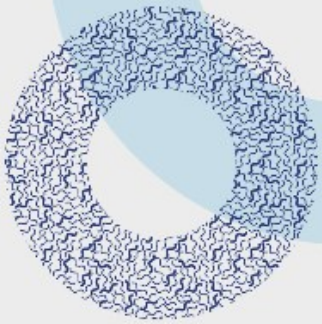
PhD Course on Gut Biology

20-23 April 2026

Sinatur Hotel Gl. Avernæs
Helnæsvej 9
DK-5631 Ebberup

Session overview



Day 1 Monday 20 April

Course Opening

Session I Introduction to the Gut & Analysis Methods

Evening Lecture on Microbiome Forensics

Day 2 Tuesday 21 April

Session II The Role of the Microbiome in Inflammatory & Metabolic Diseases

Session III Innovative Technologies and Model Systems in Microbiome Research

Session IV The Immune System at the Host-microbe Interface

Poster Session I

Meet the Speakers & Organisers

Day 3 Wednesday 22 April

Session V Diet and Gut Microbiome Interactions

Session VI (part 1) Importance of the Gut-liver Axis on the Microbiome

Session VI (part 2) Importance of the Gut-brain Axis on the Microbiome

Workshops

Poster Session II

Day 4 Thursday 23 April

Session VII Artificial Intelligence - Will It Be of Help in Microbiome Research?

Session VIII Microbiome Intervention Studies

Course Summary

Programme
Monday 20 April

10:00	Joint transportation by bus from CAU Kiel Meeting point: Parking lot at the Zentrum für Molekulare Biowissenschaften ZMB, Am Botanischen Garten 11, 24118 Kiel
13:00	Joint transportation by bus from Odense Central Station
13:00-15:00	Arrival, check-in, registration, mounting of posters coffee/tea
15:00-15:30	Course opening and meet & greet Managing Director **Tore Christiansen**, Danish Diabetes and Endocrine Academy (DK), Professor and Director **Andre Franke,** Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE) & Education & Networking Coordinator **Pernille Bruun Nielsen**, Danish Diabetes and Endocrine Academy (DK)
Session I	**Introduction to the Gut & Analysis Methods** Chair: Professor **Torben Hansen**, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (DK)
15:30-16:00	Gut Barrier Function in Chronic Inflammatory Diseases: From Diet to Host–Microbe Crosstalk Associate Professor **Benjamin Anderschou Holbech Jensen**, Department of Biomedical Sciences, University of Copenhagen (DK)
16:00-16:15	Questions, answers & discussion
16:15-16:45	Statistical Methods for Microbiome Data – Short Introduction Professor **Astrid Dempfle**, Institute of Medical Informatics and Statistics, Christian-Albrechts-University of Kiel (DE)

16:45-17:00	Questions, answers & discussion
17:00-18:30	Free time & mounting of posters
18:30-20:00	Dinner
Evening Lecture	**Microbiome Forensics** Chair: Professor and Director **Andre Franke,** Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
20:15-20:55	Microbiomes in Forensics - Are Small Things the Next Big Thing? Research Associate, Dr.rer.nat. **Jan Euteneuer,** Department of Forensic Genetics, University Hospital Schleswig-Holstein (DE)
20:55-21:10	Questions, answers & discussion
21:10-	Informal networking (optional)

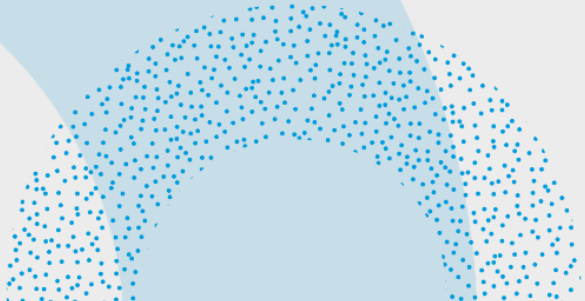
Programme
Tuesday 21 April

07:00-08:30	Breakfast & morning exercise (optional)
08:30-08:40	Welcome back
Session II	**The Role of the Microbiome in Inflammatory & Metabolic Diseases** Chair: Professor **Mathilde Poyet**, Institute of Experimental Medicine, Christian-Albrechts-University of Kiel & University Hospital Schleswig-Holstein (DE)
08:40-09:05	Chronic Viral Infection in Inflammatory Bowel Disease: Causes, Triggers, or Immunological Red Herrings Associate Professor **Rahma Elmahdi**, Department of Immunology and Microbiology, University of Copenhagen (DK)
09:05-09:20	Questions, answers & discussion
09:20-09:45	Clinical IBD - Pitfalls and Current Challenges Group Leader **Florian Tran**, Translational and Molecular Gastroenterology, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
09:45-10:00	Questions, answers & discussion
10:00-10:10	Oral presentation selected from abstracts: Plant-based Diet Consumption Exacerbates Colitis-driven Tumorigenesis in Mice PhD Student **Clarissa Gottschild,** Institute of Nutritional Medicine, University Hospital Schleswig-Holstein Campus Lübeck (DE)
10:10-10:15	Questions & answers

