median rating of 5 (on a scale of 1 = not at all, 5 = highly; Table 2)).
When asked what they liked most about their experience, fellows responded that they valued the opportunity to conduct applied research, networking with professions, develop new technical skills, and conduct outreach. Fellows indicated the fellowship highly contributed to their career goals (median = 5.0 (on a scale of 1 = not at all, 5 = highly; Table 2). When asked about their contributions during the fellowship, fellows indicated they made contributions to curriculum development, recommendations for agency processes, improvements in landslide hazard awareness, and outreach and education. Fellows suggested that the experience could be improved in future years by offering a 1-credit class in the Spring Quarter to discuss topics relevant to scientific outreach and education and the fellowship experience and to facilitate interactions with other fellows.

Table 1. Summary of responses from the four 2019 Summer Work Experience Fellows regarding their work experience during their fellowship. Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3.0
Level of responsibility	3.0
Workload assigned	2.0
Overall rating of work experience	3.0
Gained knowledge that will benefit your career development	3.0
Improved skills that will benefit your career development	3.0
Increased your access to professional development opportunities	3.0
Met other professionals who contributed to my professional growth	3.0
Facilitated connections with mentors or collaborators in your field	3.0
Overall rating of professional development and learning experience	3.0

Table 2. Summary of responses from the four 2019 Planetary Health Center of Expertise Summer Fellows regarding their fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5.

Experience Questions	Summary of Responses
What did you like most about your fellowship program?	Fellows appreciated the opportunity to conduct applied research, networking with professions, develop new technical skills, and conduct outreach.
What did you like the least about your fellowship program?	The fellowship program would benefit from increased opportunities to connect with mentors and other fellows and improved clarity in the hiring process.
What do you think was the greatest impact/contribution of your participation in the fellowship program?	Fellows thought that their greatest contributions were contributions to curriculum development, recommendations for agency processes, improvements in landslide hazard awareness, and outreach and education.
How likely are you to recommend the fellowship to a fellow student?	5.0
How well did the fellowship contribute to your career goals?	5.0
Do you have any other comments and/or suggestions to improve the fellowship program?	Offer 1-credit class in the Spring Quarter to discuss topics relevant to scientific outreach and education and the fellowship experience and to facilitate interactions with other fellows.

2018 Summer Work Experience Program
Student Evaluations

All fellows were requested to share perspectives and feedback on their summer fellowship experience through a written evaluation at the end of the summer. Overall, fellows rated their experience as excellent (median rating of 3 (on a scale of 0 = needs improvement to 3 = excellent); Table 1) with the highest rankings for mentorship received, knowledge and skills gained that will benefit them in their career development, and meeting other professionals in the field who contributed to their professional growth. Fellows also indicated a very high likelihood of recommending the fellowship to a fellow student (median rating of 4.7 (on a scale of 1 = not at all, 5 = highly; Table 2)).
When asked what they liked most about their experience, fellows responded that they appreciated the participatory learning through real-world experience, networking, and independent research. Fellows indicated the fellowship highly contributed to their career goals (median = 4.5 (on a scale of 1 = not at all, 5 = highly; Table 2). When asked about their contributions during the fellowship, fellows indicated they made substantial contributions through data collection, product design, outreach and education, and research to improve public policy. Fellows suggested that the experience could be improved in future years by providing more details regarding the expectations of the fellows (the commute for some fellows was a concern), more student 'check-ins' by the Planetary Health Center of Expertise staff, and streamlining the administrative processes for stipend compensation.

Table 1. Summary of responses from the ten 2018 Summer Work Experience Fellows regarding their work experience during their fellowship. Fellows were asked to rank their experience according to a scale of: Needs improvement = 0, Satisfactory = 1, Above Average = 2, Excellent = 3.

Evaluation Criteria	Median Response
Mentorship received	3.0
Level of responsibility	2.5
Workload assigned	2.0
Overall rating of work experience	3.0
Gained knowledge that will benefit your career development	3.0
Improved skills that will benefit your career development	3.0
Increased your access to professional development opportunities	2.5
Met other professionals who contributed to my professional growth	3.0
Facilitated connections with mentors or collaborators in your field	3.0
Overall rating of professional development and learning experience	3.0

Table 2. Summary of responses from the ten 2018 Planetary Health Center of Expertise Summer Fellows regarding their fellowship experience. For the quantitative responses, fellows were asked to rank their experience according to a scale of 1 - 5: Not at All = 1, Highly = 5.

Experience Questions	Summary of Responses
What did you like most about your fellowship program?	The fellowship program provided participatory learning through real-world experience, networking and independent research.
What did you like the least about your fellowship program?	The fellowship program would benefit from a mentoring plan to guide fellows and mentors. The commute was a challenge for many fellows.
What do you think was the greatest impact/contribution of your participation in the fellowship program?	Fellows thought that their greatest contribution was data collection, literature, product design, outreach and education, and research to improve public policy.
How likely are you to recommend the fellowship to a fellow student?	4.7
How well did the fellowship contribute to your career goals?	4.5
Do you have any other comments and/or suggestions to improve the fellowship program?	The fellowship could be improved by providing detailed expectations of the fellows, more student 'check-ins', and streamlining the administrative processes for stipend compensation.

2018 Summer Work Experience Program
Mentor Evaluations

Mentors were also requested to share feedback on the summer fellowship program. When asked whether the fellowship experience met their goals for the program, all of the mentors indicated the program was successful in achieving the objectives and in some cases, exceeded expectations with regard to the fellow's contributions. Specific feedback from the mentors on what worked well for the program included the interest, enthusiasm, and skills brought to the programs by the fellows as well as the helpful coordination by the PHCoE to match fellows with programs and mentors based on interests and experience. Suggestions for how to improve the program for 2019 included extending the length of the program to allow fellows and mentors more time to work together and more extensive advertising of the fellowship on campus as there were some graduate students (e.g., plant science graduate students) who were interested in applying, but did not receive information about the program.

Next Steps

- Continue the Summer Work Experience Program in 2022, coordinating with existing partners and with additional, new partners as opportunities and interest develop.
- Offering more in-person fellowship opportunities, as the COVID-19 restrictions allow.
- Work across all UC campuses to reach diverse student and mentor audiences.
- Further develop the spring course on science education and outreach as a preparatory step for students engaging in the Summer Work Experience Program.
- Offer multiple opportunities during the summer for fellows to connect with other mentors and each other.
- Diversify sources of funding to support students' placement in the program and being more transparent about fellowship funding during the interview process, as it varies from opportunity to opportunity.