

Friday, August 22, 2008, 8:30-10:30am

Single Cell Microbiology

Convenors: **Martin Keller** and **Michael Wagner**

- 2D and 3D Quantitative Multi-isotope Imaging Mass Spectrometry of Single Cells
Claude Lechene, Harvard Medical School, USA
- Raman-FISH for Analysing Who Eats What Where and When
Michael Wagner, University of Vienna, Austria
- The unculturables: integrated microfluidics bring single-cell genomic sequencing forward
Paul Blainey, Stanford University, USA
- Single Cell Applications in the Era of Metagenomics
Martin Keller, Oak Ridge National Laboratory, USA

Geomicrobiology and Paleobiology

Convenors: **Peter Franzmann** and **Jim Fredrikson**

- Microbial electron acceptor limitation: bacterial responses and geobiological impacts
Ken Nealson, University of Southern California, USA
- Extracellular Electron Transfer Proteins: Implications for Geomicrobial Processes
Jim Fredrickson, Pacific Northwest National Laboratory, USA
- Where to with copper bioleaching?
Peter Franzmann, CSIRO, Land and Water, Australia
- Molecular fossils and early life on Earth
Jochen Brocks, The Australian National University, Australia

Novel Technologies and Methods - Interpreting the Data

Convenors: **Karla Heidelberg** and **David Karl**

- New frontiers: Single cell genomics methodologies
Roger Lasken, J. Craig Venter Institute, USA
- From metagenomics to functional studies of microbial communities
Jillian Banfield, University of California, USA
- Metagenomic Analysis of Planktonic Microbial Populations in the Gulf of Maine
John Heidelberg, University of Southern California, USA
- Title TBC
Nikos Kyrpides, Dept of Energy, Joint Genome Institute, USA

Scratch My Back: Microbial Symbionts

Convenors: **Jared Leadbetter** and **Mike Taylor**

- Ancient partners: marine sponges and their microbial Symbionts
Mike Taylor, University of Auckland, New Zealand

- The Double Life of *Aeromonas veronii*: Pathogen of Mammals and Symbiont of Leeches
Joerg Graf, University of Connecticut, Molecular & Cell Biology, USA
- Bacterial symbionts of termite gut flagellates: a tripartite symbiosis
Andreas Brune, Max Planck Institute for Terrestrial Microbiology, Germany
- Multiple co-occurring symbionts of marine invertebrates: who's scratching whom?
Nicole Dubilier, Max Planck Institute for Marine Microbiology, Germany

The Water Cycle

Convenors: **Nick Ashbolt and Linda Blackall**

- From source to tap, understanding the ecology of environmental pathogens for sustainable drinking waters
Nicholas Ashbolt, U.S. Environmental Protection Agency, USA
- Treatment of wastewater for beneficial reuse
Linda L. Blackall, The University of Queensland, Australia
- Micro-organisms of cloud water: their potential impact on atmospheric physico-chemical processes
Pierre Amato, Louisiana State University, USA
- Microbial communities in lakes - sentinels of human impacts on freshwater
Trina McMahon, University of Madison-Wisconsin, USA

Microbial Communication

Convenors: **Leo Eberl and Lian-Hui Zhang**

- Pathogen-Host Communication in Activation of A Key Virulence Regulon
Lian-Hui Zhang, Institute of Molecular and Cell Biology, Singapore
- Nematocidal and antifungal activities of members of the genus *Burkholderia* are quorum-sensing regulated
Leo Eberl, University of Zurich, Switzerland
- How pseudomonads use small RNAs in communication and adaptation
Dieter Haas, Department of Fundamental Microbiology, University of Lausanne, Switzerland
- Shouts and whispers by the seashore: acylhomoserine lactone signaling by sponge-associated bacteria
Clay Fuqua, Department of Biology, Indiana University, Bloomington, USA