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



eibniz Institute Leibniz Institute for Virology, Hamburg

Together, they combine more than 270 years of excellence in infection research and provide a stimulating environment for about 470 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



REGISTRATION DEADLINE **JANUARY 20, 2023**

Register online:

www.lc-infection.de/de/termine

Registration is free of charge.

Certified by the General Medical Council 13 points







Cover picture: 3D rendering of contacts between mitochondria (oval shapes) and the ER (red cisternae). © Robert Gebauer, Grünewald group, CSSB, Hamburg



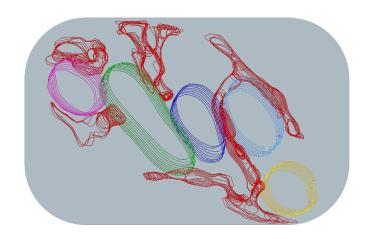
LCI Symposium 2023

Joint Event with Leibniz ScienceCampus InterACt

Compartments in Infection

January 26-27

Historic Lecture Hall Bernhard Nocht Institute for Tropical Medicine (BNITM)



Organizers Prof. Jürgen May (BNITM) Prof. Ulrich E. Schaible (FZB) Prof. Thomas Dobner (LIV)

10:00

THURSDAY, January 26

10:50 Opening by Thomas Dobner (acting speaker of LCI) and Kay Grünewald (speaker of InterACt), LIV & CSSB, Hamburg

Arrival, Registration & Welcome Coffee

Session 1: Membrane modulations in infection

Chair: Thomas Gutsmann, FZB, Borstel

Keynote Lecture

11:00 **Tobias Spielmann**, BNITM, Hamburg

Critical funcions at the parasitophorous vacuolar membrane of malaria blood stage parasites

- 12:00 Lunch & Coffee
- 13:00 Hubert Hilbi, UZH Zurich, Switzerland

 Formation of a pathogen vacuole according to Legionella
- 13:30 Lena Pernas, MPI for Biology of Ageing, Cologne Mitochondria-microbe conflict
- 14:00 Andra Schromm, FZB, Borstel
 Inflammation control by membrane active peptides:
 mechanisms and specificity
- 14:30 Nahla Galal Metwally, BNITM, Hamburg
 Role of extracellular vesicles in the pathogenesis of
 Plasmodium falciparum infection
- 15:00 Coffee & group picture

Session 2: Non-membranous compartments in infection

Chair: Jens Bosse, CSSB, Hamburg

Keynote Lecture

- 15:30 **Simon Alberti**, TU Dresden
 Biomolecular condensates at the nexus of cellular stress,
 disease and aging
- 16:30 Maria João Amorim, IGC, Oeiras, Portugal Rules for hardening influenza A virus liquid condensates
- 17:00 Lucas Pelkmans, UZH, Zurich, Switzerland

 DYRK kinases as regulators of biomolecular

 condensates
- 17:30 Enrico Caragliano, LIV, Hamburg
 Human cytomegalovirus forms phase-separated
 compartments at viral genomes to facilitate viral
 replication
- 18:00 Cocktail Reception Meet the Speakers
- 19:00 Speakers Dinner

Friday, January 27

Session 3: Cytoskeletal processes in infection

Chair: Tim Gilberger, BNITM, Hamburg

Keynote Lecture

- 9:00 **Walter Mothes**, Yale University, New Haven, USA *Imaging retroviruses and SARS-CoV-2 across spatial and temporal scales*
- 10:00 Friedrich Frischknecht, University Heidelberg
 From divergent Plasmodium cytoskeletons to new
 experimental malaria vaccines

- 11:00 Michael Hensel, University Osnabruck
 Reorganization of host cell actin cytoskeleton and
 endosomal system during infection by Salmonella
 enterica
- 11:30 Josie Ferreira, BBK London, UK

 The malaria parasite's changing cytoskeleton adapts cell
 shape to suit environmental niche
- 12:00 Lunch & Coffee

Session 4: Role of lysosome & phagosome in infection

Chair: Wolfram Brune, LIV, Hamburg

Keynote Lecture

- 13:00 **Maximilian Gutierrez**, Francis Crick Institute London, UK Host cell environments and antibiotic efficacy in Tuberculosis
- 14:00 Stefan Linder, UKE, Hamburg

 Uptake and intracellular processing of the Lyme disease pathogen Borrelia by human macrophages
- 14:30 **Coffee**
- 15:00 Caroline Barisch, University Osnabruck

 Hostile takeover: host lipid acquisition by pathogenic

 mycobacteria
- 15:30 Thomas Braulke, UKE, Hamburg

 LYSET: an essential Golgi protein for lysosomal enzyme
 transport and viral infection
- 16:00 Farewell Address by Ulrich Schaible, FZB, Borstel

Contact