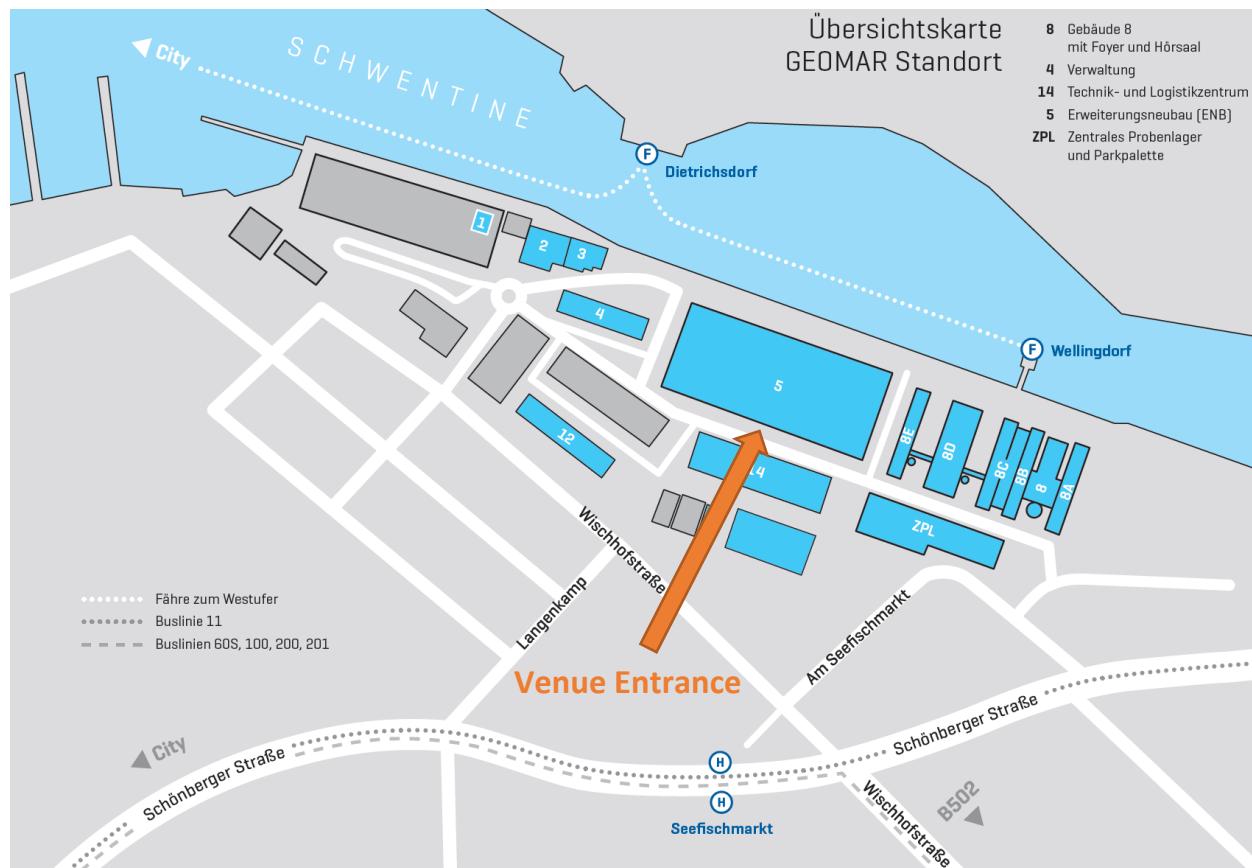


Metaorganism Symposium on Cellular Underpinnings in Host-Microbe Crosstalk

15-16 May 2025

GEOMAR Helmholtz Centre for Ocean Research Kiel
Building 5, Wischhofstraße 1-3, 24148 Kiel

Venue:



