

THE 5TH INTERNATIONAL

ONE
HEALTH
PLATFORM

ne health CONGRESS

Canada
SASKATOON 22-25 June
2018

OHS
ONE
HEALTH
SCIENCE

AMR
ANTIMICROBIAL
AGENTS AND
RESISTANCE

SPI
SCIENCE
POLICY
INTERFACE

Programme

FRIDAY 22 JUNE 2018

11:00-12:00	CONGRESS PRESS BRIEFING	SALON C-D
<p>CONGRESS CO-CHAIRS: Prof. Ab Osterhaus and Prof. John Mackenzie</p> <p>The congress press briefing is open for members of the press attending the congress. Congress co-chairs Prof. Ab Osterhaus and Prof. John Mackenzie will provide an overview of the congress programme, highlighting key lectures and elaborating on major topics. The scope and objectives of the congress will be put in the wider framework of the threats of emerging and re-emerging diseases and the challenges the world faces when addressing antimicrobial resistance. Members of the press receive detailed information about speakers' backgrounds and expertises and on how to contact them during the congress. The press briefing will not be recorded and can therefore not be shared with journalists who are not attending the congress.</p>		
12:00-14:30	SPECIAL PLENARY SESSION-open to non-congress attendees	SALON A-B
<p>Chronic Wasting Disease-lessons learned from the BSE crisis</p>		
<p>CHAIR: Adriano Aguzzi, <i>director Institute of Neuropathology, University Hospital Zürich, Switzerland</i></p>		
<p>1. First evidence of intracranial and peroral transmission of Chronic Wasting Disease into Cynomolgus macaques: a work in progress</p>		
<p>Stephanie Czub, <i>Canadian Food Inspection Agency, Alberta, Canada</i></p>		
<p>2. Battling Chronic Wasting Disease in Norway: an update on management and disease development after two years on the map</p>		
<p>Carlos Gonçalo das Neves, <i>Head of Food Safety & Emerging Health Threats, Norwegian Veterinary Institute, Norway</i></p>		
<p>3. Detection of prions associated to Chronic Wasting Disease in animal blood and in association to environmental materials</p>		
<p>Claudio Soto, <i>Director the George and Cynthia Mitchell Center, University of Texas/USDA, USA</i></p>		
<p>4. Investigations of Chronic Wasting Disease strains and transmission barriers</p>		
<p>Glenn Telling, <i>Prion Research Center, Colorado State University, USA</i></p>		
<p>5. BSE, CWD and alternatively folded forms of the cellular 1 prion protein, PrP^c</p>		
<p>David Westaway, <i>Centre for Prions and Protein Folding Diseases, University of Alberta, Canada</i></p>		
<p>6. Why do we have a prion protein?</p>		
<p>Adriano Aguzzi, <i>director Institute of Neuropathology, University Hospital Zürich, Switzerland</i></p>		
14:30-15:00	COFFEE BREAK	
15:00-17:00	SPECIAL PLENARY SESSION	SALON A-B
available		

FRIDAY 22 JUNE 2018

17:00-18:30

SPECIAL PLENARY SESSION

SALON A-B

Potential impact of vaccination on antibiotic usage and antibiotic resistance: the influenza case

CHAIRS: **Surbhi Malhotra-Kumar**, *University of Antwerp, Belgium*

Ab Osterhaus, *RIZ Hannover, Germany*

1. Quantifying the problem of antibiotic resistance
Surbhi Malhotra-Kumar, *University of Antwerp, Belgium*
2. The role of diagnostics and viral vaccines in reducing antibiotic resistance
Speaker to be confirmed
3. Assessing the full economic value of vaccines in reducing AMR
Jonathan Rushton, *Professor of Animal Health and Food Systems Economics, University of Liverpool, UK*
4. Vaccination and antibiotic resistance in developing countries
Speaker to be confirmed
5. The influenza case: a systematic literature review on the impact of influenza vaccination on antibiotic use
Marco Goeijenbier, *Erasmus Medical Center Rotterdam, The Netherlands*

18:30-20:00

OPENING CEREMONY

THEATRE

- Welcome by the congress chairs

OPENING LECTURES:

1. **Theresa Tam**, *Chief Public Health Officer of Canada*
2. **Jaspinder Komal**, *acting Chief Veterinary Officer of Canada*

KEYNOTE ADDRESS:

- One Health for a Challenged World by Nobel Laureate by
Peter Doherty, *University of Melbourne, Australia*

