Tuesday, 10 October 2017

Admin or Side Meetings (MTG)
15:30 - 17:30

CCSA 1
02. Accelerated access to new TB medicines, regimens, and diagnostics: the supply management challenges during transitions

There are recommended new drugs, new regimen and new formulations for the management of TB, from the standardised 20-24 months regimen for drug-resistant TB (DR-TB) to the shortened 9-12 months regimen, to new drugs and paediatric fixed dose combinations for paediatric TB. However to successfully ensure access to these newer and better regimen and drugs, systems need to be in place to ensure ‘transitions’ and switches are done in the most efficient way possible with minimum interruption for patients taking the medicines, proper supply chain planning and coordination at all stages of pharmaceutical and supply chain management.

The purpose of this session is to share lessons learned from selected countries that have accessed new drugs, shortened treatment regimen and paediatric formulation, and to look at how ‘waste’ of obsolete medicines was minimised or avoided. This information is timely and relevant to many country programmes that are already implementing the switch or in the midst of scaling up new drugs, shortened regimen and pediatric formulation.

Objectives:
1. To discuss challenges in the global TB commodities forecasting during the transitions from old treatment regimens to new drugs and formulation, and the importance of patient data in forecasting and procurement planning.
2. To describe the role played by technical assistance focused on quality assured TB medicines, tools used in quantification and the regional-based approach to ensure uninterrupted availability of TB commodities.
3. To share experiences from countries that have introduced new drugs and formulation, approaches to adoption of new drugs and forecasting and quantification.

Expected outcome:
1. Participants will learn the challenges in global forecasting and the role of patient estimates data.
2. Participants recognise the diverse countries’ contexts, partners involvement and National TB Programme (NTP) perspectives in the supply chain planning of paediatric formulations, shortened treatment regimen (STR), bedaquiline and delamanid.
3. Participants know where/when to access technical assistance for the supply chain planning during implementation.

Chair / Coordinator: Edmund Rutta (United States of America)
Chair: Thomas Chiang
Coordinator: Andre Zagorski (Switzerland)

United States Agency for International Development (USAID) support for the accelerated access to new TB medicines, regimens, and diagnostics: updates
Thomas Chiang

Global and regional-based technical support to National TB Programme’s (NTP) forecasting and quantification of new TB medicines, regimens, and diagnostics: Global Drug Facility (GDF) updates and perspectives
Gustavo Do Valle Bastos (Switzerland)

Avoiding TB medicines stock-outs in Uzbekistan through proper quantification and early warning system
Liverko Irina (Uzbekistan)

Analysing TB medicines costs and reprogramming of TB medicines budget in Tanzania global fund grant
Jumane Marko Mkumbo (Tanzania, United Rep.)

Zimbabwe experience in implementing new child friendly formulations: lessons learnt and challenges
Dube Masimba (Zimbabwe)

Country level experiences in implementing new tools, new pediatric formulation, STR transition and new drugs
Ana Marie Celina Garfin (Philippines)
Scientific Programme

Supporting TB drugs manufacturers to increase the supply of a life-saving anti-TB medicine: USP Promoting the Quality of Medicines (PQM) technical approach
Archil Salakaia (United States of America)

Post-graduate course (PGC)
08:00 - 11:00
Hall 4 - Events Ballroom

01. Qualitative data analysis

Objectives:
1. Develop capacity in analysing and interpreting qualitative data.
2. Progress from descriptive to critical, in-depth qualitative analyses.

Description and relevance:
Qualitative research provides contextualised insight into the social and behavioural contexts of TB related determinants, challenges and outcomes. There is growing interest to integrate qualitative research into operational and clinical TB programmes. This course will strengthen participants’ capacity to analyse textual data derived from qualitative interviews or focus groups for optimal translation to TB policy and/or healthcare practice.

The course will cover:
1. Sample frameworks or approaches to analysis.
2. Iterative process of data coding, comparisons, contextualisation and representation.
3. Rigour and reflexive practice. The course will be interactive, hands-on and exercise-driven.

Expected outcomes:
1. Understand the principles of qualitative data analysis.
2. Gain hands-on experience coding and thematically analysing qualitative data.
3. Learn about the advantages, limits and levels of qualitative analysis.
4. Build capacity to be critical and reflexive researchers.
5. Appreciate approaches to determining rigour in qualitative research and their limitations.

Coordinator: Amrita Daftary (Canada)
Coordinator: Gill Craig (United Kingdom)

Approaches to qualitative data analysis: framework and thematic analysis
Gill Craig (United Kingdom)

Breaking it down and building it up: from coding to meaning-making
Stephanie Law (Canada)

Descriptive vs in-depth qualitative analysis: multiple levels of inquiry and interpretation
Nora Engel (Netherlands)

Qualitative research rigour and critical appraisal
Amrita Daftary (Canada)
Workshop (WS)
08:00 - 11:00
Hall 5 - Events Ballroom

04. Transitioning from Global Fund financing and ensuring sustainability

Outside of domestic resources, the Global Fund provides the main source of financial support for National TB Programmes in developing countries throughout the world. Many countries rely on this support to successfully implement their national strategic plans for TB. Under the Global Fund's new Sustainability, Transition and Co-Financing Policy, the organisation has started the process for several countries, specifically in the Latin American and eastern European regions, to start planning their transitions off this funding. This will be a difficult process for many countries that have relied on this funding for many years and have limited domestic resources for their programmes. This session will explore how countries can navigate these transition processes, strategically plan sustainable interventions and increase government commitment and domestic financing for TB programmes. This is aligned with Pillar 2 of the World Health Organization's (WHO) END TB Strategy, which is focused on bold policies and supportive systems needed to end TB.

Chair: Suvanand Sahu (Switzerland)
Chair: Massimo Ghidinelli (United States of America)

Is the progress and funding on track to end TB?
Suvanand Sahu (Switzerland)

Global Fund Sustainability and Transition: What it means, lessons learned, and how countries can prepare
Matthew Macgregor (Switzerland)

Developing strong national TB strategies to promote sustainability
Christy Hanson (United States of America)

Communities and civil society: What is our role during the transition process?
Alberto Colorado (United States of America)

Country Experiences
Eliud Wandwalo (Switzerland)

Workshop (WS)
08:00 - 11:00
Hall 6 - Events Ballroom

EN-ES 14. Shorter regimens today, new regimens tomorrow: the practicalities of transition, waste and procurement cycles CANCELLED

<font size="3" face="Times New Roman"> </font>
03. Update on clinical and programmatic management of multi drug-resistant (MDR) and extensively drug-resistant (XDR) TB

MDR and XDR-TB pose a significant threat to TB control and challenge clinicians and programme managers worldwide given the complexities in diagnosis, treatment and case management. This course presents cutting edge strategies for clinical and programmatic management of MDR-TB for the front-line clinician, nurse, epidemiologist, laboratorian and programme manager based on the newly updated World Health Organization (WHO) guidelines. It will use case-based and didactic presentations to illustrate ways to implement the most recent internationally recommended practices to address the challenges of MDR-TB diagnosis, treatment and care. The symposia entitled 'Update on clinical and programmatic management of MDR-TB and XDR-TB' is directly related to the theme of the 47th Union World Conference on Lung Health, because addressing the problem of MDR/XDR-TB will be one of the main challenges as we move forward towards ending and eliminating TB aligned with the targets of the End TB Strategy. Appropriate prevention and management of MDR/XDR-TB will be the key for ending the TB epidemic.

Chair: Ignacio Monedero (Spain)
Chair: Neha Shah
Coordinator: Sundari Mase (India)
Coordinator: Ernesto Jaramillo (Switzerland)

Updated guidelines on molecular tests for the diagnosis of DR-TB
Christopher Gilpin (Switzerland)

Implementation of rapid molecular diagnostics for MDR-TB: programmatic perspective
Ranjani Ramachandran (India)

Designing a treatment regimen for MDR-TB according to new WHO guidelines
Jose Caminero (Spain)

Using new anti-TB drugs in the treatment of MDR-TB: programmatic perspective
Malik Parmar (India)

Illustrative case presentations
Neha Shah

Treatment of MDR-TB: HIV co-infection, pregnancy and pediatrics
Hendrik Simon Schaaf (South Africa)

Management of adverse drug reactions
Michael Rich (United States of America)

Clinical cases
Ignacio Monedero (Spain)

Pharmacokinetics/pharmacodynamics of TB medicines: outcomes of a WHO expert consultation
Radojka Savic (United States of America)

Patient-centred care in MDR-TB: ensuring sound ethics and protecting human rights
Ernesto Jaramillo (Switzerland)

Update on the CDC/ATS/IDSA/ERS MDR TB guidelines
Sundari Mase (India)
08. Accelerating the uptake of new diagnostics, medicines and regimens to eliminate TB through improved guidance and coordination

This joint workshop of the Global Drug-Resistant TB and Global TB Laboratory Initiatives (GDI and GLI) aims to discuss and present the missions, activities and achievements of the two working groups and their task forces in 2016-17, aiming to accelerate the global uptake of new diagnostics, anti-TB medicines and regimens through improved guidance and coordination.

Chair: Charles Daley (United States of America)
Chair: Heather Alexander (United States of America)
Coordinator: Fuad Mirzayev (Switzerland)
Coordinator: Wayne van Gemert (Switzerland)

Strategic priorities and products of the Global Laboratory Initiative
Heather Alexander (United States of America)

World Health Organization (WHO) policies on new TB diagnostics and laboratory strengthening
Alexei Korobitsyn (Switzerland)

GLI model TB diagnostic algorithms for achieving universal access to rapid detection of TB and drug resistance
Martina Casenghi (Switzerland)

Essential 'standards' for a TB diagnostic network
Heidi Albert (South Africa)

GLI Africa: the need for a regional laboratory initiative
Amy Piatek (United States of America)

Global programmatic use of bedaquiline and delamanid for drug-resistant TB treatment: progress, challenges and possible solutions
Vivian Cox (South Africa)

Brian Citro (United States of America)

Ensuring access to new drug-resistant (DR-TB) medicines and regimens for accelerated and seamless transition to better treatments
Brenda Waning (Switzerland)

Concurrence of use of bedaquiline and delamanid and implementation of the nine-month multidrug-resistant TB (MDR-TB) regimen
Robert Horsburgh

Updated guidance on treatment of drug-resistant TB (DR-TB)
Charles Daley (United States of America)
The Union 2017 - 48th Union World Conference on Lung Health,
11 - 14 October, 2017,
Guadalajara, Mexico

Scientific Programme

Workshop (WS)
08:00 - 11:00
Fray Alcalde

10. The evidence of impact from digital technologies most commonly used to support TB medication adherence

Digital technologies present innovative approaches to strengthen TB efforts in patient care, surveillance, programme management and eLearning. The documented experience in their use for TB control and the evidence base for the effect of certain technologies are steadily increasing.

This workshop will focus on the state of the evidence for one specific aspect of TB care – support of medication adherence – and the sessions will include review of evidence, lessons learned from trials and programmatic application of the technologies along with a modelling of the potential impact. It will focus on three technologies in particular which are being used at large scale, namely: electronic medication monitors, short message service (mobile texting) and video (or virtual) supported care.

The workshop discussion fits into the ongoing work that is being facilitated by the WHO Global TB Programme, the European Respiratory Society (ERS) and the Global Task Force on digital health for TB. As a direct outcome of this workshop we envisage the production of a paper which will be submitted for publication to a major journal. This will complement other information and new policies on TB care to guide professionals, decision-makers, system developers and technical and funding agencies to make better choices when applying digital products in support of TB programmes.

Chair / Coordinator: Dennis Falzon (Switzerland)
Chair: Giovanni Battista Migliori (Italy)
Coordinator: Kristian van Kalmthout (Netherlands)

Translating evidence on TB medication adherence into action and into more questions
Richard Lester (Canada)

What can we learn and do about TB treatment adherence through the use of medication packaging technology?
Jessica Haberer (United States of America)

Modelling the costs and impacts of digital support for TB treatment
Kevin Schwartzman (Canada)

Collecting data to assess the performance of video-supported TB therapy: useful lessons
Richard S Garfein (United States of America)

World Health Organization perspectives on evidence and digital health support to the End TB Strategy
Dennis Falzon (Switzerland)

Post-graduate course (PGC)
08:00 - 14:00
Cabanas I

04. An introduction to TB modelling

For individuals interested in modelling TB and the impact of TB care and prevention programmes.

The session will introduce participants to the basic structures, assumptions, principles and concepts of TB modelling, including key aspects of <em>Mycobacterium tuberculosis </em>(<em>mTB</em>) natural history and the impact and cost-effectiveness of TB care and prevention programmes. Participants will gain hands-on experience of using a TB model and how to appraise TB modelling papers. We will also highlight the role of modelling for policy and decision making and resources available from the TB Modelling and Analysis Consortium (www.tb-mac.org).

Chair: Philip Welkhoff
Coordinator: Richard White (United Kingdom)
Coordinator: Finn McQuaid (United Kingdom)
The Union 2017 - 48th Union World Conference on Lung Health,
11 - 14 October, 2017,
Guadalajara, Mexico

Scientific Programme

Introduction to the day
Richard White (United Kingdom)

Lecture 1: An introduction to TB modelling
Richard White (United Kingdom)

Practical 1: Setting up a model of MTB
Emilia Vynnycky (United Kingdom)

Paper Discussion: How to critically review a modelling paper
Philip Welkhoff
Finn McQuaid (United Kingdom)

Lecture 2: Tuberculosis modelling - Interventions and cost effectiveness
Rein Houben (United Kingdom)
Fiammetta Bozzani (United Kingdom)

Practical 2: Modelling the impact and cost-effectiveness of TB interventions
Tom Sumner (United Kingdom)

Summary of the day and TB MAC
Richard White (United Kingdom)

Post-graduate course (PGC)
08:00 - 14:00
Cabanas II

05. Implementing a sustainable TB infection control programme at country level

TB transmission in health care and congregate settings, especially where drug-resistant TB and HIV are highly prevalent, continues to drive the TB epidemic. Even with increasingly available resources for TB infection control interventions, a lack of updated knowledge and skills makes development of effective and sustainable risk reduction programmes challenging. This course will explore barriers to implementation and sustaining an effective TB infection control programme.

Chair: Grigory Volchenkov (Russian Federation)
Chair: Edward Nardell (United States of America)
Coordinator: Nii Nortey Hanson-Nortey (Ghana)
Coordinator: Paul Jensen (United States of America)

Self-Introductions and Introduction to Structure of the Course
Nii Nortey Hanson-Nortey (Ghana)

Counting the cost of non-adherence to TB infection control: occupational risk factors, policies and practices
Carrie Tudor (Switzerland)

Saying YES to the FAST strategy (Finding Actively, Separating Safely and Treating): implementation and outcomes
Dylan Tierney (United States of America)

Sustainability of the FAST strategy (Finding Actively, Separating and Treating) in low-resource settings: exploring the effect of training
Ejiro Iwuoha (Nigeria)

A practical approach to environmental controls: planning, budgeting and deployment
Paul Jensen (United States of America)
Implementing upper room ultraviolet germicidal irradiation (UVGI): concept and application issues
Edward Nardell (United States of America)

Upper room GUV maintenance programme
Richard L Vincent (United States of America)

Overcoming barriers and obstacles to sustainable personal respiratory programme implementation
Grigory Volchenkov (Russian Federation)

Barriers and alternative approaches to implementation of TB infection control
Edward Nardell (United States of America)

Making TB infection control effective at country level - the dos and don'ts
Paul Jensen (United States of America)

How safe is your laboratory? Practical integration of controls
Matsie Mphahlele (South Africa)

Post-graduate course (PGC)
08:00 - 14:00
Minerva I

10. TB prevention in children in high-burden TB settings: implementing the child contact management care (CCM) cascade

Course objective: Develop knowledge and build operational capacity to effectively implement and enhance the CCM in high-burden TB settings.

Description and relevance: As noted in Pillar 1 of the End TB Strategy, prevention re-emerged as a core strategy for reaching TB control targets. This course is for stakeholders and healthcare workers who work in high-burden TB countries and will specifically address CCM implementation of child household contacts under the age of five years who have been exposed to bacteriologically positive pulmonary TB. CCM is recommended in all high-burden TB countries. This four-step care cascade includes identifying exposed child contacts under five years of age, screening them, initiating preventive treatment or TB disease treatment and ensuring completion of therapy. This course aims to engage stakeholders globally by discussing barriers and facilitators that impact CCM at each care cascade step and exploring various CCM strategies. Sharing evidence-based guidelines and reporting on implementation experiences is essential to improving CCM and ultimately accelerating towards the elimination of pediatric TB. The course will also include expert guidance regarding drug-resistant child contact management and preventive therapy regimen options for drug-susceptible (DS) and drug-resistant TB (DR-TB).

The course effectively melds experience of presenters from both high and low-burden TB settings. The format consists of lectures, case studies, role plays and exercises.

Expected outputs:
1. Understand the current World Health Organization (WHO) CCM recommendations.
2. Review the breakdown of the CCM care cascade into four distinct steps.
3. Discuss barriers and facilitators that impact CCM at each step of the care cascade.
4. Explore various CCM strategies and their effectiveness.
5. Enhance knowledge and capacity to design an effective CCM programme.
6. Investigate the most recent evidence regarding DR-TB CCM and preventive therapy regimens for DS and DR-TB.

Chair: Hendrik Simon Schaaf (South Africa)
Chair: Anna Mandalakas (United States of America)
Coordinator: Yael Hirsch-Moverman
Coordinator: Daria Szkwarko (United States of America)

WHO strategy for CCM
Anna Mandalakas (United States of America)
The Union 2017 - 48th Union World Conference on Lung Health, 11 - 14 October, 2017, Guadalajara, Mexico

Scientific Programme

CCM overview – what are the major drivers in CCM? What are the various strategies?
Karen Du Preez (South Africa)

Regimens for preventive treatment
Andrea Cruz (United States of America)

Quantifying the impact of screening and treatment in child multidrug-resistant TB contacts
Helen E. Jenkins (United States of America)

Multidrug-resistant TB preventive treatment considerations
Hendrik Simon Schaaf (South Africa)

Breakout groups
Tbc Tbc (South Africa)

Post-graduate course (PGC)
08:00 - 14:00

11. Strengthening performance management

National health programmes and donor funded projects need to improve their performances in terms of efficiency, effectiveness, quality and timeliness. This course provides participants with a conceptual framework to define and measure performance as well as practical tools to improve it. During this interactive course, participants will learn to develop score cards to measure and compare different interventions and understand the importance of comparative feedback. Participants will learn to design a performance improvement approach using score cards through a 10 steps checklist.

Objectives:
1. Empower participants to define and measure performance in public health.
2. Enhance the participants’ approach to performance management and provide necessary tools and techniques.

Expected output/outcome:
Participants will learn to recognise the importance of an early warning system for performance management and how to develop and apply techniques to improve performance.

