

## Leopoldina-Symposium

### Environmental Education of the Immune System in Health and Inflammation

Organizers:

Leibniz-Network Immune Mediated Diseases and Leibniz ScienceCampus Chronic Inflammation

August 29. - 30, 2019

Berlin-Brandenburgische Akademie der Wissenschaften

Markgrafenstr. 38, 10117 Berlin

**Program** (as of Aug 19, 2019)

je talk 20 + 5 min

Thursday, 29.08.2019

<b>WELCOME</b>	<b>Leopoldina, Leibniz, DRFZ</b>
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**Session I (9:00 - 10:15)**

**The Immune System in Context of its Body**

Chairs: Anja Hauser, Thomas Kamradt

Irmgard Förster, Bonn	Environmental control of immune homeostasis and cellular metabolism by the AhR/AhRR pathway
Claudia Waskow, Jena	Cross communication of hematopoietic cells of adult and embryonic origin.
Sander Bekeschus, Greifswald	ROS as immunomodulatory agents
Andreas Diefenbach, Berlin	tba

Coffee break (10:40 - 11:15)

**Session II - Part I (11:15 - 12:55)**

**Immune Imprinting by Nutrition and Lifestyle**

Chairs: Reinhold Schmidt, Jean Krutmann

Tilman Grune, Potsdam	Immune System and Nutrition
Julia Polansky-Biskup, Berlin	Epigenetics in T cell differentiation: From genome-wide signatures to local regulators and their targeted manipulation.
Charlotte Esser, Düsseldorf	Skin barrier and nutrition – role of the aryl hydrocarbon receptor
Dietmar Krautwurst, München	Nutrition-related immune cell priming

Lunch Break (12:55 - 14:30)

**Session II - Part II (14:30 - 15:45)**

Chairs: Antigoni Triantafyllopoulou, Klaus Rajewsky

Carsten Watzl, Dortmund	The effect of acute and sustained beta2-adrenergic receptor stimulation on the function of Natural Killer cells
Susanne Krauss-Etschmann, Borstel	Early life environment in shaping risk for respiratory disease and potential dietary intervention
Christoph Scheiermann, Geneva and Mmünchen	Circadian rhythms in the immune response

Coffee break (15:45 - 16:10)

**Session III (16:10 - 17:55)**

**Education of the Immune System by Microbiota**

Chairs: Chiara Romagnani, Heribert Hofer

Ivaylo I. Ivanov, New York	Microbiota-epithelium interactions educate host adaptive immunity
Hyun-Dong Chang, Berlin	Microbiota controlling TGF- $\beta$ and IgA expression in the intestinal mucosa
Andrew Macpherson, Bern	Distinct mucosal or systemic responses to non-pathogenic intestinal microbes build the B cell repertoire and its functional responsiveness
Alexander Scheffold, Kiel	Shaping of the human T cell repertoire by the microbial environment: mind the “-myces” !

**Science Slam** (18:00 - 19:00) - public outreach event (7 talks, 7 minutes each)

**Postersession and Get Together** (19:00 - 21:00)

Poster Committee: Andrey Kruglov, Chiara Romagnani

Friday, 30.08.2019

**Keynote Lecture (8:30 - 9:30)**

Chair: Andreas Radbruch

Lorenzo Moretta, Rome

tba

**Session IV (9:00 - 10:45)**

**Pathogens and Chronicity**

Chairs: Stefan Ehlers, Birba Hoyer

Marcus Altfeld, Hamburg

Sex differences in inflammation during chronic HIV-1 infection

Christoph Hölscher, Borstel

Inflammation in tuberculosis: friend or foe of whom?

Dietmar Zehn, München

InTOXication causes T-cell exhaustion in chronic infection.

Coffee break (10:45 - 11:30)

**Session V (11:30 - 12:45)**

**Therapies - One Health**

Chairs: Kristina Lorenz, Angela Zink

Falk Hiepe

tba

Gülsah Gabriel

Current challenges for science and healthcare posed by emerging influenza viruses

Nils Blüthgen

Modelling signalling in the intestine and colon cancer, cell by cell

**Lessons learned and poster award (12:45 - 13:00)**

Andreas Radbruch

DRFZ Berlin

Fare well Soup

**GENERAL ASSEMBLY (13:30 - 15:30)**

ScienceCampus Chronic Inflammation +

Leibniz-Network Immune Mediated Diseases