

Horizon scanning in veterinary epidemiology

17-19 April 2024

Château de Colonster, University of Liège Allée des Érables 4000 Liège - Belgium











Welcome to the AESA 33th anniversary International Congress!

t is our pleasure to welcome you in Liege at the second international symposium in Animal Epidemiology of the Association of Epidemiology and Animal Health (in French, Association d'Epidémiologie et de Santé Animale, AESA). The AESA aims to enhance the interest and education and to stimulate research in the field of veterinary epidemiology and animal health, mainly by organizing workshops, conferences, and symposia and by providing scientific support in those matters.

Despite increased interest, research and some investment in veterinary epidemiology and animal health, the scale of the task for the future is considerable for epidemiologists and many challenges remain or new challenges will arise. This reason together with the 33th anniversary of our association are explaining the title of our international congress: «Horizon scanning in veterinary epidemiology». With a look at the present, in order to anticipate the orientation of the future is the main idea of this topic. This big challenge needs sharing of information, exchange, brainstorming, interdisciplinary approach (e.g. social and economic sciences) and connectivity.

Considering these epidemiological challenges, do we need to adapt the epidemiological approach or not? Invited speakers with international appeal will try to find answers for the future in eleven different sessions concerning the Academia and Government work hand-in-hand to support wildlife conservation, protect public health and prevent the next pandemic, the one health veterinary drug resistance, the bee management practices including biosecurity and sustainability, the artificial intelligence assistance, video games and

other digital tools in epidemiology, the participatory epidemiology, the emerging and vector-borne diseases, the one health integrated surveillance, the molecular biology and bio-informatics in epidemiology and finally the biological weapons and epidemiology.

In addition of this variety of interesting subjects, we will give young scientists the opportunity to present their work during different parallel sessions during the two days symposium (oral presentations and posters).

At the end of the symposium, five prizes will be attributed to the best presentation by AVIA-GIS, ARSIA, AMCRA, UREAR-ULiege and AESA.

We thank the sponsors for their financial support: Fund for Scientific Research (F.R.S.–FNRS), the Province of Liège, Innovative Diagnostics, Emdoka and ARSIA.

We thank the Heliport brewery (Brasserie Héliport) for its hospitality in the splendid setting of Colonster Castle of the University of Liege.

A special thanks to the board members of the Scientific Committee and the AESA Organization Committee.

We appreciated all the work that had been fulfilled during the organization of this meeting as well during the evaluation of the submitted proceedings, abstracts and posters. We can be proud of the obtained results.

On behalf of the boards of the AESA we wish you a pleasant and stimulating and inspiring meeting.

Best regards, Prof. Dr. Claude Saegerman AESA President

Wednesday, April 17

13:00	17:00	Workshop	One Health Quantitative Risk Assessment	Prof. Claude Saegerman (ULiège, BE) & Prof. Maria Eleni Filippitzi (Aristotle University of Thessaloniki, GR)	Salle Carpay (1st floor, next to the elevator)
13:00	17:00	Workshop	Cartography and spatio-temporal tools	Prof. Timothée Vergne & Dr. Brandon Hayes (Université de Toulouse, INRAE, ENVT, Toulouse)	Salle bleue (2 nd floor)
18:00	23:00		Ice breaking dinner		Salle Creative

