



Phylogeography of human pathogens

Wednesday, 17th April 2013
University of Edinburgh
Kings Buildings
Ashworth Laboratories, Lecture Theatre I
West Mains Road, Edinburgh

Hosted by the
Centre for Immunity, Infection, and Evolution
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The phylogenetic study of gene sequences from pathogens has become an increasingly important tool in the understanding and control of infectious diseases with the advent of powerful new statistical and computational tools. Of particular recent interest is the integration of spatial information into these techniques to allow us to track the otherwise hidden movement of pathogens globally and to study the processes and tempo of spread. These methods have been particularly valuable for the fastest evolving pathogens such as viruses and bacteria but have also been useful for understanding the geographical distributions of eukaryotic pathogens and parasites. In this symposium we are bringing together a group of speakers who work on a diverse range of disease agents but with common interest in developing or applying phylogeographic techniques for the study of infectious disease.

Programme:

9:30 Registration coffee

10:00 Andrew Rambaut (University of Edinburgh) Welcome

10:05 Oliver Pybus (University of Oxford) *"Unifying the spatial epidemiology and evolution of emerging epidemics"*

10:40 Philippe Lemey (Katholieke Universiteit Leuven, Belgium) *"Emerging directions in viral phylogeography"*

11:15 Coffee/tea

11:40 Trevor Bedford (University of Edinburgh) *"Spatiotemporal dynamics and "phylogeography" of chronic HIV infections"*

12:15 Roman Biek (University of Glasgow) *"Beyond invasion: how do pathogens persist in their endemic state?"*

12:50 Ross Fitzgerald (Roslin Institute, Edinburgh) *"Niche adaptation and transmission of Staphylococcus aureus"*

1:25 Lunch break

2:15 Mark Achtman (University College Cork, Ireland) *"Absence of evidence for Darwinian selection in the microevolution of genetically monomorphic bacterial pathogens"*

2:50 Matt Fisher (Imperial College, London) *"Fear of fungi: Cryptic species, phylogeography, and invasive lineages"*

3:25 Coffee/tea

3:50 Wendy Gibson (University of Bristol) *"The phylogeography of African trypanosomes and the origins of sleeping sickness"*

4:25 Paul Sharp (University of Edinburgh) *"The origin and spread of human malarial"*

5:00 Drinks, nibbles and discussion

Please register at <http://ciie.bio.ed.ac.uk>