Leibniz Center Infection (LCI)

The LCI is a dynamic and flexible research alliance of three internationally renowned Leibniz Institutes in the North of Germany:



Bernhard Nocht Institute for Tropical Medicine, Hamburg



Research Center Borstel -Leibniz Lung Center, Borstel



Heinrich Pette Institute, Leibniz Institute for Experimental Virology, Hamburg

Together, they combine more than 220 years of excellence in infection research and provide a stimulating environment for about 600 scientists studying all aspects of a broad range of infectious diseases. The united expertise in parasitic, bacterial and viral infections perfectly qualifies LCI as the center for infection research.

For more information, please visit www.lc-infection.de

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REGISTRATION DEADLINE JANUARY 10, 2018

Register online:

http://www.lc-infection.de/ lci-symposium-2018-anmeldung.html

Registration is free of charge. Participants are expected to meet their own accomodation and travel expenses.

> Certified by the General Medical Council 12 points



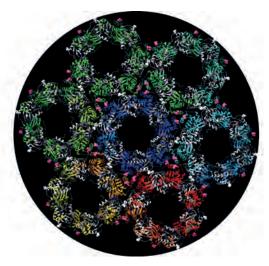




LCI Symposium 2018 Structural Biology of Infection

January 18-19

Historic Lecture Hall Bernhard Nocht Institute for Tropical Medicine (BNITM) & Centre for Structural Systems Biology (CSSB)



Organizers Prof. Egbert Tannich (BNITM) Prof. Ulrich E. Schaible (FZB) Prof. Thomas Dobner (HPI)

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LCI-Symposium 2018 **Structural Biology of Infection**

THURSDAY, January 18 (Venue: BNITM)

- Opening by Ulrich Schaible (acting speaker of LCI), 9:45 Borstel, Germany
- 10:00 LCI Keynote Lecture Chair: Ulrich Schaible (FZB)

Reidun Twarock. York. UK A systems approach to virus assembly, genome packaging and viral evolution

11:00 Coffee

Session 1: Structural basis of therapy and prophylaxis Chair: Charlotte Uetrecht (HPI)

- Thomas Gutsmann, Borstel, Germany 11:30 Molecular interaction between pore-forming peptides and lipid membranes
- 12:00 Helene Botella, New York, USA Mechanisms deployed by mycobacteria to cope with stresses imposed by chemotherapy or host immunity
- 12:30 Chris Meier, Hamburg, Germany Nucleoside triphosphates as potential chemotherapeutics to combat viral infections: design of chemical trojan horses
- Felix Rey, Paris, France 13:00 Structural insight into human antibody responses to flaviviruses: lessons for vaccine design
- 13:30 Lunch

Conference venue January 18

Historic Lecture Hall of the Bernhard Nocht Institute for Tropical Medicine Bernhard-Nocht-Strasse 74, D-20359 Hamburg, Germany Phone: +49 40 42818-0

Session 2: Host-pathogen interactions on the molecular level (part one) Chair: Matthias Wilmanns (CSSB)

- Thomas Krey, Hannover, Germany 14:15 Conformational flexibility in the viral glycoproteins - a new immune evasion strategy of the Hepatitis C virus
- Edith Houben, Amsterdam, The Netherlands 14:45 Structure and function of mycobacterial type VII secretion systems
- 15:15 Michael Kolbe, Hamburg, Germany How bacteria manipulate host cells: Structure and function of a macromolecular syringe
- **Coffee** (group photo of speakers and chairs) 15:45

Session 2: Host-pathogen interactions on the molecular level (part two) Chair: Iris Bruchhaus (BNITM)

- 16:15 Nicolas Gisch, Borstel, Germany Impact of teichoic acids on bacterial virulence and immune stimulation
- 16:45 Tobias Spielmann, Hamburg, Germany A SLI system to study the Plasmodium falciparum Artemisinin resistance protein Kelch13
- Tim Gilberger, Hamburg, Germany 17:15 Regulatory steps in red blood cell invasion of the malaria parasite
- 17:45 **Cocktail Reception – Meet the Speakers**
- 19:15 **Speakers Dinner**

Conference venue January 19

CSSB Centre for Structural Systems Biology c/o Deutsches Elektronen-Synchrotron DESY Notkestraße 85, Building 15, D-22607 Hamburg, Germany

Friday, January 19 (Venue: CSSB) Welcome & Introduction to the CSSB by Chris Meier 9:45 (scientific director of CSSB), Hamburg, Germany

> 10:00 LCI Keynote Lecture Chair: Chris Meier (CSSB)

> > Mark Sansom, Oxford, UK Molecular simulations to characterise the dynamic organization and interactions of cell and viral membranes

Session 3: New Techniques in Structural Biology

Chair: Andra Schromm (FZB)

- Lars Redecke, Lübeck, Germany 11:00 Serial crystallography in living cells
- 11:30 Alke Meents, Hamburg, Germany Structural investigations of biological samples using highly brilliant X-rays
- 12:00 Lunch & Coffee
- Charlotte Uetrecht, Hamburg, Germany 12:45 Flying viruses - from biophysical to structural characterization
- 13:15 Kay Grünewald, Hamburg, Germany Integrated structural cell biology of virus-host interactions
- Farewell Address by Ulrich Schaible (FZB) 13:45
- 14:00 **On-site visit of the CSSB** (app. 45 minutes)

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