

Infectious Disease Genomics Symposium

Friday 6th September 2024

Nucleus Building, King's Buildings, Thomas Bayes Road, Edinburgh, EH9 3FG

Programme

9:30 **Tim Aitman** (One Health Genomics Edinburgh) – Introduction and Welcome

Session 1

Chair Tim Aitman

9:40 **Mara Lawniczak** (The Sanger Institute) - Genomic resources for malaria control

10:20 **Kenny Baillie** (Centre for Inflammation Research) - Inferring molecular mechanisms from host genetics

10.40 Poster pitches

Anum Ahmad (The Roslin Institute) - Comparison of Dynamics of Udder Skin Microbiota from Grazing Yak and Cattle During the Perinatal Period on the Qinghai–Tibetan Plateau

Rob Kelly (R(D)SVS) - Using deep-amplicon sequencing to understand the dynamics of gastrointestinal nematodes present in co-grazed host species kept in a Scottish zoological collection

10:50 Coffee and Posters

Session 2

Chair Stella Mazeri

11:20 **Sara Clohisey** (Baillie Gifford Pandemic Science Hub) - The host and the pathogen in severe influenza A virus infection

11:40 **James Prendergast** (The Roslin Institute) - Uncovering the basis of natural genetic tolerance to East Coast fever

12:00 **Katie Dubarry** (The Roslin Institute) - Immune cell transcriptomics in sheep

12:20 **Tim Regan** (The Roslin Institute) - Harnessing PRR Diversity and Pan-Genomics to Improve Resilience in Farmed Mussels

12:40 Poster pitches

Vivien Shek (University of Dundee) - Novel RELM- β binding molecule identified from *Heligmosomoides polygyrus bakeri*

Muhammad Bilal (R(D)SVS) - Effect of sampling bias on disease transmission rates between the species

Innocent Chibwe (The Roslin Institute) - Genotypic characterization of antimicrobial resistance genes in *Aeromonas Caviae* isolates from Patients with Cholera-like Illness during a 2022 -2023 Cholera Outbreak in Malawi

12:50 Lunch and Posters

Session 3

Chair Ian Jackson

13:50 **Simon Biddie** (Institute of Genetics and Cancer/The Usher Institute) - Genomic approaches to uncover functional variants in inflammation and infection

14:10 **Carolina Mayes** (School of Social and Political Sciences) - Accounting for the host factor: Susceptibility and resistance in pre-genomic genetic epidemiology

14:30 **Beatriz Orosa** (School of Biological Sciences) - Ubiquitin plant immune response and pathogen subversion

14:50 **Clark Russell** (Centre for Inflammation Research) - Genomics approaches for identifying macrophage microbicidal responses against pneumococci

15:10 Coffee and Posters

Session 4 (Chair Ross Fitzgerald)

15:40 **Laura Glendinning** (The Roslin Institute) - Understanding the role of the microbiome in poultry

16:00 **Johannes Krause** (MPI Leipzig) - The genetic history of the Plague and the origin of the Black Death

16:40 **Ross Fitzgerald** (Edinburgh Infectious Diseases) – Closing Remarks

16:45 Drinks reception