

### Abbreviated Biosketch for Proposed Members of the Guideline Development Group

Title:	Dr
First name:	Thomas
Last name:	Churcher
Current position:	Professor of Infectious Disease Dynamics
Affiliation*:	Imperial College London
Country:	United Kingdom

Tom Churcher is a Professor of Infectious Disease Dynamics at Imperial College London with 25 years' experience working to support the control vector borne disease. His background is in the interface between entomology, parasitology, epidemiology and mathematical modelling and he has co-developed one of the most widely used transmission dynamics mathematical models of malaria. He leads a group of scientists focusing on using novel analytical methods and mathematical models to evaluate the efficacy of different malaria control tools and predict the best way to use them to prevent disease. The effectiveness of these tools often depends on the basic biological processes governing human-mosquito-parasite interactions so much of his work has concentrated on understanding the key processes governing transmission. The team has worked across the product development pathway evaluating different types of insecticide treated nets and residuals sprays from early laboratory experiments through to their evaluation in large cluster randomised control trials. They are also exploring how novel methods of control such as attractive sugar baits, endectocides, spatial emanators, transmission blocking vaccines and the use of genetically modified organisms can be tested, evaluated and integrated into existing malaria control efforts. Working closely with control programmes, scientists from disease endemic countries and policy makers, Tom aims to optimise the use of vector control and produce practical, policy relevant research. He was co-developed <https://mint.dide.ic.ac.uk/> an online interface to allow scientists and policy makers to explore the results of mathematical models comparing the effectiveness of different WHO recommended vector control tools. He has published over 100 peer review manuscripts and has provided evidence in scientific meetings convened by the WHO, Global Fund and Wellcome Trust.

\* Please choose your primary affiliation and mention others in the bio.

\*\*\* Please briefly describe your current and recent professional positions (past five years) and education in 200 to 300 words maximum.