

Locations

1 Maritim Hotel Bellevue

Bismarckallee 2, Kiel

2 Restaurant Bootshaus

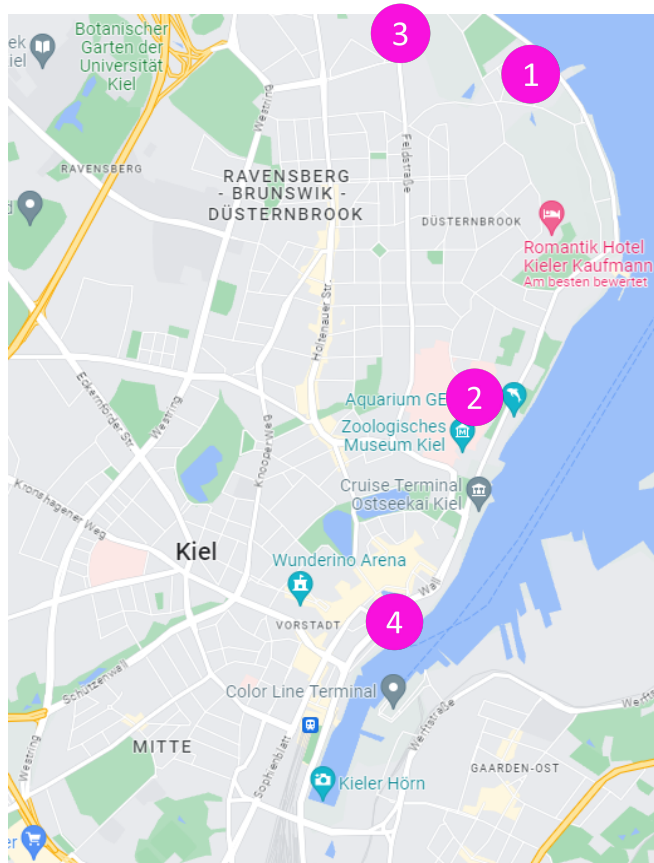
Düsternbrooker Weg 16, Kiel

3 Restaurant Forstbaumschule

Düvelsbeker Weg 46, Kiel

4 Restaurant Längengrad

Schwedenkai 1 · Kiel



Contact

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CRC 1182: Origin and Function of Metaorganisms

International Conference Horizons in Metaorganism Research

Kiel Life Science Satellite Workshop Microbiomes in agricultural systems and human nutrition

October 04-06, 2023
Maritim Hotel Bellevue Kiel,
Germany



WEDNESDAY 04.10.2023
MARITIM HOTEL BELLEVUE KIEL

KLS Satellite Workshop

Microbiomes in agricultural systems and human nutrition

08:00 Registration

09:00 Welcome & Opening
Thomas Bosch & Christina Hölzel

Session 1: Soil, Plant & Rhizosphere (Chair: Sandra Spielvogel)

09:10 **Kyle Mason-Jones**, The Netherlands Institute of Ecology
Bacteriophages and intracellular storage: Two new dimensions of soil C and N cycling

09:50 **Bahar Razavi**, KIEL UNIVERSITY, GERMANY
Resistance of microbial community and its functional sensitivity in the rhizosphere of maize

10:10 **Yijie Shi**, KIEL UNIVERSITY, GERMANY
Deep-rooting cover crop mixtures: Highways to subsoil nutrient resources

10:30 **Remco Stam**, KIEL UNIVERSITY, GERMANY
Phytopathogenic fungi and the wild tomato phyllosphere microbiome

10:50 **Coffee break**

Session 2: Livestock & Resistance (Chair: Christina Hölzel)

11:00 **Jana Seifert**, HOHENHEIM UNIVERSITY, GERMANY
Dynamic changes of the microbiome in cows along the productive life span

11:40 **Stephanie Hornburg**, KIEL UNIVERSITY, GERMANY
Applications of microbiome analysis in animal sciences to improve animal welfare

12:00 **Julia Schwenker**, KIEL UNIVERSITY, GERMANY
Intervention studies on bovine milk microbiota

12:20 **Franziska Dambon**, KIEL UNIVERSITY, GERMANY
Exploring the resistome: Unveiling antibiotic resistance genes within the Microbiome

12:40 **Lunch break and poster session**

Session 3: Nutrition (Chair: Silvio Waschina)

13:30 **Petra Louis**, ABERDEEN UNIVERSITY, UK
Dietary fibre metabolism of the human gut microbiota

14:10 **Danielle Harris**, KIEL UNIVERSITY, GERMANY
Amino acid auxotrophies in human gut bacteria are linked to higher microbiome diversity and long-term stability

14:30 **Marvin Suhr**, KIEL UNIVERSITY, GERMANY
Effects of plant-based proteins and handling stress on gut microbiota and metatranscriptome in rainbow trout

14:50 **Georgios Marinos**, KIEL UNIVERSITY, GERMANY
Identification of modulators of microbial abundances based on genome-scale metabolic modelling