Coordinator: Steffi Rust (Netherlands)
Coordinator: Ersin Topcuoglu (Netherlands)

Defining and measuring performance
Ersin Topcuoglu (Netherlands)

Using score cards as a management tool for improving performance management
Steffi Rust (Netherlands)

Ten steps to develop a score card
Imron Sahetapy (Netherlands)

Comparative feedback as a tool for improving performance management
Mamuka Djibuti (Georgia)

Use of score card at the national level: experience from Zambia
Clara Kasapo (Zambia)

Introducing the score card: experiences from Bangladesh
Muluken Melese (Ethiopia)
Scientific Programme

Use of a score-system (Standard of Care Tool) at district level: experiences from Ethiopia
Dereje Habte (Ethiopia)

Member Meetings (Regional, Section, Sub-section, Working Group)
08:30 - 09:30
Hall 8 - Events Ballroom

Countering tobacco industry working group

Introduction
Anne Jones (Australia)

Workshop (WS)
09:00 - 12:00
Degollado II R

15. Introducing new and re-purposed anti-TB agents in the era of increasing antimicrobial resistance under programmatic conditions

The aim of this session is to share information and lessons learned from South Africa with regards to the introduction of novel and re-purposed agents in order to support TB programmes in countries that are considering introduction of novel and repurposed agents.

Main objectives: To discuss the South Africa experience in preparing and implementing the introduction of new anti-TB agents; to provide an update in the clinical and programmatic management of rifampicin-resistance (RR-TB); to discuss the role of a patient-centred care, support and adherence package; to discuss the management of difficult clinical cases and the role of clinical governance in the introduction of new and repurposed anti-TB agents.

It is expected that participants of this workshop should understand key regulatory, ethical, clinical and programmatic issues that need to be considered during the planning and implementation phases. The participants should also be knowledgeable about resources required for successful programme implementation. Participants of this session should be able to scale up new and repurposed agents in order to improve their treatment success rate for those patients that are difficult to treat. The United States Agency for International Development (USAID) started a free bedaquiline programme but the uptake has been very low across the countries. Initially it was thought the countries require finances to scale up new agents although we now know that even when agents are available, free scale up may be slow like in this particular case. Therefore this session will address non-monetary issues that may affect introduction of new agents.

Chair: Jennifer Furin (United States of America)
Coordinator: Norbert Ndjeka (South Africa)
Coordinator: Martin Enwerem (South Africa)

Planning an introduction of new and repurposed drugs in the TB programme - lessons from South African National TB Programme - Bedaquiline Clinical Access Programme (BCAP) and Delamanid Clinical Access Programme (DCAP)
Norbert Ndjeka (South Africa)

Redefining the role of para-amino salicylic acid in the management of RR-TB
Peter Donald (South Africa)

The role of clinicians in supporting introduction of new and repurposed drugs
Romero Leyet (South Africa)

Designing an effective regimen in the era of increasing antimicrobial resistance using clinical case scenarios from the field
Martin Enwerem (South Africa)
Scientific Programme

The role of audiometry in support of the use of novel agents
Shadrack Mngemane (South Africa)

Member Meetings (Regional, Section, Sub-section, Working Group)
10:00 - 11:00
Hall 2 - Events Ballroom

TB control in prisons working group

Member Meetings (Regional, Section, Sub-section, Working Group)
10:00 - 11:00
Hall 8 - Events Ballroom

Getting research into tobacco control policy at regional and country level working group

Implementation of Graphic Health Warnings in Bangladesh - Challenges and Way Forward
Shameem Haider Patwary (Bangladesh)

Workshop (WS)
11:30 - 17:30
Hall 2 - Events Ballroom

01. Pharmacokinetics/pharmacodynamics science to accelerate elimination drug-susceptible and drug-resistant TB (full day session)

A full day workshop on pharmacometrics approaches to suppressing emergence of multidrug-resistance (MDR-TB) and optimising existing anti-TB regimens to minimise side effects. The workshop will provide an overview of pharmacokinetics/pharmacodynamics (PK-PD) sciences' role in chemotherapeutics, optimisation of traditional regimens and defining susceptibility breakpoints for the treatment of TB in adults, babies and toddlers and other special populations, including pregnant women and those with comorbid conditions. Experts in the field will present and review the latest evidence to support decision-making for both patient care in the clinic and TB programme management in the field.

Chair: Tawanda Gumbo (United States of America)
Chair: Helen McIlleron (South Africa)
Coordinator: Jotam G. Pasipanodya
Coordinator: Wynand Goosen (South Africa)

Introduction
Jotam G. Pasipanodya

Early morning session: Building TB regimens and the basics of PK/PD

Global collaboration for accelerating novel TB regimen development
Debra Hanna (United States of America)

The PK/PD principles of anti-TB drugs - the logic behind the madness
Eric Nuermberger (United States of America)

Principles of pharmacokinetic variability of anti-TB drugs - infinite diversity
Paolo Denti (South Africa)
Scientific Programme

TB drug delivery and penetration in human lung cavities and other difficult anatomical spaces
Keertan Dheda (South Africa)

Late morning session: Examples from the field
Pharmacokinetic and minimum inhibitory concentration (MIC) variability as determinants of TB clinical outcomes in adults and children - state of the evidence
Tawanda Gumbo (United States of America)

Therapeutic drug monitoring to combat pharmacokinetic and MIC variability to improve TB program outcomes in Europe
Jan-Willem Alffenaar (Netherlands)

Therapeutic drug and MIC monitoring to improve outcomes in TB programs in East Africa, Eastern US, and Eastern Europe
Scott Heysell (United States of America)
Stellah George Mpagama (Tanzania, United Rep.)

Eliminating pediatric TB: the role of quantitative pharmacology and a view of the future
James Seddon (United Kingdom)

Building new treatment regiments for children sui generis-from FLAME to FTEM
Devyni Deshpande (United States of America)

Plenary session: Towards TB elimination - Way forward
Global perspectives on PK/PD for MDR-TB treatment and elimination
Dennis Falzon (Switzerland)

Dosing of anti-TB drugs in the context of HIV and special populations
Helen McIlerson (South Africa)

Resources for PK/PD modelling for industry, academia and TB programmes
Klaus Romero (United States of America)

Resources to rapidly assess drug-resistance using genomic sequencing
Marco Schito (United States of America)
03. Adapting the Structured Operational Research and Training Initiative (SORT IT) model: innovations in capacity building and translating research evidence and data to health policy

This is a one-day workshop on operational research and the translation of research and data to public health policy development. The workshop will provide an overview of operational research, the SORT IT model of operational research capacity building and its innovations, adaptations of the SORT IT model to tobacco taxation and the Vital Strategies/US CDC Data to Policy programme of using research evidence and data to change policy and practice. This workshop is designed to show participants how health data and operational research can help in changing policy and practice in low-and-middle-income countries.

How the workshop is related to the conference: The theme of the conference is ‘accelerating towards elimination’. This workshop will show participants how health data and operational research on TB, HIV/AIDS and non-communicable diseases - including tobacco control - can be used to inform ministries of health and finance, disease-control programmes, health workers and the community about coverage, quality, effectiveness or safety of innovative strategies and innovative interventions to enable policy and practice to be changed to improve the health of people living in resource-poor countries.

Objectives:

- Describing what is operational research, why it is needed and how it can be used to impact policy and practice in low-and-middle-income countries.
- Describing the SORT IT model of capacity building, its innovations, successes and challenges.
- Sharing the experiences of adapting the SORT IT model to tobacco taxation.
- Describing the Data to Policy Programme, its innovations, successes and challenges.
- Understanding how to move data and research findings to policy and practice and how to monitor this progress.

Expected outcome:
Participants will finish the one-day workshop understanding the basic principles of operational research and the capacity building that is needed to develop operational research and use data strategically at a country or programmatic level.

Chair: Anthony D Harries (United Kingdom)
Chair: Rony Zachariah (Luxembourg)
Coordinator: Ajay Kumar Madhugiri Venkatachalaiah (India)
Coordinator: Srinath Satyanarayana (India)

Operational research, what, why and how?
Rony Zachariah (Luxembourg)

The SORT IT model: operational research capacity building
Anthony D Harries (United Kingdom)

Expanding SORT IT: new regions, new themes, new methods
Ajay Kumar (India)

Developing the tobacco and taxation course - Programme for Research, Advocacy and Capacity Building on Tobacco Taxation (PROACTT)
Alastair Bradstock (United Kingdom)

Results of first PROACTT workshop and thinking ahead
Skye Kurtis (United Kingdom)

The data impact programme
Adam Karpati (United States of America)
02. Measuring and improving quality of TB care

Despite the high coverage of diagnosis and treatment, TB continues to be a major threat. High TB mortality, the large number of missing TB cases, the emergence of severe forms of drug resistance and the slow decline in TB incidence indicate that merely expanding the coverage of TB services is insufficient to end the epidemic. Indeed, many TB services are well below standard and simply expanding them may make things worse. In the era of the End TB Strategy we need, therefore, to think beyond coverage and start focusing on the quality of the TB care that is routinely offered to patients in high-burden countries in both public and private sectors. This course, with leading international experts, will discuss and debate the best approaches to measurement of TB care quality; examples of quality improvement programmes that have worked or failed and lessons from such case studies; quality of care in private versus public sectors; use of quality dashboards, audits and tools and their likely impact on quality; and understanding and overcoming the pervasive know-do gap (i.e. gap between what healthcare providers know and what they actually do in practice).

Chair: Paul Nunn (United Kingdom)
Chair: Zelalem Temesgen (United States of America)
Coordinator: Madhukar Pai (Canada)
Coordinator: Ramnath Subbaraman (United States of America)

What does quality of care mean to TB patients?
Deepti Chavan (India)

What do we know about quality of TB care and how can we measure quality?
Madhukar Pai (Canada)

TB cascade of care: a valuable tool to identify quality gaps
Ramnath Subbaraman (United States of America)

Use of Operational Research to address quality of service delivery within National TB Programmes
Srinath Satyanarayana (India)

Creating ecosystems for quality assurance in TB care in the private sector - lessons from India
Shibu Vijayan (India)

Using implementation science to understand and improve the quality of TB diagnostic evaluation in Uganda
Adithya Cattamanchi (United States of America)

Quality improvement in the South African National TB Programme
Lindiwe Mvusi (South Africa)

How can National TB Programmes incorporate quality improvement (QI)?
Paul Nunn (United Kingdom)

How does Mayo Clinic assure quality? Lessons for TB and HIV care
Zelalem Temesgen (United States of America)
05. Innovative World Health Organization (WHO) policies on management of TB for accelerating towards elimination

Objectives of the workshop are to present the process and methods applied by WHO for the development of policy and to present updated WHO recommendations on the clinical, ethical and programmatic aspects of diagnosis, prevention, treatment and care of TB. Participants in this workshop will learn about updates on the evidence-based recommendations for diagnosis and treatment of drug susceptible TB, drug-resistant TB; TB patient care and support; ethics of TB treatment and care; and innovation in the End TB strategy. Participants will have the chance to understand the development process and contents of WHO policies relevant to the implementation of the End TB strategy and to discuss or provide feedback on the policy implementation.

Target audience: physicians, nurses, National TB Programme managers and public health professionals, policy-makers, donors, academia, civil society, non-governmental organisations (NGOs) and international technical partners.

Chair: Charles Daley (United States of America)
Chair: Linh Nguyen (Switzerland)
Coordinator: Ernesto Jaramillo (Switzerland)

Processes of assessing evidence and updating WHO guidelines
Linh Nguyen (Switzerland)

Updated guidance on diagnosis of TB and TB drug resistance
Christopher Gilpin (Switzerland)

Updated guidance on treatment of drug-susceptible TB and patient care
Linh Nguyen (Switzerland)
Soleil Labelle (Switzerland)

Updates on pharmacokinetics and pharmacodynamics of TB drugs and WHO recommendations on the treatment of drug-resistant TB
Dennis Falzon (Switzerland)

Updated guidance on ethics of TB prevention, diagnosis, treatment and care
Ernesto Jaramillo (Switzerland)
07. Programmatic implementation of bedaquiline and delamanid: experiences in drug procurement, technical assistance, clinical management and drug safety monitoring

The United States Agency for International Development (USAID) and the Janssen bedaquiline donation programme (BDQ) made available 30,000 treatment doses over a four-year period for patients with multidrug-resistant TB (MDR-TB). Delamanid (DLM) is also available through the Stop TB Partnership and Otsuka initiative, where countries can now access DLM through the Global Drug Facility (GDF). Progress has been made with more than 50 countries placing orders for over 8,500 bedaquiline doses by the end of March 2017. However, DLM uptake has been much slower compared to BDQ.

The purpose of this session will be to share lessons learned from countries that have expanded BDQ and DLM through the GDF and have used that experience to strengthen pharmacovigilance in order to achieve better TB treatment outcomes. As countries introduce and scale up shorter treatment regimen (STR), the use of BDQ, DLM and companion medicines will be critical for those ineligible for STR.

Objectives:
1. Share different countries’ experiences on the programmatic introduction and scale up of BDQ and DLM.
2. To share countries’ approach on how they have strengthened the patient adverse drug safety monitoring system using the World Health Organization (WHO) active TB drug safety monitoring and management (aDSM) approach.
3. Understand how to apply successful experiences from introduction of BDQ and DLM in implementation and scale up of STR.
4. To provide updates on the BDQ donation programme and the future implementation plans.

Expected outcomes:
1. Participants will learn critical programmatic considerations as they introduce STR, BDQ and DLM for successful implementation and scale up.
2. Participants recognise the diverse countries’ contexts, partners and National TB Programme perspectives in the introduction of STR, BDQ and DLM.
3. Practical examples and lessons learned on active drug safety monitoring and management implementation are shared.
4. Participants know where to access technical resources to assist the implementation of STR, bedaquiline and delamanid in their countries.

Chair / Coordinator: Edmund Rutta (United States of America)
Chair: Susan van den Hof (Netherlands)
Coordinator: Vivian Cox (South Africa)

First, let us get the numbers: order status and patients enrolled on bedaquiline and delamanid
Ramon Crespo (Switzerland)

The role of technical assistance to build National TB Programme (NTP) readiness to introduce bedaquiline, delamanid and shortened treatment regimen: progress from 23 Challenge TB supported countries
Fraser Wares (Netherlands)

India’s plan to rapidly expand access to bedaquiline, delamanid and shortened regimen nationwide
Sunil Khaparde (India)

Using introduction of bedaquiline as a catalyst to strengthen DR-TB management
Anh Innes (Thailand)

Enhancing childhood MDR-TB treatment options and adult new medicines and novel regimens in the Philippines
Ana Marie Celina Garfin (Philippines)

Addressing clinician and programmatic capacity through a clinical implementation mentorship approach
Vivian Cox (South Africa)
EN-ES Embracing new community of practice paradigms for more effective community engagement in combating TB/HIV globally

The incidence and impact of TB/HIV co-infection is significant and growing. Approximately one-third of the 34 million people living with HIV are infected with latent TB and TB is the leading cause of death among people living with HIV. Individuals co-infected with HIV and TB are also 30 times more likely to progress to active TB disease. Co-infected individuals also face the potential of drug-resistant TB, including multiple drug resistance TB (MDR-TB) and extensively drug resistant TB (XDR-TB), both of which further complicate HIV and TB care and treatment.

Methods: Community engagement is a key component of research. Integrating TB and HIV outreach and education is essential to reduce the impact of co-infection. The Community Research Advisors Group (CRAG), the community-based advisory body to the U.S. CDC’s Tuberculosis Trials Consortium (TBTC), Community Partners (CP) and a group of community representatives working across the five National Institutes of Health (NIH) HIV/AIDS clinical trials networks, formed a collaboration to address issues related to community engagement in TB/HIV clinical research. Results: CP and CRAG collaborate to address global research issues of mutual concern. Efforts have included joint work on pregnancy inclusion in TB trails, the development of materials and webinars on ethics of standard of care, incidental findings to foster research literacy and co-infection awareness, peer mentoring for community engagement and tools to reduce stigma and integrate community input in TB/HIV research.

Conclusions: Intentional and focused collaborations between researchers, communities, government and non-governmental agencies and organisations are needed to support TB/HIV education and awareness. A new global integrated community of practice for TB/HIV should address cultural, social, community, structural, biomedical and intersectional determinants of TB/HIV co-infection. Such an approach, with support from researchers and communities, could develop more effective approaches and tools for community engagement in TB/HIV research.

Chair: Cynthia C Lee
Chair: Russell Campbell
Coordinator: Michael Frick (United States of America)
Coordinator: Lindsay McKenna

Embracing new community of practice paradigms for more effective community engagement in combating TB/HIV globally

Cynthia C Lee

Embracing new community of practice paradigms for more effective community engagement in combating TB/HIV globally

Russell Campbell
Scientific Programme

Embracing new community of practice paradigms for more effective community engagement in combating TB/HIV globally
Michael Frick (United States of America)

Embracing new community of practice paradigms for more effective community engagement in combating TB/HIV globally
Lindsay McKenna

Workshop (WS)
11:30 - 17:30
Fray Alcalde

11. Accelerating urban TB control - a road map

Sufficient evidence exists that the TB burden is greater in urban areas compared to rural zones, both in developed and developing countries. Rapid urban development has brought with it accelerated growth of slums, with increasing amounts of people living in (extreme) poverty. Their living conditions contribute to higher transmission. The growth of urban areas worldwide has been attributed to industrialisation attracting migrants from rural areas and small cities. Even across borders people are driven by the search for better quality of life, better job opportunities, higher wages and access to social services.

In this workshop, different urban models and examples will be presented of high-burden TB countries with rapid urbanisation such as India, Mexico, Nigeria and Nepal. An urban TB framework based on the Pan American Health Organization (PAHO) framework of 'TB in Large Cities' will be used as the basis of the participatory discussion. The different approaches and elements need to be taken into account to formulate a comprehensive, equitable and actionable roadmap for urban TB control. The various elements will be intersectoral and inter-programmatic in character, ranging from primary prevention to detection, treatment and care including the reduction of catastrophic costs. The inputs and the discussions will be used to draft a global roadmap to improve and accelerate the planning of urban TB strategies and their impacts.

Objective:
1. To review a number of recent initiatives in urban TB that merit scaling up.
2. To explore intersectoral elements of a comprehensive urban TB framework.
3. To develop a roadmap to identify quick wins to accelerate urban TB control.

Methodology of the workshop:
- Presentations of a variety of country case studies.
- Group discussions and exercises.
- Interactive co-creation.
- Roadmap development.

The outcome will be a draft roadmap to accelerate intersectoral urban TB control in countries.

Chair / Coordinator: Netty Kamp (Netherlands)
Chair / Coordinator: Erik Post (Netherlands)

A road map for urban TB control
Netty Kamp (Netherlands)

The EQUIP model: participatory engagement in case-finding and treatment of drug-susceptible (DS) and drug-resistant TB (DR-TB)
Ramya Ananthakrishnan (India)

The roles of community pharmacists and patent medicine vendors in urban TB control in Nigeria.
Rupert Eneogu (Nigeria)

Mobilising frontline health workers and involving pharmacies to increase case finding
Ram Sharan Gopali (Nepal)
Scientific Programme

Measuring and improving TB/HIV services in the private sector: a stepwise approach
Anire Asumah (Nigeria)

Intersectoral approach to control TB in urban municipalities in Mexico
Ivonne Orejel (Mexico)

Post-graduate course (PGC)
11:30 - 17:30
Colomos II

07. Making sense and use of routine TB data for management

The course follows up similar post-graduate courses at The Union conferences in 2015 and 2016. It is based on a guide that the National TB Programme (NTP), The Union and TB CARE developed and piloted in Zimbabwe and which is used on The Union international courses. The objective is to introduce a simple and user-friendly approach to how health staff and managers at facility, district and higher levels tabulate and analyse their own routine TB data for management. Key indicators covering the main components of TB programmes are compared with expected values to identify strengths and challenges and to agree on action points targeting these challenges. The approach is implemented through strengthened supportive supervision which is data driven, using check lists with summary tables of routine data and through quarterly performance review meetings. The approach will also be presented from another setting (Kenya).

