

CONFERENCE PROGRAMME

Updated 19 September 2016



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CONFERENCE PROGRAMME

MONDAY 26 SEPTEMBER 2016

10:00 **Conference opening**

10:15 **KEYNOTE LECTURE**

Superbugs attack! How the world can win the war on antimicrobial resistance
Dr. Steven J. Hoffman, *Director – Global Strategy Lab at the University of Ottawa, Canada*

PLENARY MEETING: ANTIBIOTIC USE AND RESISTANCE: CROSS-CUTTING THEMES

Chairs: Prof.dr. Peter Borriello, *Veterinary Medicines Directorate, UK*
Dr. Timothy Robinson, *International Livestock Research Institute, Kenya*

10:45 Modelling the distribution of intensifying livestock production systems
Dr. Marius Gilbert, *Spatial Epidemiology Lab, Université libre de Bruxelles, Belgium*

11:10 Mapping the global use of antimicrobials in food animals
Dr. Thomas P. Van Boeckel, *Department of Environmental Systems Science, ETH Zurich, Switzerland*

11:35 Moving beyond the classic foodborne pathogens to quantify the total public health burden of using antibiotics in food animals
Prof.dr. Lance B. Price, *Milken Institute School of Public Health, The George Washington University, USA*

12:00 Resistance from food to humans: a multidimensional problem
Prof.dr. Jan Kluytmans, *University Medical Center Utrecht and Amphia Hospital, the Netherlands*

12:30 **Lunch break**

PLENARY MEETING: GLOBAL APPROACHES TO RESPONSIBLE USE OF ANTIBIOTICS

Chairs: Prof.dr. Peter Borriello, *Veterinary Medicines Directorate, UK*
Prof.dr. Jan Kluytmans, *University Medical Center Utrecht, the Netherlands*

13:30 Collection of data on the use of antimicrobial in animals: an important tool to develop a policy for responsible use
Dr. Jean-Pierre Orand, *Director, The French Agency for Veterinary Medicinal Products/The French Agency for Food, Environmental and Occupational Health & Safety (ANMV/ANSES), France*

13:55 Unpacking factors influencing antimicrobial use in global aquaculture
Dr. Patrik J.G. Henriksson, *Stockholm Resilience Centre, Sweden and WorldFish, Malaysia*

14:20 Antimicrobial resistance: exploring the human animal link! Perspectives from the Latin American Caribbean region
Prof.dr. H. Morgan Scott, *Department of Veterinary Pathobiology, Texas A&M University, on behalf of PAHO Foundation, USA*

14:45 Working together: Australia's response to antimicrobial resistance
Dr. Mark Schipp, *Chief Veterinary Officer, Department of Agriculture and Water Resources, Australia*

15:10 Antimicrobial resistance transmission between animal and human; what we can do from now?
Prof.dr. Yong Ho Park, *College of Veterinary Medicine, Seoul National University, Korea*

15:35 Transatlantic Taskforce on Antimicrobial Resistance (TATFAR), collaboration in veterinary medicine
Jordi Torren Edo, *Veterinary Medicines Department, European Medicines Agency, UK*

16:00 **Networking break**

MONDAY 26 SEPTEMBER 2016

PLENARY MEETING: ANTIBIOTIC USE AND RESISTANCE – CASE STUDIES FROM DEVELOPING COUNTRIES

Chair: Dr. Timothy Robinson, *International Livestock Research Institute, Kenya*
Dr. Delia Grace, *International Livestock Research Institute, Kenya*

16:30 Chair's introduction

16:40 Development and migration of antimicrobial resistance in livestock in China
Dr. Dengpan Bu, *Institute of Animal Science, Chinese Academy of Agricultural Sciences (CAAS), China*

17:00 Antibiotic use in small holder peri-urban dairy farms in India: sowing ignorance, reaping resistance
Dr. Manish Kakkar, *Public Health Foundation of India, India*

17:20 A veterinary intervention to reduce antimicrobial usage in chicken production in Vietnam (ViParc programme)
Dr. Juan J. Carrique-Mas, *Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Vietnam*

17:40 Multiresistant *E. coli* in small vs. large scale pig farms in North Eastern Thailand
Dr. Jatesada Jiwakanon, *Faculty of Medicine, Khon Kaen University, Thailand*

18:00 Antimicrobial resistance along the meat value chain in Kenya
Prof.dr. Samuel M. Kariuki, *Kenya Medical Research Institute, Kenya*