Thursday, 15 May

10:00-10:30 Welcome coffee

		Session 1	Chair: Ute Hentschel Humeida
10:30-10:35	Opening words <i>Hinrich Schulenburg, Kiel University, Germany</i>		
10:35-10:45	From science to classroom: teaching digestion, nutrition, and the gut microbiome in school <i>Martina Kapitza, IPN, Germany</i>		
10:45-11:30	Microbiome variation in the marine annelid <i>Platynereis dumerilii</i> along the European coastline <i>Detlev Arendt, EMBL Heidelberg, Germany</i>		
11:30-12:00	Microbial impacts on stem cell decision-making in <i>Hydra</i> <i>Jinru He, Kiel University, Germany</i>		
12:00-12:30	Tracking root colonization in soil-inspired microfluidics <i>Guido Grossmann, University of Düsseldorf, Germany</i>		
12:30-13:30	Lunch		
		Session 2	Chair: Georgios Marinos
13:30-14:15	Towards understanding a systemic immune response to symbiosis and how to get along: lessons from the Hawaiian bobtail squid <i>Spencer Nyholm, University of Connecticut, USA</i>		
14:15-14:45	From microbial co-cultures to cassiosomes: reducing complexity to disentangle cnidarian holobiont functioning <i>Claudia Pogoreutz, University of Perpignan, France</i>		
14:45-15:00	Group picture		
15:00-16:15	Poster session		
16:15-17:00	Three kingdoms, one holobiont: metabolic interactions in cnidarian symbiosis <i>Manuel Aranda, KAUST, Saudi Arabia</i>		
17:00-17:30	Metabolic maps: charting the chemical dialogues in host-microbe consortia <i>Manuel Liebeke, Kiel University, Germany</i>		
17:30-17:35	Day 1 summary and thanks <i>Ute Hentschel Humeida, GEOMAR, Germany</i>		
18:00	Dinner at the restaurant Alte Mühle		

SPEAKER Prof. Dr. Hinrich Schulenburg hschulenburg@zoologie.uni-kiel.de VICE-SPEAKER Prof. Dr. Tal Dagan tdagan@ifam.uni-kiel.de

SCIENTIFIC MANAGER Dr. Barbara Cania bcania@ifam.uni-kiel.de ADMINISTRATIVE MANAGER Anika Hintz ahintz@zoologie.uni-kiel.de

www.metaorganism-research.com



Friday, 16 May

8:30-9:00 Welcome coffee

Session 3

Chair: Harald Gruber-Vodicka

9:00-9:45 **Animal-algae photosymbioses across evolutionary and environmental gradients**
Liz Hambleton, University of Vienna, Austria

9:45-10:15 **Can sponges differentiate between microbial friend or foe?**
Ute Hentschel Humeida, GEOMAR, Germany

10:15-10:45 **Microbiota-derived natural products determine protection against pathogens in *C. elegans***
Katja Dierking, Kiel University, Germany

10:45-11:00 Coffee break

Session 4

Chair: Olivia Roth

11:00-11:30 **Change of scale and new challenges in the era of single cell technologies, scratching the shell of the functional diversity of oyster immune cells**
Guillaume Charriere, University of Montpellier, France

11:30-12:00 **Phagocytosis-driven microbial selection ensures balance of bacterial colonization in the cnidarian *Nematostella***
Sebastian Fraune, University of Düsseldorf, Germany

12:00-12:30 **Maternal provisioning as a multi-kingdom enhancement of offspring fitness**
Tyler Carrier, UNC Charlotte, USA

12:30 Lunch

Posters

Reactive oxygen species affect microbial growth rates in a dose-dependent manner

Hina Ayub, Kiel University

The plasmidome of the Mediterranean sponge *Aplysina aerophoba*

Kristina Bayer, GEOMAR

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

Lukas Becker, University of Düsseldorf

TBA

Lena Best, Kiel University

Importance of second messenger signaling in enterocytes

Stina Madeline Bettendorf, Kiel University

TBA

Anna Czerwinski, Kiel University

Industrialization alters IgA-bacteria interaction patterns across worldwide human cohort

Alexandra Deutsch, Kiel University

Clade-specific genome evolution of *Ca. Riegeria*, the obligatory endosymbiont of the mouthless flatworm *Paracatenula*

Igor Duarte, Kiel University

Extracellular polymeric substances drive *Curvibacter* host adaptation and co-speciation with *Hydra*

Liam Fürbach, University of Düsseldorf

From microscale to microbial insights

Marjan Ghotbi, GEOMAR

Effects of smoking and obesity on respiratory health across generations

Ann-Cathrin Hofacker, Kiel University

TBA

Mirjam Knop, Kiel University

Visual library

Susanne Landis, Science Communication Lab



Automated discovery of production-boosting compounds for microbiome-sourced therapeutic intervention

Andy Mercado Gamarra, Kiel University

Integrin-mediated symbiont uptake in cnidarian

Sara Brites de Oliveira, LMU Munich

Microbial discrimination through phagocytosis in the marine sponge *Halichondria panicea*

Alexi Pearson-Lund, GEOMAR

Industrialisation of lifestyles impacts gut microbiome-mediated metabolism of cholesterol

Emmanuel Kofi Quaye, Kiel University

Functional understanding of *Aurelia aurita* microbiome interactions

Vincent Reinmuth, Kiel University

Genome-wide identification of genes associated with root colonization in *Pantoea agglomerans*

Kai Ripcke, Kiel University

Genetic determinants of host-microbiome interactions in humans

Johanna Saalfrank, Kiel University

TBA

Wenqing Shi, GEOMAR

Insights into the insides - visualizing host-microbe interactions in the murine intestine

Malin Stüwe, Kiel University

Metazoan transcriptional responses to microbiome dynamics reveal species-specific adaptations

Jan Taubenheim, Kiel University

Parental transfer of microbiota through male pregnancy

Kim-Sara Wagner, Kiel University

General symposium information

Sessions

All oral presentations will take place in Room 5-1.213/5-1.214 of GEOMAR Building 5. The poster session will be held in the foyer in front of this room.