Expected outputs/outcomes: Participants will learn the importance of quality data, acquire skills in data tabulation and analysis directly linked to management at facility, district and provincial levels through practical examples; how to carry out strengthened supportive supervision; plus performance review meetings and how to roll out the approach in countries.

Relevance of the topic for the target audience: The approach strengthens implementation of the End TB Strategy by focusing on the facility-level, where TB patients are increasingly being diagnosed and treated, along with the district-level, which monitors the network of facilities, identifying both 'hot' and 'cold' spots where early case detection should be strengthened. The approach makes local staff more motivated, empowered and owners of their data, strengthening data quality, content of supervision, follow-up of training, supplies, usefulness of new tools and, ultimately, patient care.

The approach is very much in line with the conference theme (accelerating towards elimination) and contributes to health system strengthening.

Chair: Charles Sandy (Zimbabwe)
Chair: Enos Masini (Kenya)
Coordinator: Christopher Zishiri (Zimbabwe)
Coordinator: Einar Heldal (Norway)

Introduction: key questions to be answered by the recording and reporting system, indicators to be monitored, recording and reporting tools
Charles Sandy (Zimbabwe)

How to tabulate and analyse data at facility level (with exercises)
Nicholas Siziba (Zimbabwe)

How to tabulate and analyse data at district level (with exercises)
Ronald Thulani Ncube (Zimbabwe)

How to tabulate and analyse data at provincial level (with exercises)
Nqobile Mlilo (Zimbabwe)

How to do data-driven supportive supervision
Enos Masini (Kenya)

How to use data for decision-making at different levels
Christopher Zishiri (Zimbabwe)
How to conduct performance review meetings
Riitta Dlodlo (Zimbabwe)

Rolling out the guide in the country and maintaining its use
Einar Heldal (Norway)

How to use digital health innovations to improve recording and reporting of TB data - sharing practical country experiences
Patrick Hazangwe (Zimbabwe)

Experiences in using routine TB data in Kenya
Godana Mamo (Kenya)

FIND & New Diagnostics Working Group
This year, FIND and the New Diagnostics Working Group (NDWG) join in convening partners and members at a symposium to be held on 11 October as a side-event at the 48th Union World Conference on Lung Health.

During the symposium, we will provide an overview of the most recent advances in the global TB diagnostics pipeline and review progress made in various areas to address diagnostic needs towards ending the TB epidemic. Sessions will focus on the use of next-generation sequencing for surveillance, diagnosis and patient management, and on the development of new tests for latent TB infection to support TB elimination.

The event will also involve a round table discussion around the challenges in molecular testing roll-out on a programmatic level. Panelists will consider how the interpretation of genetic mutations can guide clinical decision for treatment and will share different perspectives about the prospects of scaling up molecular approaches in different settings.

Chair: Catharina Boehme (Switzerland)
Chair: Daniela Maria Cirillo (Italy)

The global TB diagnostics pipeline: Progress and needs 13:00 - 14:00

Welcome address
Catharina Boehme (Switzerland)
Daniela Maria Cirillo (Italy)

Overview and updates on recent developments against needs
Claudia Denkinger (Switzerland)

The funding gap in TB diagnostics R&D - Results from report on TB research funding trends
Erica Lessem (United States of America)

Highlights and new promising technologies

Use of genome-wide expression for diagnosing active TB and potential for non-sputum based diagnosis
Purvesh Khatri (United States of America)
Potential of cell-free DNA in plasma or urine for rapid detection of *Mycobacterium tuberculosis*
Niaz Banaei (United States of America)

**Supporting development of new tests for LTBI: Recent advances**
14:00 - 14:45

**Incipient TB assays to support TB elimination: Opportunities and challenges**
Samuel Schumacher (Switzerland)

**Estimating the impact of a test for incipient TB: Preliminary results of a transmission and cost effectiveness model**
Suzanne Verver (Netherlands)

**The current landscape of discovery and early development in LTBI and incipient TB**
Gavin Churchyard (South Africa)

**Coffee break**
14:45 - 15:15

**Progress in the use of next-generation sequencing (NGS) for surveillance, diagnosis and patient management**
15:15 - 16:00

**Programmatic Implementation of NGS for TB and future plans for the ReSeqTB knowledgebase**
Timothy Rodwell (Switzerland)

**Predicting susceptibility to first-line drugs: Can we phase out phenotypic DST and transition to WGS-led diagnostics?**
Timothy Walker (United Kingdom)

**WHO policy update: Interpretation of DST**
Christopher Gilpin (Switzerland)

**Panel discussion: Challenges in molecular testing roll-out on a programmatic level.**
16:00 - 17:00
Moderator: Martina Casenghi, Core Group New Diagnostics Working Group
Martina Casenghi (Switzerland)

**Panelists**
Stephanie Denamps (United Kingdom)
Gunta Dravniece (Netherlands)
Kathleen England (United States of America)
Lerole David Mametja (South Africa)
Kaiser Shen
Scientific Programme

Encuentro: Participatory Activity
13:00 - 13:30

What works? Engaging mind-space of community over reaching them; efficient and effective way to end TB by 2025 in India

The ‘End TB’ strategy aims to achieve elimination of TB by 2025 in India which will be possible only through development and rapid endorsement of communication modalities which can engage mind-space of community over reaching them. Identifying key factors that can trigger behavior change and develop ideal behavior among the intended population. Messages used should be very simple, devoid of jargon and information should be specially tailored for intended population which touches them and most essentially is easy to retain for translating into action.

Messages, stories and concepts should be also able to address action and change that intended population is ready to make. Credible messengers and influencers can be used to reach the community. Sometimes a person emphasizing about TB as public health problem might not be appropriate for treatment adherence & reducing stigma, probably a good story line and concept will be more effective. The messages on TB should be consistent across all channels and means. Only one message should not be there for everything. Key points to be communicated should be identified. For developing messages written and visual literacy levels of target audience should be considered. Messages should be well articulated because cluttering of information might confuse the intended population and will be ineffective.

The participatory activity in form of fish bowl discussion will describe the current and potential ways to develop effective strategy to engage mind-spaces of community over and above reaching the community through mass communication and using credible messengers– a celebrity, someone in authority or a group member. A blue print will be created and shared with implementers to give simple directions to connect with target audience and intended population.

Coordinator: Archana Trivedi (India)
Coordinator: Bharathi Ghanashyam (India)

Speaker:
Archana Trivedi (India)
Bharathi Ghanashyam (India)

Member Meetings (Regional, Section, Sub-section, Working Group)
13:00 - 14:00

TB, HIV and tobacco use working group

Workshop (WS)
14:00 - 15:00

Feria por la VIHda

Feria por la vihda es un proyecto que pertenece a las líneas estratégicas del área de prevención del centro de atención integral en VIH-sida A.C. Este proyecto nace en el 2013 a través de un grupo de jóvenes preocupados por la educación sexual en jóvenes.

Se maneja lo que es una metodología par, donde en este caso los participantes son jóvenes al igual que los expositores.

Feria por la VIHda
06. Strengthening health systems to support management and control of TB burden in East, Central and southern Africa

In sub-Saharan Africa, TB is among the top five causes of death with about a third of the world’s 22 high-burden TB countries being in southern Africa. A particular trend of high prevalence has been observed in mining and peri-mining areas, cross-border areas, labour-sending communities and along the region’s transport corridors. Responding to the problem of TB in southern Africa, therefore, requires a regional multi-sectorial approach that focuses on addressing determinants of TB spread and tackling health systems constraints that inhibit TB response. These include:
1. Weak and non-standardised TB prevention and treatment strategies and protocols across countries.
2. Weak laboratory diagnostic capacity, laboratory networking and quality assurance.
3. Inadequate human resources for health.

The workshop brings together multi-sectorial experts including public health experts policy makers and mining and labour experts to discuss collaborative efforts to combat the TB burden in sub-Saharan Africa. The workshop will seek to meet the following objectives:

1. Discuss

- The current efforts of building laboratory capacity to contribute to control of TB and other infectious diseases in east, central and southern Africa.
- Innovative approaches to cross-border management of TB and other infectious diseases.
- The value of harmonised guidelines and strategies for TB and occupational health.
- Current research efforts to inform management and control of the TB burden.
- Findings of the training needs assessment for the control and management of TB burden in the region.

The expected outputs of the workshop include:

1. Consensus on best practices in:

- Laboratory system strengthening to support management and control of TB.
- Cross-border management of TB and other infectious disease.

2. Identification of training and human resource capacity building needs to manage the TB burden in East, Central and southern Africa.

Chair: Martin Matu
Chair: Talkmore Maruta (Tanzania, United Rep.)
Coordinator: Chimwemwe Chamdimba (South Africa)

Opening remarks and setting Workshop Objectives

Session 1: Strengthening Laboratory Capacity to Support Management and Control of TB Burden
Scientific Programme

The Southern Africa Tuberculosis and Health Systems Support (SATBHSS) laboratory system strengthening efforts to support control of TB burden in Southern Africa
Talkmore Maruta (Tanzania, United Rep.)

The East Africa Public Health Laboratory Network efforts in strengthening laboratories to support TB and other infectious diseases
Martin Matu

South to South Support for Building Local Capacity for TB diagnostics in Eastern and Southern Africa Region
Stephen Muleshe (Tanzania, United Rep.)

Discussion

Session 2: Human Resource Capacity and Regulatory Needs in the Management and Control of TB Burden

The Human Resource for Health Capacity of the Africa Region - Its Impact in meeting the 2030 Targets
Willy Were (Tanzania, United Rep.)

Results of the Southern Africa TB Health System Support Project training needs assessment
Pascalina Chanda-Kapata (Tanzania, United Rep.)

Implementation of harmonised TB management guidelines and cross-border referrals in the mining sector in Southern African Development Community (SADC) Region
Ivandra Chirrime (Tanzania, United Rep.)

The state of Mine Health regulation and Dust Control Policies in the SADC Region
Chimwemwe Chamdimba (South Africa)
Norma Khoza

Discussion

Session 3: Regional Learning and Innovation: The SATBHSS Centres of Excellence in TB and Occupational lung disease control

Community based TB Management by use of digital mobile X-rays
Simon Marealle (Lesotho)

Community TB care & integrated disease surveillance
James Mpunga (Malawi)

MDR-TB & childhood TB management
Bachir Macuacua (Mozambique)
Benedicta Jose (Mozambique)

Occupational health and safety
Morton Khunga (Zambia)

Discussion

Closing Session: Key next steps and closure
09. What we need to do for ending TB: adapting current progress to the framework of the End TB Strategy

The End TB Strategy aims for a 10 per cent annual decline in TB incidence globally for 2025. In the workshop held at the previous Union Conference, in Liverpool, we discussed what brought about the rapid reduction in TB in Japan, western Europe and North America. Through the discussion, we identified several factors possibly attributable to declining TB: intensified case findings, involvement of all health care providers, quality assurance mechanisms for diagnosis and care, continuous human resource development, community involvement and improved environment. In the coming workshop, five speakers from Asia will present the current or planned policies or systems against TB in their countries, particularly related to Pillar 2 (Bold Policies and Supportive Systems), followed by adapting current progress to the framework of the End TB Strategy.

Objectives:
1. To review and analyse the factors attributable to having achieved 10 per cent annual decline discussed the previous workshop.
2. To review the current policies or systems in other Asian countries (the Philippines, China, Korea and Taiwan) especially in Pillar 2 of the End TB Strategy.
3. To discuss what we need to do for ending TB; adapting current progress to the framework of the End TB Strategy.

Expected outcomes:
The participants understand the progress in TB control towards ending TB in other countries and realise what policies or systems they should introduce in the era of the End TB Strategy. The participants will understand how they should develop policies or systems for ending TB through a multi-disciplinary approach and adapting current progress to the framework of End TB Strategy. Discussion points from the workshop, as well as the experiences shared among the participants, will be used in the TB programmes of respective countries so that the End TB Strategy can be translated into actions in Asia.

Chair: Paula Fujiwara (United States of America)
Chair: Seiya Kato (Japan)
Coordinator: Kosuke Okada (Japan)

Universal Health Coverage (UHC): social protection and other countermeasures against TB in Japan
Akihiro Ohkado (Japan)

New law against TB and Universal Health Care (UHC) in the Philippines
Celina Garfin (Philippines)

Universal Health Coverage (UHC) and social protection in China
Caihong Xu (China)

People-centred care, Universal Health Care (UHC) and social protection in Korea

Bold policy of Universal Health Care (UHC) and social protection in Taiwan
Pei-Chun Chan (Taiwan)

Summary
Kosuke Okada (Japan)
12. Designing digital health solutions for supporting patient and community-based TB monitoring

New technologies are increasingly being used to promote and strengthen the management of healthcare through the development of inspiring eHealth and mHealth technology tools. However, the role of these innovative devices in the management of TB remains less explored. Currently, there is a wide gap in capturing data and information about the TB response at the community level for feedback to the National TB Programmes for improving the quality of care and services to the patient. In this context, the Stop TB Partnership provides a platform to develop tailored digital tools to address the spectrum of challenges faced by patients in communities, the specific needs of key populations and tackling the barriers at each stage of the TB treatment cascade in order to strengthen community level monitoring as well as recognise their contribution to the response. As TB healthcare shifts towards a more patient-centred and outcome-based approach, exploiting the use of digital tools will enable this transformation at the community level.

Participants will be divided into groups based on the purpose of the intervention, the target population and specific challenges faced in community-based monitoring. Each group will work through a set of activities and scenarios towards developing a sample template that can be translated into a digital tool tailored to the specific needs of the TB community.

Chair: Vipin Yadav (Switzerland)
Coordinator: Caoimhe Smyth (Switzerland)

Stop TB Partnership: platform for capturing data and information about the TB response at community level for feedback to the national TB programmes
Fatima Kazi (Switzerland)

Using innovative technology solutions to transform data into experiences and empowerment of individuals in self-health care monitoring

Responding to people’s needs in real time: an experience from Tajikistan
Safar Naimov (Tajikistan)

Communities reporting to the national TB programme in Cambodia
Choub Sok Chamreun (Cambodia)
13. How to help TB patients to quit smoking, improve their outcomes and reduce the risk of their family developing TB

In many high-burden TB countries smoking is very common among TB patients. Smoking worsens TB outcomes; a TB patient who smokes is two to three times more likely to die of TB than a non-smoking patient. Even non-smokers exposed to tobacco smoke have a higher risk of TB. However TB care providers have a window of opportunity to help patients quit and, in the process, improve their outcomes and life expectancy. Unfortunately, most TB patients are neither asked about their smoking nor offered any advice. In general, policy makers express scepticism about the cost-effectiveness of smoking cessation and its potential benefit to TB patients. TB managers struggle to put systems and support in place to promote smoking cessation, health professionals lack motivation and skills needed to encourage their patients to quit and researchers find it a challenge to evaluate the impact of such interventions. This workshop will address these barriers to supporting TB patients to quit smoking and ultimately improve their outcomes. After the workshop, attendees will be able to:

1. Summarise the best scientific evidence on the effect of smoking in TB patients and the interventions to help them quit.
2. Know how to offer smoking cessation to TB patients and to integrate it within TB care.
3. Plan to evaluate the impact of smoking cessation interventions on quit rates, TB outcomes and patients making their homes smoke-free.

The workshop will be facilitated by world leading experts in the field who will combine their brief presentations with interactive group activities and one-to-one coaching; a Spanish speaking facilitator will work with attendees with such a preference. The outputs will include:

1. Take-home briefing on the updated evidence.
2. A worked-up plan to offer and implement smoking cessation in the participant’s setting.
3. A worked-up plan to evaluate smoking cessation interventions.

Chair: Mark Parascandola  
Coordinator: Chris Bullen (New Zealand)

The case for integrating tobacco cessation interventions in TB programmes  
Omara Dogar (United Kingdom)

Tobacco cessation interventions in TB programmes - evidence on behavioural support and pharmacotherapy  
Mark Parascandola

Measures of tobacco use and exposure  
Mark Parascandola

How to evaluate smoking cessation interventions using trials  
Chris Bullen (New Zealand)

Implementing and evaluating tobacco and TB messaging  
Surabhi Joshi (Switzerland)
Workshop (WS)
14:30 - 17:30  Degollado II R

16. Unveil, map and triangulate underutilised sources of data to identify missing TB cases locally for differentiated programme planning

The workshop will explore how to strengthen capacities to use publicly available, user friendly tools to analyse subnational data effectively to identify target populations and TB transmission hot spots.

The outcomes of these analysis will be used to understand and interpret the main programmatic gaps and challenges in order to plan appropriate local interventions that reduce the burden of TB.

In order to achieve the Sustainable Development Goal (SDG) targets by 2030, it is imperative for National TB Programmes to allocate resources more effectively towards key populations and areas of continuous TB transmission, utilising available information that informs locally tailored approaches. A new approach will be introduced, which includes mapping and triangulating previously underutilised sources of data, with the aim of identify missing TB cases throughout the pathway of care at subnational level.

At the end of the workshop participants are expected to:
1. Appreciate the use of subnational data to effectively understand and interpret the main gaps and challenges in their TB programme.
2. Be able to interpret and evaluate health maps.
3. Describe and interpret spatial patterns (such as hot spots) of health indicators and epidemiological data.
4. Understand triangulation of data from various sources to explain variations in TB notification and suggest appropriate actions.

Chair: Suvanand Sahu (Switzerland)
Chair: Lucie Blok (Netherlands)
Coordinator: Mirjam Bakker (Netherlands)

Introduction to the approach
Lucie Blok (Netherlands)

Geographical analysis and data triangulation: knowing your local epidemic
Mirjam Bakker (Netherlands)

Geographical analysis and data triangulation: understand the TB response
Christina Mergenthaler (Netherlands)

Develop locally tailored approaches
Jacob Creswell (Switzerland)

Member Meetings (Regional, Section, Sub-section, Working Group)
14:30 - 15:30  Minerva I

Asthma management working group
17. Quantification challenges in times of new TB medicines and regimen: country experiences and speed-course using a digital tool

This workshop consists of a plenary part with presentations and a ‘speed-course’ on the QuanTB tool with practical exercises.

The new recommended TB medicines and treatment regimen posed challenges to the National TB Programmes during introduction and scale up. While reviewing treatment guidelines and adapting diagnostic algorithms to local context, countries need to develop transition plans for phasing in new regimens while phasing out others. There is a need to quantify potential wastage of ‘old’ medicines in order to enable informed decision making on the introduction of more effective regimens to treat patients and eliminate TB. With better tools incorporated into diagnostic algorithms, treatments for drug-resistant TB (DR-TB) are becoming more individualised and diverse. The current scenario of transition from donor support to domestic funding sources contributes to challenges in forecasting medicine usage. Complex calculations are required for quantification of multiple regimens and optimised procurement with more frequent deliveries. Analyses of funding gaps are critical to ensure that patients have continuous access to appropriate TB treatment.

