

National Symposium on Zoonoses Research 2013

September 19-20 2013 | Berlin

Programme

(updated: September 17 2013)

September 19 2013

09.00 – 16.30 **Registration**

10.30 – 12.30 Plenary Session
Room Ballsaal

10.30 – 11.00 **Opening Ceremony**

11.00 – 11.45 **Time to develop antiviral strategies against rabies**
Noël Tordo, Paris, France

11.45 – 12.30 **Reasons to suspect that colon cancer may represent a zoonosis**
Harald zur Hausen, Heidelberg, Germany

12.30 – 14.00 **Lunch Break**

14.00 – 15.00 Session "Epidemiology, modelling and risk assessment I"
Room Ballsaal - Chair: Eberhard Straube

Subtype specific risk factors for sporadic human salmonellosis - from stable to table?

D. Ziehm, S. Rettenbacher-Riefler, J. Dreesman, W. Rabsch, A. Fruth, M. Pulz, L. Kreienbrock, A. Campe

ESBL-producing *E. coli* in farm animals – a cross-sectional study in Germany

J. Hering, K. Hille, C. Frömke, A. Friese, C. von Münchhausen, U. Rösler, L. Kreienbrock

Cowpoxvirus infections in Wistar Rats – improving the risk assessment for humans

A. Puppe, A. Nitsche, A. Kurth

Serological evidence of Human Hantavirus infections in West Africa

P. T. Witkowski, B. Klempa, B. Auste, N. L. Ithete, L. Koivogui, E. Fichet-Calvet, S. Weiss, E. Couacy-Hymann, C. G. Akoua-Koffi, J. F. Drexler, C. Drosten, W. Preiser, F. Leendertz, D. H. Krüger

14.00 – 15.00 Session "Innate and adaptive immune response"
Room Zehlendorf - Chair: Konrad Sachse

Intracellular processing of *Chlamydia* by antigen presenting cells

D. Kägebein, D. Fiegl, M. Gutjahr, M. Sens, M. R. Knittler

Inhibition of Interferon- β induction by Tribec Virus

M. Spiegel, M. Besse, C. Berndt, V. Meyer-Pannwitt, F. Martinpott, N. E. Brandt, M. Dilcher, M. Weidmann, S. Böhlken-Fascher, G. Dobler, F. T. Hufert

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Differential inhibition of filoviruses by interferon induced transmembrane proteins

F. Wrensch, C. B. Karsten, K. Gnirß, F. Kaup, M. Winkler, S. Pöhlmann

Analysis of *Toxoplasma gondii*-specific IgG-profiles in patients with different forms of toxoplasmosis

P. Maksimov, U. Pleyer, M. Mänz, J. Zerweck, M. Schutkowski, U. Reimer, A. Maksimov, U. Groß, W. Däubener, F. J. Conraths, G. Schares

14.00 – 15.00 **Session "Pathogen-cell interaction I"** **Room Steglitz - Chair: Ralph Goethe**

Structure of a bimodular botulinum neurotoxin complex provides insights into its oral toxicity

K. Lee, S. Gu, L. Jin, T. Tuc Nghi Le, L. W. Cheng, J. Strotmeier, A. M. Krueel, G. Yao, K. Perry, A. Rummel, R. Jin

Ultramorphological features of *Chlamydia abortus*

M. Wilkat, E. Herdoiza, V. Forsbach-Birk, P. Walther, A. Essig

High-throughput RNA sequencing uncovers cell type-specific interactions between *Toxoplasma gondii* and skeletal muscle cells

I. J. Swierzy, U. Händel, A. Kaefer, M. Scharfe, M. Jarek, D. Schlüter, C. G. K. Lüder

Indoleamine-2,3-dioxygenase as antiparasitic effector mechanism *in vivo*

S. Pudelko, Stuhlsatz, M. Leineweber, J. Nau, C. Woite, V. Antoni, W. Däubener

15.00 - 16.00 **Poster Exhibition**

16.00 – 17.30 **Panel Discussion (Topic Dual Use)** **Room Ballsaal**

17.30 – 19.30 **General Assembly of the National Research Platform for Zoonoses (in German)** **Room Ballsaal**

- Annual report
- Election of the internal advisory board

19.30 **Get-Together**

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08.00 – 09.30 **Young Scientists Breakfast**

