

11th Retreat of the Collaborative Research Center 1182

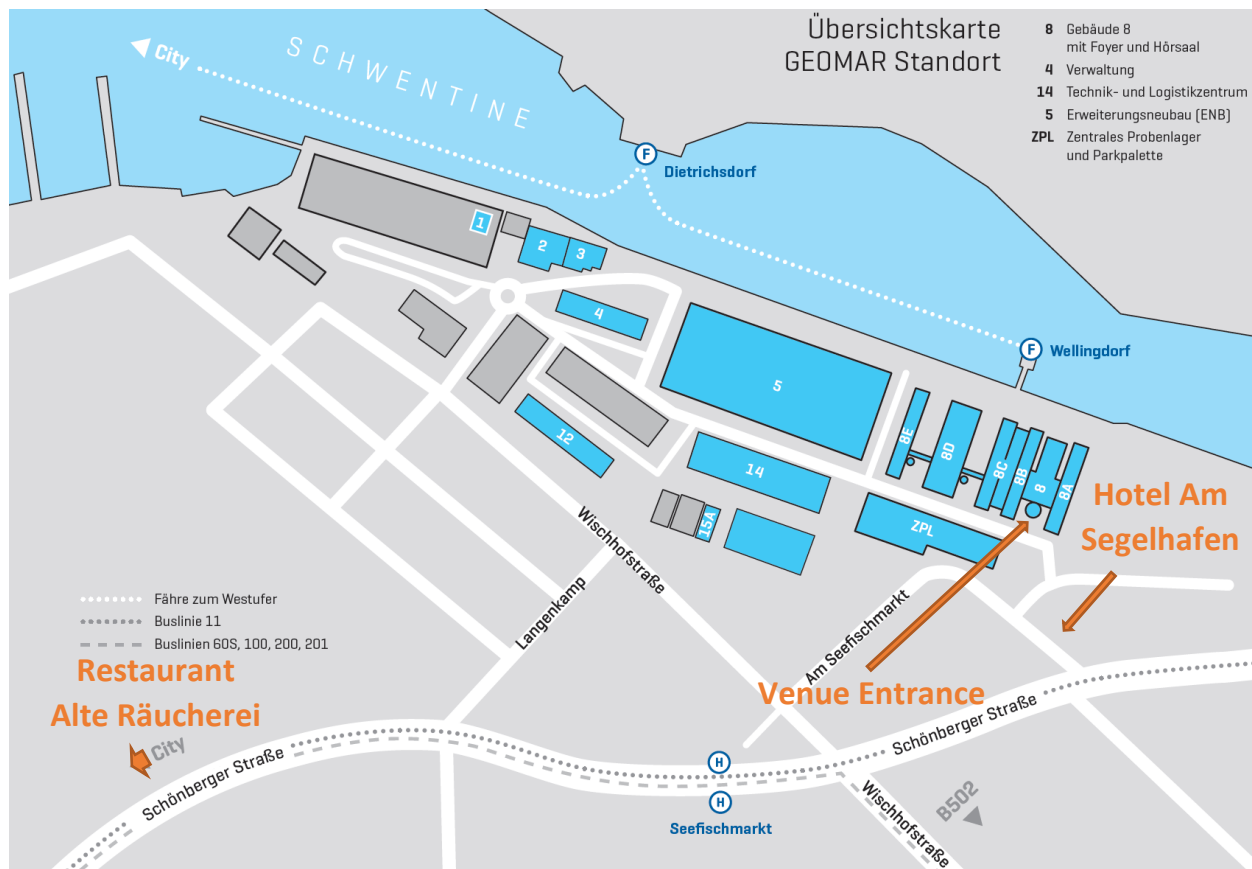
“Origin and Function of Metaorganisms”

8-10 October 2025

GEOMAR Helmholtz Centre for Ocean Research Kiel

Building 8, Wischhofstraße 1-3, 24148 Kiel

Venue:



