

**Zoonoses 2021 – International Symposium on Zoonoses Research**  
**“From Disease Ecology to SARS-CoV-2”**  
*Preliminary Online Program*

*Date: 13 – 15 October 2021*

*Venue: online*

<b>Wednesday, October 13, 2021</b>	
10:00	Session Opened (time for discussions, Poster viewing)
11:00	<b>Plenary Session</b> Welcome Note: BMG, Martin Groschup
11:30	<b>Keynote I: Sarah Cleaveland (University of Glasgow)</b> Moderation: Fabian Leendertz, Kerstin Fischer
12:15	<b>Posterslam I</b>
13:15	Break (virtual poster viewing)
14:15	<b>Session I:</b>  <b>Parasites</b> <b>Ecology of Zoonotic Infections</b> <b>Antimicrobial Use and Resistance</b> Moderation: Jonas Schmidt-Chanasit/ Birgit Walther
14:15	<b>The mode of action of <i>T. gondii</i> tissue cyst inhibitors</b> Deborah Maus (Robert Koch-Institut, Berlin)
14:24	<b>Pathogen traits determine landscape persistence during climate extremes</b> Christian Imholt (Julius-Kühn Institut, Münster)
14:33	<b>Comprehensive phylogeographic analysis of zoonotic Borna disease virus 1 (BoDV-1) infections in domestic mammals and humans</b> Dennis Rubbenstroth (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)
14:42	<b>Large-scale screening of rodent and insectivore species for exploring the BoDV-1 (Borna disease virus 1) reservoir</b> Viola Haring (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)
14:51	<b>Genomics of climate adaptation in <i>Aedes aegypti</i> sampled along an altitudinal climatic gradient in Nepal</b> Isabell Kramer (Goethe University Frankfurt am Main)
15:00	<b>Tick-borne encephalitis (TBE) virus infection in wild rodents in two natural TBE foci in Bavaria</b> Philipp Johannes Brandenburg (University of Leipzig)
15:09	<b>Lassa virus persistence in its natural reservoir host, <i>Mastomys natalensis</i></b> Chris Hoffmann (Bernhard-Nocht-Institute for Tropical Medicine, Hamburg)
15:18	<b>Disease-Alleviating Effects of Peroral Activated Charcoal Treatment in Acute Murine Campylobacteriosis</b> Stefan Bereswill (Charité - Universitätsmedizin Berlin)
15:27	<b>Environmental factors associated with the occurrence of antimicrobial resistance in wild boars (<i>Sus scrofa</i>)</b> Taras Günther (Freie Universität Berlin)
15:36	<b>Reduced persister cell formation in an ATP-synthase deficient mutant strain of <i>Salmonella Typhimurium</i></b> Sebastian Braetz (Freie Universität Berlin)

15:45	<b>Break</b>
16:00	<b>Plenary Session</b> <b>Keynote II: Chelsea Wood (University of Washington)</b> Moderation: Caroline Herr, Emanuel Heitlinger
16:45	Social room/ open discussion round
17:30	Session closed

