

The NSF-CREST Center for Cellular and Biomolecular Machines uses an interdisciplinary approach combining physical, biological and engineering methods to understand and control the functioning of multi-scale assemblies of biomolecules and cells, and to design and develop novel bio-inspired functioning machines ranging from designer cells and tissue to diagnostic and therapeutic devices. The center also focuses on enhancing biophysics, biochemistry and bioengineering graduate and undergraduate education; leading STEM outreach activities in the Merced area for teachers, students, and the community; and broadening participation in STEM fields.

Hosted by the NSF-CREST Center for Cellular and Biomolecular Machines at the University of California, Merced

Science for Humanity Series

Prof. LeRoy Westerling "Pyregence Consortium: Open Source Wildfire Simulations for the 5th California State Climate Assessment"



Ferguson Fire, 2018

Thursday, April 29, 2021 10:30 - 11:30 am Pacific

<u>Via Zoom</u>





Prof. LeRoy Westerling

Join us for an interactive session. All are welcome. Questions will be invited from the audience. *The <u>Science for Humanity Series</u> invites general audiences to attend engaging & societally relevant scientific sessions.*

About "Pyregence Consortium: Open Source Wildfire Simulations for the 5th California State Climate Assessment"

California has a long-standing commitment supporting applied research to assess climate change impacts and vulnerabilities, and adaptation and mitigation strategies. The fifth state climate assessment seeks to provide guidance to stakeholders across the state as they take actions to mitigate and adapt to climate change. The Pyregence Consortium is developing state of the art open source models and datasets that simulate extreme wildfire events on a biweekly basis through 2099, including fire severity mapped to 30 meters, fire emissions, carbon storage, and vegetation changes for an array of scenarios for future climate, development footprint, and fuels management. Projected changes in wildfire are in turn used to assess risks to infrastructure, housing, public health, and critical habitat.

LeRoy Westerling, Ph.D.

LeRoy Westerling is Professor of Management of Complex Systems and Director of Center for Climate Communication, UC Merced. His research interests and publications are in applied climatology, climate-ecosystem-wildfire interactions, statistical modeling for seasonal forecasts, paleofire reconstructions, climate change impact assessments, and resource management and policy. He is a graduate of UCLA with a Ph.D. from UC San Diego.



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