

# The TB Research Movement: *Past, present and future*

Stop TB Partnership

## 21st Stop TB Partnership Coordinating Board Meeting

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Bangkok, Thailand

30<sup>th</sup> January – 1<sup>st</sup> February 2012



*Photo: Dominic Chavez*

Christian Lienhardt  
Stop TB Partnership  
Geneva

# Objectives of the session

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- To give a brief summary of the history and objectives of the Research Movement;
- To present the outputs of the Research Movement activities (2009-2011);
- To propose directions for the future of the Research Movement.

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- *Established in 2007 on recommendation from the Stop TB Partnership Coordinating Board and WHO STAG-TB with the view to engage stakeholders in a collaborative, concerted & strategic effort to increase the scope, scale and speed of TB research.*
  - The **goal** is to stimulate, support, accelerate, and expand research *across the continuum* to ensure the global elimination of TB by 2050.

# The TB Research Movement



## Two major objectives

**To provide *leadership and advocacy* to mobilize increased resources in support of a *coherent & comprehensive global TB research agenda***

**To *provide a forum for researchers, funders and implementers* of TB research to coordinate plans & actions, to ensure research needs are addressed, opportunities prioritized, & gaps filled**

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# RM Strategy Plan – 2010-2011



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## ***1. Setting the landscape: revision of the Global Plan to Stop TB***

- address the full continuum of TB research and development
- revise research targets and indicators
- revise estimation of needs

## ***2. Develop coherent and comprehensive global TB Research agenda***

- map existing research agendas
- establish a logical, thorough, transparent, reproducible, widely inclusive and fully coordinated process to identify critical priorities in TB research
- address specific OR issues and develop a Guide for OR to improve TB care and control

## ***3. Understand the global TB R&D funding landscape***

- track global TB R&D funding

## ***4. Forum for funders and implementers of TB Research***

- Bellagio high-level meeting
- TB RM website

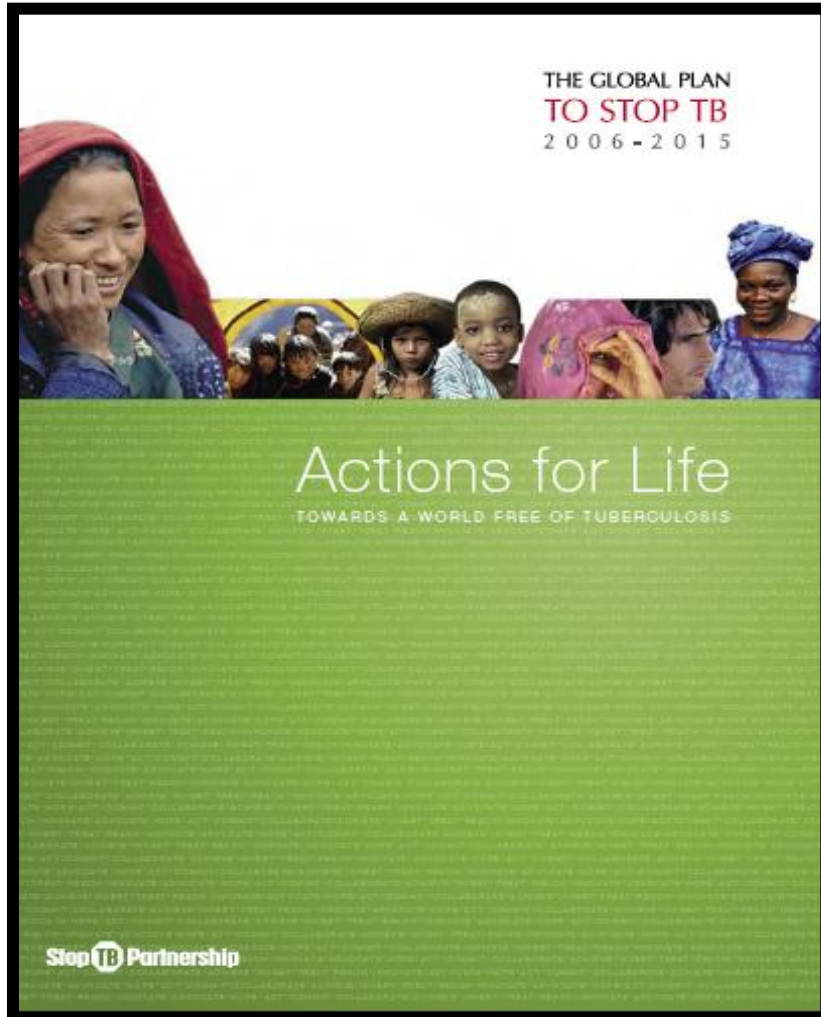
## What Research Is Needed to Stop TB? Introducing the *TB Research Movement*