18:20 Chair's summary

18:30 – 19:30 **Lounge party**

TUESDAY 27 SEPTEMBER 2016

PARALLEL SESSION 1: NATIONAL APPROACHES TO ANTIBIOTIC USE AND RESISTANCE – FOCUS ON EU AND USA

Chairs: Dr. Cristina Muñoz Madero, *Spanish Agency of Medicines and Medical Devices, Spain*
Dr. Rick Sibbel, *Merck Animal Health, USA*

08:30 Update on the U.S. National Action Plan to Combat Antibiotic-Resistant Bacteria
Dr. Thomas R. Shryock, *Antimicrobial Consultants, USA*

08:50 Implementation of the Veterinary Feed Directive in the USA: issues and impacts
Dr. Jeffrey L. Watts, *Zoetis, USA*

09:10 The CVMP Strategy on Antimicrobials 2016 to 2020 – an EU regulatory perspective
Dr. Helen Jukes, *Veterinary Medicines Directorate, UK*

09:30 Organic farming and antimicrobial resistance in Germany – the example of *E. coli* in dairy herds
Dr. Bernd-Alois Tenhagen, *Department Biological Safety, Federal Institute for Risk Assessment, Germany*

Case studies from the USA

09:50 Strategies in U.S. Veterinary Medicine for antibiotic use and surveillance of antibiotic resistance
Dr. Rick Sibbel, *Merck Animal Health, USA*

10:10 Incentivising R&D for new antimicrobial drugs and non-antibiotic alternatives
Dr. Stacy Sneeringer, *Structure, Technology, and Productivity Branch, Economic Research Service, U.S. Department of Agriculture, USA*

10:30 Environmental, economic, and animal health implications from antibiotic-free production of broilers in the U.S.
Dr. Matthew J. Salois, *Elanco Animal Health, USA*

10:50 **Networking break**

Measures taken in the EU to reduce the need for and the use of antibiotics in animal husbandry

11:15 Actions promoting prudent use of antibiotics in Spain: One Health approach
Dr. Antonio Lopez, *Spanish Agency of Medicines and Medical Devices (AEMPS), Spain*

11:35 The French action plan to reduce the risk of antimicrobial resistance in veterinary medicine: a global collective and voluntary approach
Dr. Jean-Pierre Orand, *The French Agency for Veterinary Medicinal Products/The French Agency for Food, Environmental and Occupational Health & Safety (ANMV/ANSES), France*

11:55 Evolution of antimicrobial use and resistance in animals in Belgium
Dr. Bénédicte Callens & Wannes Vanderhaeghen, *Center of Expertise on Antimicrobial Consumption and Resistance in Animals (AMCRA), Belgium*

12:15 The effect of reduced use of antibiotics on resistance levels and next steps in achieving responsible use of antibiotics in livestock
Dr. Hetty van Beers-Schreurs, *The Netherlands Veterinary Medicines Authority (SDa), the Netherlands*

12:35 Antimicrobial resistance and use, the Danish experience
Dr. Elisabeth Okholm Nielsen, *Animal Welfare and Veterinary Medicine Division, Danish Veterinary and Food Administration, Denmark*

13:00 **Lunch break**

TUESDAY 27 SEPTEMBER 2016

PARALLEL SESSION 2: IMPORTANCE AND RELEVANCE OF ANIMAL INTESTINAL AND RESPIRATORY HEALTH

Chairs: Dr. Arie K. Kies, *DSM Nutritional Products and Wageningen University & Research, the Netherlands*
Dr. C. Stephen Roney, *College of Veterinary Medicine, The University of Georgia, USA*

08:30 Chair's introduction

08:40 Microbial colonisation is essential for the development of the gut immune system in chickens
Prof.dr. Bernd Kaspers *Department of Veterinary Sciences, LMU Munich, Germany*

09:05 Antibiotic usage during early life perturbs gut development in pigs
Dr. Dirkjan Schokker, *Animal Sciences Group, Wageningen Wageningen University & Research, the Netherlands*

09:30 Antibiotic therapy in poultry: friend or foe to the gastrointestinal tract?
Dr. C. Stephen Roney, *College of Veterinary Medicine, The University of Georgia, USA*

09:55 Modulating the gut flora to reduce antibiotic usage in livestock
Prof.dr. Roberto Marcello La Ragione, *Veterinary Pathology Centre and Department of Pathology and Infectious Diseases, University of Surrey, UK*

