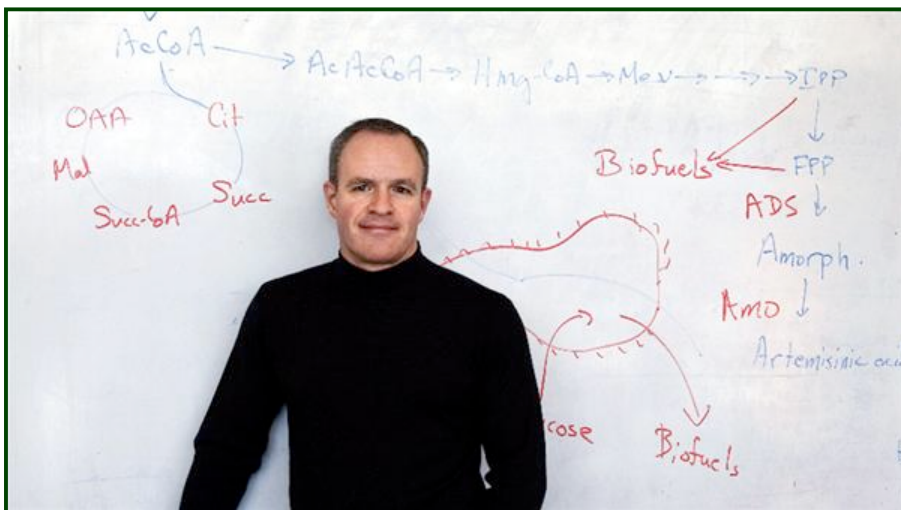


***The School of Engineering: The Cox Lecture  
I-CARES Distinguished Speaker Series***

**Synthetic Biology for Synthetic Chemistry:  
From Bugs to Drugs and Fuels**

According to the World Health Organization, each year nearly 500 million people become infected with malaria, and nearly three million, mostly children, die from it. This prognosis for the world has been radically altered by the use of synthetic biology, the re-design of existing, natural, biological systems for useful and practical purposes. But in the mind of the scientist leading this research, which led to a major break through in international health care with the creation of a new, less expensive anti-malarial drug, the same techniques he used to develop a remedy, could also be used to produce a next generation of biofuels – carbon-neutral transportation fuels derived from plant biomass. For the impact of his research on contemporary society, its impact on future generations, contribution to the field of biotechnology and the level of innovation exhibited, Jay Keasling was awarded the 2009 **Biotech Humanitarian Award** by the Biotechnology Industry Organization (BIO).



Jay Keasling is a Professor of Bioengineering and Chemical Engineering at the University of California, Berkeley and the Acting Deputy Director and CEO of the Joint BioEnergy Institute at Lawrence Berkeley National Lab. His research is organized around three primary themes: synthetic biology, systems biology and environmental biotechnology. He has been associated with institutions throughout the country such as the Massachusetts Institute of Technology, Michigan State University, Johns Hopkins and

Stanford University. He has published over 150 articles. For his breakthroughs in the field of synthetic biology, including treatments for malaria, AIDS, and cancer as well as discoveries of new fuel resources, *Discover Magazine* awarded Professor Keasling with its first-ever Scientist of the Year award in 2006.

**October 30, 2009**

**11:00 a.m. – 12:00 p.m.**

**Whitaker Hall Auditorium**

For more information, contact the School of Engineering at [jon.turner@wustl.edu](mailto:jon.turner@wustl.edu)

