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# SVEPM 2023, the annual conference of the Society for Veterinary Epidemiology and Preventive Medicine: Toulouse finally welcomes us in person

The 2023 Annual Meeting of the Society for Veterinary Epidemiology and Preventive Medicine (SVEPM) was hosted in person in Toulouse, France, from 22nd to 24th of March, 2023. After planning to host the conference in 2021, and swiftly changing plans to an excellently organised online meeting due to the COVID-19 pandemic, the local organising committee, chaired by Dr Timothée Vergne, finally received us in person. The eagerness of our peers to meet was evident by the record 230 in person registrations (plus 9 9online), with delegates representing 31 countries from 5 different continents. It is worth noting that, despite the conference was a hybrid event (and advertised as such), only 9 delegates registered as online participants, highlighting how social and scientific face-to-face interactions are highly valued by the SVEPM community.

The committee reviewed 82 abstracts and prepared a scientific programme that included 21 oral presentations and 99 posters. These high numbers of abstracts and posters were almost double those of the previous year, breaking the curse of lower engagement experienced during and shortly after the COVID-19 pandemic. Delegates could enjoy a rich, high quality scientific programme. As per tradition, six workshops were offered on the first conference morning: *Mediated modelling meets veterinary epidemiology – One Health in practice; New approaches to inferential modelling with high dimensional (wide) data; Reconstructing viral spread from sequence data: intro to phylodynamics; Veterinary clinical epidemiology: basics and bias; Global burden of animal diseases; and Generic risk assessment for animal disease incursion.* 

On March 23rd, the President Prof. Philip Robinson opened the conference and gave the floor to Dr Marius Gilbert, Université Libre de Bruxelles, Belgium, who began the scientific programme with the talk *"Science at the policy-communication nexus during the COVID pandemic"*. The programme continued over the three conference days with the 21 oral presentations and poster viewings. On Friday March 25th, Dr François Roger delivered the traditional Gareth Davies Lecture, closing the scientific programme with a presentation entitled *"Contribution of epidemiology to the sustainable development of the Global South"*. During the closing of the conference, the SVEPM presidential chain was handed over to Prof Dave Brodbelt by Prof Philip Robinson, who becomes the senior vice president. Prof Dave Brodbelt will serve as the President of the SVEPM until the closing of the 2024 annual meeting in Uppsala, Sweden.

Thirteen of those who delivered oral presentations at the conference chose to contribute to this special issue. After judicious peer-review, 10 manuscripts were published as part of this special issue. While the quality of these contributions has always been high in previous conference years, the immense diversity of subjects covered in those 10

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contributions is a true testimony of the high scientific engagement demonstrated in this particular SVEPM annual meeting.

We were happy to see representation of epidemiological research in companion animals among the contributions published. Pegram et al. (2024) used surgical repair of cranial cruciate ligament rupture in dogs to demonstrate the success of applying the target trial framework for causal inference to a large observational database as an alternative to a randomised controlled trial – which is not always feasible or affordable. Extracting evidence from the extensive amount of clinical data already recorded, the authors were able to show a statistically significant reduction in risk in short- and long-term lameness associated with surgical treatment.

The breadth of themes continued to be exemplified through Allan et al., (2023) work on reducing young stock mortality in camels and small ruminants in Ethiopia. The application of interventions was evaluated with the application of pre- and post-intervention questionnaire surveys. The interventions adopted in this pilot study were able to reduce median camel mortality, and the prevalence of diarrhoea and respiratory diseases. Pre-intervention prevalences, but also post-intervention effects were greater in pastoralist production systems when compared to mixed crop-livestock smallholders.

Analysis of herd parameters coupled with a survey were also methodologies used by Tamminen et al. (2024) to explore the impact of heat and season on dairy cow health and fertility. This time focusing on a Scandinavian country (Sweden), the authors demonstrated increased somatic cell counts (SCC) and reduced fertility measures during the summers. In-depth interviews with 18 dairy farmers showed how they perceived and acted differently on problems related to SCC and fertility. This emphasises, in the authors' view, the need to consider each farm's unique circumstances when designing preventive and control measures.

The importance of considering farm variation was also in focus in the work of Sorin-Dupont et al. (2023), who modeled the effects of farming practices on bovine respiratory disease (BRD) in a multi-batch cattle fattening farm. Using an individual based stochastic mechanistic model, which monitored risk factors, infection processes, detection and treatment in a farm possibly featuring several batches simultaneously, the authors showed that separated batches were more effective than a unique large one for reducing the spread of pathogens.

Chanchaidechachai et al. (2023) also applied infectious disease modeling, highlighting the need to consider specific realities when using models for inference and to inform decision-making. The authors modelled FMD in an endemic area, and discussed the potential impact of using models not parameterised to specifically represent the reality of areas of investigation. The authors developed the first model specific for

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Thailand, and showed that different areas require different approaches to control an outbreak of FMD.

