**Session N.00472**

**04. An introduction to tuberculosis modelling**  
(TB modelling and analysis consortium)

**Wednesday, 02 December 2015, 09:00 - 16:00**  
**Room MR 1.43**

<table>
<thead>
<tr>
<th>Type of session</th>
<th>Post-graduate Course</th>
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<tbody>
<tr>
<td>Track</td>
<td>TB epidemiology</td>
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<tr>
<td>Duration</td>
<td>Full-day</td>
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<tr>
<td>Max attendees</td>
<td>25</td>
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**Description**

This course is designed for individuals interested in modelling tuberculosis and the impact of TB care and control programmes. It will introduce participants to the basic structures, assumptions, principles and concepts of TB modelling, including key aspects of Mycobacterium tuberculosis (MtB) natural history and the impact and cost-effectiveness of TB care and control programmes. Participants will gain hands-on experience in using a TB model & how to appraise TB modelling papers. The course will also highlight the role of modelling for policy and decision making and the resources available from the TB Modelling and Analysis Consortium (www.tb-mac.org).

**Target audience**

1. TB and HIV researchers, heads of national TB programmes, policy-makers  
2. Decision-makers, epidemiologists, clinicians

**Objectives**

1. Introduce participants to the basic structures, assumptions, principles and concepts of TB modelling  
2. Introduce key aspects of MtB natural history and impact and cost-effectiveness of TB care and control programmes  
3. Provide hands-on experience in using TB models and the insights they can provide  
4. Provide training in the critical appraisal of modelling papers  
5. Highlight role of modelling for policy and decision making and modelling resources available from TB MAC

**Keywords**

TB; mathematical modelling; economics; prevention; control; care;

**Coordinator(s)**

Piotr Hippner (South Africa), Rein Houben (UK)

**Chair(s)**

Richard White (UK)

**Presentations**

1. Lecture 1: An introduction to tuberculosis modelling  
   Richard White (UK)

2. Practical 1: Setting up a model of MtB  
   Emilia Vynnycky (UK), Tom Sumner (UK)

3. Paper discussion: how to critically review a modelling paper  
   Gwenan Knight (UK)

4. Lecture 2: Tuberculosis modelling - interventions and cost effectiveness  
   Rein Houben (UK), Anna Vassall (Netherlands)

5. Practical 2: Modelling the impact and cost effectiveness of TB interventions  
   Emilia Vynnycky (UK), Tom Sumner (UK)

6. Summary of the day  
   Richard White (UK)