20:00-22:00

WELCOME RECEPTION

SATURDAY 23 JUNE 2018

07:30-9:00	BREAKFAST PLENARY SESSION	SALON A-B
	Tuberculosis: A One-health problem in underserved communities	
	<i>Organized by the University of Saskatchewan</i>	
09:15-10:15	KEYNOTE LECTURES	THEATRE
	1. One Health as a Pillar of Policy, Bill Karesh , <i>Ecohealth Alliance</i>	
	2. Past, present and future of AMR, Giuseppe Cornaglia , <i>University of Verona, Italy</i>	
10:15-10:45	COFFEE BREAK	
10:45-12:30	PARALLEL SESSIONS	
	ONE HEALTH SCIENCE 1	SALON A-B
	Pathogen discovery	
	CHAIR: Linfa Wang , <i>Duke-NUS Medical School, Singapore</i>	
	CO-CHAIR: Peng ZHOU , <i>Chinese Academy of Sciences</i>	
	1. Plagiorchis sp. in small mammals of Senegal: an emerging food-borne trematodiasis? Stefano Catalano , <i>Royal Veterinary College, University of London</i>	
	2. Zika Virus Exposure In Malaysia; A Preliminary Study On Seroprevalence Among Local Population Wan Nabilatul Huda Wan Ghazali , <i>Institute For Medical Research, Malaysia</i>	
	3. A new concept for de-novo detection of viral pathogens with adaptive diagnostics and integrated data analysis approaches results in the recent discovery of two novel viruses Leonie Franziska Forth , <i>Friedrich-Loeffler-Institut, Germany</i>	
	4. Novel orthobunyavirus identified in an African child with severe encephalopathy Arthur Wouter Dante Edridge , <i>Academic Medical Center, The Netherlands</i>	
	5. Seroprevalence of West Nile virus in wild birds in Bangladesh Ausraful Islam , <i>ICDDR,B-Bangladesh</i>	
10:45-12:30	ONE HEALTH SCIENCE 2	SALON C-D
	Surveillance and early detection	
	CHAIR: Ab Osterhaus , <i>RIZ Hannover, Germany</i>	
	CO-CHAIR: Nistara Randhawa , <i>One Health Institute UC Davis, USA</i>	
	1. One Health-oriented outbreak response in Cameroon: A case study of the 2016 Monkeypox outbreak response in Cameroon Moctar Mouiche , <i>MOSAIC, Cameroon</i>	
	2. Zoonotic Enteric Parasites in Humans, Animals, and Drinking Water in Mongolian Households and Their Associated Risk Factors Anu Davaasuren , <i>The National Center for Communicable Diseases, MOH, Ulaanbaatar, Mongolia</i>	
	3. Evidence of silent infection of domestic pigs with Highly Pathogenic Avian Influenza H5N1 and H1N1pdm09 in 'hot spot' Nigeria: Is a pandemic virus already in the pipeline? Clement Adebajo Meseko , <i>National Veterinary Research Institute, Nigeria</i>	
	4. Phylogenetic analysis of viruses detected in mosquitoes, horses and humans supports epidemiological data indicating two different geographical origins for epidemics of encephalitis due to Murray Valley encephalitis virus David William Smith , <i>PathWest Laboratory Medicine WA, Australia</i>	
	5. Prevalence and characterization of Brucella spp. in slaughter animals in Gauteng Province abattoirs and assessment of zoonotic risk factors posed to abattoir workers Francis Babaman Kolo , <i>University of Pretoria, South Africa</i>	

SATURDAY 23 JUNE 2018

10:45-12:30

ANTIMICROBIAL AGENTS AND RESISTANCE**GALLERY C-D****Use of antibiotics in human and animals, in food and agriculture and the link to AMR and environmental impact**CHAIR: **Jorgen Schlundt**, *Nanyang Technological University, Singapore*CO-CHAIR: **Jaap Wagenaar**, *Utrecht University, The Netherlands*

1. **Reduced and responsible use of antibiotics in food-producing animal in The Netherlands**
Christianne J.M. Bruschke, *Ministry of Agriculture, Nature and Food Quality, The Netherlands*
2. **Antimicrobial resistance in wildlife species: the potential for sentinel surveillance in a ONE HEALTH perspective**
Carlos G. Das Neves, *Norwegian Veterinary Institute, Norway*
3. **Comparative human exposure to antimicrobial-resistant Campylobacter species, Escherichia coli, Salmonella enterica from food animals using integrated assessment modelling: A farm to fork approach**
Colleen Patricia Murphy, *Public Health Agency of Canada*
4. **Assessing Impacts of Antibiotic Therapy in Neonatal Dairy Calves on Gut and Animal Health**
Olivia Char Lottes, *Washington State University, USA*
5. **Prevalence and Antimicrobial Resistance profile of Salmonella spp. in retail meats of Super Shop: a food safety risk**
Mohammed Abdus Samad, *Bangladesh Livestock Research Institute, Bangladesh*

10:45-12:30

SCIENCE POLICY INTERFACE**GALLERY A-B****The IMPACTS of Zoonotic Diseases – Why should OH be of importance to policy makers? Lessons learnt from One Health crises.**CHAIR: **John Mackenzie**, *Curtin University, Australia*CO-CHAIR: **Casey Barton-Beravesh**, *CDC, USA*

1. **New World Screwworm Eradication in South Florida – A One Health Success Story**
Lisa Conti, *One Health Initiative*
2. **Ebola: what went wrong and where do we go now?**
Speaker to be confirmed
3. **Rift Valley Fever as a public health emergency**
Pierre Formenty, *Team lead – Viral Haemorrhagic Fevers (VHF), World Health Organization*
4. **Lessons learned from the H1N1 influenza pandemic: are we prepared for a new outbreak**
Speaker to be confirmed

12:30-14:00

LUNCH

SPECIAL PLENARY SESSION**SALON A-B****PREDICT Project**

SATURDAY 23 JUNE 2018

14:00-15:45

PARALLEL SESSIONS

ONE HEALTH SCIENCE 1

SALON A-B

Diagnostics

CHAIR: **Martyn Jeggo**, *Geelong Centre for Emerging Infectious Diseases, Australia*CO-CHAIR: **Dang Xuan Sinh**, *Center for Public Health and Ecosystem Research, Hanoi, Vietnam*