Speakers will present on the implementation of an open-source, freely downloadable digital health early warning system (EWS) for TB medicines, including quantification of second-line and paediatric medicines to timely predict variations on enrollment, consumption and costs, and how to take opportunistic corrective actions.

During the ‘speed-course’, participants will have the opportunity to use QuanTB with hands-on practical exercises. At the end of the workshop, participants will be able to identify key data for quantification, quantify first and second-line medicines and review quantification outputs. Participants will develop transition plans for introduction of new tools in different scenarios and implement an EWS suitable for their context.

Chair: Job van Rest (Netherlands)
Chair: Luis Gustavo do Valle Bastos (United States of America)
Coordinator: Niranjan Konduri (United States of America)

Applying the Pharmaceutical Systems Strengthening (PSS) approach in improving quantification and early warning systems for TB commodities

Andre Zagorski (Switzerland)

The impact of introducing new drugs and regimen for quantification and drug management in Kazakhstan and Kyrgyzstan

Svetlana Pak (Kazakhstan)

A new e-learning methodology to meet the demand for quantification and forecasting

Kanjinga Kakanda (United States of America)

A speed course on quantification: the basics

Job van Rest (Netherlands)

A speed course on QuanTB: early warning system and in-depth analysis

Luis Gustavo do Valle Bastos (United States of America)
EN-ES TB en México

La TB es una de las enfermedades infecciosas más antiguas y conocidas de la humanidad. El gran reto es disminuir el impacto de dicha enfermedad en virtud de la complejidad de su diagnóstico, tratamiento y curación, así como el reforzamiento de acciones y estrategias específicas para su abordaje en las poblaciones con VIH-SIDA y Diabetes Mellitus, así como otros determinantes sociales que se vinculan a la TB. Describimos el escenario en México y así establecer estrategias para intervenciones exitosas, basadas en la información veraz, completa y oportuna, en beneficio de la población afectada por enfermedad.

Chair: Marina Kasten (Mexico)
Chair: Eduardo Rodríguez Noriega (Mexico)

14:45 - 16:15

TB en México
Héctor Raúl Pérez Gómez (Mexico)
Eduardo Rodríguez Noriega (Mexico)
Jaime Federico Andrade Villanueva (Mexico)
Sergio Quintero (Mexico)

Member Meetings (Regional, Section, Sub-section, Working Group)
15:00 - 16:00

Education and training working group

Networking zone for young people for tuberculosis

Tuberculosis among adolescents and youths over the years has received little or no attention in TB programs; clinical and radiological findings of TB in adolescents and youths are almost absent due to combination as identified in children and adults. This does not provide opportunity to meet their unique needs. According to WHO, BCG vaccine has a documented protective effect against meningitis and disseminated TB in children, the limitations of the effectiveness of this vaccine especially in developing countries posed great danger for youths and adolescence; control of TB is ultimately a question of justice and human rights and adolescents and young people should not be left behind. In 2013, Tuberculosis was the leading cause of death among youths in South Africa killing 10,962 youths and still remains a major cause of death among youths in South Africa. A recent prevalence survey among adults conducted in Kenya reported a TB prevalence among 15-24-year-olds of 3.7 per 1000 (95% confidence interval (CI) 2.2-6.2) among females and 1.8 per 1000 (95% CI 0.8-4.2) among males.

Peer to peer approaches in addressing issues around stigma are not common because young people lack effective engagement to deal address them. Appropriate use of language and education about TB can play a vital role in empowering and encouraging people affected by TB and young people can play the role of influencers, educators, and champions in the fight against TB.

This session is aimed at creating an environment for young people to network and to discuss the role young people can play as community change makers for Tuberculosis. It is also an environment aimed at providing opportunities for experience sharing and how these experiences can be made to fit into varying community context in order to facilitate an accelerated response towards the elimination of Tuberculosis.

Coordinator: Wuese Iho (Nigeria)
Coordinator: Folashade Bamigboye (Nigeria)

Networking zone for young people for tuberculosis
Mayowa Joel (Nigeria)
Maximina Jokonya (Zimbabwe)
Nicholas Niwagaba (Uganda)
Scientific Programme

Member Meetings (Regional, Section, Sub-section, Working Group)  
16:00 - 17:30  
Hall 3 - Events Ballroom

Zoonotic sub-section and working group

Member Meetings (Regional, Section, Sub-section, Working Group)  
16:00 - 17:30  
Minerva I

MDR-TB working group

GDI Triage task force report  
Agnes Gebhard (Netherlands)  
16:00 - 16:10

Results of The Union MDR-TB Working Group Survey  
Robert Horsburgh  
16:10 - 16:20

Update on Clinical Trials for Treatment of MDR- and XDR-TB  
Robert Horsburgh  
16:20 - 16:30

Update on Global Use of New Drugs  
Vivian Cox (South Africa)  
16:30 - 16:40

Member Meetings (Regional, Section, Sub-section, Working Group)  
16:15 - 17:15  
Degollado I

Nurses & Allied Professionals Sub-section

Nursing meeting  
Linette McElroy Hawkes (Canada)  
16:15 - 16:25

Workshop (WS)  
16:30 - 17:30  
Foro - Encuentro Expo

Research literacy networking zone: Interactive workshop

Background: Community Engagement (CE) and Good Participatory Practice in TB Trials (GPP-TB and GPP-TB VACC) continues to become more purposefully incorporated into TB clinical trial planning and implementation, and is accepted as the standard of practice in TB clinical research. TB Alliance and Aeras are collaborating to advance the field of CE in clinical research, and work with research site-level stakeholders to support the engagement of communities in ongoing and planned TB clinical trials.

Research Literacy is a key component of a successful CE strategy, and true engagement with community stakeholders in the process of TB drug and vaccine research and development requires a high level of understanding about TB disease, treatment, the need for new tools, and the process of clinically testing experimental products.

Proposal: The Research Literacy Networking Zone: Interactive Workshop would be an interactive session to allow TB Alliance and Aeras to introduce research literacy, childhood TB and Good Participatory Practice materials to participants to receive feedback. This interactive workshop is proposed as a component of the overall Research Literacy Networking Zone exhibition space, where TB Alliance and Aeras will provide opportunities for participants to learn more about TB drug and vaccine research through a variety of activities detailed in educational tool kits for communities involved in TB research.

Coordinator: Stephanie Seidel (United States of America)
Coordinator: Anja van der Westhuizen (South Africa)
The Union 2017 - 48th Union World Conference on Lung Health,
11 - 14 October, 2017,
Guadalajara, Mexico

Scientific Programme

Research literacy networking zone: Interactive workshop
Stephanie Seidel (United States of America)
Anja van der Westhuizen (South Africa)

Encuentro: Panel Discussion
16:30 - 17:30
Encuentro session room

Agenda ambiental para Jalisco, como una opción para revertir las enfermedades respiratorias

El Colectivo Ambiente y Salud (CAS) propone la realización de una Agenda Ambiental para el estado de Jalisco como una opción para revertir las enfermedades respiratorias agravadas por un ineficiente sistema de transporte público, excesiva cantidad de automotores, deficiente calidad de los hidrocarburos que contaminan aire y agua, la incidencia de incendios forestales, la deforestación o la utilización de especies vegetales alergénicas por la falta de planeación y una prácticamente nula formación ambiental de las autoridades.

Chair: Filemon Garcia (Mexico)
Coordinator: Ludivina Calderón (Mexico)

Agenda ambiental para Jalisco, como una opción para revertir las enfermedades respiratorias
Mónica Abarca (Mexico) 16:30 - 16:40

Agenda ambiental para Jalisco, como una opción para revertir las enfermedades respiratorias
Roberto Novelo (Mexico) 16:40 - 16:50

Agenda ambiental para Jalisco, como una opción para revertir las enfermedades respiratorias
Rául López Velázquez (Mexico) 16:50 - 17:00

Agenda ambiental para Jalisco, como una opción para revertir las enfermedades respiratorias
Filemon Garcia (Mexico) 17:00 - 17:10

Plenary session (PL)
18:00 - 20:00

EN-ES Inaugural Session

Mr Jorge Aristóteles Sandoval Díaz, Governor of the state of Jalisco (Mexico)
Dr Jeremiah Chakaya Muhwa, President of The Union (Kenya)
Mr Jose Luis Castro, Executive Director of The Union (France)
Mr Tabaré Vázquez, President of Uruguay (Uruguay)
Dr Jeffrey Starke, Expert in the management of childhood tuberculosis and mycobacteria infections (USA)
Ms Mileni Romero, Affected Community Representative (Venezuela)

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Scientific Programme

Plenary session (PL)
20:00 - 21:30

Welcome Reception
Satellite session (SS)
07:30 - 08:45
Hall 6 - Events Ballroom

EN-ES 01. Ordinary people doing extraordinary work to improve the clinical and programmatic management of DR-TB in South Africa / Gente corriente que hace una labor extraordinaria para mejorar la gestión clínica y programática de la tuberculosis resistente en Sudáfrica

To share the advances and best practices that were implemented by the clinical and programmatic staff in South Africa with regards to:

- The introduction of Bedaquiline at a primary health care level in both an urban as well as in a limited resource setting
- The successful management of DR-TB care at Primary health care facilities
- Community management of Bedaquiline, a working solution (Free State Province)
- The risk of nosocomial acquisition in a specialized TB hospital
- Introduction of a National DR-TB Register and how it has improved the DR-TB programme management within the South African context

Chair: Lerole David Mametja (South Africa)

Comparing early treatment outcomes of Bedaquiline based and conventional MDR -TB within the South African NTP in PHC clinics in the Cape Metro / Comparación de los resultados del tratamiento precoz convencional o con bedaquilina de la tuberculosis multirresistente dentro del Programa Nacional de Control de la Tuberculosis de Sudáfrica en centros de atención primaria en Cape Metro
Lenny Naidoo (South Africa)

Primary healthcare clinics are successfully managing multidrug-resistant tuberculosis (MDR-TB): Comparing MDR-TB treatment outcomes in TB hospitals to clinics in the Western Cape, South Africa / Manejo satisfactorio de la tuberculosis multirresistente (MDR-TB) en los centros de atención primaria: Comparación de los resultados del tratamiento de la tuberculosis multirresistente en hospitales especializados en tuberculosis y en centros de salud de la provincia Occidental del Cabo, Sudáfrica
James Kruger (South Africa)
Scientific Programme

**Community management of Bedaquiline in a limited resource setting / Gestión comunitaria de la bedaquilina en un entorno con recursos limitados**
Leole Sethlare (South Africa)
08:00 - 08:15

**Incidence of nosocomial infections in patients admitted to a drug-resistant TB hospital / Incidencia de las infecciones nosocomiales en pacientes ingresados en un hospital para el tratamiento de la tuberculosis multirresistente**
Razia Gaida (South Africa)
08:15 - 08:30

**Introduction of a National DR-TB Register and how it has improved the DR-TB programme management within the South African context / Implantación de un Registro Nacional de tuberculosis resistente y cómo ha mejorado la gestión del programa de tuberculosis resistente dentro del contexto de Sudáfrica**
Riyadh Manesen (South Africa)
08:30 - 08:45

**Satellite session (SS)**
07:30 - 08:45
Hall 12 - Jalisco Hall

**02. New innovations in the fight to end TB**
Organised by: Cepheid

One of the key components of WHO’s new End TB Strategy is to modernize all aspects of tuberculosis care and prevention through the use of fast molecular diagnostics. This symposium will provide insights into new and upcoming innovations in diagnostic care, as well as explore implementation strategies of such new diagnostic tools to combat the tuberculosis epidemic in a variety of settings.

Chair: Philippe Jacon (France)

**Advances in molecular diagnostics for pulmonary tuberculosis: Xpert MTB/RIF, Xpert MTB/RIF Ultra, and RealTime MTB**
Kate Shearer (South Africa)
07:30 - 07:45

**End TB in China**
Sha Wei (China)
07:45 - 08:00

**Expanded drug resistance testing for TB using the GeneXpert system**
David Alland (United States of America)
08:00 - 08:15

**Member Meetings (Regional, Section, Sub-section, Working Group)**
07:45 - 08:45

**TB infection control working group**

**TB and mental health working group**
Scientific Programme

Q TB and migration working group

TB and Migration Working Group Meeting
Gilles Cesari (Switzerland)

Encuentro: Panel Discussion
EN-ES Meaningful engagement of communities in active TB case finding: how can we get it right?

In comparison to epidemics like HIV or, more recently, Ebola, civil society has played a lesser role in TB and the response has been led more by the medical community. However, civil society can play a critical role in supporting the WHO End TB objectives. Meaningful civil society engagement can contribute to more informed communities and key populations, who can better support TB patients in accessing and completing treatment.

Meaningful community engagement can only take place if; 1). All stakeholders understand what 'meaningful community engagement' means and how it benefits the fight against TB; and, 2). There is a clear understanding of the factors that influence community engagement. Questions that need to be answered include: How we can prepare communities to undertake active case finding activities and how they can support home or community based counselling and treatment completion? Can community members with limited education acquire requisite kills to accurately screen and identify people with TB-like symptoms? What are the factors in the immediate environment of the communities that prevent or support case detection and treatment adherence/completion? Should interventions be specific to key population groups or cover the general population in high burden areas? Are data collection and monitoring tools used adapted to the needs of local civil society organisations and are they aligned to the national TB programmes’ data collection tools?

This panel discussion will explore these issues through lessons learnt while implementing community based active case finding activities in high TB burden settings in nine sub-Saharan African countries and in India. It identifies some of the barriers, such as human resources, training, collaboration with other stakeholders, assessment of intervention areas, preparation of the health facilities, acceptance of the communities etc., and shares local solutions that have been used to address such challenges

Chair: Paul Sommerfeld (United Kingdom)

Speaker: Sameer Sah (United Kingdom) 08:15 - 08:30

Speaker: Olga Guerrero (Spain) 08:30 - 08:45
Scientific Programme

Plenary session (PL)
09:00 - 10:00

**EN-ES 01. The Road to the UN HLM**

Co-chairs: Dr Eric Goosby, UN Special Envoy on Tuberculosis (United States of America), Dr Suvanand Sahu, Deputy Executive Director of the Stop TB Partnership (Switzerland)

Speakers: Chief Wilton Littlechild, Civil Society Representative, (Canada)
Prof Michel Kazatchkine, UN Secretary-General’s Special Envoy on HIV/AIDS in Eastern Europe and Central Asia (Switzerland)
Dr Jeremiah Chakaya Muhwa, President of The Union (Kenya)

Chair: Eric Goosby (United States of America)
Chair: Suvanand Sahu (Switzerland)

**Karel Stbylo Public Health Prize**
09:00 - 09:05

**Introduction**
09:05 - 09:10

Suvanand Sahu (Switzerland)

**International legal framework for Indigenous people**
09:10 - 09:22

Wilton Littlechild (Canada)

**The Road to the UN High Level Meeting**
09:22 - 09:37

Michel Kazatchkine (Switzerland)

Encuentro: Panel Discussion
09:00 - 10:00

**Plenary Broadcast**

Live transmission from the plenary hall into the Encuentro session room
Encuentro: Participatory Activity
10:00 - 10:30

Louder than TB  [all day]

Since World TB Day 2016, more than 50 global institutions have joined under the banner of the Louder Than TB campaign to raise awareness and address the challenges posed by TB. These efforts focus on the integration of TB into maternal and childhood services, boosting TB prevention, and driving investments in new TB drugs, diagnostics, and vaccines.

The campaign centers on the universality of music and sound, transforming the bad sounds of TB into good sounds. The global coalition of organizations who support the effort includes WHO, UNITAID, Médicins Sans Frontières, Save The Children, ONE, The Global Fund, World Bank Group, and dozens more.

Our proposal is for a space that would showcase the impact of the Louder than TB Campaign, including informational pamphlets, factsheets, and brochures. We will also bring posters and two dry-erase boards that would encourage participants to write in their names and to join the Louder than TB coalition and share on social media. We would like to see the space used as a forum to speak with interested parties and spread the message of TB awareness.

Pending availability of resources, we would also like to set up a multi-screen, interactive installation in a central conference location. See an example of the installation here:
https://twitter.com/louderthantb/status/845299820961185792/photo/1

Coordinator: Roksana Bialczak (United States of America)
Coordinator: Thomas Lynch (United States of America)

Louder than TB
Thomas Lynch (United States of America)
EN-ES Community engagement for impact

Background: Conducting clinical research, such as STREAM Stage 2, in developing countries presents distinct opportunities and challenges, and cannot succeed without the support of affected communities. Recent controversies regarding clinical research conducted in developing countries indicate that much remains to be learned about what constitutes effective community collaboration.

Defining Community: Community members in the area surrounding a research site can include traditional healers, faith-based organisations, individuals and families affected by MDR-TB, and other community organisations. Traditional healers, or shamans, in Africa are highly revered since illness is thought to be caused by witchcraft, pollution or through neglect of the ancestors. In South Africa, compared to 25,000 Western-trained doctors there + 200,000 traditional healers who are consulted by approximately 60% of South Africans. Broader CE stakeholders include political decision makers, civil society, donors, and advocacy groups.

Methodology: Presentations, group role plays and group discussion

Presentations
- Traditional healer: experience of dealing with MDR-TB
- Trial Participant: STREAM experience
- Member of the STREAM trial team: STREAM experience

Role plays
- Trial participant discusses MDR-TB and clinical trials with a traditional healer (20 minutes)
- Trial participant discusses the informed consent form with the research team (20 minutes)

Group Discussions
The audience will be divided into two groups (40 minutes)
1. Group 1, led by traditional healer representative, will outline a community entry and communication plan to enhance stakeholder understanding of strategies to increase awareness of STREAM and other TB trials.
2. Group 2, led by a study team member, will outline a researcher communication plan that describes how the research team intend to deal with issues that arise during the trial that could limit support for the trial, negative media coverage, and socio-cultural taboos/myths about clinical research.

In closing, group leaders will give feedback on how to engage effectively with stakeholders.

Coordinator: Jessica Nan (United States of America)
Coordinator: Francesca Conradie (South Africa)
Chair: Nombuyiselo Tshandu (South Africa)
Chair: Yemisrach Zewdie (Ethiopia)

Speakers: Magic Khanyile (South Africa) Yemisrach Zewdie (Ethiopia) Nombuyiselo Tshandu (South Africa)
**EN-ES 06. Elimination of TB in indigenous people - developing positive relationships between community and TB programme / Erradicación de la tuberculosis en la población indígena - desarrollo de relaciones positivas entre la comunidad y el programa de tuberculosis**

Indigenous people globally have high rates of TB. Effective partnerships between TB control programmes and Indigenous peoples is necessary to bring these rates down. Innovative work is being done in many countries, to better understand and to incorporate Indigenous ways of knowing into planning and resource allocation for TB programmes. We propose to bring together Indigenous leaders and persons with experience developing positive relationships between TB control programmes to exchange experience and share practical examples of successfully engaging communities.

A nivel mundial, la población indígena presenta tasas de tuberculosis elevadas. Es necesario establecer relaciones efectivas entre los programas de control de la tuberculosis y la población indígena para reducir estas tasas. En muchos países se está llevando a cabo una labor innovadora dirigida a entender mejor la situación e incorporar las formas de conocimiento de los indígenas en la planificación y la asignación de recursos de los programas de tuberculosis. Proponemos reunir a líderes indígenas y a personas con experiencia en el desarrollo de relaciones positivas con respecto a los programas de control de la tuberculosis, para que intercambien su experiencia y compartan ejemplos prácticos de comunidades que se han involucrado satisfactoriamente.

