# ASF Global update and threats: David Williams, AAHL



David Williams is the leader of the Emergency Disease Laboratory Diagnosis group at the CSIRO Australian Animal Health Laboratory, Geelong, Victoria. This group comprises multidisciplinary capability in virus diagnostics, contributing to national and regional emergency animal disease diagnostics and surveillance. Dr Williams' research interests have included the detection, diagnosis, and epidemiology of emerging and exotic viruses that affect humans and animals in Australia and overseas. This work has focussed on mosquito-borne viruses, and the application of novel technologies for virus detection and discovery. More recently, his research has extended to the laboratory diagnosis and pathogenesis of African swine fever and animal influenza viruses.

Screening seized pork products for ASF: Brian Clarke, Department of Agriculture

Dr Brian Clarke is currently acting Director of the Biologicals team, Animal Biosecurity Branch at the Department of Agriculture. He got his PhD from Deakin University in conjunction with the Australian Animal Health Laboratory using shRNAs to generate zebrafish specifically resistant to Viral Haemorrhagic Disease Virus. Prior to joining the department in 2017, he worked on codon-deoptomised poliovirus with the Defence Science and Technology Organisation, and was a post-doctoral fellow at the University of Queensland studying non-coding RNAs produced by West-Nile virus and other flaviviruses and a post-doctoral fellow at the Pirbright Institute using next-generation sequencing to study the evolution and transmission of peste-des-petits ruminants virus in North Africa, the Middle east, and Bangladesh.

Mapping and managing feral pig populations in Australia: Peter Durr, AAHL



Peter Durr has worked as a veterinary epidemiologist for the past 20 years, initially at the Veterinary Laboratories Agency (Weybridge) in the UK, and since 2006 with CSIRO at the Australian Animal Health Laboratory (AAHL). At AAHL, his work has mostly been on the epidemiology of Transboundary Animal Diseases, particularly highly pathogenic avian influenza, bluetongue, foot and mouth disease and Newcastle disease. He has a specialist interest in the application of Big data approaches and most recently has been applying these for projects developing a web-based Decision Support System for the spread of FMD and investigating the feasibility of releasing Koi herpes virus for the biocontrol of invasive common carp in south eastern Australia.

Northern Australia Quarantine Strategy – ASF: Michele Byers, Department of Agriculture



Michele Byers is a veterinary officer involved in the Northern Australian Quarantine Strategy (NAQS), in the Australian Department of Agriculture, Cairns, Queensland. She has worked in private practice in various places including the UK, Southern Africa and Australia. She joined the Department of Agriculture in 2009 and was based in Darwin until 2015.

Assessing exposure to HPAI in Australian migratory shorebirds: **Andrew Breed**, Department of Agriculture

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Andrew's current role involves leading and managing projects in animal disease surveillance and epidemiology. He worked in mixed-animal veterinary practice in Australia and the UK before completing an MSc in Wild Animal Health at the Royal Veterinary College and then a PhD on the epidemiology of Hendra and Nipah viruses at the Australian Biosecurity Cooperative Research Centre for Emerging Infectious Disease. He is a Diplomate of the European College of Zoological Medicine and specialist in Wildlife Population Health. He has published widely on the epidemiology and ecology of viral pathogens, is a member of the IUCN's Wildlife Health Specialist Group, and editor for the journals *EcoHealth* and *Epidemiology & Infection*.

Beating Buruli - a case-control study in Victoria: Kim Blasdell, AAHL



Kim Blasdell is an infectious disease scientist with a focus on zoonotic viruses. Originally from the UK, she undertook her PhD at the University of Liverpool before moving to Cambodia to conduct work on rodent-borne diseases. She came to AAHL in 2010 and during her time here has worked on important arboviruses of livestock and the impact of urbanisation on rodent-borne viruses. She is particularly interested in how zoonotic pathogens circulate in wildlife, especially in urban environments and is currently involved in a study that is trying to shed light on the ecology of *Mycobacterium ulcerans*, the agent of Buruli ulcer.



