In this CVERA e-zine, we provide a brief overview of some of the recent work conducted by CVERA staff in collaboration with a wide range of national and international institutions. More in-depth information can be found at http://www.ucd.ie/cvera/, noting the role of CVERA to provide high quality independent scientific research and advice to support national evidence-based policy-making in animal health & welfare and public health and related matters.

EUFMDis

CVERA has supported Ireland's role in the EuFMDiS project, a European foot-and-mouth disease (FMD) modelling programme. The primary function of the model is to promote evaluation of emergency preparedness for exotic animal disease incursions, discussions amongst participating European National Disease Control Centres, and engagement of stakeholders. CVERA collaborated with the disease modellers to adapt the model for Ireland as well as aggregating detailed data for the model on direct animal movements, animal populations, markets and indirect contacts between farms. For more information please visit: http://www.fao.org/eufmd/global-situation/eufmdis/en/

Foot and Mouth Disease atmospheric dispersion system

A decision support system to aid in the risk evaluation of airborne animal diseases was developed for Ireland. The system's primary objective is to assist in risk evaluation of the airborne spread of Foot and Mouth Disease (FMD). The operational system was developed by Met Éireann – the Irish Meteorological Service and CVERA, in co-operation with NOAA-ARL (National Oceanic and Atmospheric Administration – Air Resources Laboratory) and ECMWF (European Centre for Medium-Range Weather Forecasts). The infrastructure largely relies on the HYSPLIT dispersion model driven by both ECMWF meteorological forecasts for longer range simulations, and HARMONIE-AROME meteorological forecasts, a high resolution local area meteorological model, ideal for shorter range national emissions. Following on from previous work by the Bureau of Meteorology, Australia as well as the Australian Department of Agriculture, Fisheries and Forestry, further modifications were made to the HYSPLIT source code to improve the model's characterisation of the Foot and Mouth Disease virus. FMD is a highly infectious disease among cloven hoofed animals that can transmit via airborne means. Biological characteristics related to temperature, humidity, lifespan as well as atmospheric washout were all incorporated either through new or existing functionality of the dispersion model. Combining the model dispersion capabilities of HYSPLIT with a virus emission model and GIS mapping software with farmland zoning, the disease dispersion system becomes a powerful analysis and decision support tool. This airborne animal disease atmospheric dispersion system helps improve emergency preparedness, as well as aid confinement and eradication strategies for relevant Irish authorities, during a disease outbreak. The associated open access paper appears in Advances in Science and Research and is available at https://doi.org/10.5194/asr-16-113-2019

European perspectives on efforts to reduce antimicrobial usage in food animal production

New regulations on veterinary medicines and medicated feed will substantially influence antimicrobial prescribing and usage throughout Europe into the future. In an invited talk at the 70th Annual Meeting of the European Federation of Animal Science (EAAP 2019, held in Ghent,

Belgium during late August), Simon More presented an overview of efforts within Europe to reduce antimicrobial usage in food animal production. Substantial scientific progress has been made on the measurement of antimicrobial usage, including at herd-level, and on the objective measurement of farm biosecurity. Further, in a number of EU member states, monitoring systems for usage are well-established, allowing benchmarking for veterinarians and farms and monitoring of national and industry-level trends. The new regulations offer an important springboard for further progress, including in Ireland, in order to preserve the efficacy of existing antimicrobials.

Áine Collins joins CVERA

We are delighted that Dr Áine Collins has joined CVERA in her role as Veterinary Epidemiologist. Áine qualified from the UCD School of Veterinary Medicine in 2013. Following graduation, Áine travelled to École Nationale Vétérinaire de Toulouse, France, to undertake a veterinary internship farm animal practice, herd health and necropsy examination. Motivated by a keen interest in novel emerging pathogens, Áine returned to Ireland in 2014 to undertake a PhD with the UCD School of Veterinary Medicine and Teagasc on Schmallenberg virus (SBV) in Irish dairy herds, with a special focus on the epidemiology, virology and entomology of this virus. Subsequently, Áine commenced a role as Veterinary Inspector with the Department of Agriculture Food and the Marine in 2017 where she worked in the Veterinary Public Health Inspection Service.

***M. bovis* 2020 abstract submission is now open**

Abstract submission and registration for *M. bovis* 2020 has opened. Conference themes include: One Health and zoonotic Tb, immunology and genetics of host resistance, management of Tb in wildlife, social science and economics, national control strategies, diagnostics development and strategies & epidemiological tools and application. All abstracts will be reviewed by the Scientific Committee prior to acceptance. The deadline for abstract submission is 12th January 2020. For more information please visit: https://www.mbovis2020.com/

Congratulations to Jarlath O'Connor on successfully defending his DGov thesis

Dr. Jarlath O'Connor recently defended his DGov thesis titled "Assessment of the perceptions of Stakeholders to Bovine Tuberculosis Eradication in Ireland and the role of collaborative governance". This research examined the attitudes and perceptions of key stakeholders of bovine tuberculosis (bTB) eradication in Ireland. Additionally, this research explored the attitude of stakeholders to using a collaborative governance approach to achieve that target, given a governmental target of eradication by 2030. This research was informed by the theory of collaborative governance which holds that public administrators should directly engage non-state stakeholders in a collective decision-making process that is consensus-oriented, deliberative and that aims to make or implement public policy. Interpretative phenomenological analysis, a qualitative research methodology, was used to describe, explain and understand the perspectives of study participants on bTB eradication.

This e-zine, and previous news items, can be found at: http://www.ucd.ie/cvera/news/

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