

The 4th *LASSB* Mini-symposium on Systems and Synthetic Biology

NYU Abu Dhabi, Abu Dhabi, UAE

Monday February 5, 2018 | Building A6, room 009

Session 1 – Bioengineering and genomics of algae

5:00-5:20 Umaima Al Hoqani (Applied Sciences Department, Higher College of Technology, Muscat, Sultanate of Oman)

*Development of chloroplast transformation methodology for *Nannochloropsis gaditana**

5:20-5:40 Kyle J. Lauersen (Algae Biotechnology & Bioenergy, Center for Biotechnology, Bielefeld University)

*Synthetic biology enables engineering *Chlamydomonas reinhardtii* for light driven bio-production of high value compounds*

5:40-6:00 Weiqi Fu (Division of Science, NYU Abu Dhabi)

Marine biotechnology exploitation: Intracellular spectral recompositioning of light enhances algal photosynthetic efficiency

6:00-6:20 David Nelson (Center for Genomics and Systems Biology, NYU Abu Dhabi)

Desert algal genomics

Break (6:20-6:40)

Session 2 – Genome-scale metabolic modeling

6:40-7:00 – Bushra Dohai (Division of Science, NYU Abu Dhabi)

Metabolic properties of mouse spermatogenesis defined through constraint-based modeling

7:00-7:20 – Diana Charles El Assal (Systems Biochemistry Group, Luxembourg Centre for Systems Biomedicine, University of Luxembourg)

Constraint-based modelling of nigrostriatal bioenergetic pathway switching in Parkinson's disease