

PRISM Workshop September 2016

Modelling Emerging Infections and Neglected Tropical Diseases

Program Overview

Thursday 22 nd September	
Population mobility, demographics and spatial determinants	
<i>Nic Gead, Chair</i>	
2-5pm	<p><i>2.00-2.10 Introduction- Jodie McVernon</i></p> <p><i>2:10-2.40-Population migration and mobility</i> Invited speaker: Graham Medley</p> <p><i>2:40-3.00 Modelling demographic change and its implications for disease transmission and control-</i> Nic Gead</p> <p><i>3:00-3:20 Assessing the impact of maternally targeted vaccine strategies in LMIC settings -</i> Trish Campbell</p> <p><i>3:20-3:30 Afternoon tea</i></p> <p><i>3:30-4:00 Uniting correlative spatial modelling with mechanistic dynamical models-</i> Invited speaker: Nick Golding</p> <p><i>4:00-5:00 Panel discussion – new approaches to understanding and incorporating population heterogeneity in models</i></p>
5-6pm	Networking drinks, discussion

Friday 23 rd September	
Archie Clements, Chair Population susceptibility, immunity and risk	
9-10.50am	<p>9:00-9:30 - <i>Spatial epidemiology of dengue fever in Bangkok Thailand: Multidisciplinary approach for optimizing control strategy</i> Invited speaker: Wirchada Pan-Ngum</p> <p>9:30-9:50- <i>Modelling the spread of HRP2-negative Plasmodium falciparum parasites</i> Michelle Gatton</p> <p>9.50-10.10-<i>Examining the life course of antibody dynamics against multi-strain pathogens –</i> Adam Kucharski</p> <p>10.10-10:30 <i>The Infection Tree Theory: Assessing the Risk of Infection in a Population –</i> Fingani Mphande-Nyasulu</p> <p>10:30-10:50 Panel discussion</p>
10.50-11.15 am	Morning Tea, networking
James McCaw, Chair Resistance – drivers and solutions	
11.15-1pm	<p>11:15-11:45 -<i>Evolution of Polygenic Drug Resistance in Helminth Populations Exposed to Preventive Chemotherapy: A Stochastic Individual Based Model</i> Invited speaker: Luc Coffeng</p> <p>11:45-12.05 – <i>Developing a patch model for the transmission of Onchocerca volvulus –</i> Karen McCulloch</p> <p>12:05-12:25 <i>Global phylogenomics of the multidrug-resistant Staphylococcus aureus clone ST772–</i> Eike Steinig</p> <p>12:25-12:45 <i>Modelling the temporal antimalarial effect during blood-stage P. falciparum infection –</i> James McCaw</p> <p>12:45-1pm Panel discussion</p>
1pm-2pm	Lunch, networking
Trish Campbell, Chair New approaches to treatment and prevention of NTDs	
2-4 pm	<p>2:00-2:30 - <i>Developing a model to evaluate mass drug administration for the treatment of scabies in a high prevalence setting</i> Invited speaker: David Regan</p> <p>2:30-2:50 - <i>Economic evaluation of a potential group A streptococcal vaccine; from static to dynamic modelling</i>-Jeff Cannon</p> <p>2:50-3:10 - <i>Determining the age of first infection from incomplete data –</i> Michael Lydeamore</p> <p>3:10-3:30 – <i>Optimising tuberculosis control by integrating transmission dynamic, health economic modeling and optimization algorithm – the AUTUMN framework –</i> Tan Doan</p> <p>3:30-3:50 – <i>Dynamics of progression to active TB: which model structure to best replicate them? –</i> Romain Ragonnet</p> <p>3:50-4:00 <i>Summation and close</i></p>