Chair: Wendy Lee Wobeser (Canada)
Chair: Wilton Littlechild (Canada)

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<th>Time</th>
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<td>Indigenous principles for positive engagement for TB elimination /</td>
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<td>Principios indígenas para un compromiso positivo con la erradicación de</td>
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<td>Malcolm King (Canada)</td>
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<td>10:50 - 11:10</td>
<td>Tuberculosis in indigenous communities of Colombia: epidemiology and</td>
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<td>beliefs / La tuberculosis en comunidades indígenas de Colombia: Epidemiología y creencias</td>
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<td>Jose Mauricio Hernandez Sarmiento (Colombia)</td>
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<td>Loselinio Velasquez (Colombia)</td>
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<td>11:10 - 11:30</td>
<td>The importance of cultural safety for NTP managers / La importancia de</td>
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<td>la seguridad cultural para los gestores del Programa Nacional de Control</td>
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<td>Martín Castellanos (Mexico)</td>
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<td>Addressing ethnicity and TB from the Pan American Health Organization /</td>
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<td>Sandra del Pino (United States of America)</td>
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<td>11:50 - 12:00</td>
<td>Discussion / Debate</td>
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02. Regional Prospective Observational Research in TB (RePORT) International: biomarkers of TB and comorbidities across Brazil, India and South Africa

RePORT International builds upon collaborations between US investigators and those based in high-burden settings with co-funding from local governments and the US National Institutes of Health's (NIH) National Institute of Allergy and Infectious Diseases (NIAID) and Division of AIDS (DAIDS). Objectives for participants include:
1. Understanding the goals and methods the RePORT network utilises to facilitate data and specimen sharing.
2. Learning how immunologic signatures are informing new biomarkers of TB progression and severity, including in TB-diabetes and TB-HIV co-infection.
3. Increasing knowledge about how the investigations are shaping new diagnostic options for children.

The topics are of relevance to researchers and government policy makers to consider for the direction of future programmatically relevant research.

Chair: Carol Hamilton
Chair: Roxana Rustomjee

Introduction of RePORT International
Sudha Srinivasan (United States of America)  10:30 - 10:45

Approaching TB diagnostics using transcriptional and cytokine signatures in TB-HIV
Valeria Rolla (Brazil)  10:45 - 11:00

Clinical and immunological findings from the effect of diabetes on TB (EDOTS) study in India
Hardy Kornfeld (United States of America)  11:00 - 11:15

Biological differences in tuberculosis diagnosis and disease in women
Jyoti Mathad (United States of America)  11:15 - 11:30

Biomarkers in Pediatric TB Disease
Nicole Salazar-Austin (United States of America)  11:30 - 11:40

Discussion  11:40 - 11:55

03. Heat not burn – new challenges for tobacco policy

Major tobacco companies are attempting to change the game with the introduction of a new tobacco product known as ‘Heat Not Burn’. This product heats tobacco in a device designed to release nicotine without producing smoke. With current evidence limited to clinical trials conducted by Philip Morris International, the immediate and long-term health implications of these products are unknown. Furthermore, Heat Not Burn products present a new challenge for the health sector as the industry move at accelerated speeds to encourage governments to make exceptions in tobacco and smokefree legislations for what they are presenting as low-harm products.

Chair: Quan Gan (China)

Heat Not Burn products and their benefits and risks  10:30 - 10:50
Konstantinos Farsalinos (Greece)
Scientific Programme

The awareness, usage and regulation of heat-not-burn tobacco products in Japan
Ying Jiang (Japan)

Heat not burn - new challenges for tobacco policy
Reto Auer (Switzerland)

Heat not burn (HNB) tobacco products - a public health perspective
Pranay Lal (India)

Discussion

Short Oral Abstract session (SOA)
10:30 - 12:00

01. At the front line of resistance

Chair: Vivian Cox (South Africa)
Chair: Claudia Denkinger (Switzerland)

SOA-300-1 Bedaquiline and clofazimine resistance in MDR- and XDR-TB patients from Armenia
Elisa Ardizzoni (Belgium)

SOA-301-1 Frequency of mutation Arg463Leu of the katG gene in historical multidrug-resistant tuberculosis in South Africa
Nontuthuko Maningi (South Africa)

SOA-302-1 High degree of fluoroquinolone resistance among pulmonary tuberculosis patients at a tertiary care center in North India
Rohini Sharma (India)

SOA-304-1 Can Geno Type MTBDRplus v.2.0: be a rapid diagnostics tool in smear-negative pulmonary tuberculosis?
Binit Kumar Singh (India)

SOA-305-1 Genetic mutations associated with second line drug resistance in Mycobacterium tuberculosis strains isolated from North-west India
Sarman Singh (India)

SOA-307-1 Detecting pyrazinamide resistance and pattern of pncA gene mutations in multi drug-resistant Mycobacterium tuberculosis isolates in Myanmar
Wah Wah Aung (Myanmar)

SOA-308-1 Reliance on Xpert® MTB/RIF to start DR-TB treatment reduced time to treatment but seemed to worsen treatment outcomes in Tanzania
Edson Mollel (Tanzania, United Rep.)

SOA-309-1 Determination of true drug susceptibility of Mycobacterium tuberculosis using quantitative minimum inhibitory concentration tests
Ruwen Jou (Taiwan)

SOA-310-1 Plasma Mycobacterium tuberculosis cell wall metabolites identify patients with multidrug resistant tuberculosis: a pilot study
Jeffrey Collins (United States of America)
Symposium (SP)
10:30 - 12:00
Hall 6 - Events Ballroom

EN-ES Medio ambiente y daños a la salud
Los principales efectos de la contaminación atmosférica sobre la salud van desde alteraciones de la función pulmonar, problemas cardíacos y otros síntomas y molestias hasta un aumento del número de defunciones, de ingresos hospitalarios y de visitas a urgencias, especialmente por causas respiratorias y cardiovasculares. Las Partículas en Suspensión (PM) afectan a más personas que cualquier otro contaminante y sus principales componentes son los sulfatos, los nitratos, el amoníaco, el cloruro sódico, el carbón, el polvo de minerales y el agua.

Chair: Esteban González Diaz (Mexico)
Chair: Marina de Jesús Kasten Monges (Mexico)

10:30 - 10:50
Contaminacion ambiental y daño pulmonar
Hermes Ulises Ramirez Sanchez (Mexico)

10:50 - 11:10
Contaminacion ambiental y cancer
Ruth Araceli De Celis Carrillo (Mexico)

11:10 - 11:30
Contaminacion ambiental y enfermedad renal
Felipe De Jesús Lozano Kasten (Mexico)

11:30 - 11:50
La contaminacion ambiental y el daño cardiovascular
Jose Luis Ruiz Sandoval (Mexico)

Discussion
11:50 - 12:00

Oral Abstract session (OA)
10:30 - 12:00
Hall 7 - Events Ballroom

EN-ES 01. Non-communicable lung diseases in adults - recent updates / Enfermedades pulmonares no contagiosas en adultos - últimas actualizaciones

Chair: Jean-William Fitting (Switzerland)
Chair: Anne Fanning (Canada)

OA-101-12 Non-communicable lung disease in Malawi: a meta-analysis of community-based cross-sectional studies in urban and rural settings / Enfermedades pulmonares no contagiosas en Malawi: un metaanálisis de estudios de prevalencia de base comunitaria en entornos urbanos y rurales
Rebecca Nightingale (United Kingdom)

OA-103-12 In-door air pollution from cooking with biomass fuels and chronic bronchitis among women in a rural district of Rwanda / Contaminación del aire en el interior de la vivienda como resultado de cocinar con combustibles de biomasa y la bronquitis crónica entre las mujeres de un distrito rural de Ruanda
Olivier Mulisa Manzi (Rwanda)

OA-104-12 A comparison of paper and smartphone-based data collection tools in a Burden of Obstructive Lung Disease (BOLD) study conducted in rural Sudan / Una comparativa de herramientas de recopilación de datos de base papel y a través de teléfonos inteligentes en el estudio BOLD (Prevalencia de la enfermedad pulmonar obstructiva) realizado en una comunidad rural del Sudán
Rana Ahmed (Sudan)
Scientific Programme

**OA-105-12**  Byssinosis amongst ‘home-based’ power loom workers in Madhya Pradesh, India / Bisinosis entre los trabajadores de telares mecánicos “caseros” en Madhya Pradesh, India  
Debashish Kundu (India)

**OA-106-12**  Indoor air pollution and tuberculosis: analysis of National Family Health Survey-III, a nationally representative survey, India / Contaminación del aire en el interior de la vivienda y tuberculosis: análisis de la Encuesta Nacional sobre Salud Familiar-III, una encuesta representativa a nivel nacional, India  
Jaya Prasad Tripathy (India)

**Oral Abstract session (OA)**  
10:30 - 12:00  
Hall 8 - Events Ballroom

**02. Access to patient care: is it their right, privilege or ethical challenge?**

Chair: Amrita Daftary (Canada)  
Chair: Silvia Kelbert (Tanzania, United Rep.)

**OA-107-12**  To B or not to B: the rights V/s program debate for access to bedaquiline  
Neerja Arora (India)

**OA-108-12**  Solidarity in addressing ethical challenges in the implementation of new technologies: a qualitative study  
Diego S. Silva (Canada)

**OA-109-12**  Improving documentation of tuberculosis cases notified by community health volunteers in high tuberculosis burden facilities in Kenya  
Anne Munene (Kenya)

**OA-110-12**  Civil society experiences in community engagement in the fight against TB  
Kondwani Mshali (Malawi)

**OA-111-12**  Role of ex-tuberculosis patient engagement in TB care and control in Afghanistan: data review  
Basir Ahmad (Afghanistan)

**OA-112-12**  Community-based TB care in conflict-affected areas in Myanmar: evaluation of community-based activities by international non-governmental organisations  
Zin Min Thet Lwin (Myanmar)

**OA-113-12**  School-children as TB Soldiers played crucial role to control TB epidemic by disseminating messages of symptoms & free treatment among their peers, family and neighbours in Bastar  
Gayadhar Mallick (India)

**OA-114-12**  Exploring the effectiveness of community engagement in tuberculosis treatment outcomes in Afghanistan: a cohort analysis  
Mostafa Shefa (Afghanistan)
04. Overcoming Challenges in the Introduction and Scale-Up of Newer Drugs for the Treatment of Multidrug-Resistant Tuberculosis: Lessons from the Field

It has been almost four years since the World Health Organization recommended the use of bedaquiline for the treatment of multidrug-resistant tuberculosis. Since that time, more than 8,000 persons have been treated with bedaquiline and another 490 treated with delamanid under program conditions. While there has been significant discussion around successful models of care, a frank discussion of barriers encountered both in introduction and in scaling up in some settings has been missing from the scientific literature. In order to accelerate uptake of these urgently needed drugs, exploring barriers to their use as well as strategies for overcoming them is vital.

**Chair:** Erica Lessem (United States of America)

- **10:30 - 10:45**
  - The impact of limited access to newer drugs: a patient perspective on overcoming barriers
    - Deepti Chavan (India)

- **10:45 - 11:00**
  - Overcoming challenges to introducing newer drugs in higher-income countries: example from Mexico
    - Rafael Laniado-Laborin (Mexico)

- **11:00 - 11:15**
  - Surmounting barriers to the use of newer drugs in outbreak settings: lessons learned from Papua New Guinea
    - Rendi Moke (Papua New Guinea)

- **11:15 - 11:30**
  - Limited access, limited good: barriers to wider scale up of BDQ in India
    - Jai Mullerpattan (India)

- **11:30 - 11:45**
  - Scaling up multiple innovations: bedaquiline, delamanid and shortened regimens in Swaziland
    - Debrah Vambe (Swaziland)

- **11:45 - 12:00**
  - Discussion

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05. Preventing child TB as we move towards elimination: programmatic realities and achievements

Following the 2010 World Health Organization (WHO) recommendation, many high-burden TB countries endorsed the use of Preventive Therapy (PT) to treat latent TB infection (LTBI) in populations at risk of developing TB. However in 2015 WHO reported that only 7 per cent of eligible children receive PT following TB exposure. Among individuals initiating therapy, completion rates are unknown or consistently suboptimal. In this session experts from high, medium and low-burden TB settings will explore common barriers to PT uptake and adherence while highlighting successful strategies to prevent TB in at-risk and marginalised populations including children, migrants and people living with HIV.

**Chair:** Anna Mandalakas (United States of America)
**Chair:** Lisa V. Adams (United States of America)

- **10:30 - 10:45**
  - Eliminating TB among newly arrived refugees: new guidelines to promote LTBI diagnosis and treatment prior to resettlement
    - Kathleen Moser (United States of America)
Scientific Programme

Initiating isoniazid preventative therapy in child contacts and adolescents living with HIV: parental and healthcare worker knowledge, attitude and perceptions in a TB-HIV high-burden setting
Alexander Kay (Swaziland)  10:45 - 11:00

Routine implementation of isoniazid preventive therapy in HIV-infected patients in Zimbabwe
Kudakwashe Takarinda (Zimbabwe)  11:00 - 11:15

Finding and preventing TB among the Wayuu of Colombia: lessons learnt and replicated
Andrea Cruz (United States of America)  11:15 - 11:30

Integration of child TB within peripheral care settings
Anne Detjen (United States of America)  11:30 - 11:45

Discussion  11:45 - 12:00

Short Oral Abstract session (SOA)  10:30 - 12:00
Hall 11 - Jalisco Hall

02. Improving care and support for patients
Chair: Netty Kamp (Netherlands)
Chair: Alice Christensen (Tanzania, United Rep.)

SOA-311-1  Evaluating the effectiveness of tuberculosis care providers on treatment outcomes in Afghanistan: a cross-sectional study
Ghulam Qader Qader (Afghanistan)  10:30 - 10:36

SOA-312-1  Exploring tuberculosis services provision and patient satisfaction in Afghanistan
Mostafa Shefa (Afghanistan)  10:36 - 10:42

SOA-313-1  Does physical tracing of treatment interrupters improve treatment outcomes? Patient-centered care approach to care and treatment in Busia County, Kenya
Gloria Okoko (Kenya)  10:42 - 10:48

SOA-314-1  Decentralisation of healthcare facilities is contributing to early tuberculosis treatment initiation in Central India
Moumita Biswas (India)  10:48 - 10:54

SOA-315-1  Efficacy of DOTS implementation in densely populated cities of Afghanistan: experience from Jalalabad city
Ghulam Qader Qader (Afghanistan)  10:54 - 11:00

SOA-316-1  Standard of TB-HIV care monitoring tool improves quality of care
James Mpunga (Malawi)  11:00 - 11:06

SOA-317-1  Supporting the patients: training social workers for an expanded role in patient-centered care for drug-resistant tuberculosis and HIV in South Africa
Jennifer Zelnick  11:06 - 11:12
SOA-318-1  Traditional beliefs and practices related to treatment non-adherence among TB patients in North Gondar, Ethiopia
Sisay Tigabe (Ethiopia)

SOA-319-1  Treatment outcome patterns among tuberculosis patients exclusively treated at health facility level versus community/health post level in Ethiopia
Nebiyu Hiruy (Ethiopia)

SOA-320-1  How does the motivation of community healthcare workers compare with the community's healthcare-seeking experiences? A qualitative study in peri-urban and rural Cambodia
Afifah Rahman-Shepherd (United Kingdom)

11:30 - 11:36

The study of barriers and facilitators to adherence to treatment among drug resistant tuberculosis patients in Georgia to inform policy decision
Lela Sulaberidze (Georgia)

Symposium (SP)
10:30 - 12:00  Hall 12 - Jalisco Hall

01. Jump-starting the engagement of private TB providers: public-private mix (PPM) action plans and system-wide interventions

Achieving universal health coverage will be impossible without the productive engagement of private providers. The past decade has seen many innovations in engaging private providers in TB care and prevention but most countries struggle with scale up. To overcome this block, the PPM action plan process structures planning for the entire health sector, including the definition of targets, costing and budgeting. Experiences with this process from Bangladesh and Ethiopia will be presented, along with ideas and an example from India on how to design system-wide policies that enable large numbers of private providers to contribute to public health goals in TB.

Chair: William Wells (United States of America)
Chair: Monica Dias (Switzerland)

Plans and progress for nation-wide scale up of private providers’ engagement: Bangladesh experience
Akramul Islam (Bangladesh)

Charting the way forward for private TB healthcare: the action plan process in Ethiopia
Asfawesen Gebryohannes (Ethiopia)

Managing markets for health: how to bring a unified governance approach to mixed health systems
William Wells (United States of America)

Using technology-based solutions to address quality of care for patients seeking care with private providers in India
Bhavin Vadera (India)

Discussion

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Scientific Programme

Oral Abstract session (OA)
10:30 - 12:00
Hall 13 - Jalisco Hall

**03. HIV-TB: from diagnosis to outcomes - something for everyone**

Chair: Katharina Kranzer (United Kingdom)
Chair: Stacie Stender (South Africa)

**OA-115-12** Identification of geospatial hotspots of TB-HIV co-infection distribution in USAID/PEPFAR supported LGAs in Nigeria: using GIS for intensified case finding
Amobi Onovo (Nigeria) 10:30 - 10:40

**OA-116-12** Patient education versus clinician mentoring for increasing isoniazid preventive therapy uptake in the South African primary care setting
Colleen Hanrahan (United States of America) 10:40 - 10:50

**OA-117-12** Barriers to and enablers of sputum collection and HIV testing during household contact investigation in Uganda
Mari Armstrong-Hough (United States of America) 10:50 - 11:00

**OA-118-12** Improving sputum collection to increase TB case finding among HIV-positive persons enrolling in HIV care and treatment clinics in Botswana, 2012-2014
Unami Mathebula (Botswana) 11:00 - 11:10

**OA-119-12** Substantial increase in risk for HIV patients with multidrug-resistant tuberculosis for aminoglycoside-induced hearing loss
Hyejeong Hong (United States of America) 11:10 - 11:20

Herman Weyenga (Kenya) 11:20 - 11:30

**OA-121-12** Treatment outcomes among people living with HIV and non-tuberculosis mycobacteria versus Mycobacterium tuberculosis in Botswana
Tefera Agizew (Botswana) 11:30 - 11:40

**OA-122-12** Urinary LAM with TB disease severity and culture outcomes in HIV-infected adults in ambulatory South African clinics
Rachel Kubiak (United States of America) 11:40 - 11:50

Oral Abstract session (OA)
10:30 - 12:00
Hall 14 - Jalisco Hall

**04. Recent developments in TB co-morbidities: updates from the front line**

Chair: Anthony D Harries (United Kingdom)
Chair: Zohar Mor (Israel)

**OA-123-12** Impact of untreated depression on tuberculosis treatment outcomes, disability, and quality of life in Ethiopia: a cohort study
Fentie Ambaw Getahun (Ethiopia) 10:30 - 10:40

**OA-124-12** Glycemic control and prevalence of LTBI: population-based study using HbA1c, fasting plasma glucose and 2-h plasma glucose
Leonardo Martinez (United States of America) 10:40 - 10:50
OA-125-12  High rates of active hepatitis C amongst multidrug-resistant tuberculosis patients in Armenia  
Ohanna Kirakosyan (Armenia)

OA-126-12  Costs per accurate diagnosis of bi-directional screening in Indonesia and Romania: integrating tuberculosis and diabetes services  
Philip Hill (New Zealand)

OA-127-12  Effectiveness of screening drug addicts for pulmonary tuberculosis in Afghanistan: a cross-sectional study  
Ghulam Qader Qader (Afghanistan)

OA-128-12  Use of metformin and risk of tuberculosis among incident diabetic patients: a population-based study  
Po-Wei Chu (Taiwan)

OA-129-12  High burden of DM-TB co-morbidity in Cambodia: initiation of bi-directional DM-TB screening in three operational districts  
Soy Ty Kheang (Cambodia)

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Do we still need the injection for treating multidrug resistant tuberculosis?