1. Recombinant techniques to address the challenges in development of assays for diagnosis and surveillance of emerging zoonotic diseases
Felicity Jane Burt, *University of the Free State, South Africa*
2. Comparison of two RdRp PCR assays for the detection of MERS related Coronaviruses
Sininat Petcharat, *King Chulalongkorn Memorial Hospital, Thailand*
3. The accuracy of pre-vaccination screening for Q fever and the extent of exposure – Bayesian latent class analysis
Solomon Meseret Woldeyohannes, *University of Queensland, Australia*
4. Reproducibility of results and performance of TB diagnostics in East Africa Public Health Laboratory Networking Project sites in Kenya: Implication on Policy Resolution for Strategic TB Diagnosis
Willie Abela Githui, *Kenya Medical Research Institute*
5. Development of lateral flow immunochromatographic test for multiple detection of Salmonella Species in poultry food product
Rafik Sayed, *Central laboratory for evaluation of veterinary biologics, Egypt*

14:00-15:45

ONE HEALTH SCIENCE 2

SALON C-D

Intervention strategies

CHAIR: **Sarah Cleaveland**CO-CHAIR: **Rachel Hopper**, *Liverpool School of Tropical Medicine, UK*

1. Adapting the determinants of health perspectives to developing and implementing integrated priorities to address social and ecological expectations for fisheries and community health
Craig Stephen, *University of Saskatchewan, Canada*
2. Control versus elimination of *Taenia solium* in eastern Zambia: Preliminary assessment of a two-year interventional program in the Katete and Sinda districts in the Eastern Province of Zambia
Emma Clare Hobbs, *Institute of Tropical Medicine, Antwerp, Belgium*
3. An integrated human-animal health approach to reduce the disease burden of psittacosis
Lenny Hogerwerf, *National Institute for Public Health and the Environment, The Netherlands*
4. Factors associated with improved uptake of Johne's Disease control mechanisms on Australian dairy farms: Regulatory insights from evolving control strategies
Paul Douglas Burden, *University of Calgary, Canada*
5. Harm reduction: A strategy for One Health action in the face of uncertainty and conflict
Christa Gallagher, *Ross University School of Veterinary Medicine. St. Kitts and Nevis*

SATURDAY 23 JUNE 2018

14:00-15:45

ANTIMICROBIAL AGENTS AND RESISTANCE

GALLERY C-D

Genomic epidemiology / evolution of AMR transmissionCHAIR: **Robert Skov**, *MVZ Synlab, Leverkusen, Germany*CO-CHAIR: **Jesper Larsen**, *Statens Serum Institut, Denmark*

1. The human resistome within the Dutch pork production chain, a metagenome-wide study among farmers and slaughterhouse workers
Liese Van Gompel, *Utrecht University, The Netherlands*
2. Genomic and evolutionary analysis of *Clostridium difficile* sequence type 11: a genetically diverse lineage of significant One Health importance
Daniel R Knight, *University of Western Australia, Australia*
3. Whole genome sequencing reveals limited contribution of non-intensive chicken farming to extended-spectrum beta-lactamase producing *Escherichia coli* colonization in humans in southern Vietnam
Trung Nguyen Vinh, *Oxford University Clinical Research Unit, Vietnam*
4. Associations between antimicrobial use and the fecal resistome on broiler farms in nine European countries
Roosmarijn Luiken, *Utrecht University, The Netherlands*
5. Epidemic clones of community-acquired methicillin-resistant *Staphylococcus aureus* in slaughter pigs, Cuba
Michel Baez Arias, *National Centre of Animal and Plant Health (CENSA), Cuba*

14:00-15:45

SCIENCE POLICY INTERFACE

GALLERY A-B

Addressing zoonotic diseases at the animal-human-ecosystem interface. What are the threats? How to be prepared?CHAIR: **Ab Osterhaus**, *RIZ Hannover, Germany*

1. Avian Influenza Surveillance in Live Birds Markets in Thailand
Ong-orn Prasarnphanich, *United States Centers for Disease Control and Prevention Southeast Asia Regional Office*
2. Challenges in Complexity: How Brucellosis Thrives in the Science-Policy Interface Space
Darrell Abernethy, *Faculty of Veterinary Science, University of Pretoria*
3. Achieving Rabies Zero by 2030
Waqas Ahmad, *University of Veterinary and Animal Sciences, Pakistan*
4. Future Earth's Top Ten Challenges for One Health
Peter Daszak and William B. Karesh, *EcoHealth Alliance*

15:45-16:15

COFFEE BREAK

SATURDAY 23 JUNE 2018

16:15-18:00

PARALLEL SESSIONS

ONE HEALTH SCIENCE 1

SALON A-B

Social science and politics

CHAIR: **Jonathan Rushton**, *University of Liverpool, UK*CO-CHAIR: **Mieghan Bruce**, *Murdoch University, Australia*

