



**Joint International Symposium of CRC 900 and Cluster of Excellence RESIST:  
04<sup>th</sup> - 05<sup>th</sup> October 2021, Courtyard Hannover Maschsee**

## **Determinants of Infection Susceptibility and Microbial Persistence**

Final Programme, last update 23.09.2021

### **Monday 04.10.2021**

#### **Welcome**

08.00            *Registration and Coffee*  
08.45h         Welcome and Opening: Thomas Schulz

#### **Session 1: Host Response during Chronic Infections**

Chairs: Sebastian Suerbaum & Melanie Brinkmann

09.00            **Immo Prinz**, UKE Hamburg, Germany  
                     *$\gamma\delta$  T cell responses to CMV reactivation in HSCT patients*

09.20            **Sarina Ravens**, Hannover Medical School, Germany  
                    *Impact of age, microbial exposure and malaria on the development of human  
 $\gamma\delta$  T cell effector subsets*

09.40            **Britta Eiz-Vesper / Britta Maecker-Kolhoff**, Hannover Medical School, Germany  
                    *Patient-tailored adoptive immunotherapy with EBV-specific T cells from  
related and unrelated donors: patient monitoring, donor testing and beyond*

10.00            **Abel Viejo-Borbolla**, Hannover Medical School, Germany  
                    *Novel immune and neuromodulatory strategies mediated by human  
herpesviruses*

10.20            **Ulrich Kalinke** Twincore Hannover, Germany  
                    *Single-cell RNA sequencing analysis of HCMV treated monocyte-derived  
dendritic cells*

10.40            Coffee Break

Chairs: Reinhold Förster & Sarina Ravens

11.10            **Heiner Wedemeyer / Markus Cornberg**, Hannover Medical School, Germany  
                    *Host Responses after HCV cure: Long-HepC?*

11.30            **Eleanor Barnes**, University of Oxford, UK - remote  
                    *Vaccines in chronic hepatitis-early results from a novel therapeutic HBV  
vaccine (and lessons from HCV)*

- 12.00 **Thomas Pietschmann / Dorothea Bankwitz**, Twincore Hannover, Germany  
*Correlates of humoral immune protection in acute resolving and chronic HCV infection*
- 12.20 **Maura Dandri**, UKE Hamburg, Germany  
*Determinants of HBV and HDV infection susceptibility and activity*

12.50 Lunch

## Session 2: Microbial Communities and Host Response

Chairs: Dirk Schlüter & Marco Galardini

- 14.00 **Sebastian Suerbaum**, Ludwig-Maximilians-University München, Germany  
*Helicobacter pylori genome and methylome evolution during chronic infection*
- 14.20 **Burkhard Tümmler**, Hannover Medical School, Germany  
*Microevolution of Pseudomonas aeruginosa in cystic fibrosis airways*
- 14.40 **Till Strowig**, HZI Braunschweig, Germany  
*Exploring microbial competition for the next generation of anti-infectives*
- 15.00 **Guntram Graßl**, Hannover Medical School, Germany  
*Salmonella effectors mediating intracellular survival in macrophages*
- 15.20 Coffee Break

Chairs: Christine Josenhans & Burkhard Tümmler

- 15.50 **Franziska Faber**, Julius-Maximilians-University Würzburg, Germany  
*The metabolic footprint of commensal Clostridia and Erysipelotrichia*
- 16.20 **Felix M. Key**, MPI Infection Biology Berlin, Germany  
*On-person adaptive evolution of Staphylococcus aureus during atopic dermatitis increases disease severity*
- 16.50 **Pradeep Singh**, University of Washington, USA, USA - remote  
*Pathogen Diversification During a Human Infection, Lessons from Cystic Fibrosis*

18.00 Social Event

20.00 Conference Dinner

## Tuesday 05.10.2021

### Get together

08.00 Venue opens, Coffee, Tea

### Session 3: SARS-CoV-2 / Covid-19

Chairs: Thomas Pietschmann & Sabrina Schreiner

- 09.00 **John Ziebuhr**, Justus-Liebig-University Gießen, Germany  
*Coronavirus replicase gene-encoded nucleotidyltransferase activities*
- 09.30 **Volker Thiel**, University of Bern, Switzerland - remote  
*SARS-CoV-2: from gene to function*
- 10.00 **Wendy S. Barclay**, Imperial College, UK - remote  
*Evolution of the spike cleavage site in SARS-CoV-2 enhances airborne transmission*
- 10.30 Coffee break

Chairs: Susanne Eschenburg & Ulrich Kalinke

- 11.00 **Thomas Krey**, University Lübeck, Germany  
*Identification and characterization of neutralizing antibodies targeting the spike protein of  $\beta$ -Coronaviruses*
- 11.20 **Reinhold Förster**, Hannover Medical School, Germany  
*Immune responses against SARS-CoV-2 variants after heterologous and homologous mRNA- and vector-based vaccination*
- 11.40 **Kay Grünewald**, CSSB Hamburg, Germany  
*Structural cell biology reveals a molecular pore spanning the double membrane of the coronavirus replication organelle*
- 12.00 **Luka Cicin-Sain**, HZI Braunschweig, Germany  
*Long-term protection against SARS-CoV2 by a single shot immunization with a herpesvirus based vaccine vector.*
- 12.30 Lunch

### Session 4: Innate Immunity and Intrinsic Response

Chairs: Britta Eiz-Vesper & Abel Viejo-Borbolla

- 13.30 **Susan Weiss**, University of Pennsylvania, USA - remote  
*Coronavirus activation and antagonism of double-stranded RNA induced antiviral pathways*
- 14.00 **Olivia Majer**, MPI Infektionsbiologie Berlin, Germany  
*Compartmentalized signalling control of endosomal TLRs maintains immune tolerance to self-nucleic acids*
- 14.30 **Beate Sodeik**, Hannover Medical School, Germany  
*On host proteins promoting or restricting the function of herpesviral capsids*
- 14.50 **Christine Goffinet**, Charité Berlin, Germany  
*Single Cell RNA-Sequencing Reveals Forced Transcriptional Modulation and Impaired Immunity upon HIV-1 Reactivation in CD4<sup>+</sup> T-Cells*
- 15.10 **Melanie Brinkmann**, TU Braunschweig / **Stephan Halle**, MHH, Germany  
*Herpesviruses meet innate immunity*

15.30 **Christine Josenhans**, Ludwig-Maximilians-University München, Germany  
*Helicobacter pylori cagPAI-dependent immunomodulatory activities on human host cells*

15.50 Coffee break

### Session 5: Predisposing factors for chronic and acute infection: genetics and inflammation

Chairs: Gesine Hansen & Reinhold Schmidt

16.20 **Doris Steinemann**, Hannover Medical School, Germany  
*Inborn errors of immunity – from small to large genomic alterations*

16.40 **Jean-Laurent Casanova**, Rockefeller University, USA - remote  
*Genetic and immunological causes of life-threatening COVID-19*

17.10 **Malte Rühlemann**, Kiel University, Germany  
*Genetic determinants of host-microbiome interactions*

17.40 **Trine Mogensen**, Aarhus University, Denmark  
*Studies of rare inborn errors of immunity in patients with recurrent lymphotropic Mollaret's meningitis reveal an important antiviral role of autophagy in the central nervous system*

### 18.10 Closing Remarks and Farewell

Thomas Schulz