The continued reliance on the injectable agents for the treatment of MDRTB causes significant problems for persons living with MDRTB, the providers who support their care, and the programs within which they are treated. In the past, there were limited options, but with the new and repurposed drugs available, mandatory use of these toxic agents is questionable. This panel will review the evidence supporting the use of the injection and then present a discussion on the ethics of continued injectable use in the ear of "patient-centered care". The panel discussion will include perspectives from DRTB survivors and other members of the affected community.

Coordinator: Jennifer Furin (United States of America)

Speakers:  
Ingrid Schoeman (South Africa)  
John Kangwele (Kenya)

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Estudio de Caso: Paciente con Insuficiencia Renal candidato a recibir la cirugía de Trasplante que presenta TB

Elaboración de un estudio de caso de una paciente con insuficiencia renal que ha concluido sus estudios de protocolo, se encuentra en tratamiento sustitutivo de hemodiálisis y está programado para recibir la cirugía de Trasplante. En la etapa previa a su cirugía presenta síntomas que sugieren TB, lo cual se confirma mediante pruebas de laboratorio y esta situación implica que el paciente sea sometido a tratamiento por un año, para recuperar las condiciones necesarias y poder recibir la cirugía de trasplante. Esta situación tiene muchas complicaciones para el paciente desde varias perspectivas, esto es médicas, obviamente en su salud, económicas, psicológicas principalmente.

El trabajo contempla, explicar el acompañamiento que el paciente y su familia reciben a través de la Asociación de Trasplantados en el HCFAA, para sobrellevar esta situación que lo vulnera y no le permite recibir el Trasplante Renal.

Chair: Georgina Velasco (Mexico)
Scientific Programme

Estudio de Caso: Paciente con Insuficiencia Renal candidato a recibir la cirugía de Trasplante que presenta TB
Georgina Velasco (Mexico)

11:30 - 11:40

Member Meetings (Regional, Section, Sub-section, Working Group)
12:00 - 12:40

Bacteriology & Immunology Sub-Section

Annual scientific meeting
Stella Van Beers (Netherlands)

12:00 - 12:10

Asia Pacific Region Meeting

The Union China Office in 2017
Quan Gan (China)

12:15 - 12:35

Council Meeting - Reports
Ral Antic (Australia)

12:35 - 12:40

APR committee
Takashi Yoshiyama (Japan)

12:40 - 12:45

The Union Asia Pacific Region Treasurers Report 2017. APR Council Meeting
Elisabeth Cadena

12:45 - 12:50

APRC2019
Camiro Roa

12:50 - 12:55

APRC2017
Seiya Kato (Japan)

12:55 - 13:00

Member Meetings (Regional, Section, Sub-section, Working Group)
12:15 - 13:15

South-East Asia Region Meeting

Member Meetings (Regional, Section, Sub-section, Working Group)
12:15 - 13:15

Middle-East Region Meeting
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Member Meetings (Regional, Section, Sub-section, Working Group)
12:15 - 13:15
Hall 8 - Events Ballroom

Africa Region Meeting

Member Meetings (Regional, Section, Sub-section, Working Group)
12:15 - 13:15
Foro - Encuentro Expo

G Global indigenous STOP TB initiative working group

Encuentro: Networking Activity
12:30 - 14:00
Encuentro session room

EN-ES Strengthening collaborative advocacy for clean air action

Air pollution is by far the most important global environmental health risk, with 6.5 million deaths per year are attributable to poor indoor and outdoor air quality. This burden falls disproportionately on low-income populations and on people living in low- and middle-income countries. Aggressive clean air action is needed not only to reduce pollution-related illness and death but also to reduce emissions contributing to climate change. History shows that advocacy by civil society organizations is crucial for driving public health action and environmental protection measures by government.

This networking session will be an opportunity for members of community organizations, lung health clinicians, researchers and others to meet, share experiences and lessons learned, including from TB and tobacco control advocacy, and develop strategies for building capacity and closer collaboration in effective clean air advocacy

Coordinator: Elvis Nidikum Achiri (Cameroon)
Coordinator: Thomas Matte (United States of America)

Speaker:
Kellen Namusisi Nyamurung (Uganda)
Thomas Matte (United States of America)
Jóse Rogelio Pérez Padilla (Mexico)
Rosario Hernandez (Mexico)
Nyamurungi Kellen (Uganda)
Yeriel Salcedo Torres (Mexico)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

01. MDR-TB: burden and trends

Row 3

Chair: Patrick Phillips (United Kingdom)

PD-500-12 Prevalence of drug-resistant tuberculosis in Nigeria: a systematic review and meta-analysis
Isaac Alobu (Nigeria)

PD-501-12 Prevalence of resistance to second-line drugs and pyrazinamide resistance among multidrug-resistant tuberculosis patients in China
Guirong Wang (China)
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PD-502-12  Resistance pattern of the drugs included in the short-course MDR regimen according to susceptibility to fluoroquinolones and injectables in Peru
Zully M Puyen (Peru)

PD-503-12  Decline in MDR-TB prevalence among new TB patients in Rwanda: impact of implementing rapid molecular tests in programmatic management
Jean Claude Ngabonziza S. (Rwanda)

PD-504-12  Prevalence of rifampicin resistance among presumptive TB and drug-resistant TB populations: TB-HIV coinfected, paediatric and extra-pulmonary patients, Mumbai, 2015-2016
Daksha Shah (India)

PD-505-12  Paradigm shift in all types of presumptive DR-TB: a comparative analysis of MDR-TB diagnosis in Bangladesh
Nazis Arefin Saki (Bangladesh)

PD-507-12  Prevalence of drug resistance among patients with presumptive TB in Namibia
Nunurai Ruswa (Namibia)

PD-508-12  Panorama de la resistencia a inyectables y quinolonas en casos multirresistentes, Colombia, 2015-2016
Claudia Llerena Polo (Colombia)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

02. Mycobacterium bovis: transmission, detection and public health implications

Row 1
Chair: Francisco Olea-Popelka (United States of America)

PD-509-12  First appraisal of genetic diversity of Mycobacterium tuberculosis isolated from captive Asian elephants (Elephas maximus)
Sarman Singh (India)

PD-510-12  Knowledge, awareness and practices of small household milk producers regarding zoonotic tuberculosis in rural India
Mira Aghi (India)

PD-511-12  Genotyping of mycobacterial isolates from Ghana's tuberculosis prevalence survey - Mycobacterium bovis not found
Kennedy Kwasi Addo (Ghana)

PD-512-12  Detection of drug resistance and efflux pump mutations in Mycobacterium bovis in cattle and human isolates from Baja California, México, using whole-genome sequencing
Raquel Muñiz-Salazar (Mexico)

PD-513-12  Reverse zoonotic transmission of tuberculosis from an emerging strain of Mycobacterium tuberculosis and associated risk factors in south-eastern Nigeria
Hezekiah Adesokan (Nigeria)

PD-514-12  Mycobacterium bovis on Michigan dairy farms: evidence of animal-to-human transmission
John B. Kaneene (United States of America)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45
Poster Area

03. Back to basics: diagnosis, notification and outbreak investigations

Row 5
Chair: Frederick Quinn (United States of America)

PD-515-12  Seasonal pattern of tuberculosis case notification in Afghanistan, 2005-2016
Mohammad Nazim Samadi (Afghanistan)

PD-516-12  Gearing contact screening through SM, a missing link for TB control in the private sector,
Khyber Pakhtunkhwa Pakistan
Maqsood Ali (Pakistan)

PD-517-12  Improved TB case notification by private health care providers: an experience from 40
urban sites of India
Sripriya Pandurangan (India)

PD-518-12  Mapping tuberculosis case relative locations to inform active case detection and linkage to
care in Swaziland
Alexander Kay (Swaziland)

PD-519-12  Yield of facility-based verbal screening amongst household contacts of patients with multi-
drug resistant tuberculosis in Pakistan
Mahboob Ul Haq (Pakistan)

PD-520-12  The missing link between DOTS expansion, functionality and case detection: review of the
DOTS expansion strategy in Nigeria
Lucia Okwuonye (Nigeria)

PD-521-12  Active tuberculosis case search pilot intervention in selected communities: birth of the first
TB prevalence survey in Nigeria
Richard Olukolade (Nigeria)

PD-522-12  Scale-up of house-to-house TB case finding in Nigeria: best practices and lessons learnt
Oluremilekun Kusimo (Nigeria)

PD-523-12  Association between prediabetes and tuberculosis: a cohort study
Tsun-Hao Ko (Taiwan)

PD-524-12  Intensified case finding for tuberculosis at health facilities in Palawan, the Philippines
Kyung-Hyun Oh (Korea, Republic of)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

04. HIV-TB treatment and outcomes

Row 6
Chair: Charles Ssonko (Swaziland)

PD-525-12  Antiretroviral therapy and viral suppression during and 3 years after completion of
tuberculosis therapy in an inner-city cohort in Atlanta, Georgia
Marcos C. Schechter (United States of America)
Scientific Programme

PD-526-12  **Tuberculosis treatment outcomes in HIV-positive and -negative adolescents in Kenya**  
Sarah Puryear (United States of America)

Obinna Mbah (Nigeria)

PD-528-12  **Mortality of TB-HIV co-infected patients in Kampala remains high despite early initiation of ART**  
Samuel Kasozi (Uganda)

PD-529-12  **Mortality predictors among women of reproductive age on tuberculosis treatment in Kampala, Uganda**  
Deus Lukoye (Uganda)

PD-530-12  **Treatment outcomes among HIV co-infected MDR-TB patients in Uganda**  
Samuel Kasozi (Uganda)

PD-531-12  **Autopsy characterisation of lung microbiome of HIV-positive patients in a tertiary referral hospital in Ghana**  
Dorothy Yeboah-Manu (Ghana)

PD-532-12  **A tweak in policy, an increase in usage**  
Birru Shigut (Malawi)

PD-533-12  **TB-HIV services for HIV key and vulnerable populations in Tanzania: who and what should be prioritized?**  
Caterina Casalini (Tanzania, United Rep.)

Poster discussion session (PD)  
12:45 - 13:45  
Poster Area

**05. Muddying the waters - co-morbidities in drug-resistant TB**

Row 7

Chair: Ajay Kumar (India)

PD-534-12  **Feasibility and yield of screening for common non-communicable diseases in a cohort of patients treated for TB in Lima, Peru**  
Anthony Byrne (Australia)

PD-535-12  **Depression as a concomitant illness needs attention in the treatment regimen of DR-TB patients: a study from Jharkhand, India**  
Sashi Kanta Nayak (India)

PD-536-12  **Treatment outcome and mortality in pulmonary TB in lower-income countries: impact of drug resistance and HIV co-infection**  
Kathrin Zürcher (Switzerland)

PD-537-12  **Introduction of short standardised treatment for multidrug-resistant tuberculosis in Mozambique: cohort description and early culture conversion in HIV-positive and negative patients**  
Mathieu Bastard (Switzerland)
Co-infections and DR-TB treatment outcomes: a 4-year retrospective study in Mumbai, India
Sapna Surendran (India)

Mortality predictors among drug-resistant tuberculosis patients in Uganda
Samuel Kasozi (Uganda)

Association of diabetes mellitus and smoking with treatment outcomes of drug-resistant tuberculosis patients in Pakistan, 2010-2014
Abdullah Latif (Pakistan)

Demographic and co-morbidity patterns at initiation of treatment among MDR-TB clients in Lagos, Nigeria
Bolanle Olusola-Faleye (Nigeria)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

06. The proof is in the pudding - treatment and outcomes for drug-resistant TB
Row 20
Chair: Molly Franke (United States of America)

Tratamiento de tuberculosis extensamente resistente, manejo centrado en el paciente en un programa nacional: Perú
Valentina Alarcón Guizado (Peru)

Pneumonectomy in the complex treatment of extensively drug-resistant pulmonary tuberculosis
Denis Krasnov (Russian Federation)

Advantages of using vats in delayed thoracoplasty after surgery of destructive forms of pulmonary TB
Mirzagaleb Tillyashaykhov (Uzbekistan)

Scaling-up of shortened multidrug-resistant tuberculosis regimens in Niger: 8 year experience
Mahamadou Bassirou Souleymane (Niger)

Outcomes and risk factors in a programme treating MDR-TB in Swaziland for 2011—2013 cohorts
Charles Ssonko (Swaziland)

Totally implantable central venous access device in the treatment of multidrug resistant and extensively drug-resistant tuberculosis
Aliaksandr Skrahin (Belarus)

The efficacy, safety and tolerability of the short 12-month pre-XDR-TB regimen in Ukraine
Natallia Lytvynenko (Ukraine)

Primary healthcare clinics are successfully managing multidrug-resistant tuberculosis (MDR-TB): comparing outcomes in TB hospitals to clinics in the Western Cape, South Africa
Razia Vallie (South Africa)
PD-551-12  Treatment outcomes for drug-resistant TB under an out-patient model of care in Johannesburg, South Africa
Kate Shearer (South Africa)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

07. A picture in time - chest X-ray and other diagnostic considerations in TB
Row 21
Chair: James Johnston (Canada)

PD-552-12  Assessing sensitivity of symptoms for efficiency in TB case detection in a male clinic in Lesotho
Makeneiloe Ramapepe (Lesotho)

PD-553-12  Improving tuberculosis diagnosis with deep learning algorithm to analyze chest X-rays
Jesús Peinado (Peru)

PD-554-12  Evaluation of LED fluorescence microscopy for the diagnosis of tuberculosis
Ariadna Betsabe Arroyo-Vargas (Mexico)

PD-555-12  ’Missing TB cases’: potential of offering chest X-ray upfront to all smear-negative cases in narrowing this gap
Ganesh Chandra Mallick (India)

PD-556-12  Role of chest X-ray and symptom screening tool for tuberculosis case detection: national TB prevalence survey 2015-2016, Bangladesh
Sayeedur Rahman (Bangladesh)

PD-557-12  Increasing the yield of TB cases from communities: experience from India
Preeti Shokeen (India)

PD-559-12  Active search for TB cases on a campaign mode in India - modus operandi and early experience
Malik Parmar (India)

PD-560-12  Computer aided diagnostics tool for chest X-rays using deep neural networks
Gift Gana (Zimbabwe)

PD-561-12  Chest X-ray radiologist reading agreement analysis in screening for TB: the IOM Global Teleradiology Quality Control Program
Sifrash Meseret Gelaw (Philippines)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

08. Treatment delays misdiagnoses and losses to follow up - let’s close the gap
Row 8
Chair: Anete Trajman (Brazil)
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PD-562-12 Effect of delayed treatment on tuberculosis treatment outcomes among patients on DOTS in districts of south-west Ethiopia: a prospective cohort study
Abyot Asres (Ethiopia)

PD-565-12 Pre-treatment loss to follow-up among smear-positive pulmonary tuberculosis patients in Cameroon
Elias Onyoh (Cameroon)

PD-566-12 Yield of bacteriologically confirmed TB from a national population-based TB prevalence survey in Zimbabwe, 2014-2015
Shepherd Mufudzi Machekera (Zimbabwe)

PD-567-12 Patient and health system delay among pulmonary tuberculosis patients in Switzerland
Christian Auer (Switzerland)

PD-568-12 TB or non-TB? Factors associated with misdiagnosis of tuberculosis in Yogyakarta, Indonesia
Antonia Morita Iswari Saktiawati (Indonesia)

PD-569-12 Can active case finding help reduce patient's delay in TB diagnosis in rural India?
Preeti Shokeen (India)

PD-570-12 TB case finding in crisis situation: lessons learnt from Borno state, Nigeria
Emperor Ubochioma (Nigeria)

PD-571-12 TB patient cost analysis, Cavite Province, The Philippines: assessment of households experiencing catastrophic costs
Ewan Tomeny (United Kingdom)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

09. Progress engaging private and informal health providers in TB care in India
Row 22
Chair: Aakshi Kalra (India)

PD-572-12 Involving private practitioners in Indian’s national tuberculosis control programme: a randomized trial
Vijayashree Yellappa (India)

PD-573-12 Improving quality of care delivered by private providers: Patna, Bihar
Sirisha Papineni (India)

PD-574-12 Private provider engagement through effective service delivery: Patna, India
Sirisha Papineni (India)

PD-575-12 Can India’s informal health care providers become a strategic alliance in TB care and prevention?
Karuna Devi Sagili (India)

PD-576-12 High loss to follow-up of TB patients treated in private sector: follow-up study in urban, rural and tribal parts of Maharashtra
Om Bera (India)
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PD-577-12 Notification of TB patients from private health care providers in India: inter-district variation and underlying characteristics
Bhavin Vadera (India)

PD-578-12 Managing resources for maximizing patient benefit: an experience from private provider interface agency, Mumbai, India
Varsha Nagwekar (India)

PD-579-12 Private sector TB notifications. Where are we? Experience in 13 provinces of India
Vaibhav Ghule (India)

PD-580-12 Combating TB through private provider engagement: PPIA model
Vaishnavi Jondhale (India)

PD-581-12 Simple, cost-effective strategy for increased TB case notification by private sector health care providers in 100 cities of India
David Livingstone (India)

Poster discussion session (PD)
12:45 - 13:45

10. Where are they? Case finding and preventive therapy for paediatric TB

Row 9

Chair: Lisa Cranmer (United States of America)

PD-582-12 Addressing bottlenecks in the childhood tuberculosis cascade: a model to accelerate case detection, treatment and prevention of TB among children in Viet Nam
Lal Sadasivan (United States of America)

PD-583-12 “That is why others give up”: care giver perspectives on TB case-finding and HIV clinical services among pediatric TB patients, Tanzania
Courtney Emerson (United States of America)

PD-584-12 Quantifying exposure to tuberculosis in child contacts: a validation study
Julia Coit (United States of America)

PD-585-12 Improvements in IPT uptake rates in under-five children in Ethiopia: results of a five-year program
Dereje Habte (Ethiopia)

PD-586-12 Decentralisation of child TB services increases child TB case detection in Uganda
Rodrigo Nyinoburyo (Uganda)

PD-588-12 Do intensified case finding activities among malnourished children yield results? Prospective cohort study at nutritional rehabilitation centres, Maharashtra
Om Bera (India)

PD-589-12 Barriers to contact screening and isoniazid preventive therapy among paediatric contacts of adults with smear-positive tuberculosis
Vasudha Belgaumkar (India)

PD-590-12 Modelo de abordaje para la atención al contacto de tuberculosis en edad pediátrica basado en la estructura comunitaria en los Altos de Chiapas
Alied Bencomo Alern (Mexico)
11. Tobacco advertising and smoke legislation

