

Rutgers Symposium on the New Biology of Environment and Health

G.H. Cook Campus Center, New Brunswick NJ
May 27-28, 2009

Systems wide analysis of biology is revolutionizing our ability to understand how environment and health interact to affect wellness. Energy production and consumption are intimately linked with our ability to maintain a healthy environment and promote human well being. New Jersey represents a microcosm where these issues are particularly relevant to the health and well being of our citizens. This symposium highlights visionary scientists who are using innovative technologies that are relevant to meeting these acute challenges facing the world today.

Day 1: Wednesday, May 27, 2009

8.00-8.45 Registration and Coffee
8.45-9.00 Opening Remarks **Robert Goodman, Philip Furmanski**

Health

9.00-9.15 Introduction: **Ronald P. Hart**, Rutgers University
9.15-10.00 **Rita Colwell**, Canon US Life Sciences
“Climate, Genomics and Infectious Diseases”
Break
10.30-11.15 **Robert L. Strausberg**, J Craig Venter Institute
“Next Generation Oncogenomics: Opportunities and Challenges”
11.15-12.00 **Abhijit “Ron” Mazumder**, Merck Research Laboratories
“Genomics, Therapeutics, and Personalized Medicine”
Lunch

Environment

1.30-1.45 Introduction: **Debashish Bhattacharya**, Rutgers University
1.45-2.30 **Janet Jansson**, Lawrence Berkeley National Laboratory
“Exploring the Human Environment Using ‘Omics”
2.30-3.15 **Colleen Cavanaugh**, Harvard University
“Getting the 411 on 454: DNA Pyrosequencing and Microbial Diversity Estimates”
Break
3.30-4.15 **Roger Beachy**, Donald Danforth Plant Science Center
“Creating Agriculture that Sustains and Enhances the Environment”
4.30-5.15 **Panel Discussion on the New Biology of Environment and Health**
Dinner

Day 2: Thursday, May 28, 2009

8.30-9.00 Coffee

Energy

9.00-9.15 Introduction: **Joachim Messing**, Rutgers University
9.15-10.00 **Christoph Benning**, Michigan State University
“Beyond Oil Seeds: Engineering Triacylglycerol Biosynthesis in Non-seed Tissues and Algae”
Break
10.30-11.15 **Tom Jeffries**, USDA Forest Products Laboratory
“Metabolic Engineering for Next Generation Biofuels”
11.15-12.00 **Martin Keller**, Oak Ridge National Laboratory
“The BioEnergy Science Center: On the Way to Overcome Biomass Recalcitrance”
12.00-12.15 Concluding Remarks