Christian Lienhardt<sup>1\*</sup>, Marcos Espinal<sup>1</sup>, Madhukar Pai<sup>2</sup>, Dermot Maher<sup>3</sup>, Mario C. Raviglione<sup>1</sup>





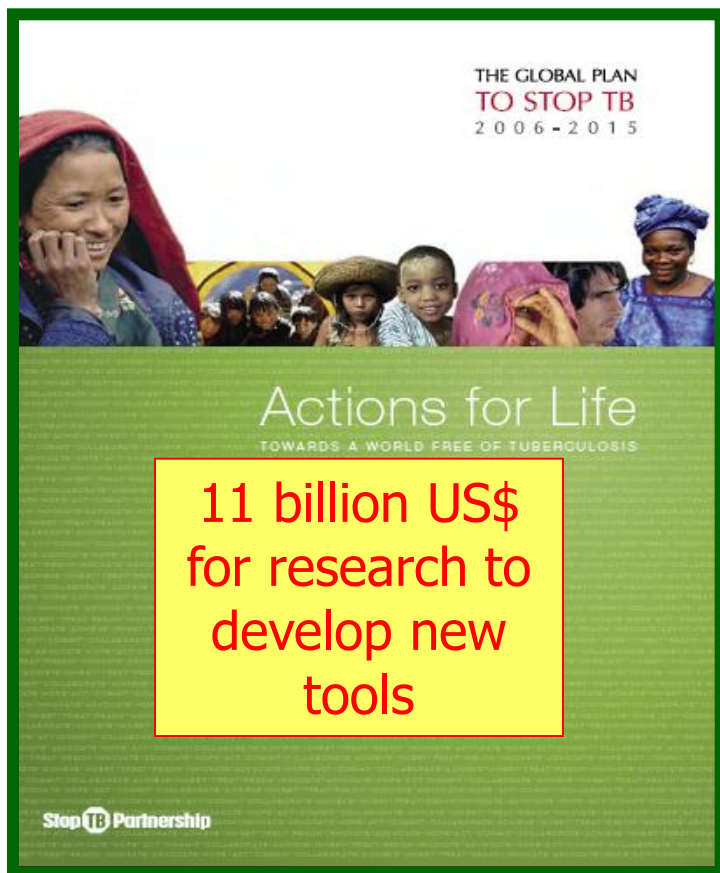
# The Global Plan 2006-15 proposed achievements



1. MDGs for TB and the Partnership's 2015 targets to halve prevalence and death rates globally
2. Treatment of 50 million people with TB, 3 million TB/HIV co-infected patients on ARV, and 1.6 million with MDR
3. Saving of 14 million lives from 2006-2015
4. The first new TB drug introduced by 2010
5. The "point of care" diagnostics introduced by 2010
6. Develop a new vaccine by 2015

# Strengthening the fight

The Global Plan 2006-2015 defined direction and costs



The Global Plan 2011-2015 strengthens the fight



# *Global Target: Eliminate TB by 2050 (<1case/million population)*

## **Fill the knowledge gaps**

- Epidemiology research and modeling
- Basic research

- Better understanding of TB epidemiology and effects of population dynamics on TB transmission
- Better understanding of disease spectrum and markers of the spectrum

## **Develop new TB tools**

- Prime vaccines
- Boost vaccines
- New single vaccine
- New drugs
- Combined regimens
- New diagnostics

- Safe, effective and affordable suite of tools to prevent, rapidly detect and cure

