



## Edinburgh Next Generation of Genomics Symposium Tuesday 1<sup>st</sup> October 2024

Playfair Library, Old College

## **Programme**

09:30 Tim Aitman (IGC) - Introduction and Welcome

09:35 Opening Speaker - Kenny Baillie (IRR) - Integrating biological knowledge with genomics data

10:00 Session 1 (Chairs - Briggithe Melchor-Castro & Haolan Tu)

**Devin Bendixsen** (IGC) - Mapping the mutational landscape of malignant pleural mesothelioma via uniform re-analysis of published patient cohorts

**Shipra Bhatia** (IGC) - Unravelling the cell-type specific roles of disease-associated mutations in the 'noncoding regulatory genome'

**Jessica Powell** (The Roslin Institute) - Identifying functional genomic variants and genes associated with Theileria infection in cattle

**Michael Nicholson** (Mathematics) - DNA lesion bypass and the stochastic dynamics of transcription coupled repair

11:00 Coffee/tea break

11:30 Session 2 (Chairs – Anum Ahmad & Alice Buckner)

**Audrey Martin** (The Roslin Institute) - Supporting the implementation of genomic selection in a guide dogs' population using simulation

**Christina Rochus** (The Roslin Institute) - Using genomic data to estimate dominance variance and inbreeding depression in a local sheep breed

**Ismail Ozkaraca** (IGC) - Temporal Orderings of Genomic Features for Patient Stratification: Applied to High Grade Serous Ovarian Cancer

12:15 Keynote speaker - Robb Hollis (IGC) - Ovarian Carcinosarcoma: A Tale of Two Tumours?

12:40 Lunch and Posters

14:10 Session 3 (Chairs – Shipra Bhatia & Rashi Krishna)

**Matthew Swaffer** (WCCB) - RNA polymerase II dynamics and mRNA stability feedback scale mRNA amounts with cell size

Daria lakovleva (IRR) - Investigating the role of ASXLs in brain development

**Robert Mason** (IMPS) - N-hydroxy-pipecolic acid modulates the immune inducible transcriptome of Arabidopsis thaliana through chromatin remodelling transcription factors

Elisa Barbieri (ISCR/IRR) - OTX2 controls chromatin accessibility in formative pluripotent stem cells

15:05 Coffee/tea break

15:35 Session 4 (Chairs – Barry Ryan & Mosi Li)

**Laurence Nisbet** (Psychiatry) - An integrative multi-omic analysis of depression

Joshua Slaughter (Informatics) - Towards the Robust Targeted Estimation of Genetic Effects

**Hong Kiat Ng** (IGC/NTU LKC School of Medicine) - Epigenome-wide association study in HELIOS and Generation Scotland identifies novel markers for atopic dermatitis

**Caelinn James** (SRUC) - Integrating deep phenotyping and whole-genome sequencing to decipher genetic basis of feed efficiency in dairy cattle

16:35 Prize voting

16:45 <u>Keynote speaker</u> – **Emily Clark** (The Roslin Institute) – From FAANG to Fork: how highly annotated genomes can provide resources to inform future farmed animal production

17:10 Helen Colhoun (IGC) - Closing Remarks and prize presentation

17:25 Drinks reception

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