Wednesday, 8 October

8:30-9:00 Welcome coffee

9:00-9:15 Opening

Hinrich Schulenburg & Tal Dagan, CRC Speaker and Vice-Speaker

Session 1: Metaorganisms Dynamics and Metabolism

Chair: Bob Week

9:15-9:40 Microbiome-mediated adaptation and niche construction

Carola Petersen, CRC A1.1 project

9:40-10:05 AvrStb6: a secreted protein involved in fungal-*Pseudomonas* interactions in the wheat apoplast

Liz Florez, CRC A3.1 project

10:05-10:30 A systems biology approach to study host-microbe interactions

Jan Taubenheim, CRC A1.5 & INF projects

10:30-11:00 Coffee break

11:00-11:20 Structural and functional shifts in *Hydra*-associated microbiota in response to metabolic perturbations

Natchapon Srinak, CRC A1.5

11:20-11:30 Microorganisms: culture and single cell analysis

Finn Gehlert, CRC Z2.1 project

11:30-11:40 Microscopy solutions for metaorganism research

Marc Bramkamp, CRC Z2.2 project

11:40-11:50 Protein energy malnutrition

Joana Pimenta Bernardes, CRC Z3.1 project

11:50-12:00 Proteomics

Andreas Tholey, CRC Z3.2 project

12:00-12:10 Metabolites at the crossroads of host-microbe interactions

Manuel Liebeke, CRC Z3.3 project

12:10-13:10 Lunch

Session 2: Molecular Biology and Evolution of Metaorganisms

Chair: Henry Berndt

13:10-13:35 G protein-coupled receptors mediate host-microbe interactions in house mice

Eva Holländer, CRC A2.1 project

13:35-14:00 ABO histo-blood group-associated signatures in the gut microbiome

Johanna Saalfrank, CRC A2.2 project

14:00-15:25 **Poster session**

15:25-15:50 Role of symbiosis plasmid in metabolic capacity of the plant-associated *Pantoea agglomerans*

Tal Dagan, CRC A3.2 project

15:50-16:15 Plasmid domestication in the plant-associated genus *Pantoea*

Devani Romero Picazo, CRC B4.1 project

16:15-16:40 **Bringing Meta into the classroom: innovative teaching of digestion and nutrition**

Martina Kapitza, CRC PR2 project

16:40-17:00 Coffee break

17:00-17:25 Multilevel selection in multi-type populations

Amanda de Azevedo-Lopes, CRC A4.1 project

17:25-17:50 Multilevel selection on *C. elegans* and its natural microbiota

Inga Hamerich, CRC A4.3 project

17:50-18:15 Quantitative genetics of microbiome mediated traits

Bob Week, CRC A4.3 project

18:15 Networking with refreshments

Thursday, 9 October

8:30-9:00 Welcome coffee

Session 3: Metaorganisms Molecular and Functional Bases

Chair: Ehsan Sakib

- 9:00-9:25 Understanding phage dynamics and function in marine sponges
Ute Hentschel Humeida, CRC C4.3 project
- 9:25-9:50 Jumbo phage-mediated transduction of genomic islands
Paul Rainey, CRC C4.1 project
- 9:50-10:10 Positive and negative bacteria-bacteria interactions as currency in a host-associated lifestyle
Daniel Unterweger, CRC B4.2 project
- 10:10-10:30 **Metaorganism science communication**
Tom Duscher & Susanne Landis, CRC PR3 project
- 10:30-10:50 Coffee break
- 10:50-11:15 Type I secretion system mediated effector donation by widespread intra-ER endosymbionts
Henry Berndt, CRC C1.3 project
- 11:15-11:40 The effect of FoxO on intestinal stem cell aging and barrier integrity
Mirjam Knop, CRC C2.1 project
- 11:40-12:05 Protein energy malnutrition
Finn Hinrichsen, CRC C2.2 project

12:05-12:10 **Group photo**

12:10-13:10 Lunch

Session 4: Metaorganisms in Marine and Aquatic Environments

Chair: Olivia Roth

13:10-13:35 cJUN dependent innate immunity controls microbiome through selective phagocytosis in *Nematostella*
Nida Kaya, CRC B1.2 project