## **Uptake in current practice**

- Delivery systems/programs

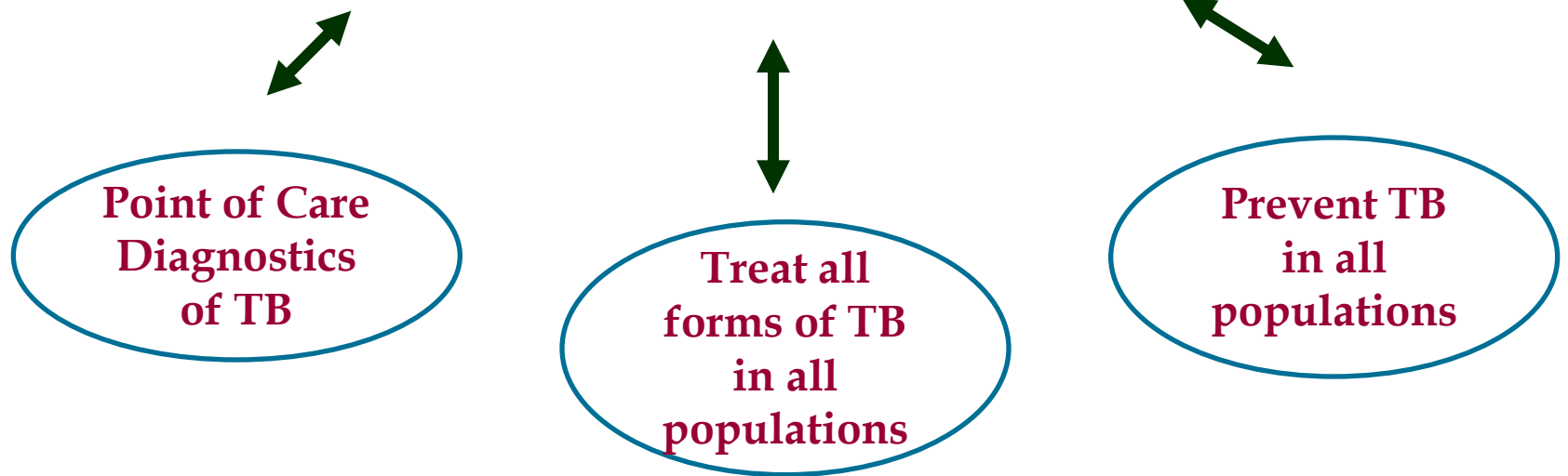
- Effective uptake in control programmes
- Optimal programmatic outputs

## **The larger context**

- Health system research
- Links with the larger socio-economic development context

- Universal access to health
- Improvements in socio-economic and education status

