

Plant Biology and Biotechnology Symposium

The Biology and Business of Biofuels

January 28, 29 and 30, 2008

Monday, January 28, 2008

Lignocellulose and Biomass Crops

- 8:45 – 9:00 **Steve Kay**, UCSD-Biological Sciences, Welcome
- 9:00 – 9:30 **Richard Somerville**, UCSD-SIO
"The Science of Climate Change: What Do We Know, How Do We Know It?"
- 9:35 – 10:05 **Chris Somerville**, Carnegie Institution/Stanford
"Which technological problems need to be solved to produce ethanol from biomass?"
- 10:10 – 10:25 Discussion of the big picture. Chair: **Steve Kay**
- 10:30 – 11:00 *BREAK*
- 11:00 – 11:30 **Dave Ehrhardt**, Carnegie Institution/Stanford
"How do plants make cellulose?"
- 11:35 – 12:00 **Neal Stewart**, University of Tennessee
"Pros and cons of different biomass crops"
- 12:05 – 12:25 **James Zhang**, Mendel Biotechnology
"Genetic improvement of biomass crops."
- 12:30 – 1:30 *LUNCH in the SALK Foyer sponsored by CIBUS*
- 1:30 – 2:00 **Clint Chapple**, Purdue University
"Improving biomass digestion by changing lignin"
- 2:05 – 2:35 **Bärbel Hahn-Hägerdal**, University of Lund
"Can black viscous soup be fermented efficiently?"
- 2:40 – 3:10 **Justin Stege**, Verenum Corporation
"Improved Enzymes for Sugar Production from Biomass"
- 3:15 – 3:45 *BREAK*

- 3:45 – 4:15 **George W. Huber**, University of Massachusetts
"Breaking the chemical and engineering barriers to lignocellulosic ethanol"
- 4:20 – 4:50 **Charles Wyman**, University of California, Riverside
"Opportunities and challenges for the production of ethanol from cellulose"
- 5:00 – 6:00 *RECEPTION IN THE SALK FOYER* – Socializing / Networking
Sponsored by Mendel Biotechnology

Dinner on your own

Tuesday, January 29, 2008

The Business of Biofuels: beyond crops

- 9:00 – 9:30 **Jeff Severinghaus, UCSD-SIO**
"Biofuels, agriculture and the Earth's atmosphere"
- 9:35 – 10:05 **David Tilman**, University of Minnesota
"The ecological impacts of a global biomass revolution: how to do it right"
- 10:10 - 10:30 Discussion: **Fuel or food, which shall it be?**
Chair: **Maarten Chrispeels**, UCSD
Participants: Severinghaus, Tilman, Stewart.
- 10:30 – 11:00 *BREAK*
- 11:00 – 11:30 **B. Greg Mitchell**, UCSD-SIO
The UCSD consortium to develop biofuels from microalgae.?"
- 11:35 – 12:00 **Stephen Mayfield**, The Scripps Research Institute
"Genetic Engineering of algae for oil production"
- 12:15 – 1:15 *LUNCH in the SALK Foyer sponsored by Morrison Foerster*
- 1:15 – 1:45 **M. Ward**, Morrison & Foerster LLP
"IP barriers and protection of the IP space"
- 1:50 - 2:20 **William Hitz**, DuPont Crop Genetics
"Second generation fuels"j
- 2:25 – 3:30 **PANEL DISCUSSION: Which way: Terrestrial biomass, algae or photosynthetic bacteria.**
Chair: **Steve Briggs**, UCSD
Participants: Wyman, Mitchell,

- 3:30 – 4:00 *BREAK*
- 4:00 – 4:30 **Bernhard Palsson**, UCSD
"Genome-scale in silico models to engineer microbes."
- 4:35 – 5:10 **Ari Patrinos**, *Synthetic Genomics*.
" Advanced Fuels through Synthetic Genomics"
- 7:00 – 9:30 RECEPTION AND DINNER The Great Hall, by invitation.
Sponsored by Wells Fargo

Wednesday, January 30, 2008

The Business of Biofuels

- 9:00 – 9:45 **Michael Swanson**, Wells Fargo
"Economic impacts of biofuels"
- 9:50 – 10:20 **Congressman Nick Lampson (D-TX, 22nd District)**
Chair, Subcommittee on Energy and Environment
House Committee on Science and Technology
"The Picture From Washington D.C."
- 10:30 – 11:00 *BREAK*
- 11:00 – 11:30 **Josh Green**, MDV-Mohr Davidow Ventures
"The current biofuels investing environment"
- 11:35 – 12:05 **Arun Sharma**, Sempra Energy
"Down to Earth: Meeting the California Mandate"
- 12:10 - 12:30 **PANEL DISCUSSION: Investing in biofuels**
Mary Wenzel, Wells Fargo, Chair
- 12:30 -1:15 Lunch in the SALK Foyer
Sponsored by Sempra Energy