<b>Thursday, October 14, 2021</b>					
8:45	Session Opened (time for discussions, Poster viewing)				
9:00	<b>Plenary Session</b> <b>Keynote III: Jose de la Fuente (University of Castilla-La Mancha)</b> Moderation: Ard Nijhof, Nina Militzer				
09:45	<b>Election Internal Advisory Board Part I</b>				
10:15	Break (virtual poster viewing)				
10:45	<b>Posterslam II</b>				
11:45	Break (virtual poster viewing)				
12:45	<b>Session II</b> <b><i>New and Re-Emerging Zoonotic Diseases</i></b> <b><i>Novel Methods, Diagnostics and NGS</i></b> <b><i>Pathogen-Cell Interaction</i></b> <b><i>Vaccines, Innate and Adaptive Immune Response</i></b>				
	<table border="1" style="width:100%"> <tr> <th style="width:50%"><b>Room 1</b></th> <th style="width:50%"><b>Room 2</b></th> </tr> <tr> <td>Moderation: Martin Groschup &amp; Cornelia Silaghi</td> <td>Moderation: Imke Steffen &amp; Stefanie Lüth</td> </tr> </table>	<b>Room 1</b>	<b>Room 2</b>	Moderation: Martin Groschup & Cornelia Silaghi	Moderation: Imke Steffen & Stefanie Lüth
<b>Room 1</b>	<b>Room 2</b>				
Moderation: Martin Groschup & Cornelia Silaghi	Moderation: Imke Steffen & Stefanie Lüth				
12:45	<table border="1" style="width:100%"> <tr> <td style="width:50%"> <b>Experimental infection of shrews with Borna Disease Virus-1</b> Daniel Nobach (Justus-Liebig-University, Gießen)                 </td> <td style="width:50%"> <b>Use of humanized IgE reporter systems for diagnosis of Echinococcus granulosus infection in the human accidental host</b> Franco Harald Falcone (Justus-Liebig-University, Gießen)                 </td> </tr> </table>	<b>Experimental infection of shrews with Borna Disease Virus-1</b> Daniel Nobach (Justus-Liebig-University, Gießen)	<b>Use of humanized IgE reporter systems for diagnosis of Echinococcus granulosus infection in the human accidental host</b> Franco Harald Falcone (Justus-Liebig-University, Gießen)		
<b>Experimental infection of shrews with Borna Disease Virus-1</b> Daniel Nobach (Justus-Liebig-University, Gießen)	<b>Use of humanized IgE reporter systems for diagnosis of Echinococcus granulosus infection in the human accidental host</b> Franco Harald Falcone (Justus-Liebig-University, Gießen)				
12:54	<table border="1" style="width:100%"> <tr> <td style="width:50%"> <b>CD8+ T cell mediated protection against Zika virus induced by recombinant Modified Vaccinia virus Ankara expressing the nonstructural protein NS2B</b> Jan Schwarz (LMU Munich)                 </td> <td style="width:50%"> <b>Development of an innovative detection assay for STEC/EHEC based on the enzymatic activity of Shiga toxin</b> Isabell Ramming (Robert Koch-Institut, Berlin)                 </td> </tr> </table>	<b>CD8+ T cell mediated protection against Zika virus induced by recombinant Modified Vaccinia virus Ankara expressing the nonstructural protein NS2B</b> Jan Schwarz (LMU Munich)	<b>Development of an innovative detection assay for STEC/EHEC based on the enzymatic activity of Shiga toxin</b> Isabell Ramming (Robert Koch-Institut, Berlin)		
<b>CD8+ T cell mediated protection against Zika virus induced by recombinant Modified Vaccinia virus Ankara expressing the nonstructural protein NS2B</b> Jan Schwarz (LMU Munich)	<b>Development of an innovative detection assay for STEC/EHEC based on the enzymatic activity of Shiga toxin</b> Isabell Ramming (Robert Koch-Institut, Berlin)				
13:03	<table border="1" style="width:100%"> <tr> <td style="width:50%"> <b>In vitro evolution and reassortment of influenza A viruses circulating in swine</b> Marcel Edgar Friedrich (WWU Münster)                 </td> <td style="width:50%"> <b>Serological differentiation of WNV and USUV induced antibodies in humans by recombinant E proteins with mutations in conserved fusion loop</b> Beatrice Sarah Berneck (Fraunhofer Institute for Cell Therapy and Immunology IZI, Leipzig)                 </td> </tr> </table>	<b>In vitro evolution and reassortment of influenza A viruses circulating in swine</b> Marcel Edgar Friedrich (WWU Münster)	<b>Serological differentiation of WNV and USUV induced antibodies in humans by recombinant E proteins with mutations in conserved fusion loop</b> Beatrice Sarah Berneck (Fraunhofer Institute for Cell Therapy and Immunology IZI, Leipzig)		
<b>In vitro evolution and reassortment of influenza A viruses circulating in swine</b> Marcel Edgar Friedrich (WWU Münster)	<b>Serological differentiation of WNV and USUV induced antibodies in humans by recombinant E proteins with mutations in conserved fusion loop</b> Beatrice Sarah Berneck (Fraunhofer Institute for Cell Therapy and Immunology IZI, Leipzig)				