09.30 – 10.30 **Session "Novel methods and diagnostics"**

Room Zehlendorf - Chair: Lothar Wieler

Vaccination of NMRI mice against *Bacillus anthracis* using DNA-vectors and novel adjuvants as an approach to a new acellular vaccine-combination

S. M. Koehler, T. Huwar, L. Baillie, W. Beyer

Experimental hepatic co-culture model for infection studies with *Francisella tularensis*

K. Rennert, M. Wallert, S. Lorkowsky, P. Otto, H. Tomaso, A. Mosig

Viral metagenomics: unbiased detection of emerging viruses in tissue

C. Kohl, W. Dabrowski, A. Brinkmann, A. Radonic, A. Nitsche, A. Kurth

Recombinant immunofluorescence assay for differential diagnosis of Middle East Respiratory Syndrome (MERS) coronavirus infections

B. Meyer, D. Muth, T. Binger, U. Buchholz, A. Nitsche, A. Sanewski, U. Dittmer, N. Wevering, T. Bauer-Balci, C. Drosten, M. A. Müller

09.30 – 10.30 **Session "Innate and adaptive immune response II"**

Room Ballsaal - Chair: Martin Groschup

Recombinant vaccinia MVA expressing E and prM/M proteins of West Nile Virus for vaccine generation

M. Kaserer, A. Volz, S. Jany, S. Lim, B. Martina, G. Sutter

Early protection against HPAIV H5N1 by single shot application of a live-attenuated influenza variant to mice, chickens and ferrets

S. Röhrs, D. Kalthoff, M. Beer

Modelling insect innate immunity towards Rift Valley Fever Virus: a fly use for flies

S. Jansen, K. Huber, Stefanie Becker

Low dose immunization with modified Vaccinia Virus Ankara induces rapid in vivo expansion of protective CD8+ T cells

A. Volz, S. Jany, M. H. Lehmann, U. Kalinke, G. Sutter

09.30 – 10.30 **Session "Pathogen-cell interaction II"**

Room Steglitz - Chair: Thomas Müller

Identification of cowpox virus factors involved in hemorrhagic lesions on infected chorioallantoic membranes (CAMs) of embryonated chicken eggs

Z. Xu, D. Zikos, A. Tamosiunaite, R. Klopffleisch, K Osterrieder, B. K. Tischer

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Host cell factors promoting Ebola Virus entry into human macrophages

F. Dahlmann, N. Biedenkopf, S. Becker, A. Krüger, H. Hofmann-Winkler,
S. Pöhlmann

Affinity-purification of RABV polymerase complex and identification of cellular binding partners

A. Bauer, A. Karger, A.-K. Henning, S. Finke

Interaction between *Anaplasma phagocytophilum*-infected endothelial cells and human neutrophils under flow conditions

J. Wang, V. Dyachenko, R. K. Straubinger

10.30 – 11.30 Poster Exhibition

11.30 – 13.00 **Session "Pathogen-cell interaction III"**
Room Steglitz - Chair: Martin Beer

The Neuraminidase beside the hemagglutinin is the main virulence determinant of H5N1 high-pathogenic avian influenza viruses in chicken

O. Stech, E.-S. Abdelwhab, J. Veits, J. Bogs, U. Wessels, T. C. Mettenleiter,
J. Stech

ISG15 and its new role in the restriction of Influenza A Virus host range

J. Knepper, V. K. Weinheimer, T. Wolff

Type I interferon mediated signalling is inhibited upon Influenza A Virus and *Staphylococcus aureus* co-infection

K. Warnking, C. Klemm, B. Löffler, S. Niemann, G. Peters, S. Ludwig, C. Ehrhardt

Functional domains within the spike protein of a SARS-like coronavirus: dissecting analysis by generation of chimeric proteins.

M. Hoffmann, T. Gützkow, C. Losemann, M. A. Müller, J. F. Drexler, K.-H. Esser,
C. Drosten, G. Herrler

Analysis of the proteolytic activation of the spike-protein of the MERS-coronavirus

S. Gierer, A. Schendzielorz, A. Heurich, S. Pöhlmann

ANP32B is a Nuclear Target of Hendra Virus matrix protein

S. Neumann, A. Karger, A. Henning, L. Kwasnitschka, A. Balkema-Buschmann,
G. Keil, S. Finke

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11.30 – 13.00 **Session "Epidemiology, modelling and risk assessment II"**

