Survival artists

Microorganisms represent the greatest diversity of life on earth and have evolved fascinating metabolic adaptations. Some ensure survival in challenging environments, others allow mutualistic interactions with plant or animal hosts and provide the resulting holobiont with emerging properties that are of a selective advantage. This multi-national workshop brings together scientists that study such adaptations from various angles, often combining molecular with cultivation-based or process-oriented approaches. The topics range from metabolic strategies of bacteria and archaea that exploit even small amounts of energy in anoxic environments, to interactions among microbes and contributions of host-associated microbiomes to host nutrition or defense.

For more information please contact us:

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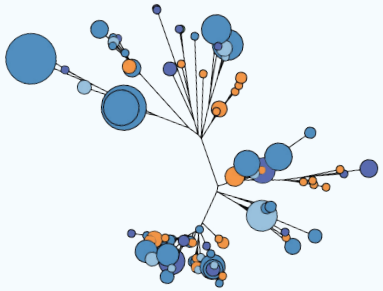
Please note: You must have an invitation to attend the meeting. If you are interested in attending and have not been invited, please contact us.

Description of the cover image

Methanogenic archaea colonizing the microoxic periphery of termite guts, visualized by autofluorescence of F_{420}, a cofactor of methanogenesis that is also involved in oxygen removal.

Reference

A. Brune and C. Dietrich. The gut microbiota of termites: Digesting the diversity in the light of ecology and evolution. Annu. Rev. Microbiol. 69:145-166 (2015)



DFG

Philipps Universität Marburg

MPI

Workshop of the CRC 987

Microbial Diversity in Environmental Signal Response

Welcome Hotel Marburg
Pilgrimstein 29
35037 Marburg

Survival Artists

October 9, 2017

www.sfb987.de

8:30 - 9:00 Registration

9:00 - 9:15 Opening remarks by **Andreas Brune**
Scientific organizer of the workshop

Session 1

Chair: *Andreas Brune*

9:15 - 10:00 **Martin Kaltenpoth**
(Johannes Gutenberg University Mainz)
Outsourcing immunity: Microbial symbionts for pathogen defense in insects

Session 2

Chair: *Hannes Link*

10:00 - 10:30 **Cornelia Welte**
(Radboud University, Nijmegen, Netherlands)
Detoxifying symbiosis in cabbage root flies

10:30 - 11:00 **Philipp Engel**
(University of Lausanne, Switzerland)
Genomic changes associated with the evolutionary transition of an insect gut symbiont into a blood-borne pathogen

11:00 - 11:30 Coffee break

Session 3

Chair: *Werner Liesack*

11:30 - 12:00 **Thomas Clavel**
(RWTH Aachen University, Germany)
From complex gut communities to minimal microbiomes via cultivation

12:00 - 12:30 **Svetlana Dedysh**
(Russian Academy of Sciences, Moscow, Russia)
Novel bacteria from micro-oxic habitats: unexpected phenotypes and specific adaptations

12:30 - 13:30 Lunch break

Session 4

Chair: *Tobias Erb*

13:30 - 14:15 **Jillian Petersen**
(University of Vienna, Austria)
A function, fine-scale diversity, and molecular interactions in marine chemosynthetic symbioses

Session 5

Chair: *Lennart Randau*

14:15 - 14:45 **Amelia-Elena Rotaru**
(University of Southern Denmark, Odense)
Syntrophic acetate oxidation facilitated by (semi)conductive materials in Baltic Sea sediments

14:45 - 15:15 **Michael Pester**
(Leibniz Institute DSMZ Braunschweig, Germany)
Novel sulfate reducers within microbial dark matter?

15:15 - 15:45 Coffee break

Session 6

Chair: *Knut Drescher*

15:45 - 16:15 **Thomas Wichard**
(Friedrich Schiller University Jena, Germany)
Bacteria-induced morphogenesis in macroalgae: The sea lettuce *Ulva* only gets into shape with the right bacteria

16:15 - 16:45 **Paolina Garbeva**
(Netherlands Institute of Ecology, Wageningen)
Microbial small talk: the role of volatiles in fungal–bacterial and bacterial–bacterial interactions

16:45 - 16:50 Closing remarks by **Erhard Bremer,**
Speaker of the CRC 987