13:12	<b>Epidemiological and phylogenetic analysis suggest peridomestic infection of highly lethal Borna disease virus 1 encephalitis, a newly detected zoonosis in Germany</b> Kirsten Pörtner (Robert Koch-Institut, Berlin)	<b>The role of Salmonella Pathogenicity Island 2 (SPI2) in the course of neonatal non-typhoidal Salmonella infections</b> Kira van Vorst (Freie Universität Berlin)
13:21	<b>Seroprevalence, seroconversion and seroreversion of Borrelia burgdorferi-specific antibodies using two population-based studies in children and adolescents in Germany (KiGGS), 2003–2006 and 2014–2017</b> Stefanie Böhm (LGL Bayern)	<b>Garlic Essential Oil as Promising Option for the Treatment of Acute Campylobacteriosis—Results from a Preclinical Placebo-Controlled Intervention Study</b> Markus Heimesaat (Charité – Universitätsmedizin Berlin)
13:30	<b>Assessing the zoonotic potential of SARS-CoV/SARS-CoV-2-related viruses from bats and pangolins</b> Lu Zhang (German Primate Center, Göttingen)	<b>Single-cell analysis of arthritogenic alphavirus-infected human synovial fibroblasts links low abundance of viral RNA to induction of innate immunity and arthralgia-associated gene expression</b> Fabian Pott (Charité - Universitätsmedizin Berlin)
13:39	<b>Autochthonous human West Nile virus cases in Germany 2018 – 2020</b> Christina Frank (Robert Koch-Institut, Berlin)	<b>Characterization of the Nipah virus in well-differentiated porcine bronchial epithelial cells cultured at the air-liquid interface</b> Martin Müller (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)
13:48	<b>Autochthonous West Nile virus infection outbreak in humans during summer 2020, Leipzig, Germany</b> Corinna Pietsch (Leipzig University)	<b>Biological properties of the H9N2 virus ribonucleoprotein complex in A549 and CEF cells.</b> Richard Sugrue (Nanyang Technological University, Singapore)
13:57	<b>Towards the innate immunity phenotype of newly emerging viruses</b> Ulrike Felgenhauer (Justus-Liebig-University, Gießen)	<b>Unraveling the mechanisms of macrophage suppression by RABV</b> Carmen Embregts (Erasmus Medical Centre - Department of Viroscienc, the Netherlands)
14:06	<b>New insights into distribution range of the novel rustrela virus in its putative reservoir, the yellow-necked field mouse (Apodemus flavicollis)</b> Sina Nippert (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)	<b>Chimeric bat-derived influenza A virus - a versatile tool</b> Sebastian Giese (University of Freiburg)
14:15	<b>Risk factors associated with Crimean-Congo haemorrhagic fever virus exposure in livestock and human in northern Tanzania</b> Ellen C. Hughes (University of Glasgow)	<b>Identification and characterization of an immuno-active factor belonging to the arginine deiminase pathway of Enterococcus spp. involved in immunomodulatory effects of probiotic Enterococcus faecium SF68</b> Fereshteh Ghazisaeeedi (Freie Universität Berlin)

14:24	<b>Pathogen screening of field-collected mosquitoes (Diptera: Culicidae), East Germany, summer 2019 to winter 2020/202</b> Katharina Köchling (Friedrich-Loeffler-Institut)	<b>Strategies to overcome restriction factors for rescue of infectious rotavirus reassortants carrying field strain antigens using reverse genetics</b> Alexander Falkenhagen (German Federal Institute for Risk Assessment, Berlin)
14:45	Break	
15:00	<b>Plenary Session</b> <b>Keynote IV: Florian Krammer (Icahn School of Medicine at Mount Sinai)</b> Moderation: Linda Brunotte & Christin Müller	
15:45	<b>Election Internal Advisory Board Part II</b>	
16:45	Social room/ open discussion round	
17:30	Session closed	

<b>Friday, October 15, 2021</b>		
09:00	Session Opened (time for discussions, Poster viewing)	
09:30	<b>Plenary Session</b> <b>Keynote V: Lothar Wieler (Robert Koch-Institut)</b> Moderation: Robin Köck & Natalie Effelsberg	
10:15	<b>Session III</b> <b>Covid-19/ SARS-CoV-2</b> <b>Risk Assessment, Epidemiology and Modelling</b> <b>Bioinformatics, Data assessment</b> <b>Pathogenesis and Modelling</b> <b>Public Health</b>	
	<b>Room 1</b> Moderation: Christian Drosten	<b>Room 2</b> Moderation: tba
10:15	<b>The MEK-inhibitor ATR-002 efficiently blocks SARS-CoV2 propagation and alleviates pro-inflammatory cytokine responses</b> André Schreiber (WWU Münster)	<b>Tick borne encephalitis in Germany: Acute clinical manifestations and health care utilisation in cases notified 2018–2020</b> Teresa M. Nygren (Robert Koch-Institut, Berlin)
10:24	<b>Defects in interferon signaling cause increased and prolonged SARS-CoV-2 replication in adult and enhanced disease progression in aged mice</b> Daniel Schnepf (Universitätsklinikum Freiburg)	<b>A new risk assessment model for Campylobacter from chickens to humans</b> Racem Ben Romdhane (Freie Universität Berlin)
10:33	<b>Reduced ACE2 dependency of B.1.1.7 hints towards SARS-CoV-2 lineage-specific cofactor requirement</b> Daniela Niemeyer (Charité - Universitätsmedizin Berlin)	<b>Validation and Optimization of a Predictive Model for Human Puumala Orthohantavirus Infections in Germany</b> Orestis Kazasidis (Julius-Kühn-Institut, Münster)
10:42	<b>Light Sheet Microscopy-Assisted 3D Analysis of SARS-CoV-2 Infection in the Respiratory Tract of the Ferret Model</b>	<b>Diagnosis and Pathogenesis of Nairobi Sheep Disease Orthonairovirus in Sheep and Cattle</b>