Wobbly possums in Australia: Jemma Bergfeld, AAHL

Jemma is a 2002 veterinary graduated of Melbourne University and has worked AAHL since 2010 as a duty vet and pathologist. She completed her PhD on Newcastle Disease in 2017. She has a keen interest in wildlife diseases.

# OIE FMD and PPR Program in Africa: Andrea Britton, Ultimate Efficacy Consulting



animals.

Dr Andrea Britton is an experienced consultant veterinarian with significant expertise in epidemiology, human and veterinary public health . Andrea is skilled at stakeholder engagement and working with partners on effective delivery of end-to-end project. Over the past 30 years she has worked as a practising vet within Australia and overseas, with global pharmaceutical companies (CSL Ltd and Pfizer) and in consultancy practice on a variety of projects for governments, Universities, not-for-profit, biotechnology companies and WHO. She is currently with OIE in Southern Africa region , working on projects regarding Foot and Mouth Disease in production

# Defining the role of wind dispersal in the spread of FMD: Kerryne Graham (AAHL)



Kerryne works within the Veterinary Investigation and Epidemiology team located here at AAHL. She is involved in a number of collaborative projects where she is able to apply her expertise in data management, spatial analysis and implementation of surveillance information systems. Kerryne has most recently been involved in modelling the habitat suitability for the effective release of Cyprinid Herpes virus-3 for the control of European Carp and is also involved in development of SPREAD — a web-based system integrating epidemic data, wind-dispersion and molecular data for surveillance and response.

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### Are we FMD READY? Wilna Vosloo, AAHL



Wilna is a senior principal research scientist at the CSIRO-Australian Animal Health Laboratory (AAHL) in Geelong. For the last 30 years her research has focused on transboundary animal diseases that not only have the potential to infect livestock species, but have wildlife maintenance hosts that make the control of these diseases very complex and eradication near impossible. Foot-and-mouth disease has been her major focus. Currently she is responsible for the FMD research programme at AAHL and the principal investigator on a project that uses FMD as a model for Improved Surveillance, Preparedness and Return to Trade for Emergency Animal Disease

Incursions. This project involves a number of collaborators across different disciplines and aims to build models and tools that could be used for improved disease control.

Mycoplasma bovis- NZ update: Kate Sawford, MPI NZ



Dr Kate Sawford graduated with a DVM degree from Ontario Veterinary College in 2006. She has then gained a PhD in Epidemiology and Public Health from the University of Calgary. During her PhD she collaborated with officials and government veterinarians in Sri Lanka to develop an intelligence-driven disease surveillance system. She has also obtained membership in the epidemiology chapter of the Australian and New Zealand College of Veterinary Scientists and diplomate status in the American College of Veterinary Preventive Medicine. Kate

worked in Alberta and British Columbia before working at the University of Sydney. She then worked as a district vet for Greater Sydney LLS in Braidwood NSW for three years. She joined the MPI in New Zealand last year to assist with the Mycoplasma bovis emergency response.

Bulk milk tank testing for M. bovis: Amy Burroughs, MPI NZ



Amy Burroughs is a veterinarian with a particular interest in epidemiology, particularly study design, study methodology and outbreak investigations. After graduating from veterinary science at the University of Queensland, Amy worked for two years as a district veterinarian with Biosecurity Queensland in Rockhampton. Here, she was involved in an outbreak response to Hendra virus where she became interested in batborne zoonoses. She undertook a PhD at AAHL, followed by a Master of Applied Epidemiology through the Australian National University. She has

worked for the Department of Agriculture and Ausvet. Amy now works with MPI in New Zealand.

#### Leptospirosis in NSW and beyond: Ofir Schwarzmann, NSW DPI



Ofir Schwarzmann is a veterinary officer at the Department of Primary Industries, Orange NSW. Originally graduating from the University of Sydney with a Bachelor's degree in Veterinary Medicine in 2016, she practiced as a small animal veterinarian in Sydney before returning to university to undertake a Master's degree in Health Security. She joined the Department of Primary Industries at the end of 2018. Her interests include 'One health', zoonotic diseases and food safety.

