

# 14<sup>th</sup> Seeon Conference

# Microbiota, Probiotics and Host Mikrobiota, Probiotics und Wirt

JUNE 30<sup>TH</sup> - JULY 2<sup>ND</sup>, 2022 CONFERENCE CENTER MONASTERY SEEON

For more information: www.DGHM.org/seeon



### PROGRAM Thursday, June 30<sup>th</sup>

14<sup>00</sup> – 16<sup>00</sup> Registration

16<sup>00</sup> – 16<sup>15</sup> Welcoming: Thomas Clavel, RWTH Aachen, Germany

- 16<sup>15</sup> 17<sup>00</sup> 1<sup>st</sup> Keynote Lecture: Thaddeus Stappenbeck, Lerner Research Institute, Cleveland, Ohio, USA:
  Shaping immunoglobulin responses by the microbiome Chair: Dirk Haller, Technical University Munich, Germany
- 17<sup>00</sup> 18<sup>00</sup> Session 1 MICROBIOME & INFLAMMATION

**Taubenheim Jan**, Research Group Medical System Biology, Institute of Experimental Medicine, University of Kiel, Germany

Metabolic microbiome-host interactions and its role in inflammatory bowel disease **Häcker Deborah**, Technical University of Munich, Chair of Nutrition and Immunology, Freising-Weihenstephan, Germany

Exclusive enteral nutrition drives protective microbiome modulation in pediatric crohn's disease

**Sander Anika**, Intestinal Microbiology Research Group, Department of Molecular Toxicology, German Institute of Human, Nutrition, Potsdam-Rehbruecke, Nuthetal, Germany

Influence of intestinal Hyperbilirubinemia on the gut microbiota and colonic inflammation

**Steimle Alex**, Luxembourg Institute of Health, Esch-sur-Alzette, Luxembourg Targeted gut microbiota modulation alters autoimmune neuroinflammation

18<sup>15</sup> – 19<sup>45</sup> Dinner

 $20^{00} - 21^{30}$  **Poster Slam** (2 minutes / 2 slides)

### PROGRAM Friday, July 1<sup>st</sup>

09<sup>00</sup> – 09<sup>45</sup> **2<sup>nd</sup> Keynote Lecture: Bas Dutilh**, Viral Ecology and Omics Group, Friedrich Schiller University Jena, Germany / Metagenomics Group, Utrecht University, The Netherlands: **Mapping the Microverse and modelling its drivers** 

Chair: Bärbel Stecher-Letsch, Max von Pettenkofer Institute/ LMU Munich, Germany

### 09<sup>45</sup> - 10<sup>45</sup> Session 2 ECOLOGY & MANIPULATION

**Krause Jannike L.**, German Rheumatism Research Center Berlin - A Leibniz Institute, DRFZ, Schwiete Laboratory for Microbiota and Inflammation, Berlin, Germany Sample logistics affect structural and functional profiles of faecal microbiota **Ruple Hannah**, Dept. of Microbiome Research and Applied Bioinformatics, University

of Hohenheim, Stuttgart, Germany

Donor strain engraftment in patients with irritable bowel syndrome after fecal microbiota transplantation

**de Hoog Almási Éva**, Microbial Immune Regulation, Helmholtz Centre for Infection Research, Braunschweig, Germany

Understanding the impact of sugar utilization in pathogenic-commensal Klebsiella competition in the gut with CRISPR-Cas9

**von Strempel Alexandra**, Max von Pettenkofer-Institut, LMU Munich, Germany Targeted design and manipulation of defined microbial consortia by bacteriophages

10<sup>45</sup> – 11<sup>15</sup> Coffee Break / **Poster at the first glance** 

11<sup>15</sup> – 12<sup>15</sup> Session 3 MICROBE & HOST

**Ortiz Diego**, Microbial Immune Regulation, Helmholtz Centre for Infection Research, Braunschweig, Germany

Influence of probiotic-modulated microbiota on the immune system and infection susceptibility of preterm newborns

**Grießhammer Anne**, Interfaculty Institute of Microbiology & Infection Medicine Tübingen + Cluster of Excellence "Controlling Microbes to Fight Infections", University of Tübingen, Germany

Exploring the impact of non-antibiotic drugs on colonization resistance to enteric pathogens

**Viehof Alina**, Functional Microbiome Research Group, RWTH University Hospital, Aachen, Germany

Intestinal Coriobacteriia influence host metabolism

*Hoffard Nils*, Department of Dermatology and Allergy Biederstein, School of Medicine, Technical University of Munich, Munich, Germany