Row 11

Chair: Rana Jugdeep Singh (India)

**PD-591-12** Compliance with smoke-free legislation and smoking behavior: observational field study from India
Sonu Goel (India)

**PD-592-12** Validity of indirect indicators of smoking in predicting active smoking behavior in public places: cross sectional survey of Tobacco Smoke Free state of India
Sonu Goel (India)

**PD-593-12** Compliance with Uganda's new smoke-free law in hospitality venues: challenges and opportunities from a civil society perspective
Kellen Namusisi Nyamurung (Uganda)

**PD-594-12** An evaluation of compliance, knowledge and attitudes related to the 100% smoke-free law in bars and restaurants in Kampala, Uganda
Kellen Namusisi Nyamurung (Uganda)

**PD-595-12** Tobacco information in Brazil's high participation social media: an analysis based on indirect television advertising, 2014
Valeska Figueiredo (Brazil)

**PD-596-12** Implementing the tobacco advertising and promotion regulation in Vietnam - a cross-sectional data
Vu Tran (Viet Nam)

**PD-598-12** The fight for 85% pictorial health warnings on tobacco product packages: a success story from India
Ranjit Singh (India)

**PD-599-12** Impact of India’s film rule for tobacco control messages on attitudes, intentions and cessation-related behaviour of Bangladeshi tobacco users
Nalin Singh Negi (United States of America)

**PD-600-12** India’s single cigarette economy: a back of the envelope assessment of its volume and size in 2014 and 2016
Pranay Lal (India)

12. Knowledge is power

Row 10

Chair: Stephanie Vaswani (Singapore)

**PD-602-12** Provider Behaviour Change Communication (PBCC) approach for increasing private sector engagement for tuberculosis (TB) programme in India
Preeti Shokeen (India)
**Scientific Programme**

**PD-603-12** Target audience responses to television public service announcements on awareness of TB testing and treatment: message-testing findings from India  
Christina Curell (United States of America)

**PD-604-12** Atención centrada a personas afectadas por tuberculosis, mediante planes de cuidado, en la región costa chica del Estado de Guerrero  
Julietaq Lopez Caballero (Mexico)

**PD-605-12** ‘I’m not going to play with my life’: qualitative study of tuberculosis patient education and empowerment  
Stephanie Law (Canada)

**PD-606-12** Tuberculosis knowledge, attitudes and practices in a fragile emergency situation: the experience of Somalia  
Walter Mukhwana (Kenya)

**PD-607-12** Myths and realities of knowledge, attitudes and practices of household contacts of patients with tuberculosis in five cities of Colombia  
David Alejandro Rodriguez (Colombia)

**PD-608-12** Mapping the needs for training on drug-resistant TB clinical decision making  
Pauline Lempens (Belgium)

**Poster discussion session (PD)**  
12:45 - 13:45  
Poster Area

13. **Tobacco use prevalence and risk of diseases**

Row 1  
Chair: Quan Gan (China)

**PD-610-12** Prevalence of tobacco use among priests and their willingness to spread anti-tobacco messages among devotees in Delhi  
Shekhar Grover (India)

**PD-613-12** Active and passive smoking in relation to lung cancer incidence in the Women’s Health Initiative prospective cohort study  
Ssempala Brian Adriane (Uganda)

**PD-614-12** Opportunistic screening for oral cancer and precancerous lesions in dental OPDs of Government hospitals of Punjab, India  
Pranay Lal (India)

**PD-615-12** Women and tobacco in Mexico. gender differences found in a tobacco cessation programme  
Guadalupe Ponciano-Rodriguez (Mexico)
### 14. Tobacco control at the global perspective

**Row 13**

**Chair:** Dean Schraufnagel (United States of America)

- **PD-616-14** Sustainable funding and Plan for tobacco control  
  Syed Mahbubul Alam (Bangladesh)

- **PD-617-12** How do we measure progress in tobacco control? Comparing GATS results from 2010 and 2017  
  Pranay Lal (India)

- **PD-618-12** Comparison of tobacco control programmes worldwide: a quantitative analysis of the 2015 WHO MPOWER report  
  Gholamreza Heydari (Iran, Islamic Rep. Of)

- **PD-619-12** Ten years of India’s National Tobacco Control Programme: achievements, challenges and the way forward  
  Ashish Kumar Pandey (India)

- **PD-620-12** Bangladesh Tobacco Control Research Network: a journey towards program sustainability  
  Mohammad Shahjahan (Bangladesh)

- **PD-622-12** Systems strengthening for reduction in prevalence of tobacco use in Punjab, India  
  Pranay Lal (India)

- **PD-623-12** Ten year support of Bloomberg initiative grants program for tobacco control in Bangladesh  
  Balasubramanian Gopalan (India)

- **PD-624-12** Awareness and implementation of a national tobacco control law in Northern India  
  Rama Shankar Rath (India)

### 15. The role of civil society organisations and communities in case finding

**Row 24**

**Chair:** Jonathan Daniels (United States of America)

- **PD-625-12** Impact of project Axshya on tuberculosis indicators in Punjab state, India  
  Sukhwinder Singh (India)

- **PD-626-12** Community TB outreach using Xpert® MTB/RIF in urban slums of Ogun state, Nigeria: are the missing cases detected?  
  Nkem Chukwueme (Nigeria)

- **PD-627-12** Impact of two video formats on understanding tuberculosis vaccine clinical trials among community volunteers in South Africa  
  Vela Mhlola (South Africa)

- **PD-628-12** Project Axshya: a civil society initiative in India pushing the agenda of END TB  
  Sajna Sarasita Nayak (India)
16. Key affected populations

Row 14

Chair: Lynette Mabote (South Africa)

PD-635-12  Active screening for tracing hidden TB cases in a vulnerable community, Punjab, India
    Naresh Kumar Sharma (India)

PD-636-12  Identifying missing cases from key affected population through active case finding in rural India
    Preeti Shokeen (India)

PD-637-12  Implementation of high-yield intervention package for urban TB control: experience from 40 urban sites of India
    Sripriya Pandurangan (India)

PD-639-12  Addressing a persistent outbreak in a socially disengaged, mobile population. Infection, outreach, and treatment in shearing gangs in New Zealand
    Naomi Gough (New Zealand)

PD-640-12  Yield of tuberculosis screening using Xpert MTB/RIF among HIV-infected pregnant women in Lilongwe, Malawi
    Robert Flick (Malawi)

PD-641-12  Cross border TB in Malawi: case notifications and treatment outcomes
    Henry Kanjerere (Malawi)

PD-642-12  Peer-led active case finding of TB in high-risk groups in the South-Kivu province of DRC
    Olivier Bahati Rusumba (Congo (Democratic Rep.))

PD-643-12  Comité de monitores de tuberculosis en CERESOS del Estado de Puebla
    Veronica Zarate Lemuz (Mexico)
17. Overcoming laboratory challenges in the field

Row 28

Chair: Kathleen England (United States of America)

**PD-644-12**  Sputum collection factors affecting diagnostic yield  
Sumona Datta (United Kingdom)

**PD-645-12**  Implementation of a system for laboratory specimen transportation in the Kyrgyz Republic  
Ainura Ibraimova (Kyrgyz Republic)

**PD-646-12**  Pattern of usage of TB diagnostic procedures in private sector across three cities of a central Indian state: a cross sectional study  
Janmejaya Samal (India)

**PD-647-12**  Evaluation of implantation strategies for the use of innovative sample transport reagent for tuberculosis-healthcare worker preferences of the use of the OMNiGene® Sputum reagent  
Hae-Young Kim (United States of America)

**PD-648-12**  The use of same-day, spot-spot sputum testing leads to improved pre-diagnosis retention of tuberculosis patients in public health facilities in Ethiopia  
Nebiyu Hiruy (Ethiopia)

**PD-649-12**  Outcomes of sputum and slide transportation approach on TB case notification in 19 provinces of Afghanistan  
Mir Habibullah Akhgar (Afghanistan)

**PD-650-12**  Status of accreditation of TB diagnostic tests in Africa  
Talkmore Maruta (Tanzania, United Rep.)

**PD-651-12**  Integrating and optimizing public sector CBNAAT diagnostic services for private sector TB patients in Mumbai, India  
Radha Taralekar (India)

**PD-652-12**  Impact of introducing LED-FM services in increasing case detection among smear-positive tuberculosis patients under the RNTCP, India  
Sonu Goel (India)

**PD-653-12**  QMS implementation in the TB laboratory network in Uzbekistan: phase I  
Zayniddin Sayfutdinov (Uzbekistan)

18. Don't resist! Finding the pattern through sequencing

Row 19

Chair: Alberto Garcia-Basteiro (Mozambique)

**PD-654-12**  Detection of M. tuberculosis in extra-pulmonary specimens: comparison between Xpert MTB/RIF and screening for multi-drug resistance using BACTEC™ MGIT™ 960 system with thin layer agar  
Teresa Realpe (Colombia)
Scientific Programme

PD-655-12 Performance of the GenoType MTBDRplus assay v. 2.0 in the diagnosis of tuberculosis and drug resistance in Lima-Peru
Kattya Lopez (Peru)

PD-656-12 Drug susceptibility of rifampin-resistant tuberculosis using whole genome sequencing to identify genes of interest in Pune, India
Jeffrey Alan Tornheim (United States of America)

PD-657-12 Molecular characterization of pre XDR and XDR-TB at tertiary care center of New Delhi, India
Binit Kumar Singh (India)

PD-658-12 Evaluation of Xpert MTB/RIF assay for the diagnosis of tuberculosis and rifampicin resistance in pulmonary tuberculosis
Olga Akkan (Turkey)

PD-659-12 Diagnostic accuracy of Xpert® MTB/RIF assay in detection of Mycobacterium tuberculosis in extra-pulmonary samples
Aprille Kirsten Ilustre (Philippines)

PD-660-12 Ethical considerations and data governance for the ReSeqTB data platform
Claudia Emerson (Canada)

PD-661-12 An incremental cost-effectiveness analysis of the second Xpert® MTB/RIF assay for detecting Mycobacterium tuberculosis and rifampicin resistance
Guirong Wang (China)

PD-662-12 Role of next generation sequencing in tuberculosis diagnostics: resolving the clinical dilemma of discrepancies in laboratory findings
Anneke Van der Spoel van Dijk (South Africa)

The impact of simultaneous donor withdrawal on health systems

As economies of countries are growing, many countries around the world are gradually becoming ineligible for development assistance, including donor support to health systems. There are concerns that the global development and financing landscape in some of these countries is changing too fast, and if not managed correctly, it could prevent progress, and even put past investments at risk. This is especially true for health, where constrained resources could lead to people and children not getting the life-saving TB treatment or vaccinations they need. This transition process is something countries are facing from multiple donors, often at the same time, or with only a few years apart. The process for many donors such as the Global Fund, Gavi, PEPFAR, USAID and other bilateral donors are not dissimilar.

It is critical to ensure donor withdrawal is gradual and responsible and does not put at risk development gains and cause harm to individuals and services. The challenges countries face from simultaneous withdrawal of financing for health must be taken seriously.

This panel discussion will provide an opportunity for the TB and HIV communities to discuss the impact of simultaneous transition with representatives from affected communities, civil society, donors and representatives from countries faced with simultaneous transition and innovative solutions to counteract this.

Coordinator: Rachael Crockett (United Kingdom)

Speaker: Rachael Crockett (United Kingdom)
EN-ES 48. Accelerating the response on drug resistance: TB and the antimicrobial resistant (AMR) agenda

TB is the world’s leading drug-resistant killer, causing one in three AMR deaths. Recent years have seen momentum building to put TB at the center of the AMR response. G20 leaders have acknowledged that AMR posed a serious threat to public health and pledged to take action. Looking ahead to the Russian Ministerial Conference and UN High Level Meeting on TB, this session aims to review the progress made on the TB/AMR response and chart the way forward to build the political will necessary to ensure TB continues to be a top priority of the AMR agenda.

Chair: Rachael Crockett (United Kingdom)
Chair: Mandy Slutsker (United States of America)

The role of the World Health Organization in addressing TB and AMR 14:00 - 14:10
Dennis Falzon (Switzerland)

Engaging policymakers in TB and AMR advocacy 14:10 - 14:20
Matthew Oliver (United Kingdom)

The role of policymakers in addressing TB and AMR 14:20 - 14:35
Elías Octavio Iniguez (Mexico)

Engaging civil society in high-burden countries ahead of the Russian Ministerial Conference and UN high-level meeting on TB 14:35 - 14:50
Yuliya Chorna (Ukraine)

Addressing AMR and TB at the regional level 14:50 - 15:00
Serhiy Kiral (Ukraine)

The human impact of drug-resistance 15:00 - 15:10
Enrique Delgado (Panama)

Discussion 15:10 - 15:25
EN-ES 07. Experiencia de investigación operativa en tuberculosis en Perú, impulsando la estrategia end TB: investigación intensificada e innovación

Esta investigación fue posible gracias al apoyo del Proyecto TREAT TB, una iniciativa de la Agencia de los Estados Unidos para el Desarrollo Internacional (USAID).

Presentar los resultados y experiencias del primer curso nacional de Investigación Operativa según el modelo SORT-IT en Sudamérica, enfocado en TB resistente: tratamiento de pre-XDR y XDR, resistencia a INH, TB infantil y pruebas rápidas para detectar TB-MDR. El Simposio tiene la finalidad comunicar una experiencia exitosa de alianza entre una ONG (The Union) y el Programa Nacional de TB (PCT) de Perú para desarrollar competencias en investigación operativa y lograr un adecuado uso científico de la información colectada e los últimos 5 años en el PCT. Otro objetivo es presentar una perspectiva de la IO en America Latina.

Chair: Alberto Mendoza (Peru)
Chair: Einar Heldal (Norway)

14:00 - 14:15
Visión global del Primer Curso de IO de TB en Perú
Edith Alarcón (United States of America)

14:15 - 14:30
Evaluación del manejo programático de la TB-XDR y la TB Pre-XDR en Perú
Antonieta Alarcón (Peru)

14:30 - 14:45
Tratamiento programático de la TB resistente a isoniacida, la TB infantil y pacientes hospitalizados por TB en Perú
José Cornejo (Peru)

14:45 - 15:00
Efecto de las pruebas de sensibilidad rápidas en el tratamiento y la mortalidad de la TB-MDR en Perú
George Obregón (Peru)

15:00 - 15:15
Patrocinio y perspectivas de la investigación operacional sobre la tuberculosis en las Américas
Zaida Yadon (Argentina)

15:15 - 15:30
Discusión

03. Aspects of TB - immunology and host genetics

Chair: Geraint Davies (United Kingdom)
Chair: Wendy Lee Wobeser (Canada)

14:00 - 14:06
Study of long non-coding RNA (lncRNA) expression profiles in pulmonary tuberculosis
Yan Li (China)

14:06 - 14:12
Helminths induce persistent epigenetically-mediated TB immune perturbations
Andrew DiNardo (United States of America)

14:12 - 14:18
Activation of hypoxia-inducible factor 1 (Hif-1) enhanced bactericidal effects of macrophages to Mycobacterium tuberculosis
Quan Li (China)
### Scientific Programme

**SOA-324-1**  
**Effects of aldehyde dehydrogenase 2 (ALDH2) genetic polymorphism on mouse lungs in vitro**  
Jingtao Gao (China)  

**SOA-327-1**  
**Genetic diversity of Mycobacterium tuberculosis strains causing tuberculous lymphadentiis in south-west Ethiopia**  
Mulualem Tadesse (Ethiopia)  

**SOA-328-1**  
**Animal vaccine dose-response curve predicts lower optimal TB vaccine dose in humans: proof of-concept study of immunostimulation/immunodynamic modelling methods**  
Sophie Rhodes (United Kingdom)  

**SOA-329-1**  
**Immunosuppressive and therapeutic effects of fisetin, curcumin and camelid format anti-IgE in ovalbumin-induced lung inflammation**  
Pramathadhip Paul (India)  

**SOA-330-1**  
**Genetic polymorphism effects of genes-enzymes, responsible for biotransformation of xenobiotics, on TB drug-related hepatotoxicity**  
Alexey Kazakov (Russian Federation)  

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**Symposium (SP)**  
14:00 - 15:30  
**Hall 4 - Events Ballroom**

**08. The economics of tobacco and tobacco control in Latin America: opportunities and challenges**

While progress in tobacco control has been made in high, low and middle-income countries, tobacco use remains one of the world’s leading causes of preventable premature death. Effective evidence-based interventions to reduce tobacco use and related morbidity and mortality are not yet utilised to their full potential. Building on Monograph 21: The Economics of Tobacco and Tobacco Control, a collaboration between the U.S. National Cancer Institute and the World Health Organization, this session will highlight the most cost-effective interventions for tobacco control and address arguments about the economic impact of tobacco control policies with specific examples from multiple countries.

Chair: Jorge Laucirica (Mexico)

**Tobacco control does not harm economies**  
Mark Parascandola  
14:00 - 14:15

**Progress in tobacco control and tobacco taxation in Latin America: perspectives, opportunities and challenges**  
Rosa Sandoval (United States of America)  
14:15 - 14:30

**Comparative study of the impact of tobacco tax and price on tobacco use**  
Guillermo Paraje (Chile)  
14:30 - 14:45

**Illicit tobacco trade - the real challenge to tobacco tax sustainability?**  
Roberto Iglesias (Brazil)  
14:45 - 15:00

**Channeling tobacco taxes towards Tobacco Control in Panama**  
Víctor Hugo Herrera (Panama)  
15:00 - 15:15

**Discussion**  
15:15 - 15:30
58. Improved and differentiated TB programme planning through more effective use of various sources of (sub-national) data

In order to achieve the Sustainable Development Goals (SDGs) targets by 2030, it is imperative for National TB Programmes to allocate resources more effectively towards key populations and areas of continuous TB transmission. Mapping and triangulating previously underutilised sources of data have been used to identify programmatic gaps throughout the pathway of care. This session’s objective is to present a framework of analysis and to share experiences from a number of countries in spatial analyses of their subnational TB and other relevant data to locate key populations and areas which require locally tailored interventions.

Chair: Lucie Blok (Netherlands)
Chair: Suvanand Sahu (Switzerland)

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<th>Time</th>
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<tr>
<td>14:00 - 14:15</td>
<td>Valorize TB data for local health planning</td>
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<td>Mirjam Bakker (Netherlands)</td>
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<td>14:15 - 14:30</td>
<td>Differentiated TB planning in Vietnam using sub-national data</td>
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<td>Nguyen Hoa (Viet Nam)</td>
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<td>14:30 - 14:45</td>
<td>Identifying geographic areas and key populations for prioritised interventions in Kenya</td>
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<td>Enos Masini (Kenya)</td>
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<td>14:45 - 15:00</td>
<td>Mapping and microdata analysis to inform public-private partnership in TB response, in Mumbai</td>
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<td>Shibu Vijayan (India)</td>
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<td>15:00 - 15:15</td>
<td>Using GIS and statistical algorithms to map and analyze TB hotspots in affected communities</td>
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<td>Vincent Meurrens (South Africa)</td>
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Discussion

14:00 - 15:30

EN-ES 09. TB and non-communicable diseases: recognising risks and mitigating impact / Tuberculosis y enfermedades no contagiosas: reconocer los riesgos y mitigar el impacto

The session objective is to better understand the impact of various non-communicable diseases on TB morbidity and mortality and the implications for TB control and prevention.