Lunch

Lunch will be provided in the foyer outside Room 5-1.213/5-1.214 in GEOMAR Building 5.

Dinner

Symposium dinner will take place at the [Alte Mühle](#) restaurant. The restaurant is located at An der Holsatiamühle 8., approximately one kilometer from the venue. To walk there, exit GEOMAR Building 5 through the main entrance and turn left. Walk 250 meters, then turn right onto Am Seefischmarkt. Take an immediate left to stay on Am Seefischmarkt and continue until you reach Schönberger Straße. Turn left onto Schönberger Straße and walk 250 meters, then turn left again onto An der Holsatiamühle and continue for another 250 meters. The restaurant will be on your left-hand side.

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 Thursday.

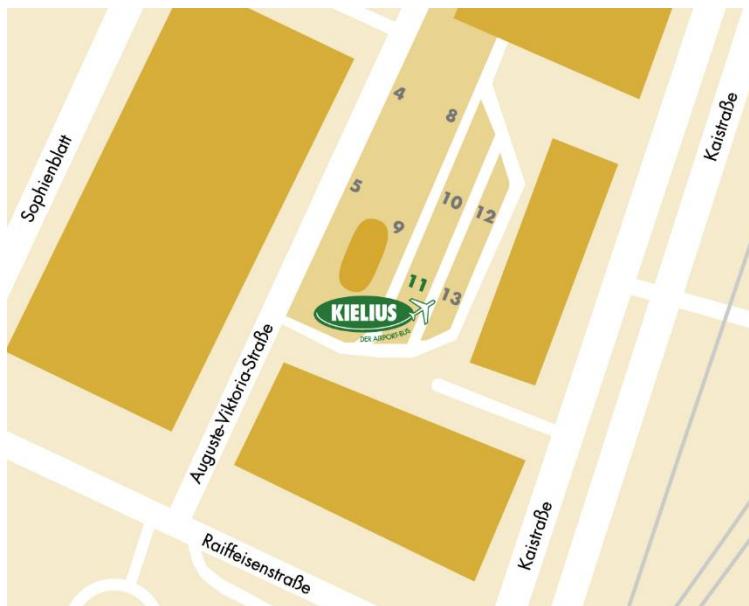
Travel to Kiel

If you travel by plane, the best way to reach Kiel is via Hamburg Airport. From there, we recommend taking the Kielius bus service, which departs for Kiel every hour directly in front of the airport building, between the departure and arrival terminals.



The journey takes approximately 90 minutes. You can check exact departure times [online](#). Tickets can be purchased [online](#) or from the driver. However, the driver accepts only cash (Euros). A cash machine is available near the arrivals area at the airport.

For your return trip, we recommend using the same service. In Kiel, the Kielius bus departs from bus platform 11 at the central bus station (ZOB) on Auguste-Viktoria-Strasse, next to the central train station.



Alternatively, you can take the [suburban train](#) (S-Bahn) line S1 from Hamburg Airport (Flughafen) to Hamburg central train station (Hauptbahnhof). The S1 runs every 10 minutes, and the journey takes 25 minutes. You can access the S-Bahn station directly from Terminals 1 and 2.

From Hamburg central train station, you can continue your journey to Kiel by [train](#), which takes approximately 75 minutes. You will arrive at Kiel central train station. The exit for the bus stop is to the left. The exit for taxis is straight ahead.

Hotels

For attendees traveling from outside Kiel, we recommend the following hotels:

[Hotel am Segelhafen](#) (walking distance to GEOMAR)

[Intercity Hotel](#) (near Kiel central train station)

[Hotel Astor](#) (near Kiel city center)

[Ibis Styles Kiel](#) (near Kiel city center)

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](#). 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	10:08	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 Bord der Fähren MS DIETRICHSDORF , MS DÜSTERNBROOK und MS WELLINGDORF befindet sich ein Fahrkartautomat zur bargeldlosen Zahlung.																							
An Sonntagen und Feiertagen verkehren die Schiffe der F2 nicht.															Fahrgäste ohne Fahrschein müssen sofort nach Fahrtantritt dort den gültigen Fahrpreis entrichten.																							
Kein Fährbetrieb von Heiligabend bis Neujahr.															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

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.