Thursday, April 18

08:00	09:00		Registration		Hall
09:00	09:20	Ope	Opening ceremony and Introduction to the international symposium Prof. Claude Saegerman - President		FAESA Salle de Lecture (2 nd floor)
SESS	ION 1		Wildlife	Chairwoman : Dr V. De Waele	
09:20	10:00	Keynote	How can Academia and Government work hand-in-hand to support wildlife conservation, protect public health and prevent the next pandemic? (videoconference)	Dr. Anne-Lise Chaber - School of Animal and Veterinary Sciences - Faculty of Medical Sciences - University of Adelaide, Australia	
10:00	10:15		Usutu virus circulation in wild birds, Wallonia 2023	Laura Duran Ilán - ULiège	Salle de Lecture (2 nd floor)
10:15	10:30	Selected oral presentations	In vitro and in vivo characterization of four bacteriophages targeting Aeromonas salmonicida	Salomé Desmecht - ULiège	
10:30	10:45		An R-Shiny application to assess the risks of introduction of infectious animal diseases in Belgium	Xavier Simons - Sciensano	
10:45	11:15		Coffee break		Péristyle (1st floor)
SESSI	ON 2A		Veterinary Drug Resistance	Chairwoman: Dr F. Dal Pozzo	
11:15	11:45	Keynote	Veterinary Drug Resistance in a One Health Perspective	Dr Laeritia Lempereur - FAO - One Health & Disease Control Group (NSAH-CJW)	
11:45	12:00		A first One Health integrated analysis of antibiotic resistance surveillance data in France	Lucie Collineau ANSES	Salle bleue (2 nd floor)
12:00	12:15	Selected oral presentations	The consumption of veterinary antibacterial products in Belgium in 2022 and its evolution since 2011	Maries Lissens AMCRA	(2 11001)
12:15	12:30		Challenges on data collection on antibiotic use in companion animals and horses	Bénédicte Callens AMCRA	
SESSI	ON 2B		Bee Health	Chairwoman: J.S. Ocaña Cabrera	
11:15	11:45	Keynote	One Health, Bee Management practices including biosecurity & sustainable beekeeping	Dr. Giovanni Formato - ITZER - IT; FAO and WAOH Reference Centre for Apiculture, Health and Biosecurity	
1:45	12:00		Sweet stingless beekeeping from the middle of the world	Joseline Sofia Ocaña Cabrera - ULiège	Salle de Lecture (2 nd floor)
2:00	12:15	Selected oral presentations	BeeToxWax: real time tool for calculation of the toxicity risk of waxes that have been subjected to a pesticide analysis	Claude Saegerman - ULiège	
12:15	12:30				
2:30	14:00		Lunch and poster session		Péristyle (1st floor
SESSI	ON 3A		Modelisation in epidemiology	Chairman : Prof. C. Saegerman	
4:00	14:30	Keynote	Modelisation in epidemiology: for which purpose?	Prof. Timothée Vergne - Université de Toulouse, INRAE, ENVT, Toulouse - FR	Salle bleue (2 nd floor)
4:30	14:45		Modeling High Pathogenicity Avian Influenza: Integration of Sociological and Environmental Factors	Maryem Ben Salem ANSES	
14:45	15:00	Selected oral presentations	Predicting mosquito biodiversity and abundance using land use and climate changes (videoconference)	Antoinette Ludwig Public Health Agency Canada	
15:00	15:15		A highly efficient ELISA to specifically detect CCHFV antibodies in animals and humans	Philippe Bevilacqua Innovative Diagnostics (Idvet)	
SESSI	ON 3B		Socio-eco epidemiology	Chairman : Dr L. Delooz	
4:00	14:30	Keynote	Socio-eco epidemiology	Prof. Niemi Jarkko (Natural Resources Institute Finland - FI)	
4:30	14:45		Stability and lytic activity assessment in milk of bacteriophages targeting Escherichia coli causing bovine mastitis	Jacob Diderich - ULiège	Salle de Lecture (2 nd floor)
4:45	15:00	Selected oral presentations	Antimicrobial resistance characterization of MRSA and MRSP isolated in dogs and cats in Belgium	Suzanne Dewulf - UGent	
15:00	15:15		Comparaison of herd mortality rates in Wallonia	Julien Evrard - ARSIA	
5:15	15:45		Coffee break		Péristyle (1st floor
SESSI	ON 4A		Digital tools in Epidemiology	Chairman : Dr L. Martinelle	
5:45	16:15	Keynote	Artificial intelligence assistance, video games and other digital tools in Epidemiology	Ir. Sébastien Picault - INRAe - FR	
6:15	16:30		New real time biosecurity tool in your hands	Claude Saegerman - ULiège	Salle bleue (2 nd floor)
16:30	16:45	Selected oral presentations	Horizon scanning for plant pests at EFSA : tools and methods	Magali Larenaudie - EFSA	
6:45	17:00	presentations	Optimizing surveillance strategies of highly pathogenic avian influenza in live bird markets across southeast Asia	Dr. Brandon Hayes (IHAP, ENVT, Toulouse, INRAE)	
SESSI	ON 4B		Participatory Epidemiology	Chairman : Dr JY. Houtain	
5:45	16:15	Keynote	The added-value of participatory epidemiology	Dr. Bryony Jones (Senior Epidemiologist at Animal and Plant Health Agency - UK)	Salle de Lecture (2ºd floor)
16:15	16:30		Surveying tick control practices on dairy farms in subtropical areas of continental Ecuador	Valeria Paucar - ULiège	
6:30	16:45	Selected oral presentations	Assessing acaricide treatment expenses on dairy farms in subtropical areas of Ecuador	Valeria Paucar - ULiège	
16:45	17:00		First Expert Elicitation of Knowledge on Drivers of Emergence of Bovine Besnoitiosis in Europe	Claude Saegerman - ULiège	
8:00	19:00		Visit of the « Plants World Observatory » of U	Jniversity of Liège	
		AESA 33 rd anniversary gala dinner			Péristyle (1st floor