# The Continuum of TB Research



Fundamental Science

Translational Studies

Preclinical Studies

Clinical Studies/Trials

Deployment/Operational research



# The International Roadmap for TB Research



**Improve our understanding of the science underpinning new tools**

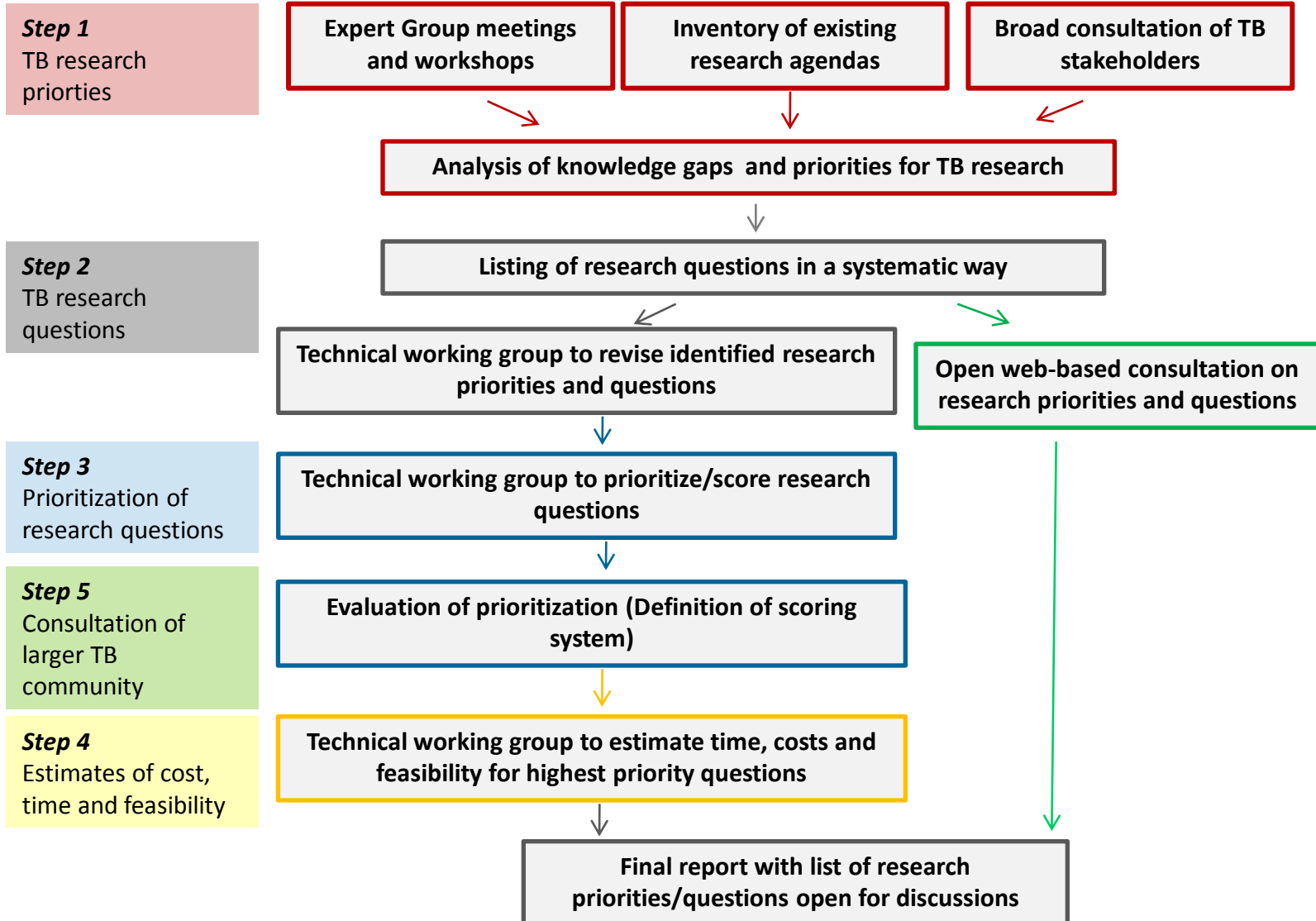


**Develop new tools for TB control (diagnostics, drugs, vaccines)**



**Ensure that newly developed tools & interventions are effectively used**

# Development of the TB research roadmap



# The International Roadmap for TB Research



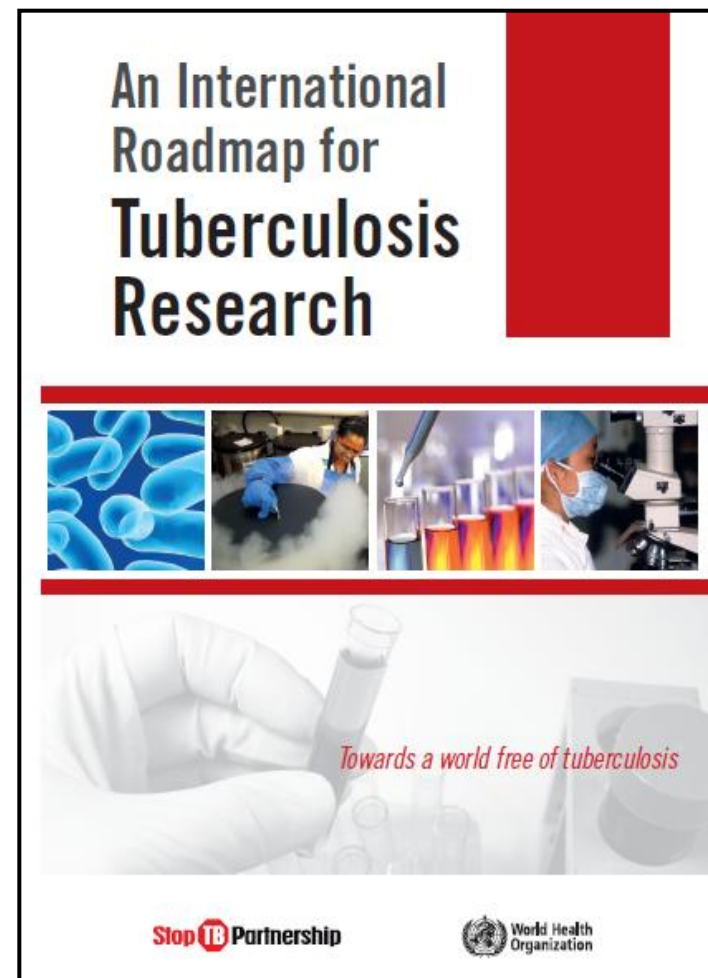
## **Overall goal:**

To identify **knowledge gaps** and **priority areas** in TB research towards elimination of TB by 2950

## **Objectives:**

- To strengthen the role of every aspect of TB research *along the continuum*
- To achieve consensus and credibility by involving the larger TB community
- To mobilize and focus resources into TB research areas of importance

Large contributions from a wide variety of partners and stakeholders involved in TB Research worldwide



*Launched at the 42<sup>nd</sup> Lung Health Conference, Lille, 29<sup>th</sup> October 2011*

# Priorities in Operational Research to Improve TB Care & Control



## Objective:

to assist countries/NTPs in conducting OR to improve TB care and control and applying for grants for OR