13:35-14:00 Monitoring of microbiota in sex-specific tissues of the broad-nosed pipefish *Syngnathus typhle* during the breeding season
Mareike Georg, CRC B1.3 project

14:00-14:25 Vertical microbiota transfer of fluorescent *Vibrio* in the sex role reversed pipefish
Max Fiete Willmer, CRC B1.3 project

14:25-15:25 **Poster session**

15:25-15:50 Microbial discrimination of *Vibrio* strains by the marine sponge *Halichondria panicea*
Alexi Pearson-Lund, CRC B1.1 project

15:50-16:15 Microbial impacts on stem cell decision making in *Hydra*
Jinru He, CRC C1.1 project

16:15-16:35 Coffee break

16:35-17:35 **Extending stress resilience through host microbiome engineering**
Christian Voolstra, University of Konstanz

18:00 Dinner at the restaurant Alte R  ucherei Ellerbek

Friday, 10 October

9:00-9:30 Welcome coffee

Session 5: Human Metaorganisms

Chair: Paul Rainey

9:30-10:30 Long-term health outcomes in adolescents with obesity treated with faecal microbiota transplantation

Tommi Vatanen, University of Helsinki

10:30-10:40 Coffee break

10:40-12:10 ECR workshop
“Work opportunities in and
outside of academia”

10:40-11:25 PI workshop
“Microbiome CRC
roundtable”

11:25-12:10 PI meeting

12:10-13:10 Lunch

Chair: Marius Ortjohann

13:10-13:40 Industrialization drives convergent microbial and physiological shifts in the human metaorganism

Malte Rühlemann & Fanny Mazzamurro, CRC C5.1 project

13:40-14:05 Impact of host lifestyle-associated gut microbiota on secretory IgA

Alexandra Deutsch, CRC C5.2 project

14:05-14:30 *Prevotella*-to-*Bacteroides* enterotype shift in the human gut microbiome and artificial gut system

Hina Ayub, CRC C5.3 project

14:30-14:45 Closing

Hinrich Schulenburg & Tal Dagan, CRC Speaker and Vice-Speaker

Posters

Wednesday, 8 October

Media-dependent responses of microbial growth to reactive oxygen species

Hina Ayub, CRC C5.3 project

Molecular basis of interkingdom communication between the host *Hydra* and the symbiotic bacteria *Curvibacter*

Jay Bathia, CRC B1.2 project

Metabolic adaptation of *Curvibacter* to thrive on *Hydra* epithelium

Lukas Becker, CRC B1.2 project

Type I secretion system mediated effector donation by widespread intra-ER endosymbionts

Henry Berndt, CRC C1.3 project

Importance of second messenger signaling in the intestinal tract of flies

Stina Bettendorf, CRC C2.1 project

Neurosecretory signature of non-neuronal Inka cells in the insect tracheal system: a comparative and functional insight

Shreejita Chatterjee, CRC C2.1 project

C. elegans evolve and re-sequence: whole genome pooled-seq analysis

Pageneck Chikondowa, CRC A4.3 project

Industrialization alters IgA-bacteria binding patterns but not total IgA secretion in germ-free mice

Alexandra Deutsch, CRC C5.2 project

Metaorganism science communication

Tom Duscher, CRC PR3 project

The role of a secreted fungal invertase in pathogen-bacteria interactions

Víctor Flores-Núñez, CRC A3.1 project

Analysis of functional differences in the gut microbiome of Eastern and Western house mouse subspecies

Svenja Landfester, CRC A2.1 project

Find a niche and rediscover: microbiota transfer in the sex role-reversed pipefish

Silke-Mareike Marten, CRC B1.3 project

Thursday, 9 October

Microscopy solutions for metaorganism research

Marc Bramkamp, CRC Z2.2 project

Amino acid auxotrophy patterns in global human gut bacteria across health and disease

Laura Mews, CRC C5.1 project

Evolution of domesticated plasmid replication control in *Pantoea*

Florence Muccino, CRC A3.2 project

Investigating the dynamics of molecular evolution in microbial communities

Sandhya Narayanan, CRC C4.1 project

Temporal and seasonal dynamics of the chimpanzee microbiome

Li Pan, CRC C5.1 project

Microbiome-mediated plasticity: adaptive responses of *C. elegans* microbiota to pathogen infection

