## UC San Diego News Center

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## 'Our Energy Future' Lecture Series to Engage Community with UC San Diego Energy Research

Despite 50 years of recommendations from U.S. Presidents to end the nation's reliance on foreign oil, energy policy in the United States remains focused on keeping the price of gasoline cheap today, rather than creating a plan for sustainable energy production. This political stagnation is becoming all the more consequential as our energy use and production continue to detrimentally affect our economy, food supplies, national security and climate.

Over the course of four Thursday evenings in October, the creators of the "Our Energy Future" lecture series hope to engage the San Diego community in an informative and thought provoking discussion on energy — especially as energy policy pertains to economic growth, climate change, and food and water security. Academic experts from the University of California, San Diego will present TED-style talks in the Qualcomm Institute's Calit2 Auditorium in Atkinson Hall on the latest research pertaining to energy topics. The first installment takes place this Thursday, Oct. 3, and includes presentations on "Energy Production and Options for a Sustainable Future."

Mayfield

Professor Stephen Mayfield, Director of Food and Fuel for the 21st Century (an Organized Research Unit at UC San

Diego that is co-sponsoring the event) says the series is intended to be "a place and a time to connect the general public with the energy research being conducted at UC San Diego.

"Fuel and food are two of the biggest components of our economy, and energy continues to be a major topic of national conversation" he added, noting that UC San Diego's Center for Energy Research is a co-sponsor of the event. "The voting public needs to know the facts about energy production, climate change, and how our energy resources can be sustained for years to come, so we've purposely made sure these talks are not highly technical. We want to debunk any myths and skepticism out there with grounded research."

That grounded research includes lectures by some of the world's most prominent scientists and thinkers in the fields of energy and climate change research, including several from the UC San Diego Scripps Institution of Oceanography (SIO), the School of International Relations and Pacific Studies (IRPS) and various academic departments.

The talks this Thursday include "Production and Utilization of Fossil Fuels, Consequences and Future Prospects" by Mayfield, who is also the Director of the California Center for Algae Biotechnology; "Future Energy Needs and Consequences from a Physical Sciences Perspective" by Mark Thiemens, Dean of the UCSD Division of Physical Sciences; and "Where Do We Go From Here? Biological Energy Options," by Susan Golden, Director of the Center for Chronobiology. UC San Diego Chancellor Pradeep Khosla will give opening remarks and the talks will be moderated by Tony Haymet, Vice Chancellor emeritus and distinguished professor of oceanography at SIO.

The three subsequent installments of "Our Energy Future" include:

Thursday, Oct. 10: The Impact of Energy on Climate Change (Scripps CO2 Director Ralph Keeling will moderate this session)

- "Climate Change and the Impact of Carbon Dioxide" by Richard Somerville, SIO Professor Emeritus
- "A New Approach to Slowing Down Climate Change and Sea Level Rise in the Near-term" by Veerbhadran Ramanathan, Director of the Center for Atmospheric Sciences
- "International Politics of Climate Change" by David Victor, Director of the Lab on International Law and Regulation

**Thursday, Oct. 17: Economic and Social Issues of Energy** (Center for Energy Research Professor George Tynan will moderate this session)

- "Economic and Social Impact of Energy Production and Use" by Josh Graff-Zivin, Director of International environmental and Health Studies,
- "The Importance of Energy for the Bottom Billion" by Gordon McCord, Assistant Professor at IRPS
- "Regulation of Energy Use and Energy Efficiency" by Mark Jacobsen, Associate Professor of Economics

**Thursday, Oct. 24: Energy, Water and Food Security** (Sapphire Energy Chairman and CEO Cynthia (CJ) Warner will moderate this session)

- "Energy and Modern Agriculture" by Steven Briggs, Distinguished Professor of Biology
- "Climate Change: Water and Energy in California" by Dan Cayan, SIO Climate Atmospheric Researcher
- "Energy, Climate Change, and Food Security" by Jennifer Burney, Assistant Professor at IRPS

The lectures will be filmed and will serve as the introductory lectures of a Massive Open Online Course (MOOC) on energy and biofuels developed by Mayfield and Food and Fuel for the 21st Century, and produced by the Qualcomm Institute. The MOOC, for which Mayfield received a grant from Google to help produce, is scheduled to launch in early 2014. Titled "Our Energy Future" the course will be available worldwide through a number of online venues, as well as for academic credit through UC San Diego Extension. The lectures, interviews and other learning modules will also be offered more broadly as a public service to what Mayfield calls a "global classroom."

"The MOOC will be based on the university's Introduction to Biofuels course, but it will be expanded to include engineering, economics, climate science, and social science," explained Mayfield. "We will also discuss energy production and utilization from each of those perspectives."

Each installment in the "Our Energy Future" lecture series begins at 5:30 p.m. and will end at 8:30 p.m., following a catered reception. Cost is \$10 for general audience members (includes parking), but students and staff at UC San Diego can attend for free.

To register for the in-person lectures, visit http://ff21.ucsd.edu/oef-series.html.

UC San Diego's <u>Studio Ten 300</u> offers radio and television connections for media interviews with our faculty, which can be coordinated via <u>studio@ucsd.edu</u>. To connect with a UC San Diego faculty expert on relevant issues and trending news stories, visit <u>https://ucsdnews.ucsd.edu/media-resources/faculty-experts.</u>