Data-Driven Innovation in Policy and Practice

4th to 5th March 2025

John McIntyre Conference Centre, Edinburgh

This year, the theme for EPIC Conference 2025 is "Building a Resilient Future for Animal Health and Welfare: Data-Driven Innovation in Policy and Practice."

Each day will offer opportunities to connect, learn, and share ideas about data-driven innovation (such as machine learning and artificial intelligence) and promote future thinking about applications to animal health and welfare.

Conference Programme

Tuesday 4th March 2025

13.00 – 14.00	**Registration and Buffet Lunch** *Lunch/Coffee/Tea/Refreshments*
14:00 – 14:30	**EPIC Director Welcome**
14:30 – 15:30	**Conference Opening Keynote:** Data-Driven innovation informing animal health policy and practice *Professor Christos Tachtatzis, University of Strathclyde*
15:30 – 15:50	**Break** *Coffee/Tea*
15:50 – 16:50	**Keynote:** AI opportunities and challenges: A responsible and ethical approach *Tom Wilkinson, Chief Data Officer at Scottish Government*
17:00 – 18:00	**Poster and Drinks Reception:** Data-driven innovation for One Health
18:30	**Conference Dinner** *Set menu on page 8.*

Wednesday 5th March 2025

09:00 – 10:00	**Registration** *Coffee/Tea/Light snacks*
10:00 – 11:00	**Mini Lectures:** EPIC IV Impact using data-driven innovation in research *Four 10-minute presentations and Q&A. Presenters listed on pages 4 to 5.*
11:00 – 11:15	**Coffee Break**
11:15 – 13:15	**Presentation Series:** Bridging the gap between data users and data stakeholders *Four 20-minute presentations with time for questions. Presenters listed on pages 6 to 7.*
13:15 – 14:15	**Lunch** *Buffet selection*
14:20 – 15:30	**Panel Discussion:** Exploring solutions for data-driven innovation challenges in animal health policy and practice beyond 2030 *Facilitated by Lisa Boden, EPIC Director of Policy and Impact.*
15:30 – 16:00	**Closing**

Conference Wi-Fi

- **Network**: Visit-Ed
- **Passcode**: 672-ed25 (or use SMS or a social media account to connect)

Work Spaces

If you need to take a meeting or complete work, there will be board rooms available for use. Please speak with the conference organisers at registration for assistance finding these spaces.

Getting to John McIntyre Conference Centre

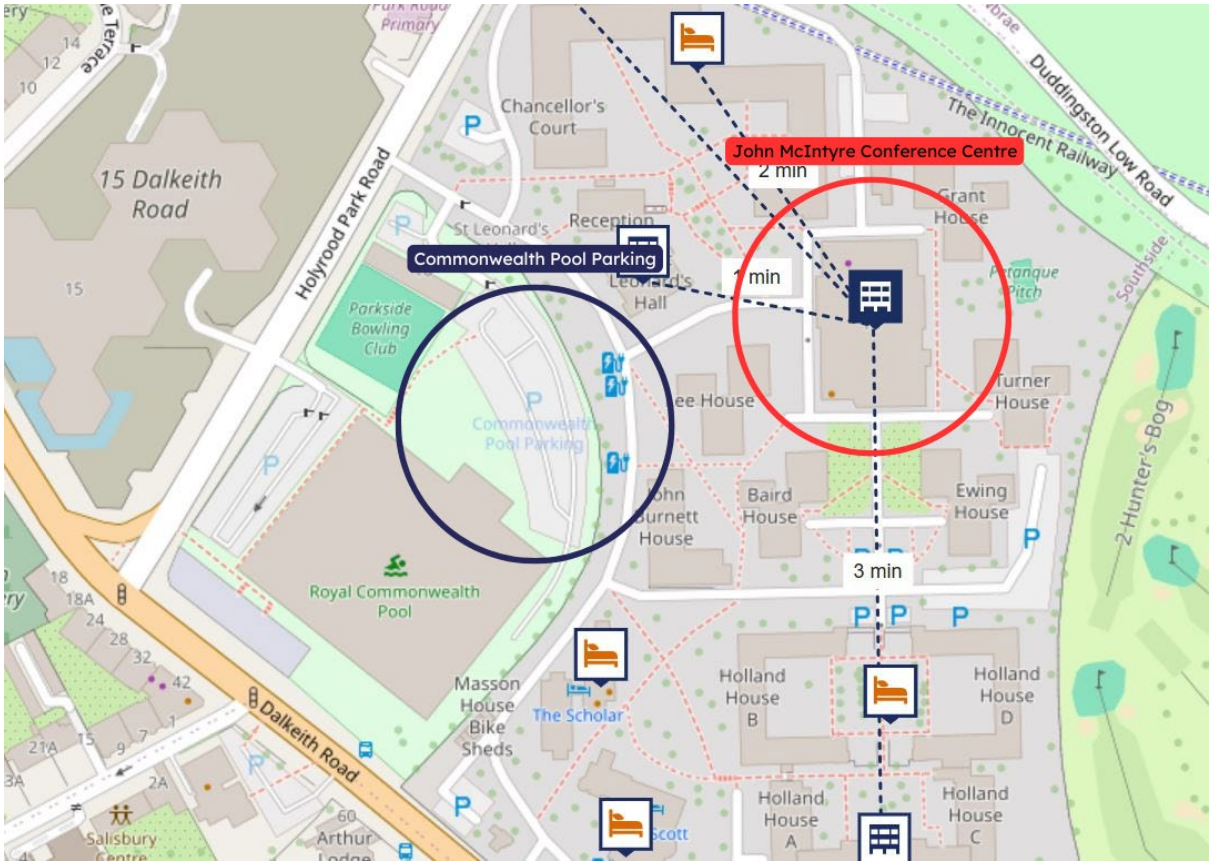
The conference and dinner will be held within The John McIntyre Conference Centre in Pollock Estate, The University of Edinburgh. For directions to the venue, visit the Conference Centre web page.

