

## DRAFT AGENDA

### 19.09.2022

- 09:30 *Georg von Samson-Himmelstjerna, Marcus Fulde, Uwe Rösler:*  
Welcome
- 09:45 *Lothar H. Wieler:*  
Introduction: Anti-infective resistance – THE emerging global One Health threat

#### Session I:

#### "Resistance against anti-infectives: a global threat"

*Chair: Lothar H. Wieler*

- 10:00 *Engeline van Duijkeren:*  
Antimicrobial resistance in a One Health context.
- 10:30 *Petra Gastmeier:*  
Where does antimicrobial resistance in human and veterinary medicine meet?
- 11:00 *Georg von Samson:*  
Anthelmintic resistance and its relevance in veterinary and human medicine
- 11:20 *Christian Drosten:*  
Phenotyping of emerging coronaviruses: MERS and SARS-CoV-2.
- 12:00 Lunch

#### Session II:

#### "Molecular Determinants of anti-infective resistance, its evolution and transmission"

*Chair: Jens Rolff*

- 13:00 *Eileen Devaney:*  
The genetics of ivermectin resistance in parasitic nematodes
- 13:30 *Andrea T. Feßler:*  
Defining antimicrobial resistance: What are the current standards?
- 13:50 *Stefan Schwarz:*  
Transfer, co-selection and persistence of antimicrobial resistance genes among bacteria

14:10	<i>Marcus Fulde:</i> The other side of the coin: bacterial persistence and hetero-resistance
14:30	<i>Charlotte Rafaluk-Mohr:</i> Resistance evolution in host-parasite interactions
14:50	<i>Jaqueline Hellinga:</i> Modelling associated experimental evolution of anthelmintic resistance
15:10	Coffee

**Session III:****“Immunological implications of anti-infective resistance”***Chair: Benedikt Kaufer*

15:40	<i>Volker Gerdts:</i> Vaccination as tool to mitigate antimicrobial resistance development
16:10	<i>Friederike Ebner:</i> Ascarid immune response in swine as model for human roundworm vaccine development
16:30	<i>Susanne Hartmann:</i> Regulation of gut microbes by intestinal worms and benefit from microbiota-driven immune modulation
16:50	<i>Jakob Trimpert:</i> A live attenuated vaccine confers superior immunity to SARS-CoV-2 variants
17:10	Round table discussion I
17:40	End of Session/ Wrap-up of first day
19:00	Dinner

**20.09.2022****Session IV:****“Alternative approaches to prevent evolution of anti-infective resistance”***Chair: Andrea T. Feßler*

09:00	<i>Peter Seeberger:</i> Glycoconjugate vaccines against resistant pathogens in humans and animals
09:30	<i>Ard Nijhof:</i> Acaricide resistance in ticks and alternative approaches for tick control
09:50	<i>Benedikt Kaufer:</i> Marek's disease virus vaccines and the evolution towards a greater virulence
10:10	<i>Roderich Süßmuth:</i> Structure-informed analysis of antimicrobial resistance mechanism
10:40	<i>Uwe Rösler:</i> Antimicrobial resistances at the animal-human-environment interface
11:00	Coffee

**Session V:****“Anti-infective resistance and its relevance for Veterinary Public Health”***Chair: Petra Gastmeier*

11:20	<i>Martin Wagner:</i> Mining for bioactive molecules by controlled microbial interactions
11:50	<i>Thomas Alter:</i> Antimicrobial resistance and the food safety perspective – a global challenge
12:10	<i>Séamus Fanning:</i> Evolutionary experiments on the emergence of biocide resistance in <i>Listeria monocytogenes</i>
12:40	<i>Annemarie Käsbohrer:</i> Modelling antimicrobial resistance in the food chain
13:00	Lunch

**Session VI:****“Environmental, clinical and preventative aspects of anti-infective resistance”***Chair: Uwe Rösler*

- 14:00 *Barbara Kohn:*  
Clinical relevance of antimicrobial resistance in companion animal medicine
- 14:20 *Birgit Walther:*  
Preventing the spread of multidrug resistant bacteria in veterinary clinics:  
from data to guidelines
- 14:40 *Heike Kaspar:*  
Less antibiotic use, less resistance? Current resistance data from the livestock sector
- 15:00 *Christa Thöne-Reineke:*  
Ethical justification of animal experimentation in the context of antiinfective resistance
- 15:20 *Jürgen Zentek:*  
Nutritional tools to prevent digestive disorders and antimicrobial resistance
- 15:40 *Jens Rolff:*  
Predicting drug resistance evolution: insights from antimicrobial peptides and antibiotics
- 16:00 *Alex Greenwood:*  
Water as vector for pathogens and source of antimicrobial resistance
- 16:20 Round table discussion II
- 17:00 Closing remarks and departure