Lena Peters, CRC A1.2 project

Inference of interactions in the gut microbiome

Chandan Relekar, CRC A4.1 project

The Role of domesticated plasmids in the plant associated lifestyle of *Pantoea agglomerans*

Kai Ripcke, CRC A3.2 project

Neuro-microbial aging in the non-senescent *Hydra*

Ehsan Sakib, CRC C1.1 project

Viral diversity and function in the Baltic Sea sponge *Halichondria panicea*

Wenqing Shi, CRC C4.3 project

Insights into the insides: visualizing host-microbe interactions in the intestine using MALDI-FISH

Malin Stüwe, CRC Z3.3 project

Positive and negative bacteria-bacteria interactions as currency in a host-associated lifestyle

Daniel Unterweger, CRC B4.2 project

General symposium information

Sessions

Oral presentations will take place in Room 8A-002 of GEOMAR Building 8. The poster sessions will be held in the foyer in front of this room. The ECR Workshop will take place in the same location as the oral presentations, while the PI Workshop and PI Meeting will be held in Room 8A-101 of GEOMAR Building 8.

Food

Lunches and refreshments will be provided in the foyer outside Room 8A-002 of GEOMAR Building 8.

Retreat dinner will be provided on Thursday, 9 October, at the [Alte Räucherei Ellerbek](#) restaurant. The restaurant is located at Werftstraße 5-7, approximately 1.4 km from the venue. To walk there, exit GEOMAR Building 8 through the main entrance and turn left. At the first intersection, turn right onto Am Seefischmarkt, then immediately right again to stay on Am Seefischmarkt. Continue for about 270 m until you reach Schönberger Straße. Turn right and walk for roughly 700 m; the restaurant will be on your left.

Oral presentations

Presenting from your personal laptop is preferred. However, a notebook computer will also be available in the session room. If you wish to use it, please prepare your talk in PowerPoint (.ppt/.pptx) or PDF (.pdf) format and bring it on a USB drive. Include your name in the file name for easy identification, and upload your presentation before your

session begins. Symposium staff will be available in the session room during welcome coffee and breaks to assist you. Alternatively, you can send your presentation to Barbara Cania (bcania@ifam.uni-kiel.de) latest on the evening before your session. If your presentation includes embedded videos or other external files, ensure that they function properly before your talk.

Each speaker has been allocated the amount of time indicated in the conference program. Please gauge the length of your talk accordingly, making sure to leave approximately 5 minutes at the end for questions.

Poster presentations

Provided poster walls can accommodate A0-sized posters hanged vertically.

Please hang your poster using the provided materials latest by the end of the lunch break on the day of your poster presentation.

Travel to the symposium venue

By bus

From Kiel's central train station/central bus station (ZOB), you can take bus lines X60, 11, 14, 200, 201, or 210. All lines take approximately 15 minutes. Exit at the stop "Seefischmarkt" and follow the signs to GEOMAR.

Tickets can be purchased from the driver with cash (Euros) or in advance via the NAH SH app or the [NAH.SH website](https://www.nah-sh.de). You can also buy a multi-journey ticket (4er-Karte) for four rides or a weekly ticket (Wochenkarte) at the KVG Service Centre at the central bus station, at the Tourist Information Office on Andreas-Gayk-Straße or from a ticket machine at the central train station.

By car

If you're arriving via the A7 from Hamburg, take the "Bordesholmer Dreieck" junction onto the A215 toward Kiel. Leave the A215 at the final exit toward the east shore (Ostufer), following signs for B76 direction Lübeck. From the B76, take the exit onto B502 toward Ostufer/Laboe and follow this road for about 4 km, then follow local signage to GEOMAR (see map for details).

If coming via the A7 from Flensburg/Schleswig, take the A210 at the Rendsburg junction in the direction of Kiel. The A210 merges with the A215 about 2 km before the exit to B76.