## Contents:

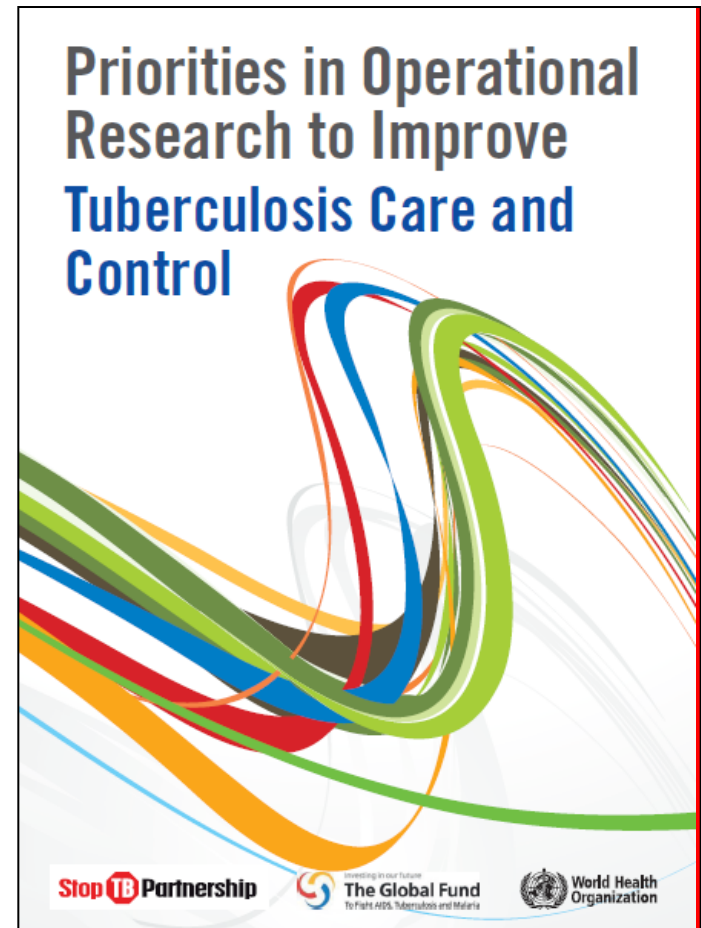
- Description of *five priority OR areas* and rationale for research questions
- Determination of *research cycles* describing a logical timeline of successive research projects
- For each research question, development of a *standard research template*



# Priorities in Operational Research to Improve TB Care & Control

Document co-published by the Stop TB Partnership, the WHO Stop TB Department, and the Global Fund to fight AIDS, Tuberculosis and Malaria

Large contributions from many institutions involved in OR (*Liverpool School of Tropical Medicine, The Union, KNCV, AIGHD, TDR, Rede-TB, CDC, KEMRI, PIH, etc...*)

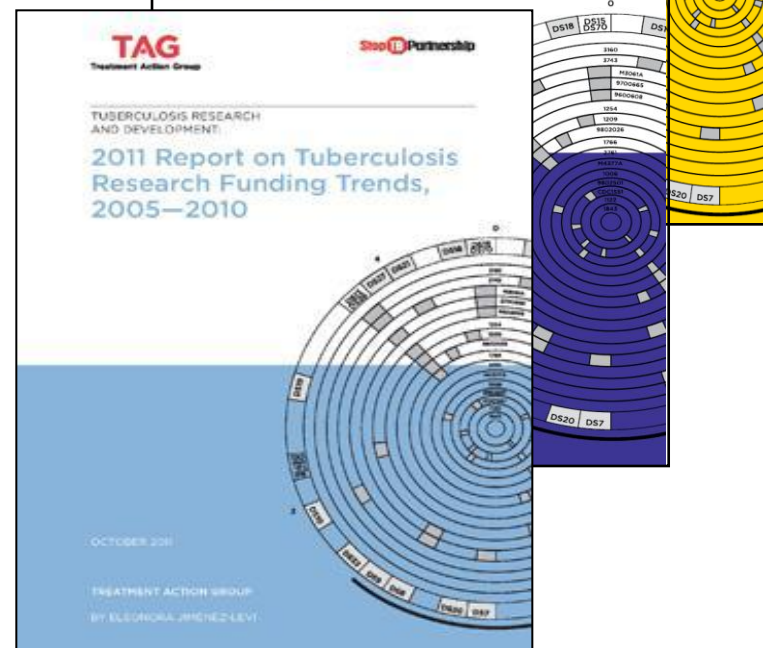
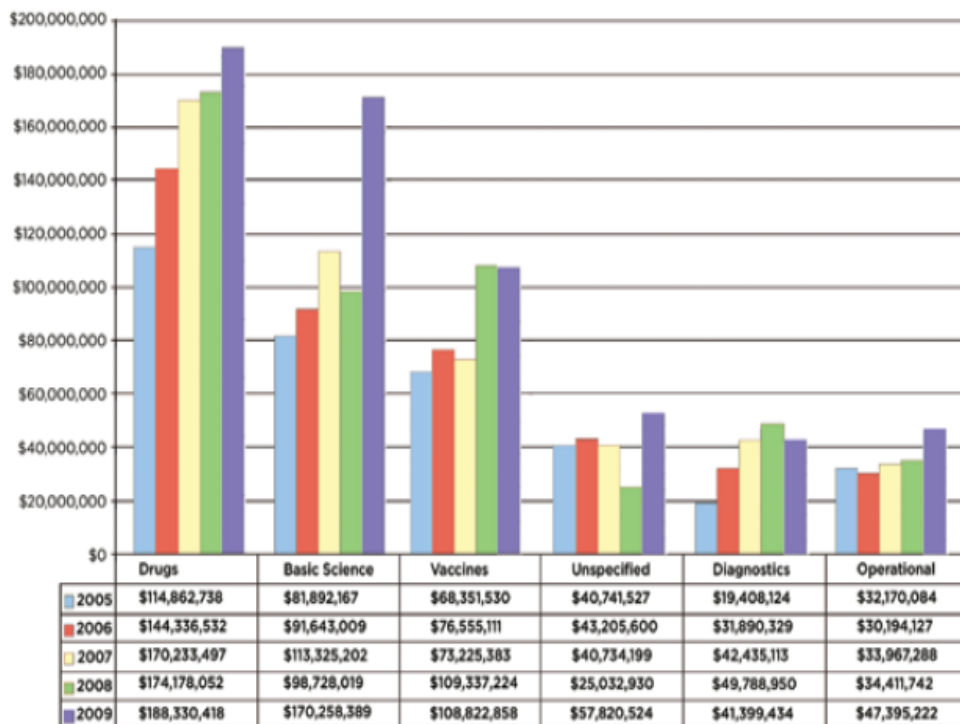