10:15-10:45	Group photo, coffee & tea break
Session III	**Innovative Technologies & Model Systems in Microbiome Research** Chair: Professor **Mathilde Poyet**, Institute of Experimental Medicine, Christian-Albrechts-University of Kiel & University Hospital Schleswig-Holstein (DE)
10:45-11:05	Drug-gut Microbiota Interactions, From Single Species to Communities Professor **Sarela García-Santamarina**, Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute (DE)
11:05-11:20	Questions, answers & discussion
11:20-11:45	Gnotobiotic Mice - A Powerful Model System to Study Host-microbiome Interactions *In Vivo* Group Leader **Felix Sommer**, Functional Host-Microbiome Research, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
11:45-12:00	Questions, answers & discussion
12:00-12:10	Oral presentation selected from abstracts: Diversity and Function of Bacterial Extracellular Vesicles from the Gut Microbiome Across Hosts and Bacterial Species PhD Student **Andre Geisler**, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
12:10-12:15	Questions & answers
12:15-13:00	Lunch
13:00-14:00	Scientific networking activity
14:00-14:20	Coffee & tea break

Session IV	**The Immune System at the Host-microbe Interface** Chair: Professor and Director **Andre Franke,** Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
14:20-14:45	Functions of γδ T Lymphocytes in Perinatal Life Professor **Sarina Ravens**, Institute of Immunology, Hannover Medical School (DE)
14:45-15:00	Questions, answers & discussion
15:00-15:25	Metabolic Sensing at the Host–microbe Interface: From Bacterial Metabolites to Metaflammation Professor **Maria Balmer**, Department of Biomedical Research, University and University Hospital Bern (CH)
15:25-15:40	Questions, answers & discussion
15:40-17:30	Free time
17:30-18:00	Poster tours Chairs: Scientific organising committee members
18:00–19:00	Poster session I
19:00-20:30	Dinner
20:30-21:30	Meet the speakers & organisers
21:30-	Informal networking (optional)





Programme
Wednesday 22 April

07:00-08:30	Breakfast & morning exercise (optional)
08:30-08:40	Welcome back
Session V	**Diet and Gut Microbiome Interactions** Chair: Professor **Karsten Kristiansen**, Department of Biology University of Copenhagen (DK)
08:40-09:05	The Gut Nutrient Market Associate Professor **Silvio Waschina**, Department of Nutriinformatics, Christian-Albrechts-University of Kiel (DE)
09:05-09:20	Questions, answers & discussion
09:20-09:45	Mucosal Metabolism in the Context of Gastrointestinal Diseases Professor, co-director **Stefanie Derer-Petersen**, Institute of Nutritional Medicine, University Hospital Schleswig-Holstein Campus Lübeck (DE)
09:45-10:00	Questions & answers
10:00-10:10	Oral presentation selected from abstracts: The Gut-Kidney Axis: Establishing Causality for Gut Microbial Metabolites Driving Chronic Kidney Disease Progression and Diet as a Potential Therapeutic Intervention PhD Student **Kisha Sårde Kern**, National Food Institute, Technical University of Denmark (DK)
10:10-10:15	Questions & answers
10:15-10:45	Coffee & tea break

Session VI (part 1)	**Importance of the Gut-liver Axis on the Microbiome** Chair: Professor and Director **Andre Franke,** Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
10:45-12:00	Professor **Christoph Schramm**, I. Department of Medicine, University Hospital Hamburg-Eppendorf (DE) Junior Group Leader **Lorenz Adlung**, Adlung Lab – Adipose Systems Immunology, University Hospital Hamburg-Eppendorf (DE) Postdoctoral Researcher **Victor Haas**, Liver Lab – Immune Regulation, University Hospital Hamburg-Eppendorf (DE)
12:00-12:45	Lunch
Session VI (part 2)	**Importance of the Gut-brain Axis on the Microbiome** Chair: Professor **Louise Torp Dalgaard**, Department of Science and Environment, Molecular and Medical Biology, Roskilde University (DK)
12:45-14:00	Lecturer, Group Leader **Jatin Nagpal**, School of Medicine and School of Pharmacy, University College Cork (IE) Associate Professor **Benjamin Anderschou Holbech Jensen**, Department of Biomedical Sciences, University of Copenhagen (DK)
14:00-14:30	Coffee & tea break
14:30-16:30	**Workshops** **Workshop A:** Designing Functional Microbiome Studies Group Leader **Felix Sommer**, Functional Host-Microbiome Research, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE) Postdoctoral Researcher **Corinna Bang**, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE) Postdoctoral Researcher **Evelina Stankevic Forman**, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (DK)

Workshop B: Hands-on Metagenome Analysis: A Parkinson's Disease Case Study

Postdoctoral Researcher **Olga Brovkina**, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)