10:20 Factors affecting the gastro-intestinal microbial balance and the impact on the health status of pigs
Dr. Paolo Trevisi, *Department of Agricultural and Food Sciences, University of Bologna, Italy*

10:45 **Networking break**

11:15 Proteolytic fermentation and the effects on intestinal health in broilers
Francois J. Nell, M.Sc., *Animal Nutrition and Health, DSM Nutritional Products and Department of Animal Sciences, Wageningen Wageningen University & Research, the Netherlands*

11:40 ResPig: impact of a structural respiratory health approach on antibiotic use
Victor Geurts, M.Sc., *MSD-AH Intervet, the Netherlands*

12:05 The nutritional costs of the immune response in pigs
Dr. Elodie Merlot, *Physiology of Adaptation, Animal Nutrition and Health, INRA/Agrocampus Ovest (PEGASE), France*

12:30 Costs of broiler and fattening pig diseases, with reference to antimicrobials
Dr. Helmut Saatkamp, *Business Economics Group, Department of Social Sciences, Wageningen Wageningen University & Research, the Netherlands*

12:55 Chair's summary

13:00 **Lunch break**

TUESDAY 27 SEPTEMBER 2016

PARALLEL SESSION 3: THE STAKEHOLDERS' VIEW ON ANTIBIOTIC USE AND RESISTANCE

Chairs: Peter J.G. Oostenbach, M.Sc., *MSD Animal Health, the Netherlands*
Dr. Stephen Page, *Advanced Veterinary Therapeutics, Australia*

- 14:00 Veterinary antibiotics: a perspective on usage, innovation incentives and effective policies
Carel du Marchie Sarvaas, *Executive Director, HealthforAnimals (Global Animal Medicines Association)*
- 14:20 Stewardship through sound science – the role of the veterinarian
John M. Blackwell, *Past president British Veterinary Association, on behalf of the World Veterinary Association (WVA)*
- 14:40 Possible measures to reduce antimicrobial use in livestock and fish; a veterinary perspective
Nancy De Briyne, *Deputy Executive Director, Federation of Veterinarians of Europe (FVE)*
- 15:00 Reducing the need for antibiotics through animal nutrition
Predrag Peršak, *Chairman of the Animal Nutrition Committee, European Feed Manufacturers' Federation (FEFAC)*
- 15:20 The links between animal health, welfare and antibiotics use from a public health perspective
Sascha Marschang, *Policy Manager for Health Systems, European Public Health Alliance (EPHA)*
- 15:40 Public health points of view regarding antibiotic resistance
Dr. Aura Timen, *President of the Section Infectious Disease Control, European Public Health Association (EUPHA)*
- 16:00 **Networking break**
- 16:50 The future of broiler breeding in an ever-changing world
Dr. Mitchell Abrahamsen, *Senior Vice President R&D, Cobb-Vantress, USA*
- 16:30 Interventional genomics for the prevention of antibiotic resistance
Prof.dr. Alex Friedrich, *Medical Microbiology and Infection Prevention, University Medical Center Groningen, the Netherlands*
- 17:10 Animal production without any antimicrobials: potential scenario or license for euthanasia?
Prof.dr. Jaap Wagenaar, *Department of Infectious Diseases and Immunology, Utrecht University, the Netherlands*
- 17:30 **Panel discussion**
- 18:15 – 19:00 **Poster viewing & drinks**
- 20:00 – 22:15 **Conference dinner**

TUESDAY 27 SEPTEMBER 2016

PARALLEL SESSION 4: ONGOING RESEARCH TO CONTROL ANTIBIOTIC USE AND RESISTANCE

Chairs: Dr. Thomas R. Shryock, *Antimicrobial Consultants, USA*

Prof.dr. Peter Silley, *MB Consult Limited and University of Bradford, UK*

14:00 A rapid procedure of PCR and a microarray lateral flow test for detection of antibiotic resistance genes

Dr. Aart van Amerongen, *BioSensing & Diagnostics, Wageningen Wageningen University & Research, the Netherlands*

14:20 Host defence peptides: natural anti-infectives?

Prof.dr. Henk Haagsman, *Department of Infectious Diseases and Immunology, Utrecht University, the Netherlands*

14:40 Unlocking the medieval medicine cabinet to help fight antimicrobial resistance

Dr. Stephen Diggle, *Centre for Biomolecular Sciences, University of Nottingham, UK*

15:00 Disarming pathogens: an evolution-proof approach to manage infections?

