

Spotlight on Sustainability Projects (Selected examples) Undergraduate Research, Scholarship & Creative Activities Conference 2020 *See 2020 abstract book for more details about each project*

Dolabrelexins and Its Role in the Growing Demands for Sustainable Crop Production
Chelsea Barrett, Major: Chemistry

Environmental Impact in the Reduction of Plastic on a Local Level
Alessandra Beelen, Major: Biological Sciences
Sabrina Denton, Major: Environmental Science and Management
Alexis Zavala, Major: Wildlife, Fish & Conservation Biology

Implications of Noise Sensitivity in Tree Swallows Lead to Possible Decrease of Birds
Jessica Beskind, Major: Wildlife, Fish and Conservation Biology

The Impact of Stress on Children's Development based on Irregular Sleep Patterns
Rosalina Burton, Major: Human Development

Different Methods of Controlling Growth Patterns of Mycelium for Applications in the Design Field
Emily Carlson, Major: Design

Studies of Conventional Products to Enhance the Interaction of Humans with Computers Based on Emotions
Yu-Shih Chen, Major: Computer Science & Engineering
Guoqin Sun, Major: Computer Science

The Correlation Between Chronic Stress and Socioeconomic Status (SES)
Austin Dalmasso, Major: Global Disease Biology

Characterization of Lethal and Sublethal Effects of Agricultural Runoffs
Nicole Egan, Major: Environmental Toxicology

Why We Should Increase Gasoline Tax: The Study Across Three Statewide Ballot Measures to Increase Gas Tax
Lucas Epstein, Major: Economics

The Real Vegan Cheese Project: Genetically Altering *Kluyveromyces lactis* to Express Four Common Bovine Casein Proteins
Phillip Garcia, Major: Chemical Physics
Ellis Hegarty, Major: Biochemistry & Molecular Biology

The Genealogical Representation of Muslims, Arabs, and Islam through the New York Times
Nancy Juarez, Major: International Agricultural Development

Algae Infestation Levels and its Impact on Rice Seedling Emergence and Establishment
Guelta Laguerre, Major: International Agricultural Development

Undercover the Impact & Implications Underlying the Use of AI Powered Technology Within the Workforce
Marcelo Lopez, Major: Sociology

Imitating the Rocket Propulsion Systems (RPS) to Accelerate Project-Based Aerospace Education
Gloria Navarro, Major: Mechanical Engineering

Phosphate Response in Crop Species
Kelly Pan, Major: Biological Sciences

Pathogen and its Effects on Soil
Christine Singh, Major: Biochemistry & Molecular Biology

Bioplastics: Conventional Petroleum-Based Plastics
Britton Stark, Major: Biological Systems Engineering



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>



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 **Synchronization between Walking Rhythm and Motion of a Walking Stick**

Jessica Tang, Major: Biomedical Engineering

 **Sustainability of the Boba Industry through Human-Centered Design**

Julie Xu, Major: Design

 **Vascular Reactivity of Small Diameter Mesenteric Arteries is Altered in Mice exposed to SHS**

Thanhmai Le, Major: Neurobiology, Physiology and Behavior

 **Bacterial Load of Transgenic Lettuce Plants**

Andreina Urrutia Gonzalez, Major: Microbiology

 **The Activation or Repression of Modify Gene Expression**

Shehan Wijesinghe, Major: Evolution, Ecology & Biodiversity

Jean Sabety, Major: Plant Biology

 **Multi-functional Wearable Shelter from Upcycled and/or Recycled Materials**

Yuxin Mao, Major: Design

 **Wave Reflection of the Cardiac Tissue**

Vincent Lovero, Major: Applied Math

 **Pancreatic Cancer Treatment and Autophagy Inhibitors**

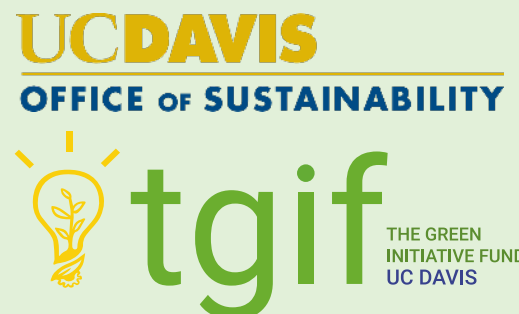
Deepak Vijay, Major: Microbiology



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>