

**Programme of the Annual Scientific Conference**  
**Monday 22<sup>nd</sup> and Tuesday 23<sup>rd</sup> April 2024**  
**UKHSA, COLINDALE**

**DAY 1**      ***Monday 22<sup>nd</sup> April 2024***

**12:00 pm**      *Registration and Lunch*

**1:00 pm**      **Welcome – Marie Chattaway & Paolo Ribeca, UK Health Security Agency**

**SESSION 1, Chaired by Xavier Didelot, University of Warwick**

**1:10 pm**      Microbiome response to antibiotics across multiple scales  
Chris Quince (Earlham)

**1:30 pm**      Diversity and distribution of mobile genetic elements in foodborne pathogens  
Clare Barker (UKHSA)

**1:50 pm**      A phylogenetic approach for estimating rates of gene gain/loss and selection  
Caitlin Collins (Cambridge)

**2:10 pm**      Classifying microbial species in contaminated disease-outbreak isolates using kmer  
spectra-based multidimensional clustering  
Ryan Morrison (UKHSA)

**2:30 pm**      Knowledge mobilization  
Noel McCarthy (Trinity College Dublin)

**2:50 pm**      From research to routine - building the public health genomics programme in Wales  
Tom Connor (Cardiff)

**3:10 pm**      **Coffee break/poster viewing**

**SESSION 2, Chaired by Noel McCarthy, Trinity College Dublin**

**3:40 pm**      **KEYNOTE SPEAKER**  
Genomic platforms for surveillance of enteric fever and AMR  
Kat Holt (LSHTM)

**4:10 pm**      LineageCapture: Phylogenetic identification of bacterial clade members excluded by  
SNP clustering  
Matt Moore (Warwick)

**4:30 pm**      Projections for COVID-19, a tale of two problems  
Matt Keeling (Warwick)

**4:50 pm**      Microevolution during the emergence of pandemic monophasic Salmonella  
Typhimurium ST34  
Robert Kingsley (Quadram)

**5:10 pm**      KPop: An assembly-free and scalable method for the comparative analysis of  
microbial genomes  
Paolo Ribeca (UKHSA)

**DAY 2** *Tuesday 23<sup>rd</sup> April 2024*

**09:00 am** **Registration, Coffee and Networking**

**SESSION 3, Chaired by Marie Chattaway, UK Health Security Agency**

**10:00 am** **KEYNOTE SPEAKER**

Applying innovative genomic approaches to the prevention and control of infectious diseases

Deborah Williamson (UKHSA)

**10:30 am** EnteroBase in 2024

Sascha Ott (Warwick)

**10:50 am** Fresh perspectives on bacterial variation: at genome scale and within patients

Gemma Langridge (Quadram)

**11:10 am** Detection and characterisation of Salmonella enterica serovar Infantis (eBG31) harbouring blaCTX-M-1 causing clinical disease in humans in England.

Matt Bird (UKHSA)

**11:30 am** Distinguishing imported cases from locally acquired cases within a geographically limited genomic sample of an infectious disease

Xavier Didelot (Warwick)

**11:50 am** An integrated approach for academic training and professional registration, addressing inequalities for healthcare scientists

Marie Chattaway (UKHSA)

**12:00 pm** **Group Photo, followed by Poster Viewing and Lunch**

**SESSION 4, Chaired by Paolo Ribeca, UK Health Security Agency**

**1:00 pm** Harnessing Genomics for a One Health Approach: Insights from Salmonella Pathogen Lead

Marie Chattaway (UKHSA)

**1:20 pm** Inference of infectious disease transmission through a relaxed bottleneck using multiple genomes per host

Jake Carson (Warwick)

**1:40 pm** Signatures of Pathogen Emergence

Julian Parkhill (Cambridge)

**2:00 pm** Cóimeáil: A Nanopore-based bioinformatics pipeline for the rapid typing and characterisation of gastrointestinal pathogens

David Greig (UKHSA)

**2:20 pm** Exploring Black Perspectives on the Impacts of Patient and Public Involvement and its Evaluation (The ELEVATE Study)

Jade Jordan (Warwick)

**2:40 pm** Deducing clonal complex population structure from gene content

Emily Fotopoulou (UKHSA)

**3:00 pm** **Closing Remarks - Xavier Didelot**