Electromicrobiology 2019

21-22 March 2019

Aarhus, Denmark

electromicrobiology.au.dk

Program

THURSDAY 21 MARCH 2019

08:15-09:00	**Registration and poster set-up**
09:00-09:15	**Welcome by the organisers**
	SESSION 1: ENVIRONMENT **- CHAIR:** Emily J. Fleming, California State University, Chico
09:15-10:00	**Lars Peter Nielsen,** Aarhus University (keynote) *What it takes to be a cable bacterium*
10:00-10:15	**Annette Rowe**, University of Cincinnati *Investigating the electrophysiology and genetics of rock (and electrode) eating microbes*
10:15-10:40	**Katherine McMahon**, University of Wisconsin-Madison (invited) *Extracellular electron transfer may be an overlooked contribution to pelagic respiration in humic-rich freshwater lakes*
10:40-11:10	**Coffee break**
11:10-11:25	**Francisco J. Cervantes**, IPICYT *Role of humic substances in global biogeochemical cycles*
11:25-12:10	**Ryuhei Nakamura**, Tokyo Institute of Technology (keynote) *Deep-Sea Electrochemistry and Its Implication for the Origin of Life Theory*
12:10-14:00	**Lunch break**
	SESSION 2: MOLECULES **- CHAIR**: Jeffrey Gralnick, University of Minnesota
14:00-14:25	**Derek Lovley**, University of Massachusetts (invited) *Diverse Protein Nanowires in Diverse Microorganisms with Diverse Applications*

14:25-14:40	**Bernd Giese**, University of Fribourg *Time resolved ET experiments with peptides and G. sulfurreducens*
14:40-15:05	**Allon Hochbaum**, University of California, Irvine (invited) *Biomolecular Principles of Electronic Conductivity in Protein Nanowires*
15:05-15:35	**Coffee break**
15:35-16:00	**David Beratan**, Duke University (invited) *Electron transport mechanisms in biology*
16:00-16:15	**Lenny Tender**, Naval Research Laboratory *Phenazine-Based Electron Transfer and Retention in Pseudomonas aeruginosa Biofilms*
16:15-18:15	**POSTER SESSION I** & Drinks
18:30-	**Dinner**

FRIDAY 22 MARCH 2019

SESSION 3: MOLECULES **- CHAIR:** Lo Gorton, Lund University	
08:30-08:55	**Tom Clarke**, University of East Anglia (invited) *The Structural Basis of Transmembrane Electron Conduits*
08:55-09:10	**Bridget Conley**, University of Minnesota *Mechanisms of Extracellular Electron Transport in Gammaproteobacteria*
09:10-09:25	**Catarina M. Paquete**, ITQB NOVA *How Gram-positive bacteria transfer electrons to an electrode: the role of OcwA*
09:25-09:50	**Filip Meysman**, Antwerp University (invited) *Conduction in Cable Bacteria*
09:50-10:05	**Group photo**
10:05-12:00	**POSTER SESSION II** & **Coffee**
12:00-14:00	**Lunch break**
SESSION 4: ORGANISMS **- CHAIR:** Jo Philips, Aarhus University	
14:00-14:45	**Sarah Glaven**, Naval Research Laboratory (keynote) *Biocathodes: from field to technology, and back again*
14:45-15:10	**Amelia-Elena Rotaru** (invited) *Conductive particles hot-wire syntrophic consortia*
15:10-15:25	**Bo Barker Jørgensen**, Aarhus University *Concurrent methane production and oxidation by ANME-1 archaea through direct interspecies electron transfer?*
15:25-16:00	**Coffee break**

SESSION 5: ORGANISMS **- CHAIR**: Eric Boschker, Delft University of Technology	
16:00-16:15	**Lori Zacharoff**, University of Southern California *Biophysical and Electrochemical Characterization of the Redox-active Membrane Vesicles from Shewanella oneidensis MR-1*
16:15-16:30	**Miriam Rosenbaum**, Leibniz Institute for Natural Product Research and Infection Biology Hans Knöll Institute (HKI) *Understanding and engineering phenazine-based electroactivity for biotechnological applications*
16:30-16:45	**Lucinda Elizabeth Doyle**, Nanyang Technological University *Deep-sea pressure affects the redox potential of flavins and cytochromes in Shewanella*
16:45-17:10	**Daniel Bond**, University of Minnesota (invited) *How Geobacter shifts electron transfer pathways in response to environmental redox potential*
17:10-17:25	**Closing remarks**
17:45-	**Buffet and goodbye**