Dankittipong et al. (2024) reviewed transmission rates of veterinary and clinically important antibiotic resistant *Escherichia coli* using Bayesian meta-analysis, and calculated ranges for transmission among young broilers and piglets. The study also showed that in groups without antibiotic treatment, the transmission rate of resistant *E.coli* in broilers was almost twice that in piglets.

While the design and application of control measures usually requires the availability of diagnostic methods with high sensitivity, Pilar Romero et al. (2023) discussed how the eradication phase of a surveillance programme presents a great challenge due to the presence of false positives. The authors generated a classification tree to guide the application of the Interferon (IFN) - gamma test towards the high-risk subgroups of herds in the context of bovine tuberculosis in England, providing potential increased efficiency in the detection of infected cattle.

Bovine tuberculosis (bTB) eradication was also addressed by Ciaravino et al. (2023), this time focusing on the Catalonia (Spain) and Pyrenees-Atlantiques (France) administrative regions. The authors aimed to characterise stakeholder communication on bTB control in the trans-Pyrenees region and provide recommendations to improve it. Through the review of over 200 online texts, with in-depth interviews of veterinarians and farmers in the region, focus groups, a meeting with representatives of the regional veterinary services, as well as a final deliberative workshop, the authors were able to deliver a comprehensive picture of the communication difficulties. More importantly, the authors gathered concrete participatory proposals to improve current bTB communications, including an increase in participatory meeting spaces, improvement in data accessibility, development of informative materials, and increased involvement of stakeholders in the development of protocols.

This general sense of stakeholders feeling left out of the access to data and development of protocols was explored in great depth by Doidge et al. (2023) who conceptualised the data divide as a disconnect between data collection practices and data use and interpretation practices. The authors also provided a comprehensive qualitative analysis of the opinions of farmers through focus groups involving both beef and dairy farmers in the United Kingdom (UK). The authors were able to clearly characterise three types of disconnect: between elements within a practice; between practices; and in the reproduction of practices because of lack of feedback. The latter, in particular, emphasises that the use of data on farms can be "improved through transformation of practices by ensuring farmers have input in the design of technologies so that they align with their values and competencies".

Grace et al. (2024) presented a comprehensive survey targeting the other end of the data divide – those consuming information generated from animal health data. Their conclusions echoed the observations from the farmer centred studies above, calling for the use of animal health data to be more participatory, transparent and focused on supporting decision-making. While the previous studies highlighted reasons why data collection fails to be sustainable, Grace et al. (2024) demonstrated that the availability of those data could lead to better evidence-based decisions and policies.

We reiterate our thanks to the organising committee that made it possible for delegates to enjoy a rich programme, both social and scientific, which truly helped us recover from the years of social distancing. This year we were especially grateful for the excellent young scientist event preceding the conference, during which the poster pitches were rehearsed, resulting in their high quality. We thank Dr Timothée Vergne and his team for hosting the annual meeting for a second time, and the 239 delegates who joined us at the conference, in particular the keynote speakers, the oral presenters, and the authors who chose to contribute to

### this special issue.

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Fernanda C. Dórea<sup>a,b,\*</sup>, Timothée Vergne<sup>a,c</sup>, Carla Correia-Gomes<sup>a,d</sup>, Luís Pedro Carmo<sup>a,e</sup>, Egil A.J. Fischer<sup>a,f</sup>, Locksley L. McV. Messam<sup>a,g</sup>, Dave C. Brodbelt<sup>a,h</sup>, Philip A. Robinson<sup>a,i</sup>

- <sup>a</sup> The Society for Veterinary Epidemiology and Preventive Medicine, United Kingdom
  - <sup>b</sup> Department of Disease Control and Epidemiology, National Veterinary Institute, Uppsala SE 75 189, Sweden
  - <sup>c</sup> UMR IHAP, Université de Toulouse, INRAE, ENVT, Toulouse, France <sup>d</sup> Animal Health Ireland, Carrick-on-Shannon N41 WN27, Ireland <sup>e</sup> Norwegian Veterinary Institute, Ås, Norway
  - <sup>f</sup> Department of Population Health Sciences, Unit Farm Animal Health, Utrecht University, Utrecht, the Netherlands
  - <sup>8</sup> Section: Herd Health and Animal Husbandry, School of Veterinary Medicine, University College Dublin, Ireland
  - <sup>h</sup> Veterinary Epidemiology, Economics and Public Health Group, Royal Veterinary College, London, United Kingdom
  - <sup>i</sup> Harper & Keele Veterinary School, Harper Adams University Campus, Newport, Shropshire TF10 8NB, United Kingdom
  - \* Corresponding author at: The Society for Veterinary Epidemiology and Preventive Medicine, United Kingdom.

E-mail address: fernanda.dorea@sva.se (F.C. Dórea).