Room Ballsaal - Chair: Sandra Eßbauer

Next generation sequencing of a longitudinal tick-borne encephalitis virus study in a micro-focus in Central Europe

S. Frey, D. Höper, M. Beer, G. Dobler, S. Essbauer

Drug susceptibility surveillance of swine influenza A viruses circulating in Germany – results of a six-year study

N. Seidel, K. Bauer, J. Lange, R. Dürrwald, R. Zell, A. Sauerbrei, M. Schmidtke

Bicoloured White-Toothed Shrew (*C. leucodon*) as a reservoir host species for Borna Disease Virus in Bavaria

M. Bourg, S. Herzog, J. A. Encarnação, D. Nobach, M. Eickmann, C. Herden

Veterinary consumption of antibiotics in Germany – representative monitoring

L. van Rennings, C. von Münchhausen, W. Honscha, H. Otilie, L. Kreienbrock

Inventory of epidemiological data sources for a joint analysis of zoonotic disease information in Germany

A. Wendt, L. Kreienbrock, A. Campe

First nationwide surveillance of *Culex pipiens* complex and *Culex torrentium* mosquitoes demonstrated the presence of *Culex pipiens* biotype *pipiens* / *molestus* hybrids in Germany

M. Rudolf, C. Czajka, J. Börstler, C. Melaun, H. Jöst, H. von Thien, M. Badusche, J. Schmidt-Chanasit, A. Krüger, E. Tannich, S. Becker

11.30 – 13.00 **Session "New and re-emerging zoonoses"**

Room Zehlendorf - Chair: Martin Pfeffer

Emerging infectious diseases: impact of anthropogenic change in land use on prevalence of blood parasites in neotropical bats

V. M. Cottontail, E. K. V. Kalko, M. Tschapka

Evidence for novel hepaciviruses in rodents

J. F. Drexler, V. M. Corman, M. A. Müller, A. N. Lukashev, A. Gmyl, B. Coutard, A. Adam, D. Ritz, L. M. Leijten, D. van Riel, R. Kallies, S. M. Klose, F. Gloza-Rausch, T. Binger, A. Annan, Y. Adu-Sarkodie, S. Oppong, M. Bourgarel, D. Rupp, B. Hoffmann, M. Schlegel, B. M. Kümmerer, D. H. Krüger, J. Schmidt-Chanasit, A. Aguilar Setién, V. M. Cottontail, T. Hemachudha, S. Wacharapluesadee, K. Osterrieder, R. Bartenschlager, S. Matthee, M. Beer, T. Kuiken, C. Reusken, E. M. Leroy, R. G. Ulrich, C. Drosten

Discovery of a novel cluster of mosquito-associated bunyaviruses in sister relationship to the genus *Orthobunyavirus*

M. Marklewitz, F. Zirkel, H. Heidemann, I. B. Rwego, A. Kurth, R. Kallies, T. Briese, C. Drosten, T. R. Gillespie, S. Junglen

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Emerging human Middle East Respiratory Syndrome (MERS) coronavirus causes widespread infection and alveolar damage in human lung

A. C. Hocke, A. Becher, J. Knepper, A. Peter, G. Holland, M. Tönnies, T. T. Bauer, P. Schneider, J. Neudecker, D. Muth, C. M. Wendtner, J. C. Rückert, C. Drosten, A. D. Gruber, M. Laue, N. Suttorp, S. Hippenstiel, T. Wolff

Middle East Respiratory Syndrome coronavirus accessory protein 4a functions as a type I interferon antagonist

D. Niemeyer, D. Muth, T. Suliman, G. Horvath, F. Weber, C. Drosten, M. A. Müller

A novel human H7N9 influenza virus grows efficiently in human respiratory tissue and cells

J. Knepper, K. Schierhorn, A. Becher, M. Budt, A. Sadewasser, K. Paki, R. Davina Nunez, S. Sängler, A. Hocke, S. Hippenstiel, T. Wolff

13.00 – 14.30 **Lunch Break**

14.30 – 16.30 Plenary Session
Room Ballsaal

14.30 – 15.15 **One Health & NGS; one disruptive technology for microbial surveillance**
Dag Harmsen, Muenster, Germany

15.15 – 16.00 **The National Consortium for Zoonosis Research in the UK – our mission**
Malcolm Bennett, Liverpool, UK

16.00 – 16.15 **Poster Awards**

16.15 **Closing Ceremony**