

## IRANIAN STUDIES OUTREACH | BILINGUAL LECTURE SERIES

### PANEL ON ENVIRONMENT & SUSTAINABILITY



**Amir Aghakouchak,**  
University of California,  
Irvine

**Amir Aghakouchak** is an assistant professor at UC Irvine. He earned his master's degrees in civil engineering from the K.N. Toosi University of Technology in Tehran, Iran, and his Ph.D. in civil and environmental engineering from the University of Stuttgart, Germany. Aghakouchak's research is interdisciplinary and crosses the boundaries between hydrology, climatology, statistics, and remote sensing to address critical global water resource issues. His long-term research objective is to utilize continuously-growing satellite data along with ground-based observations to both develop and improve integrated drought, flood and landslide modeling, prediction, and decision support systems.



**Azadeh Tabazadeh,**  
Stanford University

**Azadeh Tabazadeh** is the author of the *The Sky Detective*, a award-winning debut memoir about her childhood and adolescent years in Iran. Tabazadeh received a doctoral degree in chemistry from UCLA, and has since worked as a Senior Research Scientist at NASA Ames and a Professor of Geophysics at Stanford University. She has published over sixty scientific articles and has received prestigious awards and medals – among these many accolades a Presidential White House Science Award, a feature article in *Time* magazine, and, in 2002, a tribute from *Popular Science*, which named her one of the “Brilliant 10” young scientists in the United States.



**Mohsen B. Mesgaran,**  
University of California,  
Davis

**Dr. Mohsen B. Mesgaran** is an assistant professor in the Department of Plant Sciences at the University of California, Davis. Previously a research fellow with the Iranian Studies Program at Stanford, he also worked on population dynamics and climate niche modelling of plant species at the University of Melbourne for six years. To conduct his research, which takes place at the interface between agriculture and ecology, he uses a variety of tools including GIS, big data computing, and statistical and process-based models in order to better understand and predict agro-ecosystems.

SUNDAY, APR. 8, 2018 | 4:00 PM | 121 DODD

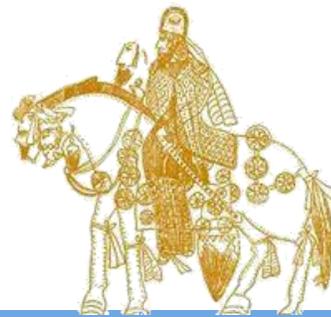
This event is made possible with the major support of  
*the Amuzegar Chair in Iranian Studies and the Musa Sabi Term Chair of Iranian Studies* and  
the generous support of  
**The Farhang Foundation**



and in collaboration with the **UCLA Center for Near Eastern Studies**.

For more information:  
[www.iranian.ucla.edu](http://www.iranian.ucla.edu)





## IRANIAN STUDIES OUTREACH | BILINGUAL LECTURE SERIES

### PANEL ON ENVIRONMENT & SUSTAINABILITY

#### **“Anthropogenic Drought and the Notion of Water-Bankruptcy,”** Amir Aghakouchak (UC Irvine)

خشکسالی انسانی و مقوله ورشکستگی آب

The presentation focuses on Iran currently experiencing serious water and environmental problems. Droughts coupled with increasing water demands and over-abstraction of surface and groundwater resources have escalated the nation's water situation to a critical level. We argue that while climate change has played a role, the primary driver of the current water problems is water bankruptcy. This problem, at least in theory, can be addressed by re-establishing the balance between the natural water supply and human water needs through demand management and/or developing additional water resources.

#### **“Current and Future Concerns About Air Pollution and Climate Change in Iran,”** Azadeh Tabazadeh (Stanford)

آلودگی هوا و تغییرات اقلیمی در ایران: نگرانی های کنونی و چشم انداز آینده

Desertification and rapid urbanization without sound regulatory environmental polices are two main factors that contribute to severe air pollution episodes in Tehran, Ahvaz, and many other large cities in Iran. The process by which air pollution forms in metropolitan areas will be discussed as well as the reasons such episodes have become more severe in Iran in recent decades. Causes and effects of global climate change will be addressed, with emphasis on how such changes will likely affect Iran's future weather patterns, mean surface temperature, average precipitation, and sea level rise.

#### **“Challenges of Iran’s Agriculture in Growing Food for Growing Population,”** Mohsen B. Mesgaran (UC Davis)

چالش های کشاورزی ایران در تولید غذا برای جمعیتی رو به افزایش

This presentation will provide an overview of the dynamics of agricultural production in Iran and its future food demands based on recent projections of population growth. We will then explore whether the land and water resources of Iran can meet the projected future food requirements of Iran, and conclude by highlighting technological and ecological solutions that can help improve both the productivity and sustainability of Iran's agriculture.

SUNDAY, APR. 8, 2018 | 4:00 PM | 121 DODD

This event is made possible with the major support of  
*the Amuzegar Chair in Iranian Studies and the Musa Sabi Term Chair of Iranian Studies* and  
the generous support of  
**The Farhang Foundation**



and in collaboration with the **UCLA Center for Near Eastern Studies**.

For more information:  
[www.iranian.ucla.edu](http://www.iranian.ucla.edu)

