UC Irvine leads regional project to reduce climate change risks in California

$5.5 million effort will prioritize community engagement, environmental justice
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Through the creation of the Wildland-Urban Interface Climate Action Network, interdisciplinary research teams from UCI, UCR and UCSD like this one will develop innovative strategies to identify, map and reduce climate risks in partnership with affected communities across Southern California.

Picture Credit:
Salvador Zárate / UCI

Irvine, Calif., Sept. 6, 2023 — A multidisciplinary team of researchers at the University of California, Irvine, in collaboration with cohorts from UC Riverside and UC San Diego, will lead a project that enables tribes and community groups to partner with universities and land managers to reduce climate change risks.

A $5.5 million grant from the UC Office of the President supports the formation of the Wildland-Urban Interface Climate Action Network, with the goal of creating knowledge and climate solutions that ensure a resilient relationship between society and wild landscapes. WUICAN will fund community leaders in assessing needs for climate action and designing appropriate responses in partnership with policy experts. By leveraging innovative climate research, land stewardship and educational projects, WUICAN will produce science-based and community-driven best practices for dealing with climate risks.

“This grant is a game-changer for empowering communities to confront climate threats like drought and wildfire,” said principal investigator Steven Allison, UCI professor of ecology and evolutionary biology. “We want to create a collaboration that values Indigenous knowledge about land stewardship and recognizes the unique needs of different communities facing climate change. A significant outcome from our project will be a how-to manual for universities, community organizations and tribes to co-design effective climate research and action strategies for California.”

The La Jolla Band of Luiseño Indians issued a statement: “As a partner of WUICAN, we look forward to equitable collaborations which respect Payómkawichum-specific values that embrace traditional climate change solutions through education, training and participation. This project will support the development of Payómkawichum-specific stewardship and decision-making practices that promote economic and environmental justice surrounding wildfire on both Tribal and nontribal lands.”

WUICAN builds on years of strategic planning and programs at UCI, UCR and UCSD focused on land stewardship and risk management in a rapidly changing climate. Working with Allison and the La Jolla Band of Luiseño Indians is an interdisciplinary team from UCI’s schools of Biological Sciences, Humanities, Law and Social Sciences, as well as UCR and UCSD. Scholars from UCI’s Center for Land, Environment, and Natural Resources will be integrated with WUICAN climate action teams to carry out legal research, observation and interviews as well as convene policy design

workshops. The multidisciplinary and multicampus reach of the project will encourage innovative strategies to identify, map and reduce climate risks in partnership with affected communities across Southern California.

WUICAN is similarly invested in supporting the next generation of climate action education and training activities for K-12, undergraduate, graduate and lifelong students. The project will include training 60 university students per year in community engagement and climate communications. In partnership with the systemwide UC Humanities Research Institute, WUICAN will host a student-centered climate communications brigade as well as an interfaith network of local religious leaders committed to environmental justice issues.

“Through internships and intensive summer engagements, we will embed our storytellers in project sites, where they will capture the research exchanges and community conversations at the heart of WUICAN,” explained Julia Lupton, interim director of UCHRI and UCI Distinguished Professor of English. “We will also partner with local religious leaders to better understand how different wisdom traditions are helping communities and youth leaders respond to climate change with resilience, courage and hope.”

Central to WUICAN is a process of co-designing solutions to climate threats. University researchers are collaborating with a wide range of local and regional environmental justice organizations, including the Orange County Environmental Justice Education Fund, GREEN-Madison Park Neighborhood Association, Sacred Places Institute, Crystal Cove Conservancy and Harbor Christian Church.

Working on issues pertaining to land and water stewardship, WUICAN is partnering with the city of Irvine, Irvine Ranch Conservancy, Irvine Ranch Water District, Laguna Canyon Foundation and Borrego Valley communities, among others. Guiding this collaboration is UCI’s Research Justice Shop, which for the past five years has engaged in an ongoing strategic planning process to support the co-design of research projects that leverage university resources and the lived experiences of community members. The Research Justice Shop works with organizations in Orange County led by and serving Black, Indigenous and other people of color and will coordinate WUICAN’s community-university collaborations.

“The UCI Climate Justice initiative and the WUICAN project together will address the urgent need to center environmental justice and community priorities in tackling the

climate crisis," said initiative director Kathleen R. Johnson, UCI professor of Earth system science. "Together, our projects will build a unique network aimed at increasing the resilience of communities facing impacts from climate change, while also equipping the next generation of climate researchers with the communication, multidisciplinary research and community engagement skills needed for effective and equitable climate action."

The creation of WUICAN is part of UCOP's new Climate Action Research Initiative, which is funded by the California Legislature to invest in research that will have a swift and measurable impact on climate resilience, as well as support programs that engage in action-oriented solutions to address California's climate goals and needs, ensure that local communities are prepared, and try to prevent future disasters. With more than $3 million in matching funds, the grant to UCI is the second-largest of 38 awards in UCOP's over $80 million Climate Action portfolio.

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 schools of Biological Sciences, Humanities, Law and Social Sciences play vital roles in the success of the campaign. Learn more at https://brilliantfuture.uci.edu/areas-to-support.

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.

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