

SCIENTIFIC SYMPOSIUM



At the Veterinary Centre for Resistance Research (Tiermedizinisches Zentrum für Resistenzforschung, TZR, <https://www.vetmed.fu-berlin.de/einrichtungen/other/tzr/index.html>) at the Department of Veterinary Medicine of the Freie Universität Berlin a symposium on „Anti-infective resistances in animal pathogens: Causes, significance and approaches to solutions“ is planned for 19/20.09.2022. The TZR is a supra-regionally and internationally acting research centre (a research building according to Art. 91b Grundgesetz/German Basic Law), where basic research in infectious medicine, hygiene and clinical specialities will work together on questions of resistance research. The common goal is to limit the increasing accumulation of the resistome (the resistance properties of all infectious agents; bacteria, fungi, viruses and parasites) in veterinary medicine. At the same time, the TZR is addressing the common overarching problem of resistance in human and veterinary medicine, also in the sense of the „One Health“ approach. Within the framework of the planned scientific TZR opening symposium current questions of the increasing resistance problems in veterinary and human medicine will be presented and discussed interdisciplinary by high-ranking national and international speakers as well as speakers from the working groups at the TZR and other research institutions. The aim of the symposium is to present the latest findings on the problem of resistance to the problem of resistance to a broad professional audience and to show new possible approaches to solving the problem.

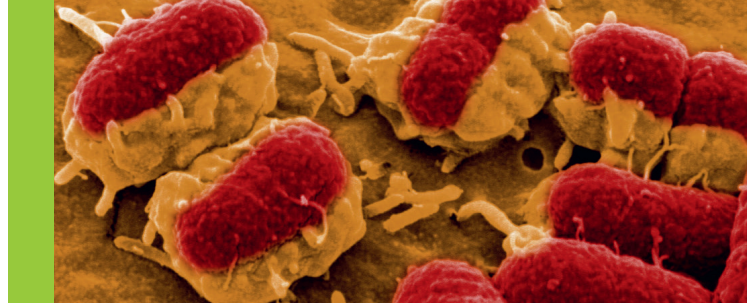


Foto: Prof. Dr. Manfred Rohde, HZI

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ANTI-INFEKTIVE RESISTANCES IN ANIMAL PATHOGENS: CAUSES, SIGNIFICANCE AND APPROACHES TO SOLUTIONS



direkt zur Anmeldung
directly to the registration



**Veranstalter & Online-Anmeldung
Organizer & Online-Registration**
DVG Service GmbH
An der Alten Post 2, 35390 Gießen
E-Mail: info@dvf.de
Web: www.dvf.de

Support:
Fachgruppen des Arbeitsgebietes
„Infektionsmedizin und Hygiene“ der DVG



Fachbereich Veterinärmedizin
der Freien Universität Berlin



**Veranstaltungsort
Venue**
Department of Veterinary Medicine
Freie Universität Berlin
Lecture hall of the equine clinic
Oertzenweg 19 B, 14163 Berlin

mit freundlicher
Unterstützung:



DEPARTMENT OF VETERINARY MEDICINE
FREIE UNIVERSITÄT BERLIN

Lecture hall of the equine clinic
Oertzenweg 19 B | 14163 Berlin

SEPTEMBER 19 - 20, 2022

ANTI-INFECTIVE RESISTANCES IN ANIMAL PATHOGENS: CAUSES, SIGNIFICANCE AND APPROACHES TO SOLUTIONS

19.09.2022

09:30 *G. von Samson-Himmelstjerna, M. Fulde, U. Rösler:* Welcome

09:45 *L. 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 *E. van Duijkeren:* Antimicrobial resistance in a One Health context

10:30 *P. Gastmeier:* Where does antimicrobial resistance in human and veterinary medicine meet?

11:00 *G. von Samson:* Anthelmintic resistance and its relevance in veterinary and human medicine

11:20 *C. Drosten:* Phenotyping of emerging coronaviruses: MERS and SARS-CoV-2

12:00 Lunch

Session II – Molecular Determinants of anti-infective resistance, its evolution & transmission

Chair: Jens Rolf

13:00 *E. Devaney:* The genetics of ivermectin resistance in parasitic nematodes

13:30 *A. T. Feßler:* Defining antimicrobial resistance: What are the current standards?

13:50 *S. Schwarz:* Transfer, co-selection and persistence of antimicrobial resistance genes among bacteria

14:10 *M. Fulde:* The other side of the coin: bacterial persistence and hetero-resistance

14:30 *C. Rafaluk-Mohr:* Resistance evolution in host-parasite interactions

14:50 *J. Hellinga:* Modelling associated experimental evolution of anthelmintic resistance

15:10 Coffee

Session III – Immunological implications of anti-infective resistance

Chair: Benedikt Kaufer

15:40 *V. Gerdt:* Vaccination as tool to mitigate antimicrobial resistance development

16:10 *F. Ebner:* Ascarid immune response in swine as model for human roundworm vaccine development

16:30 *S. Hartmann:* Regulation of gut microbes by intestinal worms and benefit from microbiota-driven immune modulation

16:50 *J. Trimpert:* 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 *P. Seeberger:* Glycoconjugate vaccines against resistant pathogens in humans and animals

09:30 *A. Nijhof:* Acaricide resistance in ticks and alternative approaches for tick control

09:50 *B. Kaufer:* Marek's disease virus vaccines and the evolution towards a greater virulence

10:10 *R. Süßmuth:* Structure-informed analysis of antimicrobial resistance mechanism

10:40 *U. Rösler:* 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 *M. Wagner:* Mining for bioactive molecules by controlled microbial interactions

11:50 *T. Alter:* Antimicrobial resistance and the food safety perspective – a global challenge

12:10 *S. Fanning:* Evolutionary experiments on the emergence of biocide resistance in *Listeria monocytogenes*

12:40 *A. Käsbohrer:* 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 *B. Kohn:* Clinical relevance of antimicrobial resistance in companion animal medicine

14:20 *B. Walther:* Preventing the spread of multidrug resistant bacteria in veterinary clinics: from data to guidelines

14:40 *H. Kaspar:* Less antibiotic use, less resistance? Current resistance data from the livestock sector

15:00 *C. Thöne-Reineke:* Ethical justification of animal experimentation in the context of anti-infective resistance

15:20 *J. Zentek:* Nutritional tools to prevent digestive disorders and antimicrobial resistance

15:40 *J. Rolf:* Predicting drug resistance evolution: insights from antimicrobial peptides and antibiotics

16:00 *A. Greenwood:* Water as vector for pathogens and source of antimicrobial resistance

16:20 Round table discussion II

17:00 Closing remarks and departure

