Dear <<First Name>>,

Welcome to the first TB Modelling and Analysis Consortium (TB MAC) newsletter of 2017, with information for TB modellers, epidemiologists, and decision makers.

**Increasing the effectiveness and efficiency of TB care and prevention policy at global and country level**

Thanks to input from modellers, economists and all our other stakeholders, TB MAC has a new mission (above), objectives and core activities To kick start our new funding period, TB MAC held a meeting with key stakeholders to discuss the TB modelling community demands and challenges, what TB MAC is planning to do to help the TB modelling community meet some of these demands, and what gaps remain.

This information is being used to fine tune TB MAC’s work plan, and the remaining gaps were fed into a second, multi-stakeholder convened meeting to draft a ‘Roadmap’ for TB modelling for the next 3-5 years.

A summary of our TB MAC meeting is [here](http://us8.campaign-archive2.com/?u=c064a1a9d4b4851d452bc08fb&id=bcfd453fd9) and information on the ‘Roadmap’ meeting will become available from the multi-stakeholder group over the coming months.

Both meetings were very constructive, and we thank everyone who contributed to TB MAC’s presentations.

**Funding from Sanofi to develop health economic models for LTBI**

Sanofi have recently released an RFP to develop a disease transmission model for latent tuberculosis infection. The model must also be adaptable for use in other countries with user friendly interface for subsequent exploratory manipulation. If you are interested, please contact Joshua Nealon at Sanofi for more information and to discuss your possible submission.

**The Union APRC 2017 workshops**

The Australian Tuberculosis Modeling Network (AuTuMN) are holding a workshop on the 22nd of March 2017 on 'Using epidemic and economic models for tuberculosis for national decision support' at the [APRC 2017](http://us8.campaign-archive2.com/?u=c064a1a9d4b4851d452bc08fb&id=bcfd453fd9) Tokyo conference. Click the links above for more information and to register.

**Introduction to infectious disease modelling and its applications course**

The London School of Hygiene & Tropical Medicine and Public Health England are running a two week course that starts mid-June on the above topic. Intended for professionals interested in expanding their knowledge of techniques available for analysing and interpreting epidemiological data on infectious diseases. Fees are
applicable, and for more information and to apply, click the link above.

**Highlight on modelling papers from our community**

Kendall EA et al use population modelling analysis to estimate the effect of a short-course regimen on the global epidemic of multidrug-resistant tuberculosis

Ragonnet R et al use modelling to determine if IPT is more effective in high-burden settings

Tuite AR et al use modelling to evaluate how interventions might enhance existing TB control efforts in an indigenous community in Canada

Wirth D et al investigate the cost-effectiveness of add on therapies to a BR to treat multidrug-resistant tuberculosis in Germany

Fofana MO et al use a multistrain model of mycobacterium tuberculosis transmission to investigate the role of Pyrazinamide in the emergence of drug resistant tuberculosis

Kendall EA et al use a model to explore the effects of adopting a 9 month regimen for multidrug-resistant tuberculosis

Rhodes SJ et al considers the potential utility of immunostimulation / immunodynamic modelling for the acceleration of TB vaccine development

Ragonnet R et al uses modelling to explore high rates of multidrug-resistant and rifampicin-resistant tuberculosis among re-treatment cases

Wang KW et al compare the performance of a moving average model and a hybrid model at forecasting TB incidence over time in China

van Rijn SP et al predicted ertapenem exposure in multidrug-resistant tuberculosis patients using a pharmacokinetic model

Moreno V et al investigate *M.tb* transmission dynamics in relation to mobility and health disparities

McBryde ES et al use a model to explore the risk of global epidemic replacement with drug-resistant Mycobacterium tuberculosis strains

Liu S et al uses a mathematical model to examine a mixed vaccination strategy to control tuberculosis in China

Chen C et al use a model to describe rifampicin treatment response in an acute tuberculosis mouse model

Gough M and May E use a model to explore the intracellular effects of vitamin D3 on mycobacterium infection of macrophages

Kendall EA et al explore 'MDR-TB treatment as prevention' and the projected population-level impact of expanded treatment for multidrug-resistant tuberculosis

Mehrotra P et al model the potential cause of increased acetyl-CoA levels in cells with virulent vs avirulent *M.tuberculosis* infections

Mandal S et al use a model to estimate population-level impact of disease control programmes in India

If you have any recently published TB modelling papers that you would like us to highlight in our future newsletters, email us with details.

For more information on TB MAC, or to get involved, please visit [www.tb-mac.org](http://www.tb-mac.org) or email us directly at tb-mac@lshtm.ac.uk.

Best wishes,

Richard, Rein, Christina, Finn and the TB MAC Committee