Salmonella enteritidis outbreak in NSW: Myles Parker, NSW DPI



Myles Parker is the leader of the *Salmonella enteritidis* program for the poultry industry at the Department of Primary Industries, Orange NSW. He has 25 years of professional agronomy experience across a broad range of agricultural industries. Myles has extensive experience in development and extension (Australia, Africa and central Asia), managing state-wide extension and development programs, and maximising the impact of programs through the use of e-technologies. He studied agricultural science at the University of Sydney, and has worked with NSW DPI for over 10 years.

Equine disease outbreak investigation workshop: Josh Slater, University of Melbourne



Josh Slater graduated from the University of Edinburgh in 1985 and spent 4 years in equine practice before moving to a residency in equine medicine at the University of Cambridge. He completed a PhD in equine infectious diseases in 1994 and was a lecturer, then senior lecturer in equine medicine at the University of Cambridge during which he held a Wellcome Trust research fellowship. He moved to the Royal Veterinary College, London in 2005 where he is professor of equine clinical studies and clinical director of the Equine Referral Hospital. His research is in equine infectious diseases, in particular strangles, equine herpesviruses and equine influenza. He is a past president of the British

Equine Veterinary Association, the European College of Equine Internal Medicine and the Federation of European Equine Veterinary Associations. He was biosecurity advisor to the Hong Kong Government for the 2008 Equestrian Olympic Games, was the National Technical Official responsible for biosecurity at the London 2012 Equestrian Olympic Games and was a biosecurity advisor for the World Equestrian Games 2014. Josh took up his position as Professor of Veterinary Medicine and Head of Department Veterinary Clinical Sciences at the University of Melbourne Veterinary School at the end of 2018.

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Queensland's flood response - what can we learn for the future: Allison Crook, QLD DAF



Allison Crook is the General Manager Animal Biosecurity and Welfare and Chief Veterinary Officer at Queensland Government. She has extensive experience in management of emergency animal diseases, including the foot-and-mouth disease outbreak in the United Kingdom in 2001, the successful equine influenza response in 2007 –2008, multiple Hendra virus incidents and the white spot disease in Queensland. Earlier in her career, she worked for Coopers Animal Health, and the Department of Primary Industries in Toowoomba.

EAD Online training modules: Simon Firestone, University of Melbourne



Simon Firestone is a Senior Lecturer in Veterinary Epidemiology and Public Health in the Faculty of Veterinary and Agricultural Sciences, The University of Melbourne. He coordinates the Master of Veterinary Public Health program and also teaches into the Doctor of Veterinary Medicine, and the Agriculture and Science degrees. His research focuses on infectious disease modelling, Bayesian diagnostic test validation, zoonoses surveillance, outbreak investigation and control, with projects on foodborne disease, Q fever, antimicrobial resistance, foot-

and-mouth disease, influenzas and arboviruses. Earlier in his career, Simon worked for the World Health Organisation in Indonesia and Cambodia, and Veterinarians without Borders/Vétérinaires sans Frontières (Canada) across Southeast Asia. Simon's favourite companion animals are his two grubby sons, his bees and chooks.



Nextstrain – toward real-time tracking of pathogen evolution: **Matt Neave**, AAHL

Matthew initially studied Marine and Freshwater Science at Deakin University in Warrnambool, before moving to the Northern Territory and completing a Ph.D. in marine genetics at Charles Darwin University. After his Ph.D., Matthew undertook postdoctoral work at the Woods Hole Oceanographic Institution in Massachusetts, and at KAUST in Saudi Arabia., working on coral genomics and their associated microbiome. Matthew joined CSIRO AAHL in 2015, working with Drs. Ken McColl and Agus Sunarto on the co-evolution of

carp and Koi Herpes virus. Since then he has worked on many different projects, including pathogen discovery from metagenomics data and phylogenomics using Nextstrain. Recently Matthew was appointed as Team Leader of the Agent Characterisation group, which includes DNA sequencing and bioinformatics for diagnostic purposes.