There are sufficient parking options available on campus.

By ferry

You can also reach GEOMAR via ferry. The boat departs from “Reventloubrücke” on the Kiellinie and takes 16 minutes to reach the Wellingdorf stop, which is located directly at GEOMAR. You can use the same tickets on the ferry as on the bus (see information on travel by bus). There is a ticket machine available on board.

Schwentine-Fährlinie F2

Ganzjährig gültig ab 1. Februar 2024 von montags bis samstags

montags bis freitags

Reventlou ab	☺	-	5:23	5:53	6:23	6:53	7:08	7:23	7:38	7:53	8:08	8:23	8:38	8:53	9:08	9:38	10:38	11:08	11:38	12:08	12:38
Dietrichsdorf		5:03	5:33	6:03	6:33	7:03	7:18	7:33	7:48	8:03	8:18	8:33	8:48	9:03	9:18	9:48	10:48	11:18	11:48	12:18	12:48
Wellingdorf	☺	5:09	5:39	6:09	6:39	7:09	7:24	7:39	7:54	8:09	8:24	8:39	8:54	9:09	9:24	9:54	10:54	11:24	11:54	12:24	12:54
Reventlou an	☺	5:21	5:51	6:21	6:51	7:21	7:36	7:51	8:06	8:21	8:36	8:51	9:06	9:21	9:36	10:06	11:06	11:36	12:06	12:36	13:06

Reventlou ab	☺	13:08	14:08	14:23	14:38	14:53	15:08	15:23	15:38	15:53	16:21	16:53	17:23	17:53	18:23	18:53	19:38	20:08	20:38	21:08	21:38
Dietrichsdorf		13:18	14:18	14:33	14:48	15:03	15:18	15:33	15:48	16:03	16:31	17:03	17:33	18:03	18:33	19:03	19:48	20:18	20:48	21:18	21:48
Wellingdorf	☺	13:24	14:24	14:39	14:56	15:09	15:24	15:39	15:54	16:09	16:37	17:09	17:39	18:09	18:39	19:09	19:54	20:24	20:54	21:24	21:54
Reventlou an	☺	13:36	14:36	14:51	15:06	15:21	15:36	15:51	16:06	16:21	16:53	17:21	17:51	18:21	18:51	19:21	20:06	20:36	21:06	21:36	22:06

samstags

Reventlou ab	☺	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:15					
Dietrichsdorf		8:40	9:10	9:40	10:10	10:40	11:10	11:40	12:40	13:10	13:40	14:10	14:40	15:10	15:40	16:25					
Wellingdorf	☺	8:46	9:16	9:46	10:16	10:46	11:16	11:46	12:46	13:16	13:46	14:16	14:46	15:16	15:46	16:31					
Reventlou an	☺	8:58	9:28	9:58	10:28	10:58	11:28	11:58	12:58	13:28	13:58	14:28	14:58	15:28	15:58	16:43					

☺ Anleger behindertengerecht ausgebaut

An Sonntagen und Feiertagen verkehren die Schiffe der F2 nicht.

Kein Fahrbetrieb von Heiligabend bis Neujahr.

An Bord der Fähren **MS DIETRICHSDORF**, **MS DÜSTERNBROOK** und **MS WELLINGDORF** befindet sich ein Fahrkartenaufnahmegerät zur bargeldlosen Zahlung.

Fahrgäste ohne Fahrschein müssen sofort nach Fahrtantritt dort den gültigen Fahrpreis entrichten.

Kein Fahrscheinverkauf durch den Schiffsführer.

Für die Einhaltung des Fahrplanes wird aufgrund von Wetter, Verkehrsaufkommen und technischer Verfügbarkeit keine Gewähr übernommen.

Schlepp- und Fährgesellschaft Kiel mbH - SFK

Telefon (0431) 375939-09 und -14

www.sfk-kiel.de

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Kiel offers rental bikes throughout the city, available via the DonkeyRepublic app (the first 30 minutes are free). There is a SprottenFlotte station directly at Reventlou, where you can return your bike before boarding the ferry.