



Real advancements in climate change science require a non-traditional, interdisciplinary approach that integrates basic sciences (i.e., geology, hydrology, and ecology) with applied sciences (i.e., urban ecology, engineering, public health, and environmental policy).



Investigating plant-soil interactions to understand the belowground response to climate change at Lady Bird Johnson Wildflower Center, Austin, Texas.

RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU)

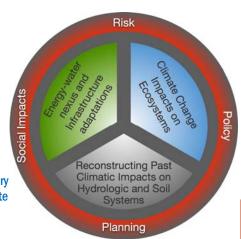
# Climate Change Impacts in Semi-Arid Regions



REU student preparing plant samples for stable isotope analysis to reconstruct paleoclimate proxies for the American Southwest.



REU students studying speleothem formation in Inner Space Cavern, Georgetown, Texas.





Students perform a benthic macroinvertebrate survey to assess stream health in Bull Creek, Austin, Texas.

The interdisciplinary approach of climate change research.



The challenges posed by global change are among the greatest society faces, including climate change, biodiversity loss, and threats to water resources and infrastructure systems. Science provides the means to understand the nature and extent of these changes.

The University of Texas at Austin is home to top faculty in climate change and sustainability research. ESI brings together people from a variety of disciplines at UT to build connections between scientific and policy fields for research, education, and outreach related to the environment, climate change, and sustainability.



# Research Experience

Your summer research will be in one of three major themes:

- Reconstructing past climatic impacts on hydrologic and soil systems
- Climate impacts on ecosystems
- Energy-water nexus and infrastructure adaptations

Each REU student will be part of a separate research group headed by a faculty mentor, but all will come together regularly for cross-cohort seminars and field experiences and to examine and participate in the projects of your colleagues.

# Program Components

ESI's REU in Climate Change Impacts in Semi-Arid Regions offers:

- an engaging research experience
- (2) the excitement of scientific inquiry
- (3) professional development opportunities
- (4) research communication workshops and symposia
- (5) an expanded perspective on graduate school and a career in science



## Why Austin?



Take a dip in Barton Springs, tour the Texas State Capitol, check out the bats at the Congress Avenue Bridge, spend an evening on Sixth Street or South Congress Avenue, sample some barbecue or Tex-Mex, or get outside at Zilker Park or on the hike and bike trails. And certainly catch a show in "The Live Music Capital of the World."



#### Schedule & Support

The 10-week REU program runs from June 5th through August 11th. All participants receive a \$5,000 stipend. Additional funds are available to defray the cost of travel. Housing in a UT dormitory and a meal plan are also provided.

### Eligibility

Undergraduate U.S. citizens and permanent residents, but not graduating seniors, may participate. ESI's REU program has a strong history of diversity.

# After the Summer

Many previous participants have elected to continue their research beyond the summer, publishing articles and presenting papers at professional conferences.



Application Deadline Applications are due February 1, 2017. Application and more details are available on the website!



#### **Environmental Science Institute**

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http://www.esi.utexas.edu/education/summerresearch-experience-for-undergraduates-reu/

