

**Hybrid Conference Programme**

Start (GMT)	Finish (GMT)	Presenter details
<b>Wednesday 6 November 2024</b>		
<b>11:30</b>	<b>12:45</b>	<b>Registration, lunch and networking</b>
12:30	12:45	Briefing for Keynote 1 & Session 1 speakers, microphone runners, chair, moderator & committee - Auditorium
<b>12:45</b>	<b>13:00</b>	<b>Welcome</b>
12:45	12:50	<b>Wellcome Connecting Science:</b> Jane Murphy, Wellcome Connecting Science, UK
12:50	13:00	<b>Scientific Programme Committee:</b> <a href="#">Kate Grabowski, Johns Hopkins University, USA</a> <a href="#">Christian Happi, Harvard University, USA</a> <a href="#">Nick Loman, University of Birmingham, UK</a> <a href="#">Katrina Lythgoe, University of Oxford, UK</a>
<b>13:00</b>	<b>13:50</b>	<b>Keynote 1</b>
		Chair: Nick Loman, University of Birmingham, UK Moderator: Katrina Lythgoe, University of Oxford, UK
13:00	13:50	Effective global genomic surveillance - what will it take? <a href="#">Meera Chand, UK Health Security Agency, UK</a>
13:50	13:55	Comfort break
<b>13:55</b>	<b>15:25</b>	<b>Session 1: Vaccines and treatments</b>
		Chair: David Robertson, University of Glasgow, UK Moderator: Kate Grabowski, Johns Hopkins University, USA
13:55	14:25	On the trail of SARS-CoV-2 cryptic wastewater lineages <a href="#">Thomas Peacock, The Pirbright Institute, UK</a>
14:25	14:55	Human papillomavirus (HPV) genital infections in young women: viral load, immune, and evolutionary dynamics <a href="#">Samuel Alizon, CNRS, Paris, France</a>
14:55	15:10	Forecasting H5N1 evolution for vaccine design Tomas Grudny, Massachusetts Institute of Technology, USA
15:10	15:25	From restrictions to vaccinations: Phylogenetic and phylogeographic analysis of disrupted RSV circulation in the UK Kate Duggan, University of Edinburgh, UK
15:25	16:05	Refreshment break and networking
15:50	16:05	Briefing for Session 2 speakers, chair & moderator - Auditorium
<b>16:05</b>	<b>17:50</b>	<b>Session 2: Animals and zoonoses</b>
		Chair: C. Jessica E Metcalf, Princeton University, USA Moderator: Nick Loman, University of Birmingham, UK
16:05	16:35	Using serologic cohorts to understand henipavirus spillovers in Bangladesh <a href="#">Emily Gurlev, Johns Hopkins Bloomberg School of Public Health, USA</a>
16:35	17:05	Title TBC <a href="#">Sarah Hill, Royal Veterinary College, UK</a>
17:05	17:20	Genomic epidemiology of Pestivirus bovis unravels different genotype circulation dynamics in France Claire Lescoat, INRAE, France
17:20	17:35	Quantifying the drivers of Usutu virus introduction and dispersal in Europe James Baxter, Roslin Institute, UK
17:35	17:50	Isolation and characterization of an infectious mammalian chu-like virus from Tasmanian devil tumor cells Julien Melade, The University of Sydney, Australia
<b>17:50</b>	<b>18:30</b>	<b>Poster pitch talks for odd number posters</b>
<b>18:30</b>	<b>19:30</b>	<b>Poster session 1 - odd number posters</b>
19:30	21:00	Dinner
19:30		Bar open (card payments only)

**Thursday 7 November 2024**

09:15 09:30 Briefing for Session 3 speakers, chair & moderator - Auditorium

**09:30 11:00 Session 3: Epidemics and Outbreaks**

Chair: Emma Hodcroft, University of Basel, Switzerland  
Moderator: Kate Grabowski, Johns Hopkins University, USA

09:30 10:00 Rapid Virus Genomics for Outbreak Investigation: Feasibility and Added Value in Kenya  
[George Githinji, KEMRI | Wellcome Trust, Kenya](#)

10:00 10:30 Advancing Viral Outbreak Surveillance in Brazil through Rapid and Cost-Efficient Nanopore Sequencing Strategies  
[Ingra Moraes Claro, University of São Paulo \(USP\), Brazil](#)

10:30 10:45 The global and regional spread of dengue virus  
Verity Hill, Yale University, USA

10:45 11:00 Genomic Epidemiology Reveals Persistent Zoonotic and Human Transmission of Mpox in West Africa  
Ifeanyi Omah, University of Edinburgh, UK

11:00 11:40 Refreshment break and networking

11:25 11:40 Briefing for Session 4 speakers, chair & moderator - Auditorium

**11:40 13:10 Session 4: Viruses in the changing world**

Chair: Tanja Stadler, ETH Zürich, Switzerland  
Moderator: Nick Loman, University of Birmingham, UK

11:40 12:10 Will there be a warning for the next pandemic? Identifying viral targets of concern  
[C. Jessica E Metcalf, Princeton University, USA](#)