*Launched in Delhi, India, on 29<sup>th</sup> August 2011*

# Track global TB R&D funding



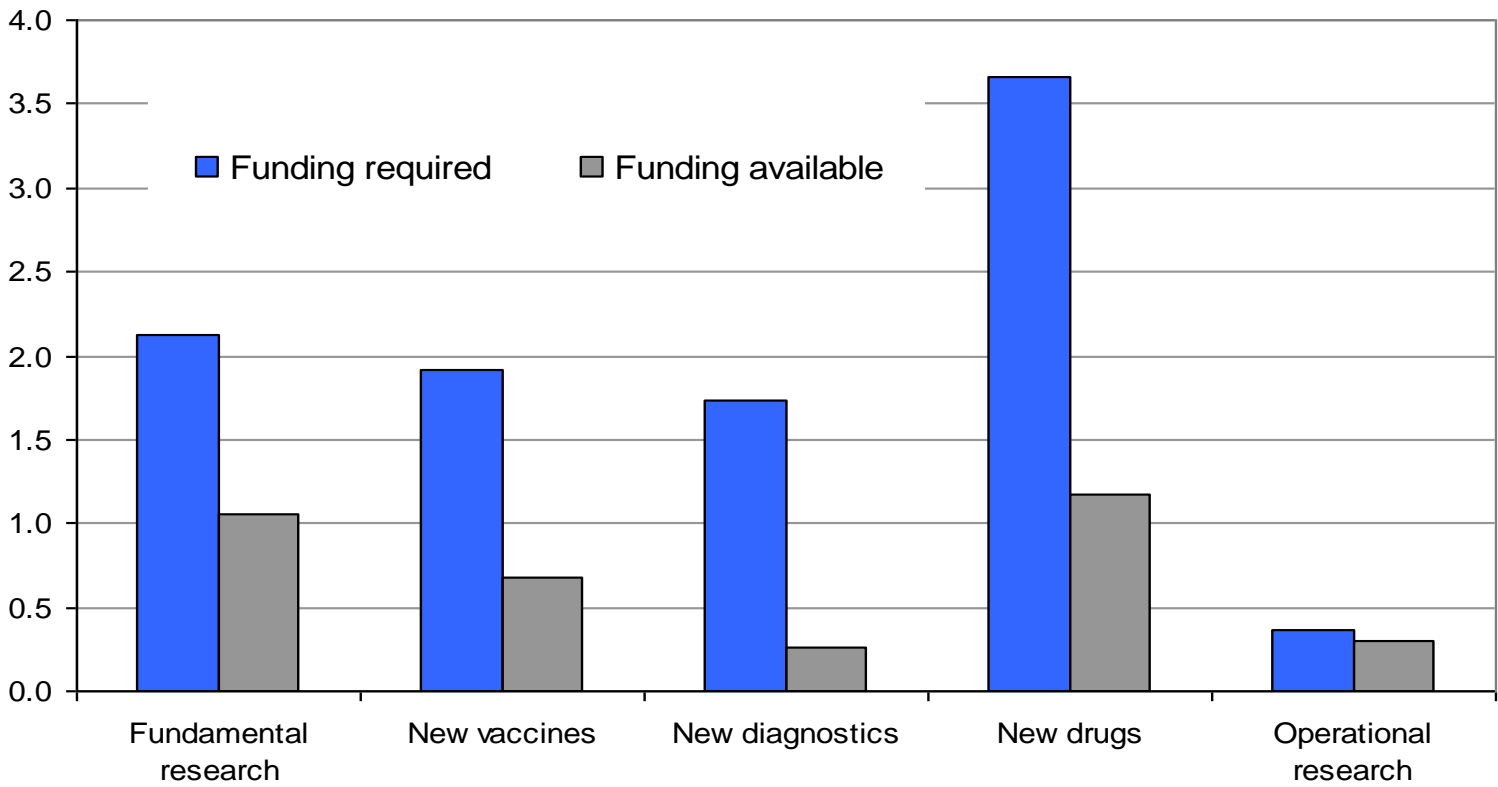
Contribution to TAG's annual survey on global TB R&D funding from 2009 to 2011  
 Confrontation of present investments with Global Plan estimates



