

# 2<sup>nd</sup> UK MOBILE GENETIC ELEMENTS WORKSHOP

24<sup>th</sup>-25<sup>th</sup> June, Norwich

## Monday, 24<sup>th</sup> June 2024

13:30-13:40 **Welcome**

13:40-14:10 **Emma Banks (John Innes Centre, Norwich)**

The Great Escape: how do gene transfer agents wake up and escape their bacterial host?

14:10-14:40 **Franklin Nobrega (University of Southampton)**

RecBCD rescues Kiwa defence from inhibition by single-stranded DNA mimic proteins.

14:40-15:10 **Akshay Sabnis (Imperial College, London)**

Plasmids maintain low mobility to prevent eradication in nature

15:10-15:40 **Giusy Mariano (University of Surrey)**

Multi-conflict islands are a widespread trend within *Serratia* spp.

15:40-16:10 **Coffee break**

16:10-16:40 **Simon Legood (University of Birmingham)**

Mechanisms and implications of transposon capture by H-NS.

16:40-17:10 **David Sünderhauf (University of Exeter)**

A good defense is a bad offense: CRISPR-Cas in inter-plasmid competition.

17:10-17:40 **Myfanwy Adams (John Innes Centre, Norwich)**

Molecular basis of foreign DNA recognition by BREX anti-phage immunity system.

19:30 **Dinner** at The Georgian Townhouse (Pembroke Room) | Address: 30-34 Unthank Rd, Norwich NR2 2RB

## Tuesday, 25<sup>th</sup> June 2024

09:30-10:00 **Daniel Cazares Lopez (University of Oxford)**

Impact on the evolution of the promiscuous plasmid RP4 conjugative transfer traits following interaction with donor-specific phage PRD1.

10:00-10:30 **Suzie Humphrey (University of Glasgow)**

Characterisation of novel bacteriophages in a hyper-adapted strain of *Clostridium clostridioforme* associated with intestinal dysbiosis.

10:30-11:00 **Jacob Malone (John Innes Centre, Norwich)**

Plasmid-chromosome crosstalk: How plasmids subvert bacterial behaviour using unusual signalling proteins.

11:00-11:30 **Coffee break**

11:30-12:00 **Cédric Lood (University of Oxford)**

Phage-host co-evolution has led to distinct generalized transduction strategies.

12:00-12:30 **Liam Shaw (University of Manchester-University of Oxford)**

How bacterial defense systems shape plasmid evolution.

12:30-13:00 **Evelien Adriaenssens (Quadram Institute, Norwich)**

Bacteriophages in the gut.

13:00 **Closing remarks**