Bacteria mediated immunomodulation of food allergy

#### 12<sup>15</sup> – 13<sup>45</sup> Lunch

 13<sup>45</sup> – 14<sup>30</sup> 3<sup>rd</sup> Keynote Lecture: Hauke Smidt, Wageningen University & Research, The Netherlands : Unlocking microbiomes diversity for human, animal and environmental health

Chair: Thomas Clavel, RWTH Aachen, Germany

14<sup>30</sup> – 15<sup>30</sup> Session 4 DIVERSITY, METABOLISM & EVOLUTION

*Krasenbrink Julia*, *Division of Microbial Ecology, University of Vienna, Austria* Role of the exclusive nutrient sulfoquinovose in gut microbiome-mammalian host symbiosis

**Omer Hélène**, Technical University of Munich, Chair of Nutrition and Immunology, Freising-Weihenstephan, Germany

Impact of *Desulfovibrio* spp. and sulfur metabolism on the pathogenesis of chronic intestinal inflammation and colitis-associated cancer

Andreani Nadia Andrea, Max Planck Institute for Evolutionary Biology, Plön + Kiel University, Kiel, Germany

Bacterial evolution during chronic inflammation in the intestine

**von Armansperg Benedikt**, Max von Pettenkofer-Institute of Hygiene and Medical Microbiology, Faculty of Medicine, LMU Munich + German Center of Infection Research (DZIF), Partner Site Munich, Germany

Influence of human-targeted drugs on virulence factor regulation in EHEC

#### 15<sup>30</sup> – 16<sup>00</sup> Coffee Break

16<sup>00</sup> – 17<sup>00</sup> Hot Topic 1 – **Pascale Vonaesch**, University Lausanne, Switzerland: **The intestinal microbiota in childhood undernutrition** 

Hot Topic 2 – Lisa Maier, University Tübingen, Germany: Dissecting the interactions between commonly used drugs and the human gut microbiota

Chair: Mathias Hornef, RWTH Aachen, Germany

- 17<sup>15</sup> 17<sup>45</sup> DGHM Fachgruppenmeeting 05 (only for members)
- 17<sup>15</sup> 19<sup>30</sup> **POSTER SESSION**
- 19<sup>30</sup> Dinner

## PROGRAM Saturday, July 2<sup>nd</sup>

09<sup>00</sup> – 09<sup>45</sup> **4<sup>th</sup> Keynote Lecture: Florent Malard**, Sorbonne Université, Hôpital Saint-Antoine, Paris, France: **Modulation of the microbiota in patients with hematologic malignancies** 

Chair: Maria J. G. T. Vehreschild, University Hospital Frankfurt, Germany

### 09<sup>45</sup> – 10<sup>45</sup> Session 5 **MICROBIOME & CANCER**

**Stein-Thoeringer Christoph**, Deutsches Krebsforschungszentrum (DKFZ) and Nationales Centrum für Tumorerkrankungen (NCT), Heidelberg, Germany

A non-antibiotic disrupted gut microbiome predicts the clinical outcomes of CAR-T cell immunotherapy

**Zhang Boyao**, Structural and Computational Biology Unit, European Molecular Biology Laboratory, Heidelberg, Germany

Gut microbiota carcinogen metabolism causes distant tissue tumours

**Brunner Valentina**, Institute of Translational Cancer Research and Experimental Cancer Therapy, Klinikum Rechts der Isar, School of Medicine + TranslaTUM, Center for Translational Cancer Research, Technical University of Munich, Germany

Introduction of a modular and rapid approach to study microbial dependencies of colorectal tumor progression in germ-free mice

*Grant Erica T.,* Luxembourg Institute of Health + University of Luxembourg, Esch-sur-Alzette, Luxembourg

Reduced dietary fiber intake in humans increases gut bacterial mucolytic activity

11<sup>15</sup> – 12<sup>15</sup> Hot Topic 3 – **Melanie Schirmer,** Technical University Munich, Germany:

Metabolic and functional disruptions of the microbiome in disease

Hot Topic 4 – **Marianne Grognot**, RWTH University Hospital, Aachen, Germany:

Biophysics of swimming: a quantitative dive into bacterial navigation in mucus-mimicking environments

Chair: Till Strowig, Helmholtz Centre for Infection Research, Braunschweig, Germany

12<sup>15</sup> – 12<sup>45</sup> **Awards** & Farewell

#### 12<sup>45</sup> Lunch-to-go

13<sup>00</sup> Shuttle to airport + train station