12:10 12:40 Tracking Viral Ecology and Evolution in a Freshwater Lake Over Three Decades  
[Karthik Anantharaman, University of Wisconsin-Madison, USA](#)

12:40 12:55 Structural phylogenetics uncover the ancient evolution of Flaviviridae glycoproteins  
Spyros Lytras, The University of Tokyo, Japan

12:55 13:10 How fast are viruses spreading in the wild?  
Simon Dellicour, University of Brussels (ULB), Belgium

13:10 14:30 Lunch and networking

14:15 14:30 Briefing for Session 5 speakers, chair & moderator - Auditorium

**14:30 16:15 Session 5: Adaptation and Evolution: Virus dynamics within and between hosts**

Chair: Sarah Hill, Royal Veterinary College, UK  
Moderator: Kate Grabowski, Johns Hopkins University, USA

14:30 15:00 Diverse patterns of intra-host genetic diversity in chronically infected SARS-CoV-2 patients  
[Adj Stern, Tel Aviv University, Israel](#)

15:00 15:30 Assessing virus evolution with protein language models  
[David Robertson, University of Glasgow, UK](#)

15:30 15:45 CTL Escape and Reversion in HIV-1 Transmission Pairs: Direct Evidence of Host-Specific Adaptation  
Harriet Longley, University of Oxford, UK

15:45 16:00 Rapid global population dynamics and fast surface protein evolution imply a vertebrate host for a prevalent mosquito orthomyxovirus  
Gytis Dudas, Vilnius University, Lithuania

16:00 16:15 Evolutionary insights into persistent infections and reinfections across different major lineages of SARS-CoV-2: findings from three years of community surveillance  
Mahan Ghafari, University Of Oxford, UK

16:15 16:55 Refreshment break and networking

16:40 16:55 Briefing for Session 6 speakers, chair & moderator - Auditorium

**16:55 17:40 Session 6: Challenging the paradigm in viral genomics**

*Chair: Kate Grabowski, Johns Hopkins University, USA*

*Moderator: Nick Loman, University of Birmingham, UK*

16:55 17:10 Pathoplexus: A Community-Driven Solution for Transparent and Equitable Viral Genomic Data Sharing  
*Emma Hodcroft, University of Basel, Switzerland*

17:10 17:25 The clocks were wrong: decades of biased phylogenetic branch length estimates for viral pathogens, and the consequences for time tree analysis  
*Matthew Hall, University of Oxford, UK*

17:25 17:40 Delphy: Fast, scalable, accurate and accessible Bayesian phylogenetics  
*Patrick Varilly, Broad Institute of MIT And Harvard, USA*

**17:40 18:20 Poster pitch talks for even number posters**

**18:20 19:20 Poster session 2 - even number posters**

19:20 21:00 Dinner

19:20 Bar open (card payments only)

**Friday 8 November 2024**

09:15	09:30	Briefing for Session 7 speakers, chair & moderator - Auditorium
<b>09:30</b>	<b>11:00</b>	<b>Session 7: Applied bioinformatics for public health</b> <i>Chair: Thomas Peacock, The Pirbright Institute, UK</i> <i>Moderator: Nick Loman, University of Birmingham, UK</i>
09:30	10:00	Capturing the diversity of co-circulating pathogens <a href="#">Tanya Golubchik, University of Sydney, Australia</a>
10:00	10:30	Making surveillance metagenomics a reality <a href="#">Rachel Colquhoun, University of Edinburgh, UK</a>
10:30	10:45	Unsupervised generative model of viral antibody escape for the design and testing of variant-proof vaccines <i>Noor Youssef, Harvard Medical School, USA</i>
10:45	11:00	Agnostic identification of pathogen lineages and estimation of fitness dynamics <i>Noémie Lefrancq, ETH Zürich, Switzerland</i>
11:00	11:15	A protein language model for exploring viral antigenicity evolution <i>Shusuke Kawakubo, The University of Tokyo, Japan</i>
11:15	11:55	Refreshment break and networking
11:40	11:55	Briefing for Keynote 2, chair, moderator & committee - Auditorium
<b>11:55</b>	<b>12:45</b>	<b>Keynote 2</b> <i>Chair: Katrina Lythgoe, University of Oxford, UK</i> <i>Moderator: Kate Grabowski, Johns Hopkins University, USA</i>
11:55	12:45	Leveraging pathogen sequencing and statistical analysis to inform public health - past, present and future <a href="#">Tanja Stadler, ETH Zürich, Switzerland</a>
<b>12:45</b>	<b>13:00</b>	<b>Closing remarks and prize presentation</b> <b>Scientific Programme Committee:</b> <a href="#">Kate Grabowski, Johns Hopkins University, USA</a> <a href="#">Christian Happi, Harvard University, USA</a> <a href="#">Nick Loman, University of Birmingham, UK</a> <a href="#">Katrina Lythgoe, University of Oxford, UK</a>
13:00	14:00	Lunch and departures
14:00		Coach departures for Stansted and Heathrow airports
14:10		Coach departures for Cambridge train station and city centre