# Funding required and available by research component, 2011–2015



**Funding required and available (estimated\*) by component, total for the period 2011-2015 (US\$ billions)**



\* Based on TAG Report (November 2010), assuming that 2009 maintained throughout 2011-2015, adjusted only for inflation. "Unspecified" funding has been distributed proportionally between the 5 components.

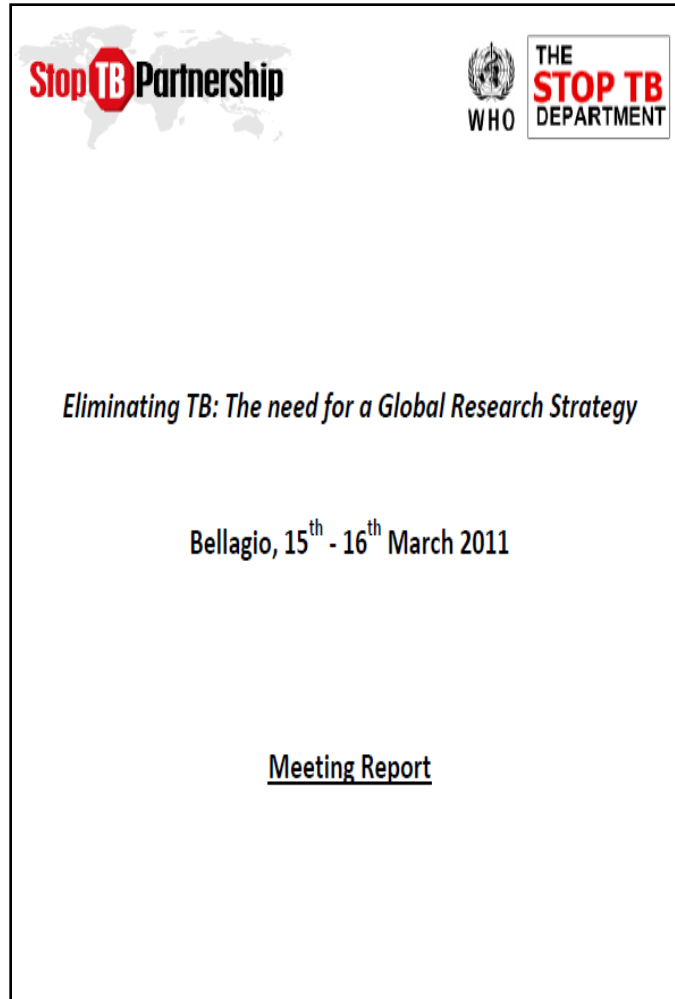
# High-Level Meeting, Bellagio, Italy

## ***Objectives of the meeting:***

- To present the *International Roadmap for TB Research*;
- To agree on the key strategic areas to move research efforts towards TB elimination;
- To support the Roadmap's vision of synergistic global TB research efforts through the establishment of a mechanism to better coordinate action and funding of research towards TB elimination.

## ***Contributors:***

27 participants representing the top 10 donors for TB research, strategic leaders in research, NGOs and BRICS country representatives (Brazil, South Africa)



## Final statement:

*"The participants at the Bellagio meeting encourage the Stop TB Partnership to endorse the TB Research Roadmap, publish it promptly as an independent document, and facilitate the execution of the following Action Plan:*

- Elaborate key areas of emphasis from the research roadmap to define an action plan for global TB research (including research advocacy);*
- Initiate consultations with countries, especially BRICS countries, researchers, policy makers, the private sector, and civil society to explore the key areas of emphasis/action plan and build ownership;*
- Match existing funded research with areas of emphasis to avoid unnecessary duplication, leverage existing resources and infrastructure to catalyse more effective collaborations;*
- Funders will establish a harmonization and coordination mechanism for research support.*

## The TB Research Movement



Progress in global TB control is constrained by the lack of highly effective and widely accessible diagnostics, drugs and vaccines, and by the current weaknesses in many health systems that fail to guarantee their proper uptake and delivery, especially in the areas where they are needed most. To overcome these current barriers, an intensification of TB research across the full continuum - extending from fundamental to implementation/operational research - is urgently needed.