Dr. Rolf Kümmerli, *Department of Plant and Microbial Biology, University of Zürich, Switzerland*

15:20 Human contact with dogs and the risk of carriage of antimicrobial resistant *E. coli*

Emma Ormandy, *Institute of Infection and Global Health, University of Liverpool, UK*

15:35 The influence of farm-specific characteristics and production management on antibiotic usage in conventional broilers

Tommy Van Limbergen, *Department of Obstetrics, reproduction and herd health, Ghent University, Belgium*

15:50 Impact of facilitated structural animal health management on antimicrobial use and animal health parameters in Dutch dairy farming.

David Speksnijder, *Department of Infectious Diseases and Immunology, Utrecht University and Veterinary Clinic Tweestromenland, the Netherlands*

16:05 **Networking break**

Focus on the environment

16:30 Antibiotic resistance in aquatic environments: from the evidences to the mitigation measures

Dr. Célia Manaia, *Centre for Biotechnology and Fine Chemistry, Catholic University of Portugal, Portugal*

16:55 Does application of antibiotic molecules to farm soil significantly increase resistance genes abundance?

Dr. Pascal Simonet, *Environmental Microbial Genomics Group, École Centrale de Lyon, France*

17:20 Antibiotics in aquaculture: facts and alternatives

Dr. Igor Hernández, *Food Research Division, AZTI-Tecnalia, Spain*

17:45 Selection for, dissemination of and exposure to antibiotic resistant bacteria in the natural environment

Dr. William H. Gaze, *European Centre for Environment and Human Health, University of Exeter Medical School, University of Exeter, UK*

18:15 – 19:00 **Poster viewing & drinks**

20:00 – 22:15 **Conference dinner**

WEDNESDAY 28 SEPTEMBER 2016

PLENARY MEETING: TOWARDS A GLOBAL APPROACH TO VETERINARY ANTIMICROBIAL STEWARDSHIP

Chairs: Prof.dr. John F. Prescott, *University of Guelph, Canada*

Dr. Stephen Page, *Advanced Veterinary Therapeutics, Australia*

08:45 Introduction to veterinary antimicrobial stewardship

Prof.dr. John F. Prescott, *Department of Pathobiology, University of Guelph, Canada*

09:00 Antimicrobial stewardship in healthcare in Scotland – key success factors

Dr. Jacqueline Sneddon, *Healthcare Improvement Scotland, UK*

09:25 Antimicrobial stewardship in livestock: principles and practice

Prof.dr. Guy H. Loneragan, *Department of Animal and Food Sciences, Texas Tech University, USA*

09:50 Antimicrobial stewardship in livestock: experiences in dairy practice

Dr. Andy Millar, *Purata Farming Ltd., New Zealand*

10:15 Antimicrobial stewardship in companion animal practice: a pilot programme in Canberra, Australia

Dr. Alison Taylor, *Kippax Veterinary Hospital, Australia*

10:40 Developing a global veterinary antimicrobial stewardship support programme

Dr. Stephen Page, *Advanced Veterinary Therapeutics, Australia*

11:00 **Networking break**

FINAL PLENARY MEETING: WHERE DO WE GO FROM HERE?

Chairs: Prof.dr. Peter Borriello, *Veterinary Medicines Directorate, UK*

Prof.dr. Jan Kluytmans, *University Medical Center Utrecht, the Netherlands*

11:30 The global response to antimicrobial resistance

Prof.dr. Mark Woolhouse, *Centre for Immunity, Infection & Evolution and Usher Institute of Population Health Sciences & Informatics, University of Edinburgh, UK*

11:50 One Health; bridging the gap between surveillance and stewardship

Dr. Luke Moore, *Department of Medicine, Imperial College London, UK*

12:15 **Panel discussion: Conclusions and path forward**

During this three-day conference the present and future of antibiotic use and resistance have been discussed from different viewpoints. Has the path forward become clearer? What are the 'take-home' messages? After a brief introduction by the moderators, questions from the participants will be answered.

Moderators:

Prof.dr. Peter Borriello

Veterinary Medicines Directorate, UK

Prof.dr. Jan Kluytmans

University Medical Center Utrecht, the Netherlands

Panel members:

Dr. Arie K. Kies

DSM Nutritional Products and Wageningen University & Research, the Netherlands

Dr. Delia Grace

International Livestock Research Institute, Kenya

Dr. Cristina Muñoz Madero

Spanish Agency of Medicines and Medical Devices, Spain

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13:00 **End of conference**