PhD Student **Álvaro Quevedo Olmos**, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)

Workshop C: From Basic Research into Industrial Applications

Chair: Professor **Karsten Kristiansen**, Department of Biology, University of Copenhagen (DK)

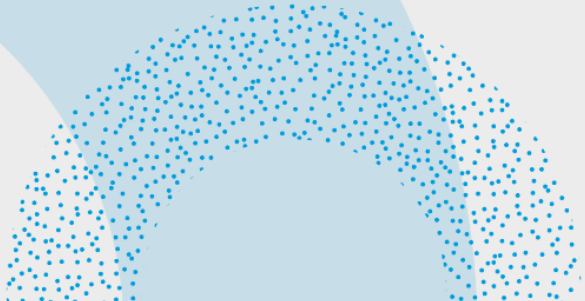
Associate Director **Fernanda Schreiber**, Microbiotica (UK)

Senior R&D Engineer **Mo Han**, Institute of Digital Earth (CN)

Postdoctoral Researcher **Marisa Keller**, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (DK)

16:30-18:00	Free time
18:00-19:30	Dinner
19:45-20:15	Poster tours Chairs: Scientific organising committee members
20:15-21:15	Poster session II & informal networking with speakers & organisers
21:15-	Informal networking (optional)





Programme
Thursday 23 April

07:00-08:30	Breakfast and morning exercise (optional)
08:30-08:50	Check-out of rooms
08:50-09:00	Welcome back
Session VII	**Artificial Intelligence - Will It Be of Help in Microbiome Research?** Chairs: Professor **Mathilde Poyet**, Institute of Experimental Medicine, Christian-Albrechts-University of Kiel & University Hospital Schleswig-Holstein (DE) & Professor **Mathieu Groussin,** Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)
09:00-09:25	The Programmable Microbiome: Engineering Diet and Probiotics to Enhance Gut Resilience Associate Professor **Ophelia Venturelli**, Department of Biomedical Engineering, Duke University (US)
09:25-09:40	Questions, answers & discussion
09:40-10:05	Developing Generative AI Models for Microbiome Data Director and Professor **Eric Alm**, Center for Microbiome Informatics and Therapeutics, Department of Biological Engineering, Massachusetts Institute of Technology (US)
10:05-10:20	Questions, answers & discussion

10:20-10:30	Oral presentation selected from abstracts: Learning and Steering Mediators of Gut Inflammation Through Engineered Bacteria PhD Student **Brennan Koegh**, Department of Biomedical Engineering, Duke University (US)
10:30-10:35	Questions & answers
10:35-11:05	Coffee & tea break
Session VIII	**Microbiome Intervention Studies** Chairs: **Torben Hansen**, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (DK) & Professor **Karsten Kristiansen**, Department of Biology University of Copenhagen (DK)
11:00-11:25	Clinic-first Approach for the Development of Live Biotherapeutic Products Senior Director Translational Biology **Ghaith Bakdash**, Microbiotica (UK)
11:25-11:40	Questions, answers & discussion
11:40-12:05	How the Inuit Genome Shape the Gut Microbiome to Improve Metabolic Health Professor **Anders Albrechtsen**, Department of Biology, University of Copenhagen (DK)
12:05-12:20	Questions, answers & discussion
12:20-12:50	Course reflection and summary
12:50-13:05	Closing words, poster awards & farewell
13:15	Lunch bag to-go
13:30	Joint transportation by bus to Odense Central Station and Joint transportation by bus to CAU Kiel ZMB, Am Botanischen Garten 11, 24118 Kiel

Organising Committee
Scientific Programme

Andreas Buch Møller, Scientific Partnerships Manager, Arla Innovation (DK)

Andre Franke, Professor and Director Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel (DE)

Karsten Kristiansen, Professor, Department of Biology, University of Copenhagen (DK)

Louise Torp Dalgaard, Professor, Department of Science and Environment, Molecular and Medical Biology, Roskilde University (DK)

Mathieu Groussin, Professor, Institute of Clinical Molecular Biology, Christian-Albrechts-University of Kiel, Founder Global Microbiome Conservancy and Speaker Kiel Microbiome Center (DE)

Mathilde Poyet, Professor, Institute of Experimental Medicine, Christian-Albrechts-University of Kiel & University Hospital Schleswig-Holstein, Founder Global Microbiome Conservancy and Speaker Kiel Microbiome Center (DE)

Torben Hansen, Professor, Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (DK)

Partners

Kiel Life Science, Christian-Albrechts-University of Kiel

International Center, Christian-Albrechts-University of Kiel

Deutsche Forschungsgemeinschaft Cluster of Excellence 2167
“Precision Medicine in Chronic Inflammation”

Deutsche Forschungsgemeinschaft Research Unit 5042 “miTarget”

Basic Metabolic Research, University of Copenhagen

Danish Diabetes and Endocrine Academy