### The Vision

The Research Movement has been launched by the Stop TB Partnership and the World Health Organization (WHO) to engage a broad alliance of TB researchers in a collaborative strategic effort to *stimulate, support and expand research to ensure the global elimination of TB in the world by 2050.*

### The objectives

The Stop TB Partnership Research Movement has three main objectives:

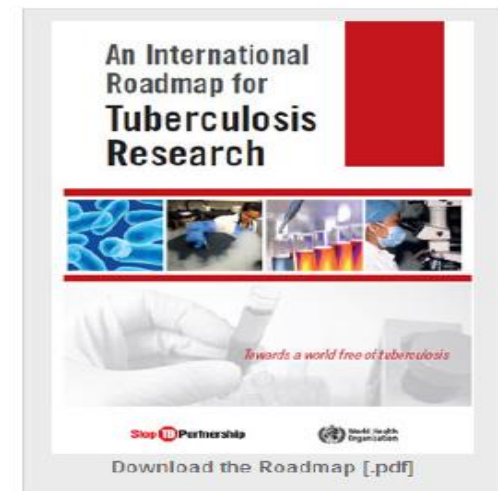
- to provide a forum for TB researchers and funders of TB research to coordinate their priorities and actions;
- to lead on efforts to increase resources for TB research;
- to work towards the development of a coherent and comprehensive global research roadmap towards TB elimination

During the last two years, the TB Research Movement has mobilized a wide collaboration of stakeholders involved in TB research and development, including academia, research institutions, public-private partnerships, donors, organizations and patients representatives, through various events (expert group meetings, workshops, symposia, communications, etc). This collaboration will help to scale and speed up TB research and most importantly, to link together basic research, the development of new tools, and operational research.

For the most recent activities of the TB Research Movement please have a look [here](#).

## In This Section

- Why is research essential to stop TB?
- Areas of TB Research
- Activities
- Papers and Publications
- Research Agendas
- Partners
- Good to know: calls, news and upcoming events
- Papers of the month



# Research Movement – Activities Outputs, 2009-2012

## Funding

- Revised estimates of R&D needs in **Global Plan to Stop TB 2011-2015**
- Contribution to annual **TAG TB R& D funding report tracking** and comparison with Global Plan to Stop TB 2011-2015 needs estimates

## Awareness

- Fully revised **RM webpage** <http://www.stoptb.org/researchmovement/>
- Contribution to **major events** (WTBD, scientific fora, intern. conferences) raised the profile of the RM in the TB community and media

## Engagement

- Engagement of **multiple stakeholders** (e.g. NIH/NIAID, B&MGF, EC, DfID USAID, PDPs, GFATM, NGOs (MSF, TAG, KNCV, The Union), academia, STP WGs, etc.) to build consensus on the aims of the RM
- **Bellagio meeting**

## Agenda Development

- Integration of a full R&D section in the **Global Plan to Stop TB 2011-2015**
- Development of the **International Roadmap for TB Research**
- Development of the **OR Guide to Improve TB Care and Control**

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## **Brainstorming session, 24 January 2012:**

- **Clear focus on BRICS and selected other high-burden countries:**
  - increase their involvement in research funding and conduct
- **Advocacy as a key area of work:**
  - strategized, prioritized and focused
  - plan how to address the relevant target groups
  - take advantage of the convening power of the Partnership and WHO, as well as of other key partners
- **The research roadmap is an essential tool as we move forward:**
  - should be a living document – to be promoted with all stakeholders
  - ongoing assessment of what is currently being done vs. what is described in the roadmap.
- **Acknowledge interdisciplinary aspects:**
  - explore how the research roadmap can be used so that it can serve as a decision tool both for donors and policy makers.

# ***The Future: proposed direction***



## ***1. Work on what is being established:***

- Promote and disseminate the *International Roadmap for TB Research*
- Promote and disseminate the *Guide for OR to Improve TB Care and Control*

## ***2. Enhance Research advocacy:***

- Match existing funded research with key strategic areas to streamline funding for TB research
- Leverage existing resources and infrastructure to catalyse more effective research collaborations

## ***3. Increase involvement of high-burden countries in TB research – particularly the BRICS countries***

# Acknowledgments



- **List of contributors:**

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*Thank you for  
your attention !*



*Photos: Dominic Chavez*