



### Venue:

Steigenberger Hotel Hamburg  
Heiligengeistbrücke 4  
20459 Hamburg  
Germany

### Directions from Hamburg Main Train Station:

Distance: 1.0 km  
Estimated taxi fare: € 15 (one way)  
By public transportation: Subway U6 heading towards  
"Schlump-Barmbek". Get off at stop "Rödingsmarkt".

### Directions from Hamburg Airport:

Distance: 12 km  
Estimated taxi fare: € 30 (one way)  
By public transportation: Suburban train S1 towards  
"Blankenese-Wedel". Get off at stop "Stadthausbrücke".



## Inflammation at Interfaces

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For further information and registration:

[symposium-iai.org](http://symposium-iai.org)

The Cluster of Excellence „Inflammation at Interfaces“



## International Symposium Precision Medicine in Chronic Inflammation of the Cluster of Excellence "Inflammation at Interfaces"

26 - 27 March 2018  
Hamburg, Germany



# Precision Medicine in Chronic Inflammation

## From Pathophysiology to Treatment Decision

Monday, March 26, 2018

10:30 – 11:00 h *Welcome coffee/Registration (Foyer Alsterarkaden, Colonnaden, ground floor)*

The meeting takes place in hall Alsterarkaden, ground floor

11:00 – 11:15 h Welcome address *Stefan Schreiber*, Speaker of the Cluster of Excellence "Inflammation at Interfaces"

### Session I --- Genomic Diversity of CIBD

Chair: Wolfgang Lieb, Kiel University

11:15 – 11:35 h **Jeanette Erdmann**, University of Lübeck  
*Update on CAD genetics – from single families to large-scale GWAS*

11:35 – 12:00 h **Jan Freudenberg**, Regeneron Genetics Center, Tarrytown, US  
*Large-scale exome sequencing for inflammatory diseases – Opportunities and challenges for drug discovery*

12:00 – 12:25 h **Kenneth Croitoru**, University of Toronto, CA  
*GEM Project: In search of the cause of Crohn's disease*

12:30 – 13:30 h *Lunch (Restaurant Fleet, ground floor)*

### Session II --- Evolution and Ecology of Microbiomes

Chair: Hinrich Schulenburg, Kiel University

13:30 – 13:50 h **Stefan Niemann**, Research Center Borstel  
*Evolution and transmission of multidrug resistant *M. tuberculosis* strains*

13:50 – 14:15 h **Sébastien Gagneux**, SwissTPH, Basel, CH  
*Genome evolution of *Mycobacterium tuberculosis**

14:15 – 14:40 h **Craig Winstanley**, University of Liverpool, UK  
*The evolution of *Pseudomonas aeruginosa* populations in the Cystic Fibrosis lung*

### Session III --- Individualized Cellular Models and Epigenetic Signatures of Inflammation

Chair: Franz-Josef Müller, Kiel University

14:45 – 15:05 h **Philip Rosenstiel**, Kiel University  
*Intestinal epithelial cells – epigenetic signatures, microbiota and intestinal inflammation*

15:05 – 15:30 h **Henk Stunnenberg**, Radboud University

ty Nijmegen, NL  
*Epigenetic marks, immunity and human disease*

15:30 – 15:55 h **Mamoru Watanabe**, Tokio, JP  
*Organoids as a therapy resource – from clinical trail in a dish to engraftment*

16:00 – 16:30 h *Coffee Break (Foyer Alsterarkaden, Colonnaden, ground floor)*

### Session IV --- Clinical and Nutritional Metabolomics

Chair: Karin Schwarz, Kiel University

16:30 – 16:50 h **Matthias Laudes**, Kiel University  
*Metabolic Inflammation – a potential novel treatment target for CIBD*

16:50 – 17:15 h **Cédric Laczny**, LCSB, Luxembourg, LU  
*Systems Ecology of the Human Gut Microbiome in Health and Disease*

17:15 – 17:40 h **Anthony Whetton**, University of Manchester, UK  
*Protein Biomarkers for Precision Medicine*

### Session V --- Experimental Models of Inflammation

Chair: Jörg Köhl, University of Lübeck

17:45 – 18:05 h **Ralf Ludwig**, University of Lübeck  
*Individualized Mouse Models*

18:05 – 18:30 h **Taeko Noah**, Cincinnati Children's Hospital, US  
*Intestinal Epithelial Allergen Sampling and Food Allergy*

18:30 – 18:55 h **Ralf Baumeister**, University of Freiburg, DE  
**C. elegans* models of signaling: Pathways, targets, drugs*

### Key Note Lecture

Chair: Stefan Schreiber, Kiel University

19:00 – 19:45 h **Friedrich von Bohlen und Halbach**, die-vini, Walldorf, DE  
*Precision Medicine in Healthcare and Drug Development*

20:00 – 23:00 h *Poster Session/Bufferet (Hall Über den Dächern von Hamburg, 8th floor)*

## Tuesday, March 27, 2018

The meeting takes place in hall Alsterarkaden, ground floor

### Session VI --- Sequence-based Profiling

Chair: Frank Kaiser, University of Lübeck

08:15 – 08:35 h **Andre Franke**, Kiel University  
*5 Years in a Nutshell: Nucleotide Lab Evolution to a Comprehensive Center for Genome Analysis*

08:35 – 09:00 h **Ivo Gut**, University of Barcelona, ES

*Multi-omics and human diseases*

09:00 – 09:25 h **Ann-Christine Syvänen**, Uppsala University, SE  
*Genomic analyses of systemic lupus erythematosus (SLE)*

### Session VII --- Multiscale Imaging

Chair: Magdalena Rafecas, University of Lübeck

09:30 – 09:50 h **Robert Huber**, University of Lübeck  
*New Horizons of imaging technology for inflammation*

09:50 – 10:15 h **Uwe Himmelreich**, KU Leuven, BE  
*In vivo Molecular Imaging of Inflammation*

10:15 – 10:45 h **Jürgen Popp**, Leibniz-IPHT, Jena DE  
*Modern Optics in Medicine*  
Poster Award Presentation

10:45 – 11:00 h *Coffee break (Foyer Alsterarkaden, Colonnaden, ground floor)*

### Session VIII --- Theoretical Models of Inflammation

Chair: Hauke Busch, University of Lübeck

11:30 – 11:50 h **Christoph Kaleta**, Kiel University  
*Model-based approaches for designing personalized therapies in inflammation medicine*

11:50 – 12:15 h **Robert Beardmore**, University of Exeter, UK  
*Antibiotic resistance evolution: different dosages maximise selection for different resistance mechanisms (a case study with erythromycin)"*

12:15 – 12:40 h **Julio Vera-González**, University Erlangen-Nürnberg, DE  
*The use of systems approaches in the design and personalization of anti cancer immunotherapy*

12:45 – 13:30 h *Lunch (Restaurant Fleet, ground floor)*

### Session IX --- Ethics, Communication and Economics

Chair: Christoph Rehmann-Sutter, University of Lübeck

13:30 – 13:50 h **Cornelius Borck**, University of Lübeck  
*Interdisciplinary Research and Translation Problems in Precision Medicine*

13:50 – 14:15 h **Ursula Klingmüller**, German Cancer Research Center (DKFZ), Heidelberg, DE  
*Ethics, bio-politics and regulation of precision medicine*

14:15 – 14:40 h **Ingrid Metzler**, University of Vienna, AT  
*Challenges of Precision Medicine for ELSA Research and Governance*

14:45 – 15:00 h *Conclusions/Farewell Stefan Schreiber*