	Luca M. Zaec (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)	Julia Hartlaub (Friedrich-Loeffler-Institut, Greifswald – Insel Riems)
10:51	<b>Combinatory Treatment with the antiviral remdesivir and the endolysosomal host-SARS-CoV-2 interface by clinically licensed functional inhibitors of acid sphingomyelinase (FIASMA) including the antidepressant fluoxetine</b> Sebastian Schloer (WWU Münster)	<b>Using organoid-derived monolayers of various species origin to study Giardia duodenalis infection and zoonotic potential</b> David Holthaus & Estefania Delgado-Betancourt (Robert Koch-Institut, Berlin)
11:00	<b>Drug synergism of p38 inhibitors with Remdesivir as therapeutic strategy for the treatment of COVID-19</b> Aileen Faist (WWU Münster)	<b>Identification and characterization of a tryptophan transport system in Streptococcus suis</b> Muriel Dresen (Stiftung Tierärztliche Hochschule Hannover)
11:09	<b>Impaired degradation of neutrophil extracellular traps: a possible severity-factor of COVID-19 patients</b> Nicole de Buhr (Stiftung Tierärztliche Hochschule Hannover)	<b>West Nile Virus - Challenges for the German Public Health System</b> Birte Pantenburg (Gesundheitsamt Leipzig)
11:18	<b>Exposure of PBMCs to SARS-CoV-2, but not SARS-CoV, induces cell-intrinsic type I interferon responses in and differentiation of monocytes</b> Julia Kazmierski (Charité - Universitätsmedizin Berlin)	<b>Vibrio parahaemolyticus from imported seafood in Germany: Antimicrobial resistances, relationship and genetic basis of multidrug-resistant isolates</b> Jens Hammerl (German Federal Institute for Risk Assessment, Berlin)
11:27	<b>Exploring the bromodomain and extra-terminal inhibitors (iBETs) as potential inhibitors of SARS-CoV-2 infection</b> Baxolele Mhleku (Charité - Universitätsmedizin Berlin)	<b>Autochthonous West Nile virus infection in Germany: Increasing numbers and a rare encephalitis case in a kidney transplant recipient</b> Julia Schneider (Charité - Universitätsmedizin Berlin)
11:36	<b>Impact of designed or naturally occurring mutations at the S1/S2 border of the SARS-CoV-2 spike protein on spike protein expression and function</b> Anzhalka Sidarovich (German Primate Center, Göttingen)	<b>A new Public Health challenge: Aedes albopictus and arboviroses in Baden-Württemberg, Germany</b> Tessa Orgassa (Baden-Wuerttemberg State Health Office, Department for Health Protection and Epidemiology)
11:45	<b>Fighting zoonotic diseases with recombinant antibodies</b> Michael Hust (Technische Universität Braunschweig)	<b>The fecal resistome of horses receiving perioperative antibiotic prophylaxis revealed antimicrobial resistance gene accumulation</b> Silver A. Wolf (Robert Koch-Institut, Berlin)
11:54	<b>Inactivation of SARS-CoV-2 in laboratory animal tissue with formalin and glutaraldehyde for transfer to BSL-1 laboratories</b> Veronika Pilchova (Stiftung Tierärztliche Hochschule Hannover)	
12:03	<b>Mutations in the spike protein of emerging SARS-CoV-2 variants can increase host cell entry and antibody evasion</b> Prerna Arora (German Primate Center, Göttingen)	
12:15	Break	

12:30	<b>Poster Prize</b>
12:45	<b>Closing remarks</b> (Christian Drosten)
13:00	Official End of Meeting
13:30	Session closed