1. Antimicrobials In Society: A One Health Approach in Kampala, Uganda
Laurie Denyer Willis, *London School of Hygiene and Tropical Medicine, UK*
2. (Re)Claiming Water Stewardship in a Changing Climate – Learning from the Margins
Corinne J Schuster-Wallace, *McMaster University, Canada*
3. MAN-IMAL: An experimental One Health degree program around animal-man-food
Francois Meurens, *Oniris-Nantes Atlantic National College of Veterinary Medicine, France*
4. Human Behavioural Research at the Animal-Human Interface: Hunting and Trading of Bushmeat in Lao PDR
Soubanh Silithammavong, *Metabiota, USA*
5. Evaluation Of One Health-Ness: Insights Into Interdisciplinary And Cross-Sectoral Integration
Simon Rüegg, *University of Zurich, Switzerland*

16:15-18:00

ONE HEALTH SCIENCE 2

SALON C-D

Pathogenesis 1

CHAIR: **Marietjie Venter**, *University of Pretoria, SA*CO-CHAIR: **Felicity Burt**, *University of the Free State, South Africa*

1. Cytokine patterns in Hemorrhagic Fever with Renal syndrome and Crimean-Congo Hemorrhagic Fever
Katerina Tsergouli, *Aristotle University of Thessaloniki, Greece*
2. Replication of naturally occurring MERS-CoV protein 4a deletion variants in vitro and in vivo
Mart Matthias Lamers, *Erasmus MC, The Netherlands*
3. The effect of antiretroviral naïve HIV-1 infection on the ability of Natural Killer cells to produce IFN- γ upon exposure to Plasmodium falciparum- infected Erythrocytes
Carole Stephanie Sake Ngane, *University of Yaoundé I, CIRCB, Cameroon*
4. Chronic ethion exposures and endotoxin interaction induce pulmonary damage and genotoxicity in mice
To be confirmed
5. Dynamic interaction of rabies virus with endosomes and end binding partners (EB3 and p140cap) of Cytoskeleton
Waqas Ahmad, *University of Veterinary and Animal Sciences, Jhang Campus, Pakistan*

SATURDAY 23 JUNE 2018

14:00-15:45

ANTIMICROBIAL AGENTS AND RESISTANCE

GALLERY C-D

Real life applications of whole genome sequencingCHAIR: **Surbhi Malhotra-Kumar**, *University of Antwerp, Belgium*

1. Comparative Genomics of Vancomycin-Resistant Enterococcus spp. isolated from Wastewater Treatment Plants
Haley Ann Sanderson, *Queen's University, Canada*
2. Integrating whole genome sequencing data into quantitative microbial risk assessment modeling: a case study for Salmonella Heidelberg resistant to third-generation cephalosporins in Canadian broiler chicken production
Lucie Collineau, *Public Health Agency of Canada*
3. Whole Genome Sequence Profiling of Antibiotic Resistant Staphylococcus aureus isolates from Livestock and Farm Attendants in Ghana
Beverly Egyir, *Noguchi Memorial Institute for Medical Research, Ghana*
4. Phenotypic and genomic analysis of antimicrobial resistant E. coli isolated from ready-to-eat food in Singapore
Siyao Guo, *Nanyang Technological University Food Technology Centre, Singapore*
5. Antibiotic use and biosecurity in pig farming are determinants for antimicrobial resistance, a metagenome-wide association study in nine European countries
Liese van Gompel, *Utrecht University, The Netherlands*

14:00-15:45

SCIENCE POLICY INTERFACE

GALLERY A-B

The drivers of emerging zoonotic diseasesCHAIR: **Moira McKinnon**, *Medical practitioner, Canberra, Australia*

1. The migration, climate change, and vector-borne disease nexus
Kanya C. Long, *World Bank*
2. AMR containment and Prevention considering the Drivers of EID in Thailand
Suwit Wibulpolprasert, *Ministry of Public Health, Thailand*
3. The Long and Hard Road to Evidence Based policy
Bonnie Henry, *Provincial Health Officer British Columbia, Canada*
4. Communicating the evidence to policy makers and populations. Who is the right audience?
Speaker to be confirmed

18:00-19:30

POSTER SESSION

- Opportunity for congress delegates to interact with poster authors
- Wine and cheese, offered by the organizers

SUNDAY 24 JUNE 2018

07:30-9:00	BREAKFAST PLENARY SESSION SALON A-B
	Global Perspectives on Health and Security and the Future of Biological Threat Reduction
	<i>Organized by the Weapons Threat Reduction Program, Global Affairs Canada</i>
09:15-10:15	KEYNOTE LECTURES THEATRE
	1. Lecture title to be confirmed, Michael Ryan , <i>World Health Organization</i> 2. From zoonoses to pandemics: lessons learned from HIV, Mark Feinberg , <i>International AIDS Initiative</i>
10:15-10:45	COFFEE BREAK
10:45-12:30	PARALLEL SESSIONS
	ONE HEALTH SCIENCE 1 SALON A-B
	Drivers for emerging diseases 1
	CHAIR: Rita Colwell , <i>Johns Hopkins University Bloomberg School of Public Health, USA</i> CO-CHAIR: Antar Jutla , <i>West Virginia University, USA</i>
	1. Quantifying the health, economic, and ecosystem impacts of land-use change as a driver of disease emergence in Southeast Asia Carlos Zambrana-Torrel , <i>EcoHealth Alliance, USA</i>
	2. Impacts of urbanization and conversion of rainforests into large industrial oil palm plantations on the ecology of <i>Aedes</i> vectors in arbovirus foci, Côte d'Ivoire Julien Zahouli Bi Zahouli , <i>Centre Suisse de Recherches Scientifiques en Côte d'Ivoire, Ivory Coast</i>
	3. The use of a nationwide pig movement network to predict the spatial risk of Nipah virus outbreaks in Thailand Anuwat Wiratsudakul , <i>Faculty of Veterinary Science, Mahidol University, Thailand</i>
	4. Ecosystem Change and Zoonoses Emergence Barry John McMahon , <i>University College Dublin, Ireland</i>
	5. Identification of molecular determinants of aquatic and terrestrial morbillivirus cross-species infections Wendy Karen Jo Lei , <i>University of Veterinary Medicine Hannover, Germany</i>

