

2011 NAIST-BS/UM-BTI Joint Symposium

Tuesday, October 18, 2011

Large Lecture Room (NAIST-BS)

Recent progress on microbial biotechnology, enzyme engineering and systems biology



Twin Cities



Nara

10:00-10:10 **Atsuhiko Shinmyo (Executive Director, NAIST)**

Opening Remarks

Chairperson: Hirotada Mori

10:10-10:35 **Hiroshi Takagi (NAIST-BS)**

A novel antioxidative mechanism mediated by proline/arginine metabolism in yeast
Saccharomyces cerevisiae

10:35-11:00 **Michael Sadowsky (UM-BTI)**

The use of fecal microbial transplantation (FMT) and pyrosequencing to cure and understand
Clostridium difficile-associated disease

11:00-11:15 Coffee Break

Chairperson: Hiroshi Takagi

11:15-11:40 **Takashi Matsuo (NAIST-Materials Science)**

Creation of artificial proteins by synthetic cofactors and organometallic complex

11:40-12:05 **Romas Kazlauskas (UM-BTI)**

Engineering enzyme-catalyzed unnatural reactions

12:05-13:00 Lunch

13:00-14:00 Poster Session (UM-BTI and NAIST-BS Students, NAIST-Microbial Labs)

Chairperson: Nobuyuki Yoshida, Iwao Ohtsu, Toru Nakayashiki

14:00-14:25 **Hirotsada Mori (NAIST-BS)**

Perspective of network biology in *Escherichia coli*

14:25-14:50 **Igor Libourel (UM-BTI)**

Structure and function of metabolic networks

14:50-15:15 **Md. Altaf-Ul-Amin (NAIST-Information Science)**

KNAPSAcK family: Integrated metabolite-species databases for multifaceted analysis of species

15:15-15:30 Coffee Break

Chairperson: Mike Sadowsky

15:30-15:55 **Daniel Bond (UM-BTI)**

Enabling unbalanced fermentations using engineered electrode-interfaced bacteria

15:55-16:20 **Masayuki Inui (RITE)**

Production of biofuels and biochemicals from non-food biomass by a growth-arrested bioprocess using corynebacteria

16:20-16:45 **Michael Travisano (UM-BTI)**

Experimental evolution of multicellularity

16:45-17:00 Coffee Break

Chairperson: Hiroshi Takagi

17:00-17:30 **Dewey Ryu (UC Davis)**

Development of a next generation biofuel technology

17:30-17:40 **Mike Sadowsky (Director, UM-BTI)**

Closing Remarks

18:00-20:00 Mixer @ Kensyu Hall