UCI researchers awarded $7.5 million for environmental justice initiative

NSF funding will support diversification, community engagement in Earth system science.

Wednesday, October 05, 2022

Brian Bell
UCI News



Co-principal investigators on UCI’s CLIMATE Justice project, which has received a $7.5 million grant from the National Science Foundation, are (from left) Kathleen Johnson, associate professor of Earth system science; Steve Allison, professor of ecology and evolutionary biology; Elizabeth Crook, associate professor of teaching in Earth system science; Benis Egoh, assistant professor of Earth system science; and Kim Fortun, professor of anthropology.

Picture Credit:
UCI

Irvine, Calif., Oct. 5, 2022 – The National Science Foundation has awarded an interdisciplinary team of researchers at the University of California, Irvine $7.5 million for a project centering environmental justice and community engagement in Earth system science research and education.

The UCI group obtained funding from the NSF's Cultural Transformation in the Geoscience Community program for a new campuswide effort labeled CLIMATE Justice – A Cultural, Learning and Institutional Model to Accelerate Transformations for Environmental Justice.

"If we are to fully and equitably address the impacts of climate change, we will need researchers at all levels and across disciplines who possess not only scientific and technical expertise but also a strong foundation in cultural competency," said co-principal investigator Kathleen Johnson, UCI associate professor of Earth system science. "Through the CLIMATE Justice initiative, we seek to transform the culture of the geosciences by fostering a learning ecosystem that brings on-the-ground challenges of environmental justice and sustainability into the heart of our research and education."

Collaborating with Johnson as co-principal investigators in the CLIMATE Justice project are Steve Allison, professor of ecology and evolutionary biology; Elizabeth Crook, associate professor of teaching in Earth system science; Benis Egoh, assistant professor of Earth system science; and Kim Fortun, professor of anthropology.

CLIMATE Justice-affiliated faculty will work to train diverse populations of postbaccalaureate and doctoral fellows in climate and geoscience skills, and they'll introduce the students to community-based research practices and the crucial role environmental justice plays in building resiliency to climate change. The fellows will co-design research projects with local organizations with the aim of sharing their technical expertise with underserved communities in Southern California that are most directly affected by climate change.

According to Johnson, a prominent Native American Earth system scientist, CLIMATE Justice was established to help train and empower postbaccalaureate and doctoral students from historically marginalized communities to pursue advanced degrees and careers related to climate change. Another goal is to increase participation in environmental justice and community-engaged research by experts from established science, technology, engineering and mathematics disciplines.

Collaboration among researchers in various fields, including biological and social sciences, will be encouraged. Johnson said CLIMATE Justice will help transform the culture of geoscience by building a “learning ecosystem” that goes beyond traditional disciplinary and hierarchical boundaries.

“CLIMATE Justice will situate UCI’s global-scale climate research in a local community context,” she said. “We will approach climate change research in a holistic way that brings together multiple communities to address climate impacts and solutions while confronting social and environmental injustice, systemic racism and knowledge imperialism that discounts different ways of knowing.”

The project will support career training and employment for at least 24 Ph.D. students, 27 postbaccalaureate students, five postdoctoral scholars and as many as 10 staff members within community partner organizations, which include Madison Park Neighborhood Association, Orange County Environmental Justice, Sacred Places Institute for Indigenous Peoples and Crystal Cove Conservancy.

“Through culturally aware mentorship and authentic community-engaged research experiences, underrepresented minorities and members of other marginalized communities will build scientific identities and a sense of belonging, increasing the diversity of people entering geoscience careers within and outside academia,” Johnson said.

UCI’s Brilliant Future campaign: Publicly launched on Oct. 4, 2019, the Brilliant Future campaign aims to raise awareness and support for the university. By engaging 75,000 alumni and garnering $2 billion in philanthropic investment, UCI seeks to reach new heights of excellence in student success, health and wellness, research and more. The School of Biological Sciences, School of Physical Sciences and School of Social Sciences play vital roles in the success of the campaign. Learn more at https://brilliantfuture.uci.edu.

About the University of California, Irvine: Founded in 1965, UCI is a member of the prestigious Association of American Universities and is ranked among the nation’s top 10 public universities by *U.S. News & World Report*. The campus has produced five Nobel laureates and is known for its academic achievement, premier research, innovation and anteater mascot. Led by Chancellor Howard Gillman, UCI has more than 36,000 students and offers 224 degree programs. It’s located in one of the world’s safest and most economically vibrant communities and is Orange

County’s second-largest employer, contributing $7 billion annually to the local economy and $8 billion statewide. For more on UCI, visit www.uci.edu.

Media access: Radio programs/stations may, for a fee, use an on-campus ISDN line to interview UCI faculty and experts, subject to availability and university approval. For more UCI news, visit news.uci.edu. Additional resources for journalists may be found at communications.uci.edu/for-journalists.

Original Source
Press Releases
News Briefs
Awards
Earth System Science
Climate Change
Diversity, Equity and Inclusion
The Future of Energy and the Environment
Instruction
View PDF