

SATELLITE MEETING ON

Next-generation molecular and evolutionary epidemiology of infectious disease: challenges and opportunities

Wednesday 16 – Thursday 17 May 2012

The Royal Society at Chicheley Hall: Home of the Kavli Royal Society International Centre

Organised by Dr Oliver Pybus, Professor Christophe Fraser and Professor Andrew Rambaut

DAY 1				DAY 2			
09.00	Welcome by Royal Society & Organisers			SESSION 3 Chair: Professor Andrew Rambaut		SESSION 4 Chair: Dr Oliver Pybus	
SESSION 1 Chair: Dr Christophe Fraser		SESSION 2 Chair: Professor Marc Suchard					
09.05	Microevolution in <i>Clostridium difficile</i> genomes reveals limited hospital transmission Dr Xavier Didelot	13.30	The birth-death skyline plot and beyond Dr Tanja Stadler	09.00	Dr Roman Biek	13.30	Integrating sequence variation and protein structure to identify sites under positive or negative selection Professor Claus Wilke
09.30	Discussion	14.00	Discussion	09.30	Discussion	14.00	Discussion
09.45	The transmission and microevolution of MRSA as revealed by next-generation sequencing Dr Ed Feil	14.15	Exploring the genomic diversity of pathogen populations: a multivariate approach Dr Thibaut Jombart	09.45	Incorporating geographic information systems data into phylogenetic analysis Dr Rebecca Gray	14.15	Within-host and between-host evolutionary rates across the HIV-1 genome Dr Samuel Alizon
10.15	Discussion	14.45	Discussion	10.15	Discussion	14.45	Discussion
10.30	Coffee	15.00	Tea	10.30	Coffee	15.00	Tea
11.00	Why is Asia ahead? Dr Sarah Cobey	15.30	Bayesian inference of epidemiological parameters using birth-death tree priors Professor Alexei Drummond	11.00	Antigenic flux in the influenza virus population Dr Trevor Bedford	15.30	Dr Jamie Lloyd Smith
11.30	Discussion	16.00	Discussion	11.30	Discussion	16.00	Discussion
11.45	Modelling the growth and transmission of infectious disease by linking epidemiology and population genetics Dr Daniel Wilson	16.15	Dr Marijn van Ballegoijen	11.45	Multiscale evolutionary dynamics of HIV Dr Katrina Lythgoe	16.15	Panel discussion/Overview (future directions)
12.15	Discussion	16.45	Discussion	12.15	Discussion		
12.30	LUNCH	17.00	CLOSE	12.30	LUNCH	17.00	CLOSE
		18.15	Pre-dinner drinks				
		18.30	DINNER				