SUNDAY 24 JUNE 2018

10:45-12:30

ONE HEALTH SCIENCE 2

SALON C-D

One health in underprivileged communities

CHAIR: **Mark Rweyemamu**, *Director of the Southern African Centre for Infectious Diseases and Surveillance (SACIDS)*CO-CHAIR: **Rafael Maciel de Freitas**, *Instituto Oswaldo Cruz, Brazil*

1. Molecular detection and characterization of *Anaplasma phagocytophilum* strains associated with different hosts in Bushbuckridge, Mpumalanga, South Africa
Agatha Onyemowo Kolo, *University of Pretoria, South Africa*
2. Assessment of aerosolization of Avian Influenza A associated with market hygiene and practices and potential occupational exposure of live bird market workers in Bangladesh
Mahbubur Rahman, **Institute of Epidemiology**, *Disease Control and Research, Bangladesh*
3. Transformation within Indigenous Lived Experiences and the Journey from a Pedagogy of Oppression to a Pedagogy of Hope and Freedom
Anne Poelina, *the University of Notre Dame, Australia*
4. Tackling the second deadliest Neglected Tropical Disease: Predicting and reducing the impact of snakebite on human and animal health through One Health analyses of hotspots and access to care
Rafael Ruiz de Castaneda, *Institute of Global Health, Faculty of Medicine, University of Geneva, Switzerland*
5. What will it take to eliminate rabies in Africa?
S Mwangi Thumbi, *Washington State University, Kenya*

10:45-12:30

ANTIMICROBIAL AGENTS AND RESISTANCE

GALLERY C-D

Prevalence and surveillance of resistance

CHAIR: **Gerard Wright**, *M.G. DeGroot Institute for Infectious Disease Research, Canada*CO-CHAIR: **Georgina Cox**, *University of Guelph, Canada*

1. Temporal Changes in Antibiotic Resistance in Common Bottlenose Dolphins (*Tursiops truncatus*), a Sentinel Species
Adam M Schaefer, *Florida Atlantic University, USA*
2. Antimicrobial Resistance in *Salmonella enterica* Isolates from Wildlife in Virginia
Karen Gruszynski, *Lincoln Memorial University, USA*
3. Antibiotic resistance and epidemiology of *Campylobacter* recovered from humans, animals and environmental sources in Ghana
Akosua Bonsu Karikari, *University for Development Studies, School of Medicine and Health Sciences, Ghana*
4. A longitudinal evaluation of *Salmonella Typhimurium* AMR prevalence and transmission using whole genome sequencing and phenotyping in a poultry population with no antimicrobial selection pressure
Helen Kathleen Crabb, *the University of Melbourne, Australia*
5. Urban Wildlife and the Epidemiology of Antimicrobial Resistance in Nairobi
James Hassel, *University of Liverpool, UK*

SUNDAY 24 JUNE 2018

10:45-12:30

SCIENCE POLICY INTERFACE

GALLERY A-B

Resistance to antibiotics and antivirals: challenges for policy makers and scientists

CHAIR: **Laura H. Kahn**, *Princeton University, USA*CO-CHAIR: **Christianne Brusckhe**, *Chief Veterinary Officer, The Netherlands*

1. Antimicrobial Resistance and One Health solutions
Joergen Schlundt, *University of Singapore*
2. Antimicrobial resistance: Canada's science and policy challenges
Aline Dimitri, *Canadian Food Inspection Agency, Canada*
3. The Nordic countries strategy for AMR: challenges at "high latitudes" for policy makers, scientists and society
Carlos Gonçalo das Neves, *Norwegian Veterinary Institute, Norway*
4. WHO guidelines on use of medically important antimicrobials in food-producing animals
Scott McEwen, *University of Guelph, Canada*

12:30-14:00

LUNCH

SPECIAL PLENARY SESSION

SALON A-B

Neglected Zoonotic Diseases in Resource-Poor, Marginalised and Under-Served Communities: Challenges in Infectious Disease Control

CHAIR: **Martyn Jeggo**, *Geelong Centre for Emerging Infectious Diseases, Australia*

1. Where we left off: main conclusions of the 2014 International meeting on the control of Neglected Zoonotic Diseases
Speaker to be confirmed
2. Combatting Neglected Zoonotic Diseases at the human/animal interface: an overview
Ab Osterhaus, *RIZ Hannover, Germany*
3. Challenges and opportunities to preventing and responding to outbreaks of helminth/bacterial/viral infections in livestock
Speaker to be confirmed
4. Need to acquire community support to implementing effective control programmes
Speaker to be confirmed

SUNDAY 24 JUNE 2018

14:00-15:45

PARALLEL SESSIONS

ONE HEALTH SCIENCE 1

SALON A-B

Drivers for emerging diseases 2

CHAIR: **Peter Daszak**, *President of the EcoHealth Alliance*CO-CHAIR: **Ottorino Cosivi**, *WHO-Brazil*