15:10 **Coffee break & poster session**



WEDNESDAY 04.10.2023
MARITIM HOTEL BELLEVUE KIEL



**INTERNATIONAL CONFERENCE
HORIZONS IN METAORGANISM RESEARCH**

16:00 Welcome & Opening
Thomas Bosch & Hinrich Schulenburg

Session 1: Opening Perspectives and Breakthroughs in Host-Microbiome Research (Chair: Thomas Bosch)

16:30 **Tom Gilbert**, UNIVERSITY OF COPENHAGEN
Hologenomics – why many things I used to believe in might be wrong

17:15 **Takema Fukatsu**, UNIVERSITY OF TSUKUBA, JAPAN
Experimental evolution of insect-E. coli mutualism

18:00 **Transfer to Dinner Restaurant Bootshaus**

THURSDAY 05.10.2023
MARITIM HOTEL BELLEVUE KIEL

Session 2: Microbial Community Assembly: (Chair: Tal Dagan)

09:00 **Gloria Dominguez Bello**, RUTGERS UNIVERSITY
The Novacene Microbiome

09:45 **SymbNET Lecture: Karina Xavier**, INSTITUTO GULBENKIAN DE CIENCIA, OERIAS, PORTUGAL
Diet shapes evolution of a key member of the gut microbiota

10:30 **Anna Czerwinski**, CRC1182 A4, KIEL UNIVERSITY
Adaptation of commensal bacteria to persist in *C. elegans* is mediated by cyclic-di-GMP

10:50 **Coffee break**

11:20 **Naama Geva-Zatorsky**, TECHNION-ISRAEL INSITUTE OF TECHNOLOGY, ISRAEL
Functional plasticity in the gut microbiota and phage-host interactions

12:05 **Mirjam Knop**, CRC1182 Early Career Researcher C2, KIEL UNIVERSITY
A mitochondrial sirtuin shapes the intestinal microbiota by controlling lysozyme expression

12:25 **Katharina Ribbeck** DEPARTMENT OF BIOLOGICAL ENGINEERING AT MIT, USA
Finding a Niche: Microbial Colonization of Host Mucosal Barriers

13:10 **Lunch break**

Session 3: Mechanisms and Model Systems: (Chair: Ute Hetschel)

14:00 **Thomas A. Richards**, UNIVERSITY OF OXFORD, UK
Some molecular perspectives on a nascent endosymbiosis

14:45 **Mark Hanson**, UNIVERSITY OF EXCETER, UK
Achilles Principle of Immune Evolution

15:30 **Mathilde Poyet** CRC1182, KIEL UNIVERSITY
Evolution of IgA-bacteria interactions

15:50 **Devani Romero Picazo**, CRC1182, KIEL UNIVERSITY
Evolution of domesticated plasmids in the plant-associated genus *Pantoea*

16:10 **Coffee break & poster session**

16:40 **Christian Voolstra**, UNIVERSITY OF KONSTANZ
Extending stress resilience through manipulation of the host microbiome

17:25 **Nadin Jensen**, CRC1182, KIEL UNIVERSITY
The life cycle transition of *Aurelia aurita* requires a specific microbiome in polyps prior to the onset of strobilation

17:45 **Lena Peters**, CRC1182, KIEL UNIVERSITY
C. elegans pathogen defense and sphingolipid metabolism are modulated by a microbiota-derived long-chain sphinganine

18:05 **General discussion & poster session**

19:00 **Get-together** in Restaurant Forstbaumschule.

Speaker dinner in Restaurant Längengrad.

FRIDAY 06.10.2023
MARITIM HOTEL BELLEVUE KIEL

Session 4: New Developments in Host-Microbiome Research: (Chair: Olivia Roth)

9:00 **Kevin Kohl**, UNIVERSITY OF PITTSBURGH
Who's in charge here? Microbial contributions to animal physiology, ecology, and evolution

9:45 **Christoph Giez**, CRC1182, KIEL UNIVERSITY
Microbes as part of ancestral neuronal circuits: Bacteria impact internal state of *Hydra*'s nervous system

10:05 **Joana P. Bernardes**, CRC1182, KIEL UNIVERSITY
Intestinal epithelial manifestations upon protein malnutrition - Acute and memory effects on intestinal tract homeostasis

10:25 **Coffee break**

10:55 **Dario R. Valenzano** FRITZ LIPMANN INSTITUTE JENA, GERMANY
Evolution and ecology of aging

11:40 **Florence Bansept**, CRC1182, KIEL UNIVERSITY & CENTURI Aix-Marseille Université, FRANCE
How does intermittent feeding shape the gut microbiome?

12:00 **Jan Taubenheim**, CRC1182 KIEL UNIVERSITY
Using metabolic modeling to understand host-microbe interactions

12:20 **Manuel Liebeke**, KIEL UNIVERSITY
Microbial Metabolism Under the Microscope: A Cellular View of Host-Microbe Interactions

13:05 **Lunch and departure**