

Spotlight on Sustainability Projects (Selected examples)

Undergraduate Research, Scholarship & Creative Activities Conference 2018

See 2018 abstract book for more details about each project



-  **Effects of cosmetics on the purple sea urchin, *Strongylocentrotus purpuratus***
Anika Agrawal, Environmental Toxicology
-  **Investigating the Effect of Neighborhood Context in Predicting Native Bee Visitation to Wildflowers**
Katherine Borchardt, Evolution, Ecology and Biodiversity
-  **Measuring Early-Age Cracking of Concrete Through a Restrained Ring Test**
Chantal Peng, Civil Engineering & Melissa Quintana, Civil Engineering
-  **Replication of Self-Driving Car Model on RC Car**
Adam Jones & Sam Minh Truong, Electrical Engineering;
Devashish Kashikar, Thanh Le Ivtle, Kalani Murakami, Sarvagya Singh, & Christopher Uy, Computer Engineering
-  **Composition of Soil Microbiomes in Tomato Fields Differ in Response to Conventional Versus Organic Management Practices**
Evan Dumas, Biotechnology
-  **Restorative Landscapes on A College Campus: A Study on How UC Davis Students Can Achieve Mental Restoration in a High Pressure Environment**
Jovita Widjaja, Landscape Architecture
-  **Nitrogen Footprint of UC Davis**
Miroslava Munguia Ramos, Shona Paterson, Kami Peer, Environmental Science and Management; & Breanna Xiong, Wildlife, Fish & Conservation Biology
-  **Incorporating a Socio-Scientific Issue Into the General Chemistry Curriculum to Improve Student Engagement**
Jennifer Kopetzky, Biochemistry and Molecular Biology; Dhruv Nandakumar, Computer Science; & Jose Sandoval, NPB
-  **Exploring Amide Catalysts for Selective Preparation of Chiral Silanols**
Noreen Brar, Pharmaceutical Chemistry
-  **A Deep Learning Approach to Sustainable Waste Management**
Pranav Gupta, Navid Nadvi & Andrew Shepherd, Computer Science & Engineering; & Jiayin Yang, Computer Science
-  **Breaking Down Barriers: Exploring Tactile Technologies for a More Accessible Campus**
Zoe Martin, Design & Matthew Raytis, Sustainable Environmental Design
-  **Antimicrobial and Rechargeable Alginate Hydrogel Beads for Highly Efficient Fresh Produce Sanitizing**
Mengxiao Zhang, Textiles and Clothing
-  **Using Herbarium Specimens to Examine the Effects of Climate Change on the Phenology of a Native California Wildflower**
Shaotong Jing, Chemical Engineering
-  **Comparative Evaluation of Agricultural Pesticide Usage in Knights Landing and Capay Valley, California**
Tiffany Jow, Neurology, Physiology and Behavior & Daniel Moher, Environmental Toxicology
-  **Characterizing Critical Highway Underpasses for Wildlife Conservation**
Paola Perez, Env. Science and Management
-  **Exploring Amide Catalysts for Selective Preparation of Chiral Silanols**
Noreen Brar, Pharmaceutical Chemistry
-  **Role of River Topography in Controlling Erosion and Deposition**
Darcy Bostic, Hydrology
-  **Fighting For a Better Life: Farmworker Advocacy in Yolo County**
Matthew Bridges, International Agricultural Development
-  **Generating Mushroom Substrates from Pre-Digested Wine Waste**
Amanda Favilla, Animal Biology
-  **The Behavior of Californian Farmers in Cover Crop Adoption**
Kennedy Gould, Environmental Science and Management

Did you know.... undergraduate students can apply for a TGIF mini-grant to support their research related to sustainability? Learn more at:
<http://sustainability.ucdavis.edu/students/TGIF>





Spotlight on Undergraduate Sustainability Projects (Selected examples)

Undergraduate Research, Scholarship & Creative Activities Conference 2018 - See abstract book for more details about each project

 **Knights Landing One Health Center Community Garden**
Ana Guerrero, Landscape Architecture

 **Whiteness Improvement on Citric Acid Treated Crosslinked Cotton Fabrics by Fluorescent Whitening Agents or Blue Dye in H₂O₂ Bleaching System**
Shaotong Jing, Chemical Engineering

 **Sprouting Up: Effectiveness of Short-Term Science and Sustainability Program in Early Elementary School**
Jane Kinner, Human Development

 **Effective Strategies by Subnational Governments to Reduce Greenhouse Gas Emissions in Areas of Agriculture, Heavy Industry, and Net-Zero Buildings**
Sara Ludwick, Environmental Science and Management

 **Land Management at Russell Ranch Modifies Heavy Metal Bioavailability**
Natalie Mcelroy, Environmental Science and Management

 **Examining Vegetation-Grazing Interactions for Preservation of Grassland Bird Habitat**
Catherine Movich, Biological Sciences

 ***Prevotella copri* as a biomarker for cattle feed efficiency**
Negeen Najafi, Animal Science

 **The Home Stretch: Body Elongation Diversity of Pelagic Fishes**
Vivian Nguyen, Animal Science; and Victoria Susman, Wildlife, Fish and Conservation Biology

 **Putah Creek Reserve Restoration**
Docnary Reyes, Ecological Management and Restoration

 **Directional Relationship Between Depression and Exercise Self-Efficacy**
Di Zhou, Cognitive Science



Sustainability at UC Davis

UC Davis strives to be a model sustainable campus, meeting measurable goals by improving daily operations; planning for the long term; and employing campus research, cutting-edge technologies and community collaboration. The Office of Sustainability develops, leads, and coordinates sustainability efforts throughout the UC Davis campus. Staff members create strategies and plans to improve campus operations, work to implement the UC Office of the President's sustainability policy, establish sustainability metrics for UC Davis, collaborate with faculty and students on project-based learning and learning-by-leading opportunities, build institutional capacity for sustainability on- and off-campus, and inspire the community to work toward a sustainable future.

The **Green Initiative Fund (TGIF)** promotes sustainable development by providing necessary monetary resources to the UC Davis community. As part of a higher education institution, TGIF will involve and educate students of all Backgrounds by empowering them to develop, propose, and enact sustainable projects on campus.



Learn more at: <http://sustainability.ucdavis.edu>