1. Leveraging viral phylodynamics to inform spatiotemporal transmission of viral infectious diseases in Africa: 2009 Influenza A/H1N1 in Africa
Fredrick Nzabanyi Nindo, *University of Cape Town, South Africa*
2. Risk of pneumonia among residents living near goat and poultry farms
Pim Martijn Post, *Dutch National Institute for Public Health and the Environment (RIVM), The Netherlands*
3. Effect of Habitat Modification on Risk of Scrub Typhus, An Emerging Infectious Disease in Bhutan
Tandin Zangpo, *Khesar Gyalpo University of Medical Sciences of Bhutan*
4. A One Health Understanding of the Rodent Meat Value Chain in the Mekong Delta, Vietnam: Implications for Zoonotic Disease Risk Mitigation (Wellcome Trust VIZIONS)
Jason Euren, *Metabiota, USA*
5. Climate variability and infectious diseases nexus: Evidence from Sweden
Mwenya Mubanga, *Uppsala University, Sweden*

14:00-15:45

ONE HEALTH SCIENCE 2

SALON C-D

Pathogenesis 2

CHAIR: **Malik Peiris**, *University of Hong Kong*CO-CHAIR: **Wendy Karen Jo Lei**, *Research Center for Emerging Infections and Zoonoses, Hannover, Germany*

1. Species specific binding of the MERS-coronavirus S1A protein
W Widagdo, *Erasmus MC, The Netherlands*
2. Using Bioluminescent Salmonella Strains to Study Host-Pathogen Interaction in Chicken will Allow One-Health-Approach
Dinesh Hirantha Wellawa, *Vaccine and Infectious Disease Organization, Canada*
3. Influenza A viruses activate host PI3K/Akt survival pathway for pro-viral advantage in chicken but not in duck cells
Sanjeeva Kumar, *University of Nottingham, UK*
4. Environmental CO2 Modification of Innate Immune responses to LPS and Organic Dust
David Schneberger, *University of Saskatchewan, Canada*
5. Rabies virus interrupts cofilin pathway and induces depolymerization of actin in hippocampal region
Waqas Ahmad, *University of Veterinary and Animal Sciences, Jhang Campus, Pakistan*

SUNDAY 24 JUNE 2018

14:00-15:45	ANTIMICROBIAL AGENTS AND RESISTANCE	GALLERY C-D
	Novel strategies for amr interventions / preparedness	
	CHAIR: Laura H. Kahn , <i>Princeton University, USA</i>	
	CO-CHAIR: Reema Persad-Clem , <i>UC Berkeley, USA</i>	
	1. Operationalising One Health Approaches to Surveillance for Antimicrobial Resistance Joanna Susan Mckenzie , <i>Massey University, New Zealand</i>	
	2. #AMR: Exploring the role of social media in addressing antimicrobial resistance M9egan Lesley Moore , <i>University of Saskatchewan, Canada</i>	
	3. Development of 2-Aminoimidazole Compounds that Enhance Antibiotic Activities to Reduce Antibiotic Usage Malcolm Thomas , <i>Agile Sciences, Inc, USA</i>	
	4. A novel participatory strategy to reduce antimicrobial use in agricultural systems Mark Bryan , <i>VetSouth Limited Winton, New Zealand</i>	
	5. Can inhibition of transmission of KPC and CTX-M producing plasmids reduce the spread of AMR? Michelle M.C. Buckner , <i>University of Birmingham, UK</i>	
14:00-15:45	SCIENCE POLICY INTERFACE	GALLERY A-B
	One health and global health security-disaster risk reduction	
	CHAIR: William B. Karesh , <i>EcoHealth Alliance</i>	
	CO-CHAIR: Trevor Smith , <i>Deputy Executive Director and General Counsel, Global Affairs Canada</i>	
	1. The Global Health Security Agenda Speaker to be confirmed	
	2. The Weapons of Mass Destruction Threat Reduction Program Trevor Smith , <i>Deputy Executive Director and General Counsel, Global Affairs Canada</i>	
	3. Objectives and achievements of the Defense Threat Reduction Agency Lance Brooks , <i>Division Chief Cooperative Bio Engagement Program, Department of Defense, USA</i>	
	4. The Role of Private Industry Speaker to be confirmed	
15:45-16:15	COFFEE BREAK	

SUNDAY 24 JUNE 2018

16:15-18:00

PARALLEL SESSIONS

ONE HEALTH SCIENCE 1

SALON A-B

Vaccines 1

CHAIR: **George Gao**, Deputy Director-General CDC ChinaCO-CHAIR: **Volker Gerdtts**, University of Saskatchewan, Canada

1. Portfolio Approach, Development and Stockpile of MERS-CoV Vaccines: A Case Study
Simone Blayer, CEPI, UK
2. Protective non-specific effect of rabies vaccine in humans, dogs and cattle: One Health implications
Anne Conan, Ross University School of Veterinary Medicine, Saint Kitts and Nevis
3. Brucellosis in the changing peri-urban dairy systems of West Africa
Laura Ann Craighhead, RVC, UK
4. A Cimaza Case Study – Highlighting Effectiveness of Comics/Animations in Enhancing Science Literacy and in Particular the Science Behind Vaccines and Viral Diseases
Susan Obeid, CIMAZA, Belgium
5. A systematic review of strategies for reducing missed opportunities for vaccination
Anelisa Jaca, South African Medical Research Council, South Africa

