

## Workshop on Arthropod-Borne Diseases

Date 16<sup>th</sup> - 17<sup>th</sup> November 2017

Conference room of the Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health, Naumburger Str. 96a, 07743 Jena, Germany

### Day 1

**Registration:** 10:00 - 11:00

### Opening:

11:00 - 11:30 Klaus Henning, Cornelia Silaghi, Gustavo R. Makert dos Santos

### Keynote

11:30 - 12:15 Cornelia Silaghi, Friedrich-Loeffler-Institut, Institute of Infectology (IMED), Greifswald - Insel Riems:  
**AMSAR: Arbovirus Monitoring, Surveillance and Research - capacity building on mosquitoes and biting midges based on the 'training the trainers' concept**  
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### Lunch

### Epidemiology

13:30 - 14:00 Thilo Fuchs, Friedrich-Loeffler-Institut, Institute of Molecular Pathogenesis (IMP), Jena, Germany:  
**Gene gain and loss in the evolution of pathogenic yersiniae**

14:00 - 14:30 Victor Carvalho, Karlsruher Institut für Technologie (KIT), Campus Süd, Zoologisches Institut, Abt. Ökologie/Parasitologie, Karlsruhe, Germany:  
**Pathogen load in ticks from recreational areas in Karlsruhe**

14:30 - 15:00 Lidia Chitimia-Dobler<sup>1</sup>, Bruno Cancian de Araujo<sup>2</sup>, Bernhard Ruthensteiner<sup>2</sup>, Timo Pfeffer<sup>3</sup>, Jason A. Dunlop<sup>4</sup>, <sup>1</sup>Bundeswehr Institute of Microbiology, Neuherbergstrasse 11, D-80937 Munich, Germany; German Center of Infection Research (DZIF), Partner Munich, <sup>2</sup>Zoologische Staatssammlung München, Münchhausenstrasse 21, D-81247, Munich, Germany, <sup>3</sup>Keyence Deutschland GmbH, Siemensstraße 1, 63263 Neu-Isenburg, Germany, <sup>4</sup>Museum für Naturkunde, Leibniz Institute for Evolution and Biodiversity Science, Invalidenstraße 43, D-10115 Berlin, Germany:  
**Amblyomma birmittum a new species of hard tick in Burmese amber**

### Coffee break with Poster session

### Pest control

15:20 - 15:50 Gustavo R. Makert<sup>1,2</sup>, Sebastian Ulbert<sup>2</sup>, <sup>1</sup>Clinic for Birds and Reptiles, Faculty of Veterinary Medicine, University of Leipzig, <sup>2</sup>Department of Immunology, Vaccine Technologies Unit, Fraunhofer Institute for Cell Therapy and Immunology IZI, Leipzig, Germany:  
**Development of a vaccine for the control of the red mite: Fipronil scandal confirmed that *Dermanyssus gallinae* still remains a challenge for the poultry industry**

15:50 - 16:20 Eva Scholl, SchädlingsBiologie Scholl, Nürnberg, Germany

### Coffee break

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## Viral diseases/others

16:40 - 17:10

Stefan Brockmann, Rainer Oehme, Thomas Buckenmaier, Martin Beer, Anna Jeffery-Smith, Monika Spannenkrebs, Susanne Haag-Milz, Christiane Wagner-Wiening, Christiane Schlegel, Jana Fritz, Sabine Zange, Malena Bestehorn, Alexander Lindau, Donata Hoffmann, Simon Tiberi, Ute Mackenstedt (Institutes: please see abstract book):

Outbreak of Tick-Borne Encephalitis transmitted by unpasteurized goat's milk and cheese in Germany, June 2016

17:10 - 17:30

Grunder JM., Tischhauser W., ZHAW Zürcher Hochschule für Angewandte Wissenschaften, Departement Life Sciences und Facility Management, Institut für Umwelt und Natürliche Ressourcen, Zurich, Switzerland:

Swiss Riskmap for Tickbites Based on the ZHAW-Application «TICK PREVENTION»

19:30 - Meeting in a restaurant

## Day 2

### Rickettsiae/others

09:30 - 10:00

Ana Santos, Instituto Nacional de Saúde Doutor Ricardo Jorge, Águas de Moura, Portugal:

Portuguese data regarding the *Rickettsiales* and *Coxiella* detected in ticks and the associated human cases

10:00 - 10:30

Mangesh Bhide, Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Košice, Slovakia:

