

OCTOBER 8-10, 2014

BEYOND THE INTESTINAL MICROBIOME – FROM SIGNATURES TO THERAPY

A HERRENHAUSEN CONFERENCE OF THE VOLKSWAGEN FOUNDATION

Onaka – „honoured middle” – that’s how our intestine is described in Japan. A wise choice: being populated by about 10^{14} microorganisms, the gut and its microbiome are considered to be pivotal players for our overall health.

Identification and sequencing of gut microorganisms has been the starting point. Today, researchers are beginning to understand the fascinating linkages between our microbiome and our organism. As the field widens and various sub-disciplines like pharmacology and infection biology address this topic, a deeper understanding of the function as well as of the therapeutic potential of the gut microbiome can be achieved. Defining, exploring and improving our gut health may hold an enormous preventive and curative potential with regard to the severe illnesses (like cardiovascular diseases, rheumatic and autoimmune diseases or diabetes) and obesity – a whole new medical approach may beckon.

Experts from fields as diverse as Inflammation, Microbial Communication, Evolutionary Game Theory, and Diabetes will gather at an inspiring venue to address open questions as well as the multiple new insights and opportunities for research trying to unriddle the mysteries of the gut microbiome.

OUR CONFERENCE TOPICS AT A GLANCE

- Molecules of Communication
- Intestinal Ecology and Environmental Influences
- Development and Primary Colonization
- Function of the Meta-organism
- Microbiome and the Brain – Role of the Gut-Brain Axis
- Inflammation and Autoimmunity
- Diabetes and other Metabolic Diseases
- Therapeutical Approaches

PROGRAM ADVISORY COMMITTEE

- Stephan Bischoff - University of Hohenheim; German Society of Mucosal Immunology and the Microbiome
- Julia Frick - Institute of Medical Microbiology and Hygiene, University of Tuebingen
- Dirk Haller - Chair of Nutrition and Immunology, Technical University of Munich
- Philip Rosenstiel - Institute of Clinical Molecular Biology, University of Kiel
- Hartmut Wekerle - Max Planck Institute of Neurobiology

CONFERENCE WEBSITE

www.volkswagenstiftung.de/microbiome

HERRENHAUSEN CONFERENCES

With its Herrenhausen Conferences the Volkswagen Foundation provides international experts as well as junior researchers with a platform for an intense interdisciplinary dialogue on exciting new areas of research and innovative methodological approaches. The main focus of the conferences does lie on the **current challenges** faced by each research area rather than on further in-depth discussions and analyses of individual well-established topics. We are interested in **unanswered questions and unsolved problems** – and in the respective research field’s relevance for society.

All academic titles have been omitted.

TENTATIVE PROGRAM

October 8, 2014

- 2 p.m. Words of welcome
Wilhelm Krull, Secretary General, VolkswagenStiftung
- 2.15 p.m. Metagenom and microbiota
Karsten Kristiansen, University of Copenhagen (confirmed)
- 3 p.m. Coffee break
- 3.30 p.m. From molecules to cells (working title)
- Chair: N.N.
Statements á 20 minutes, 10 minutes Q&A after each talk
- Gabriel Nunez**, University of Michigan (confirmed)
- Arthur Kaser**, University of Cambridge (confirmed)
- Andreas Diefenbach**, University Medical Center Freiburg (confirmed)
- 5.15. p.m. Lightning Talks I
- 6 p.m. Aperitif / Poster session
- 7 p.m. Musician´s symbiosis
Noe Inui (violin) & **Vassillis Varvaresos** (piano)
- 7.45 p.m. Conference Dinner

October 9, 2014

- 9 a.m. Keynote
Thaddeus Stappenbeck, Washington University (tbc)
- 9.45 a.m. Cells – attack and defense (working title)
- Chair: N.N.
Statements á 20 minutes, 10 minutes Q&A after each talk

Oliver Pabst, Medical School Hanover (confirmed)

Eric Pamer, Memorial Sloan-Kettering Cancer Center (confirmed)

10.45 a.m. Coffee Break / Poster session

11.45 a.m.

Jan Wehkamp, IKP Stuttgart (confirmed)

Lothar Steidler, ActoGeniX NV, Belgium (confirmed)

12.45 a.m. Lightning Talks II

1.15 p.m. Lunch and Poster session

3 p.m. Keynote

Arne Traulsen, Max Planck Institute for Evolutionary Biology (confirmed)

3.30 p.m. From cells to networks / ecosystems (working title)

Chair: N.N.

Statements á 20 minutes, 10 minutes Q&A after each talk

Margaret McFall-Ngai, University of Wisconsin (confirmed)

Sidonia Fagarasan, Laboratory for Mucosal Immunity, Riken Yokohama (confirmed)

4.30 p.m. Coffee Break

5.30 p.m.

Gurumoorthy Krishnamoorthy, MPI of Neurobiology (confirmed)

N.N.

Michiel Kleerebezem, NIZO (confirmed)

7 p.m. Lightning Talks III

7.30 p.m. Dinner

October 10, 2014

9 a.m. From Networks to organisms

Chair: N.N.

Statements á 20 minutes, 10 minutes Q&A after each talk

Alexander Chervonsky, University of Chicago (confirmed)

Josef Penninger (tbc)

Charles Mackay, Monash University (confirmed)

10. 30 a.m. Coffeebreak / Poster session

11. 30 a.m. From “bench to bedside”

Chair: Stephan Bischoff, University of Hohenheim
Statements á 20 minutes, 10 minutes Q&A after each talk

Frederik Bäckhed, University of Goeteborg (confirmed)

Harald Renz, Philipps-Universität Marburg (confirmed)

Max Nieuwdorp, AMC Amsterdam (confirmed)

1 p.m. Lunch break

2 p.m. Closing talk
Ruth E. Ley, Cornell University (confirmed)

2.45 p.m. End of Conference