The John McIntyre Conference Centre
Pollock Halls
18 Holyrood Park Rd
Edinburgh EH16 5AY

Parking

Parking at the venue is **extremely limited.** It is suggested that delegates use alternative modes of transportation to the venue where possible.

If you do need to arrive by car, the venue has advised that some parking may be available at the Royal Commonwealth Pool which is located next to Pollock Estate.



If you have any specific access requirements, please email epic.scotland@ed.ac.uk by 27 February.

Keynote Speakers

Professor Christos Tachtatzis, Professor of Applied Artificial Intelligence, Department of Electronic and Electrical Engineering, University of Strathclyde - ***Opening Keynote: Data-Driven innovation informing animal health policy and practice***

Prof Tachtatzis' research focuses on applied Artificial Intelligence in the context of livestock health and welfare, with the goal of enhancing sustainability and productivity. Parts of this work aligns within the field of disease control prevention, early detection, response, and management. His current activities have a particular emphasis on computer vision for image and video, multimodal learning, domain adaptation, and causality and explainability.

Tom Wilkinson, Chief Data Officer, Scottish Government - ***Keynote: AI opportunities and challenges: a responsible and ethical approach***

Tom is the Chief Data Officer at the Scottish Government, with extensive hands-on experience working across Data Science, Data Analysis, Data Architecture, Software Development and Data Engineering. With his wealth of experience working in various UK government departments, he has spent several years developing and improving organisations' use of data to inform policy and operational decisions.

Mini Lectures: EPIC IV Impact using data-driven innovation in research

Dr Giles Innocent, Senior Statistitian, Biomathematics and Statistics Scotland (BioSS) – ***Using data anonymisation and pseudonymisation to deliver robust solutions to policymakers***

Giles is interested in various aspects of statistics and mathematical modeling as applied to diseases of veterinary or zoonotic importance. He has worked in fields such as, modelling disease spread and control, spatial analysis of human and animal disease data, the use of generalised linear models for various aspects of disease data analysis, diagnostic test evaluation, especially in the absence of a 'Gold Standard' test, and the use of MCMC approaches to analyse data.

Dr. Niamh Mahon, Environmental Social Scientist, James Hutton Institute – ***Importance of backyard poultry registration as it relates to Avian Influenza***

A scientist with an interdisciplinary background, Niamh works in the Social, Economic and Geographical Sciences (SEGS) group at the James Hutton Institute. She is interested in stakeholders', and in particular farmers' practices, and their perspectives and understandings of sustainability in farming and the wider food system.

Dr. Stephen Catterall, Mathematical Modeller, Biomathematics and Statistics Scotland (BioSS) – ***Modelling disease spread when there is limited data on the distribution of the host***

Stephen works on models for infectious disease transmission and control, typically using Bayesian methods to fit disease transmission models to data from disease outbreaks. He is working on methods to analyse disease outbreak data when the spatial distribution of the disease hosts is uncertain or unknown.