16:15-18:00

ONE HEALTH SCIENCE 2

SALON C-D

Infectious diseases from an ecohealth perspective 1

CHAIR: **Craig Stephen**, University of Saskatchewan, CanadaCO-CHAIR: **Patrick Leighton**, University of Montreal, Canada

1. Integrating Ecosystem Approaches to Health: A One Health Investigation of Rift Valley Fever Virus
Melinda K Rostal, EcoHealth Alliance, USA
2. The Other Side of One Health: A Brucellosis story
Barbara Akorfa Glover, University of Pretoria, South Africa
3. One ring to rule them all: Uniting human, animal, and environmental data using the Checklist for One Health Epidemiological Reporting of Evidence (COHERE)
Peter M. Rabinowitz, Center for One Health Research, University of Washington, USA
4. Ecohealth Project at the community level: Disease Research and development at the human-domestic animal and wildlife interface, Uganda
Innocent Bidason Rwego, University of Minnesota, Uganda
5. “Whenever I see a fruit bat, I think Hendra” – Attitudes and risk perception of Australian horse owners towards flying foxes in relation to Hendra virus
Anke Wiethoelter, University of Melbourne, Australia

SUNDAY 24 JUNE 2018

14:00-15:45

ANTIMICROBIAL AGENTS AND RESISTANCE

GALLERY C-D

Alternative approaches to tackling resistant infectionsCHAIR: **Britta Lassman**, *International Society for Infectious Diseases*CO-CHAIR: **Mohamed Sirdar**, *University of Pretoria, South Africa*

1. Antibiotics usage by pastoralists in livestock in North-central Nigeria: The socio-cultural drivers for antibiotic resistance emergence and public health implications
Nma Bida Alhaji, *Niger State Government, Nigeria*
2. Extent of dispensing prescription-only medications without a prescription in community drug retail outlets in Addis Ababa, Ethiopia: a simulated-patient study
Begashaw Melaku Gebresillassie, *University of Gondar, Ethiopia*
3. Towards a Global Database of Emerging Antibiotic Resistance
Brooke Watson, *EcoHealth Alliance, USA*
4. Current Patterns of Antibiotic Resistance in High Density Livestock-Human Populations in Western Kenya
Steven Alan Kemp, *University of Liverpool, UK*
5. Antimicrobial use behaviours, the economics of animal disease and perceptions of antimicrobial policy in pig production in Vietnam
Lucy Alice Coyne, *University of Liverpool, UK*

14:00-15:45

SCIENCE POLICY INTERFACE

GALLERY A-B

Making one health operational: the barriers to change and glimmers of hopeCHAIR: **Robert Salerno**, *DAI Global Health*

1. Introduction to the session's concept and objectives
Robert Salerno, *session chair*
2. A decade of implementing One Health in Kenya: Translating research into practice
Peninah Munyua, *Kenya CDC*
3. One Health Secretariat: A Formalized coordinating Entity for Operationalizing One Health in Bangladesh
Meerjady Sabrina Flora, *IEDCR, Bangladesh*
4. Making One Health operational within the Caribbean Region
Chris Oura, *University of the West Indies, Trinidad*
5. Characterizing the interventions of the private sector extractive industries during the Ebola virus disease crisis in West Africa
Sambe Duale, *USAID Emerging Pandemic Threats 2 Program*
6. Tripartite Guidance: Taking One Health Approaches to Address Zoonotic Diseases in Countries: A "Glimmer of Hope"
Elizabeth Mumford, *World Health Organization*
7. Panel discussion and open Q&A

SUNDAY 24 JUNE 2018

18:00-19:30

SPECIAL PLENARY SESSION

SALON A-B

Emerging and re-emerging infectious diseases: assessment, preparedness and eradication

CHAIRS: **Mike Ryan**, *the World Health Organization*
William B. Karesh, *EcoHealth Alliance*

1. Introducing emerging and re-emerging infectious diseases / The threat of an Influenza Pandemic
Ab Osterhaus, *RIZ Hannover, Germany*
2. Eradication of infectious diseases: past, present and future
Nick Juleff, *Senior Program Officer Animal Health portfolio, Bill & Melinda Gates Foundation*
3. Risk reduction of health emergencies and impact of climate change on health: implications of relevant international frameworks
Chadia Wannous, *Towards a Safer World Network for Pandemic Preparedness (TASW)*
4. Strengthening global biological security
Speaker: to be confirmed
5. Community-based surveillance for early detection of EID
Speaker: to be confirmed
6. Health emergency challenges from the animal health pharma perspective
Speaker: to be confirmed
7. Health emergency challenges from the human health pharma perspective
Speaker: to be confirmed