Vector borne pathogens and host complement system: A tangled tale

10:30 - 10:50

Klaus Henning<sup>1</sup>, Katja Mertens<sup>1</sup>, Gustavo R. Makert<sup>2</sup>, <sup>1</sup>Friedrich-Loeffler-Institut, Jena, Germany, <sup>2</sup>Clinic for Birds and Reptiles, Faculty of Veterinary Medicine, University of Leipzig:

Project Q-GAPS - The meaning of ticks for the transmission of *Coxiella burnetii*

Coffee break with Poster session

### Borreliosis

11:20 - 11:40

Lubos Comor, Lenka Potocnakova, Irene Jimenez-Munguia, Katarina Bhide, Evelina Kanova, Ivana Sirochmanova, Zuzana Tkacova, Patricia Mertinkova, Mangesh Bhide, Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Kosice, Slovakia:

In vitro production of single-domain antibodies against H-OSPA of *B. bavariensis*

11:40 - 12:00

Lenka Potočňáková<sup>1</sup>, Ľuboš Čomor<sup>1</sup>, Patrícia Mertinková<sup>1</sup>, Katarína Bhide<sup>1</sup>, Irene Jiménez-Munguía<sup>1</sup>, Evelína Káňová<sup>1</sup>, Zuzana Tkáčová<sup>1</sup>, Ivana Širochmanová<sup>1</sup>, Mangesh Bhide<sup>1,2</sup>, <sup>1</sup>Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Košice, Slovakia, <sup>2</sup>Institute of Neuroimmunology, Slovak Academy of Science, Bratislava, Slovakia:

Novel peptide mimotopes selected by phage display for diagnosis of Lyme Disease

12:00 - 12:20

Discussion

Lunch

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Poster

**Zuzana Tkáčová<sup>1</sup>, Evelína Káňová<sup>1</sup>, Irene Jiménez-Munguía<sup>1</sup>, Petra Majerová<sup>2</sup>, Andrej Kováč<sup>2</sup>, Katarína Bhide<sup>1</sup>, Ivana Širochmanová<sup>1</sup>, Lenka Potočňáková<sup>1</sup>, Patrícia Mertinková<sup>1</sup>, Ľuboš Čomor<sup>1</sup>, Mangesh Bhide<sup>1,2</sup>**, <sup>1</sup>Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Kosice, Slovakia, <sup>2</sup>Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia:

**Identification of potential ligands of *Borrelia garinii* binding to receptors on human brain microvascular endothelial cells (BMECs)**

**Patrícia Mertinková<sup>1</sup>, Katarína Bhide<sup>1</sup>, Zuzana Tkáčová<sup>1</sup>, Petra Majerová<sup>2</sup>, Andrej Kováč<sup>2</sup>, Lenka Potočňáková<sup>1</sup>, Irene Jiménez-Munguía<sup>1</sup>, Ľuboš Čomor<sup>1</sup>, Ivana Širochmanová<sup>1</sup>, Lucia Borzséková Pulzová<sup>1</sup>, Mangesh Bhide<sup>1,2</sup>**, <sup>1</sup>Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Kosice, Slovakia, <sup>2</sup>Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia:

**Assessment of gene expression in astrocytes after stimulation by HUVEC binding site domain of borrelial OspA protein**

**Katarína Bhide<sup>1</sup>, Zuzana Tkáčová<sup>1</sup>, Petra Majerová<sup>2</sup>, Andrej Kováč<sup>2</sup>, Evelína Káňová<sup>1</sup>, Irene Jiménez-Munguía<sup>1</sup>, Ivana Širochmanová<sup>1</sup>, Ľuboš Čomor<sup>1</sup>, Patrícia Mertinková, Mangesh Bhide<sup>1,2</sup>**, <sup>1</sup>Laboratory of Biomedical Microbiology and Immunology, University of Veterinary Medicine and Pharmacy in Košice, Slovakia, <sup>2</sup>Institute of Neuroimmunology, Slovak Academy of Sciences, Bratislava, Slovakia:

**Effect of recombinant domain III of WNV on neurovascular unit cells**

**Babett Oesterreich**, Euroimmun AG, Infectious Serology ELISA Department, Lübeck, Germany

**Suman Bhowmick Jr.**, Friedrich-Loeffler-Institut, Bundesforschungsinstitut für Tiergesundheit, Greifswald - Insel Riems, Germany

**Krzysztof Niemczuk**, NVRI Pulawy, Poland, Department Cattle and Sheep Diseases, Puławy, Poland

**Monika Szymańska-Czerwińska**, NVRI Pulawy, Poland, Department Cattle and Sheep Diseases, Puławy, Poland

**Marco Drehmann**, Universität Hohenheim, Department 220B Parasitologie, Ostfildern, Germany