Dr. Sibylle Mohr, Mathematical Modeller, University of Glasgow – ***Movement Analysis: BTV movement analysis***

Sibylle is based at the University of Glasgow in the School of Biodiversity, One Health and Veterinary Medicine. Within EPIC, her focus is on the dynamics, impacts and control of the UK's major livestock and zoonotic disease risks (e.g. Foot-and-Mouth disease, Avian Influenza) as well as established endemic diseases such as sheep scab. Sibylle is a future lead in EPIC, developing tools for early warning systems and investigate new technologies for the detection and control of emerging disease threats.

Presentation Series: Bridging the gap between data users and data stakeholders

Jess Enright, Reader in Computing Science, University of Glasgow - ***Horizon scanning for the future: AI, data, and other stories***

After a PhD in theoretical computing science she held a post as an EPIC fellow at Glasgow, followed by several academic appointments in Scotland. She has expertise in algorithms and modelling of and with complex networks.

Scott McDowell, General Manager, ScotEID – ***Where do farmers fit into the data lifecycle?***

Scott worked for the Scottish Government for just over 30 years; 24 of those years being in the Animal Health and Welfare Division. He covered areas such as the quarantine regulations, the development of bovine TB payments, the Highlands and Island Veterinary Services Scheme (HIVSS), the 2001 Foot and Mouth Disease outbreak. He then moved to livestock identification registration and movement policy where he helped bring in sheep EID, the development of the new PRIMO legislation, the UHF field trials for cattle EID, ScotMoves, ScotMoves+, and the delivery of the ScotEID database system.

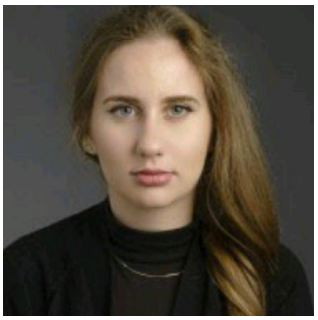
In August 2022, Scott joined the Scottish Agricultural Organisation Society (SAOS) as General Manager of the ScotEID database. ScotEID has since been further developed to add the export eligibility checker, and additional systems such as the Avian Registration Hub, and the Scottish Kept Bird Register (SKBR).

Abbie McGillivray, Information Assistant, ScotEID – ***Where do farmers fit into the data lifecycle? (Live demo of MyHerdStats (MHS)***

Abbie is an Information Assistant at ScotEID (Livestock Traceability) as well as Project Support for MyHerdStats, launched in January 2023. Her role involves engaging with farmers and ensuring MyHerdStats is an efficient system for livestock producers to use. Abbie also provides support, solving queries for farmers.

Niamh Mimnagh, Maynooth University - Predicting outbreaks of BVD on a herd-level for Irish cattle herds

A researcher based in Ireland, Niamh specialises in disease modelling and predictive analytics, with a particular focus on improving health outcomes in Irish cattle populations. During their PhD, they developed innovative methods for estimating animal population sizes, leveraging extensions to the N-mixture model to account for the complexities of real-world ecological systems, such as imperfect detection and environmental variability. They are passionate about applying advanced statistical techniques and machine learning methods to solve real-world problems in agriculture and wildlife conservation.



Miruna Clinciu, Edinburgh Centre of Robotics – ***Taming the Black Box: Explainable AI for One Health***

Miruna is a Postgraduate Research Student in the Robotics and Autonomous Systems (CDT-RAS) program at the Edinburgh Centre of Robotics, a joint initiative between Heriot-Watt University and the University of Edinburgh. Her current research project, "Explainable AI via Bayesian Learning," is sponsored by the Schlumberger Cambridge Research Center and is conducted under the academic guidance of Helen Hastie and Arash Eshghi.

Her research focuses on Explainable AI, with a strong emphasis on generating and evaluating natural language explanations. She is particularly interested in exploring causality and common-sense reasoning, aiming to make AI systems more transparent and trustworthy.

Conference Dinner Menu*
4th March, 18.30

Starters

Smoked salmon, avocado puree, pickled radishes & coastal herbs (gf)

Dietary Alternative - New season asparagus & truffle dressing (vg) (gf)

Mains

Fillet of Scottish beef, braised beef & cabbage parcel, heritage carrots & tarragon jus (gf)

Dietary Alternative - Roasted vegetable filo pastry & green olive tapenade (v) (vg)

Dessert

Dark chocolate & orange tart, Chantilly cream (v)

Dietary Alternative - Salted caramel cheesecake, roasted pineapple & mango compote (vg) (gf)

Fairtrade tea & coffee & Florentines (v)

***Please note that this is a set menu.** If you indicated a dietary restriction on your registration, you will be offered the dietary alternative listed or your meal will be modified at the chef's discretion to ensure your dietary requirement is met.