Friday, April 19

SESSION 5			Emerging and Vector-borne diseases	Chairman : Prof. D. Thiry		
09:00	09:40	Keynote	Emerging and Vector-borne viral diseases	Dr Gaëlle Gonzalez - Deputy Director of the EU-RL for equine diseases	Salle de Lecture (2™ floor)	
09:40	09:55	Selected oral presentations	Forest dynamics and acari-borne diseases: lessons from a scoping review (videoconference)	Nolwenn Blache - VetAgro Sup		
09:55	10:10		Genetic diversity of Ehrlichia ruminantium strains in West Africa, Amblyomma variegatum, tick populations	Tidjani Ayole Djiman - ULiège		
10:10	10:25		Bovine besnoitiosis: A serious threat to animal health in Belgium	Laurent Delooz - ARSIA		
10:25	10:55		Coffee break		Péristyle (1st floor	
SESSI	ON 6A	One Health Chairman : Dr. A. Mauroy				
10:55	11:25	Keynote	One health integrated surveillance	Dr Pascal Hendrikx - Conseil général de l'Alimentation, de l'Agriculture et des Espaces Ruraux - FR		
11:25	11:40	Selected oral presentations	RAG-CA and RAG-V-EZ - two initiatives from the FASFC to sustain authorities facing emeging zoonoses	Axel Mauroy - FASFC	Salle bleue (2 nd floor)	
11:40	11:55		Cross-sectional serosurvey of HEV in Belgian pig farms and identification of risk factors	Constance Wielick - ULiège		
11:55	12:10					
SESSI	ON 6B		Molecular biology and bio-informatics	Chairman : Prof. C. Saegerman		
10:55	11:25	Keynote	Added value of molecular biology and bio-informatics in epidemiology	Dr. Steven van Borm - Sciensano - BE	Salle de Lecture (2™ floor)	
11:25	11:40	Selected oral presentations	Uncovering New Pathogens in Bovine Diseases through Comparative 16S rRNA sequencing	Fabien Grégoire - ARSIA		
11:40	11:55		A new pen-side test to confirm RVF clinical suspicions in the field	Philippe Bevilacqua - Innovative Diagnostics (IDvet)	(2" 11001)	
11:55	12:10		Evaluation of the performances of a M. avium subsp. paratuberculosis Ab ELISA in young cattle	Jean-Yves Houtain - ARSIA		
12:10	13:30		Lunch and poster session		Péristyle (1st floor	
SESS	ION 7		Biological weapons	Chairwoman: Dr MF. Humblet		
13:30	14:10	Keynote	Biological weapons and epidemiology	Prof. Maria J. Espona - Catholic University of Argentina		
14:10	14:25	Selected oral presentations	Veterinary students' perception of zoonotic diseases and their prevention through an online survey in three Belgian universities	Marie-France Humblet - ULiège	Salle de Lecture (2 nd floor)	
14:25	14:40		Synergistic approaches to gastrointestinal nematode control in sheep and goat flocks	François Claine - ARSIA		
14:40	14:55					
		Oral presentations and posters awards (Avia-GIS, ARSIA, UREAR-ULiège, AESA, AMCRA) Guy Hendrickx - AVIA-GIS			Salle de Lecture	
5:00	15:30	Oral presenta	tions and posters awards (Avia-GIS, ARSIA, UREAR-ULiège, AESA, AMCRA)	Guy Hendrickx - AVIA-GIS	(2 nd floor)	