20:00-23:00

FAREWELL DINNER

REMAI MODERN ART GALLERY

MONDAY 25 JUNE 2018

08:00-10:00	BREAKFAST PLENARY SESSION	SALON A-B
10:00-10:30	COFFEE BREAK	
10:30-12:15	PARALLEL SESSIONS	
	ONE HEALTH SCIENCE 1	SALON A-B
	Vaccines 2	
	CHAIR: Lorne Babiuk , <i>University of Alberta, Canada</i>	
	CO-CHAIR: Teresia Maina , <i>University of Saskatchewan, Canada</i>	
	1. Development of a highly pathogenic avian H7N9 influenza disease model in mouse Shelby Layne Landreth , <i>University of Saskatchewan, Canada</i>	
	2. A trial to assess the thermotolerance of an inactivated rabies vaccine Felix John Lankester , <i>Washington State University, Tanzania</i>	
	3. Acceptance Of Heterologous Prime-Boost Vaccination Regimens – An Assessment Sabrina Ivol , <i>Janssen Vaccines & Prevention, The Netherlands</i>	
	4. Identifying Genomic Predictors of Vaccine Response in Swine Peris Mumbi Munyaka , <i>University of Alberta, Canada</i>	
	5. Q fever vaccine failure rate, duration of longevity of immunity and associated demographic factors in Australia Solomon Meseret Woldeyohannes , <i>University of Queensland, Australia</i>	
10:30-12:15	ONE HEALTH SCIENCE 2	SALON C-D
	Infectious diseases from an ecohealth perspective 2	
	CHAIR: Jonna Mazet , <i>UC Davis, USA</i>	
	CO-CHAIR: James Bangura , <i>UC Davis One Health Institute, Freetown, Sierra Leone</i>	
	1. The role of mainland-island bat movement in the dissemination of viruses of public health concern in the Caribbean Janine Seetahal , <i>The University of the West Indies, Trinidad & Tobago</i>	
	2. Nematode co-infections, environmental factors and weather impact infection with the zoonotic bacterium, <i>Bartonella tribocorum</i> , in urban Norway rats (<i>Rattus norvegicus</i>) Jamie Lee Rothenburger , <i>University of Calgary Faculty of Veterinary Medicine, Canada</i>	
	3. Environmental Change Increases Human-Macaque Interactions and the Risk of Zoonotic Disease Spillover Ariful Islam , <i>Institute of Epidemiology, Disease Control and Research, Bangladesh</i>	
	4. Explaining variation in human and animal zoonotic infection risk in northern Tanzania: defining agro-ecological systems and their contribution to risk William Anson de Glanville , <i>University of Glasgow, UK</i>	
	5. Building collaborative capacity to evaluate zoonotic viral sharing among bats, primates, and people in Tanzania Elizabeth VanWormer , <i>University of Nebraska, Lincoln, USA</i>	

MONDAY 25 JUNE 2018

10:30-12:15	ANTIMICROBIAL AGENTS AND RESISTANCE	GALLERY C-D
	Rapid diagnostics	
	CHAIR: Rafael Canton , <i>University hospital of Madrid, Spain</i>	
	CO-CHAIR: Moon Tay Yue Feng , <i>Nanyang Technological University, Singapore</i>	
	1. Analysis of single nucleotide polymorphism in KatG gene in isoniazid resistant Mycobacterium Tuberculosis Muhammad Arif , <i>University of Malakand, Pakistan</i>	
	2. Exploiting the potential of flow cytometry in rapid antimicrobial susceptibility testing Timothy John Jay Inglis , <i>University of Western Australia, Australia</i>	
	3. Novel and Rapid Multiplex Allele-Specific PCR (MAS-PCR) Test for Rapid Detection of MDR and XDR-TB from the Sputum of Lung TB Patients in Makassar, Indonesia Muhammad Nasrum Massi , <i>Hasanuddin University, Indonesia</i>	
	4. Presence of oqxA and oqxB genes in a multidrug resistant Salmonella Typhimurium isolate recovered from swine in Brazil Daniel F. Monte , <i>University of São Paulo, Brazil</i>	
10:30-12:15	SCIENCE POLICY INTERFACE	GALLERY A-B
	One health in underserved, resource-poor and marginalized communities / funding needs and funding mechanisms / funding policies for one health	
	CHAIR: Marietjie Venter , <i>University of Pretoria, SA</i>	
	1. One Health in Africa: a concept with global benefits Speaker to be confirmed	
	2. First Nations of Canada and the One Health approach Addie Pryce , <i>Assembly of First Nations, Canada</i>	
	3. One Health, rabies response and more-than-human considerations in Indigenous communities in Northern Australia Chris Degeling , <i>University of Wollongong, Australia</i>	
12:15-13:45	PLENARY SESSION	THEATRE
	Late breakers	
	CHAIR: John Mackenzie , <i>Curtin University, Australia</i>	
	Submission of late breaker abstracts until 15 May 2018	
13:45-14:00	CLOSING CEREMONY	THEATRE

MONDAY 25 JUNE 2018

14:00-14:30 LUNCH

14:30-15:30 **PRESS CONFERENCE - LIVE STREAM****SALON C-D**

Prof. John Mackenzie, Prof. Ab Osterhaus and other key contributors to the congress will share the main outcomes on aspects of emerging and re-emerging infectious diseases and antimicrobial resistance. They will inform members of the press about the development of a "White Paper" - established during the congress. The White Paper will provide in-depth descriptions of the major One Health challenges and threats. It will openly state what is going wrong on a societal level, what is lacking and what the gaps are in order to make the world a safer place when it comes to One Health issues. The White Paper will come with a clear call for actions, a roadmap that describes what needs to be done - better and more. The press conference will be live streamed. The accompanying press statement will be distributed to members of the press globally.

15:30- **GUIDED EXCURSIONS**