El objetivo de la sesión es entender mejor el impacto de diversas enfermedades no contagiosas sobre la morbilidad y la mortalidad de la tuberculosis y las implicaciones para el control y la prevención de la tuberculosis.

Chair: Alfred Lardizabal
Chair: Marila Gennaro

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<th>Time</th>
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<td>14:00 - 14:15</td>
<td>Epidemiology of TB in the state of Baja California, Mexico / Epidemiología de la tuberculosis en el estado de Baja California, México</td>
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<td>Rosa Herrera (Mexico)</td>
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Impact of diabetes and hyperlipidemia on host defense / El impacto de la diabetes y la hiperlipidemia sobre los mecanismos de defensa del huésped
Hardy Kornfeld (United States of America)

14:30 - 14:45
Tuberculosis and chronic kidney disease: an emerging global syndemic / Tuberculosis y enfermedad renal crónica: una sindemia global emergente
James Johnston (Canada)

14:45 - 15:00
Nutrition and the risk of tuberculosis
Peter Cegielski (United States of America)

15:00 - 15:15
Potential impact of tobacco control on tuberculosis / El posible impacto del control del tabaco sobre la tuberculosis
Khurshid Alam Hyder

15:15 - 15:30
Discussion

EN-ES 10. Air pollution effects on lung health and TB risk / Efectos de la contaminación atmosférica sobre la salud pulmonar y el riesgo de tuberculosis

Exposure to air pollution – both household and ambient – is the most important global environmental risk factor for premature mortality, mainly from lung and cardiovascular conditions. In addition, growing evidence links exposure to combustion pollutants to a wide range of adverse effects on lung health across the life course. This symposium will provide an update on findings of recent research concerning the effects of exposures to household and ambient air pollution on lung function, risk of pneumonia and TB. The mechanisms linking smoking and TB risk and their implications for possible effects of air pollution will also be discussed.

La exposición a la contaminación atmosférica —tanto en el interior de la vivienda como en el exterior— es el principal factor de riesgo medioambiental a nivel mundial en la mortalidad prematura, principalmente por afecciones pulmonares y cardiovasculares. Además, cada vez hay más evidencias que vinculan la exposición a contaminantes de combustión con un amplio abanico de efectos adversos sobre la salud pulmonar a lo largo de toda la vida. Este simposio aportará datos actualizados sobre los hallazgos de las investigaciones recientes con relación a los efectos de la exposición a la contaminación atmosférica, tanto en el interior de la vivienda como en el exterior, sobre la función pulmonar, el riesgo de neumonía y el riesgo de tuberculosis. También se tratarán aspectos relativos a los mecanismos que vinculan el fumar con el riesgo de tuberculosis y sus implicaciones por los posibles efectos de la contaminación atmosférica.

Chair: Asma El Sony (Sudan)

Inhaled environmental toxins and vulnerability to pneumococcal infection - epidemiology and mechanisms / Inhalación de toxinas ambientales y vulnerabilidad a las infecciones neumocócicas - epidemiología y mecanismos
Jonathan Grigg (United Kingdom)

14:00 - 14:20

Air pollution and other environmental factors associated with lung function decline: the Cronicas Study in Peru / La contaminación atmosférica y otros factores medioambientales asociados al deterioro de la función pulmonar: el estudio Cronicas en Perú
William Checkley (United States of America)

14:20 - 14:40
Scientific Programme

Air pollution and risk of TB: evidence and the way forward / Contaminación atmosférica y riesgo de tuberculosis: evidencias y camino a seguir
Chen-Yuan Chiang (Taiwan)

Smoking and air pollution: the new social determinants of TB? / Fumar y la contaminación atmosférica: ¿Los nuevos determinantes sociales de la tuberculosis?
Neil Schluger (United States of America)

Discussion

Symposium (SP)
14:00 - 15:30
Hall 8 - Events Ballroom

11. Using Good Participatory Practice (GPP) to bridge the gap: engaging researchers and communities in the fight against TB

Researchers, advocates and affected communities all play an essential role in the development of new tools to accelerate TB elimination. GPP guidelines for TB research provide a framework which can be used to foster greater interaction and collaboration between these groups and to encourage researchers to engage communities in all aspects of research - from the design and conduct of clinical trials to the delivery and uptake of successful innovations. Speakers in this session will present perspectives on the importance of using GPP to improve collaboration between researchers, advocates and communities.

Chair: Kristin Croucher (South Africa)
Chair: Michael Frick (United States of America)

The role of GPP guidelines in clinical research for TB
Jessica Salzwedel (United States of America)

How The Union is working to engage communities in research
I D Rusen (United States of America)

The role of researchers in advocacy
Keertan Dheda (South Africa)

Beyond tokenism: meaningful engagement with vulnerable communities
Vela Mhlola (South Africa)

Discussion

Short Oral Abstract session (SOA)
14:00 - 15:30
Hall 9 - Jalisco Hall

04. Risks and reasons for modifying approaches

Chair: Michael Kimerling (Netherlands)
Chair: Chawangwa Modongo (Botswana)

SOA-331-1 Risk of recurrent TB in the UK
2
Jennifer A Davidson (United Kingdom)
Scientific Programme

SOA-332-1  Obesity, diabetes and risk of tuberculosis in two Taiwan cohorts: a double-edged sword?  
Han Fu (United Kingdom)  
14:06 - 14:12

SOA-333-1  Demographic predictors of active tuberculosis in migrants to British Columbia, Canada: a retrospective cohort study  
Lisa Ronald (Canada)  
14:12 - 14:18

SOA-334-1  Factors associated with use of bacteriological tests for diagnosing TB in Kenya  
Jacquie Narotsu Oliwa (Kenya)  
14:18 - 14:24

SOA-335-1  Heavy alcohol consumption increases the risk of active tuberculosis in Taiwanese adults: a nationwide population-based cohort study  
Yun-Ju Lai (Taiwan)  
14:24 - 14:30

SOA-336-1  Tuberculosis: one disease, one geographic region, several epidemiological profiles  
Flávio Guinsburg Hamburger (Brazil)  
14:30 - 14:36

SOA-337-1  Potential mechanisms for the high tuberculosis notification rate among the elderly in Taiwan: a modelling approach  
Han Fu (United Kingdom)  
14:36 - 14:42

SOA-338-1  Joint impact of modifiable risk factors on tuberculosis: a population-based cohort study  
Wei-Cheng Lo (Taiwan)  
14:42 - 14:48

SOA-339-1  High rates of undetected tuberculosis in medical and oncology wards in Botswana  
Othusitse Fane (Botswana)  
14:48 - 14:54

Tehreem Mohiyuddin (United Kingdom)  
14:54 - 15:00

SOA-341-1  Seasonality in tuberculosis case notification rate and its implications for developing season-based case finding strategies in Ethiopia  
Degu Jerene (Ethiopia)  
15:00 - 15:06

Symposium (SP)  
14:00 - 15:30  
Hall 10 - Jalisco Hall

12. Accelerating TB elimination through access to bedaquiline and delamanid

The growing burden of rifampin-resistant TB (RR-TB), estimated at 580,000 in 2015, threatens End-TB Strategy goals. Rapid integration of new tools - drugs, regimens, diagnostics, case finding and prevention strategies - are key to counter this threat. This symposium will report on the implementation of the UNITAID-funded endTB initiative that is increasing access to bedaquiline and delamanid in 13 countries across six World Health Organization regions. We will highlight, among the 600 plus patients who began receiving bedaquiline or delamanid before 30 September 2016, the indications for use of bedaquiline and delamanid; culture conversion and reversion; adverse events and the delivery of bedaquiline and delamanid under public-private partnership.

Chair: Aamir Khan (Pakistan)  
Chair: Nana Kiria (Georgia)
Scientific Programme

Six-month sputum culture conversion among patients receiving MDR-TB treatment with bedaquiline and delamanid 14:00 - 14:15
Molly Franke (United States of America)

Twelve-month sputum culture reversion among patients receiving MDR-TB treatment with bedaquiline and delamanid 14:15 - 14:30
Naira Khachatryan (Armenia)

Adverse events and serious adverse events among patients receiving MDR-TB treatment with bedaquiline and delamanid 14:30 - 14:45
Nino Lomtadze (Georgia)

Experience with expanded indications for bedaquiline and delamanid 14:45 - 15:00
K J Seung (United States of America)

Engaging all healthcare providers: introduction of bedaquiline and delamanid in high-burden TB countries through public-private mix initiatives 15:00 - 15:15
Sana Adnan (Pakistan)

Discussion 15:15 - 15:30

Symposium (SP)
14:00 - 15:30
Hall 11 - Jalisco Hall

13. TB and mental health: effects of multidrug-resistant TB (MDR-TB) and extensively drug-resistant (XDR-TB) treatment drugs and regimens

The management of TB, especially MDR-TB, XDR-TB and TB-HIV is challenging as these patients are subject to long and potentially toxic treatments. In addition, many of the drugs used in MDR-TB, XDR-TB and antiretroviral therapy (ART) can lead to various symptoms related to mental illness such as anxiety, depression and suicidal tendencies. The overall objective of the session is to explore the interface between MDR/XDR-TB and mental disorders and elaborate strategies for identification and management of challenges arising from comorbid mental illness that patients face as a result of TB treatment especially MDR/XDR-TB and TB-HIV.

Chair: Tamar Gabunia (Georgia)

Mental health aspects of palliative care 14:00 - 14:15
Samson Malwa Haumba (Swaziland)

Patient-centered care approaches to reduce stigma 14:15 - 14:30
Hala Jassim AlMossawi (United States of America)

TB management and the importance of mental health 14:30 - 14:45
Ignacio Monedero (Spain)

The role of counselling and patient support systems in mitigating mental health consequences of M/XDR TB treatment 14:45 - 15:00
Tamar Gabunia (Georgia)

Facilitation of regular patient interaction with SMS based mHealth tools 15:00 - 15:15
A.N.M. Al-Imran (Canada)

Discussion 15:15 - 15:30
05. TB in correctional facilities: an update on detection and care

Chair: Harry Hausler (South Africa)
Chair: Martin Castellanos (Mexico)

- **SOA-342-1** Promising TB case finding in prison settings: a lesson learned from 10 Indonesian prisons/detention centres
  - 14:00 - 14:06
  - Ummu Salamah (Indonesia)

- **SOA-343-1** Can a prison health facility provide quality TB and DR-TB care and management? A case study of Shimo La Tewa Prison Health Centre, Kenya
  - 14:06 - 14:12
  - Abdi Mohamed (Kenya)

- **SOA-344-1** TB in prisons: CTB contribution to improving health conditions in eight prisons in Mozambique
  - 14:12 - 14:18
  - Algy Abdula (Mozambique)

- **SOA-345-1** Identifying missing cases among prisoners through a health camp approach: experience from India
  - 14:18 - 14:24
  - Preeti Shokeen (India)

- **SOA-346-1** Tuberculosis in the La Esperanza Prison, Cundinamarca, Colombia
  - 14:24 - 14:30
  - Deccy González Ruge (Colombia)

- **SOA-349-1** Effectiveness of active case finding in addressing tuberculosis control in prisons
  - 14:42 - 14:48
  - Azizullah Hamim (Afghanistan)

- **SOA-350-1** Intensified TB-HIV activity in prisoners at a central jail in Faridkot, Punjab, India
  - 14:48 - 14:54
  - Priyanka Agarwal (India)

- **SOA-351-1** Is it possible to ensure treatment completion of TB patients identified from prison intervention? Experience from India
  - 14:54 - 15:00
  - Shailendra Kumar (India)

06. Recent developments in paediatric TB and lung health

Chair: Andrew Steenhoff (United States of America)
Chair: James Seddon (United Kingdom)

- **SOA-352-1** Urine LF-LAM positivity predicts mortality in hospitalized HIV-infected children
  - 14:00 - 14:06
  - Sylvia LaCourse (United States of America)

- **SOA-360-1** Incidence of LTBI and TB disease after 24-month follow-up in paediatric contacts of drug-resistant tuberculosis patients in Armenia
  - 14:06 - 14:12
  - Helena Huerga (France)
### Scientific Programme

| SOA-353-1 2 | Genotyping and whole genome sequencing to identify tuberculosis transmission related to pediatric patients in British Columbia, Canada, 2005 - 2014 | 14:12 - 14:18 |
| Jennifer L Guthrie (Canada) |

| SOA-354-1 2 | ABCB1 polymorphism (C3435T) influences the plasma concentration of rifampicin | 14:18 - 14:24 |
| Aparna Mukherjee (India) |

| SOA-355-1 2 | Engaging the community in TB household contact screening improved IPT uptake among child TB contacts aged under 5 years in Uganda | 14:24 - 14:30 |
| John Paul Dongo (Uganda) |

| SOA-356-1 2 | Tuberculosis infection is inversely associated with atopic symptoms in HIV-infected and non-infected South African children | 14:30 - 14:36 |
| Heidi Van Deventer (South Africa) |

| SOA-357-1 2 | Reducing antibiotic prescribing for upper respiratory tract infections in children at primary care facilities in rural China: a clustered RCT | 14:36 - 14:42 |
| Xiaolin Wei (Canada) |

| SOA-358-1 2 | Accelerating access to quality TB care for paediatric TB cases through a better diagnostic strategy in four major cities of India | 14:42 - 14:48 |
| Neeraj Raizada (India) |

| SOA-359-1 2 | Monocyte-to-lymphocyte ratio is associated with confirmed TB disease and declines with anti-tuberculosis treatment in HIV-infected children | 14:48 - 14:54 |
| Rewa K Choudhary (United States of America) |

| SOA-361-1 2 | Piloting upfront Xpert® MTB/RIF testing on various specimens for infant presumptive TB cases for early and appropriate treatment initiation | 14:54 - 15:00 |
| Neeraj Raizada (India) |

| SOA-362-1 2 | Drug resistance surveillance in children with bacteriologically-confirmed tuberculosis in the Western Cape, South Africa | 15:00 - 15:06 |
| Hendrik Simon Schaaf (South Africa) |

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**Symposium (SP)**

**Hall 14 - Jalisco Hall**

**14. Adapting an innovative approach to TB workforce development: implementing the ECHO telementoring model in a variety of contexts**

The ECHO (Extension for Community Healthcare Outcomes) telementoring model — based on a combination of video conferencing, case-based learning, sharing of best practices and monitoring outcomes — is being adapted in a growing number of global contexts. The model develops communities of practice and learning that link national and international experts with site level TB practitioners. In this symposium, we will introduce participants to the basic principles of the ECHO model, review examples of adaptation and implementation in a variety of country and transnational contexts and promote discussion of challenges and opportunities for adapting the model to TB workforce development globally.

Chair: Bruce Struminger (United States of America)
Chair: Lisa Chen (United States of America)

**Introduction**

Bruce Struminger (United States of America)
Scientific Programme

The experience of developing and implementing an MDR-TB ECHO programme in Kenya, the first in Africa 14:10 - 14:20
Maureen Kamene Kimenye (Kenya)

The experience of developing and implementing an MDR-TB ECHO in Delhi State, a high-burden context 14:20 - 14:30
Rohit Sarin (India)

The experience of developing and implementing a TB ECHO programme in New Mexico, a low-burden context 14:30 - 14:40
Diana Fortune (United States of America)

Mexico-US Binational TB. ECHO Project 14:40 - 14:50
Kathleen Moser (United States of America)

The experience of developing an MDR-TB ECHO programme in the country of Georgia 14:50 - 15:00
Giorgi Kuchukhidze (Georgia)

The experience of developing an MDR-TB ECHO programme in Guatemala 15:00 - 15:10
Diana Patricia Forno (Guatemala)

Discussion 15:10 - 15:30

Encuentro: Participatory Activity 14:15 - 15:45

Communication Platform for global insertion and local change in poor communities

Chair: Pedro Quinones (Peru)

Global TB Caucus The Americas 14:15 - 14:30
Doris Saldana (Peru)

Asociacion de Promotoras de SaludDOTS Plus 14:30 - 14:45
Ana Fernandez (Peru)

Lutheran Church Peru 14:45 - 15:00
Jorge Aguilar (Peru)

Asociacion regional y Latinoamericana VIH SIDA 15:00 - 15:15
Jose Otiniano (Peru)
Encuentro: Skills Building
14:15 - 15:15
Encuentro session room

EN-ES What is the G20 and how can we use it?
The 2017 G20 German presidency saw the world’s richest economies discuss health for the first time. Antimicrobial resistance, emerging health threats and health systems strengthening were some of the issues high on the agenda. Ever wondered how the G20 works? Want to know the processes and opportunities for influence? How can we work together as civil society with parliamentarians and international organisations for best impact? This interactive workshop with advocates who have worked within the G20 will share their experience and learning and provide a space where civil society and community can plan join engagement within the Argentinian presidency.
Coordinator: Rachael Crockett (United Kingdom)

Speakers:
Rachael Crockett (United Kingdom)
Matthew Oliver (United Kingdom)
14:15 - 14:25

Encuentro: Skills Building
15:30 - 17:30
Encuentro session room

EN-ES Power and influence. Networking and partnerships
This is a highly interactive session that provides participants with a better understanding of the basics of power and influence and how to use them more effectively through creating networks, partnerships and alliances. In this two hour practical exercise, participants will come away with a better understanding of how to use their power and influence with their superiors, subordinates, peers and those within and outside their organisation. Focus is given to developing the interpersonal communication skills necessary to facilitate an enhanced sense of community and cooperation as well as to establish strong partnerships for promoting public health initiatives, in the context of the World Lung Health Conference.
Coordinator: Lara Garrido (United States of America)
Chair: Marianne Gaye-Ayrault (France)

Speaker:
Bartholomew J. Timm (United States of America)
15:30 - 15:40
EN-ES 17. TB and diabetes mellitus in high-burden settings: implementation and research experiences from Asian, African, Caribbean and Latin American countries / Tuberculosis y diabetes mellitus en entornos con una carga elevada: implementación y experiencias de investigación de países de Asia, África, Caribe y América Latina

We now have strong evidence and programmatic experience that demonstrate the feasibility and high yield of bi-directional screening for TB and diabetes mellitus (DM). However more data is needed on larger scale implementation experiences in real-life situations and in settings with diverse backgrounds. Our specific objectives are to:
1. Review global updates on the implementation of TB/DM integration.
2. Share innovations and implementation experiences from different regions of the world.

Actualmente contamos con una fuerte evidencia y experiencia programática que demuestra la viabilidad y el elevado rendimiento de la evaluación bidireccional para la tuberculosis y la diabetes mellitus. No obstante, es necesario disponer de más información relativa a experiencias de implementación a mayor escala en situaciones reales y en entornos con contextos diversos. Nuestros objetivos específicos son:
1. Revisar la información global más reciente sobre la implementación de la integración tuberculosis/diabetes mellitus.
2. Compartir las innovaciones y las experiencias de implementación de diferentes regiones del mundo.

Chair: Pedro Guillermo Suarez (United States of America)
Chair: Kerri Viney (Australia)
EN-ES 07. National and subnational strategic approaches to TB elimination / Enfoques estratégicos a nivel nacional y regional para la erradicación de la tuberculosis

Chair: Caterina Casalini (Tanzania, United Rep.)
Chair: Janet Ginnard (Switzerland)

SOA-363-1 Quantifying the impact of Sustainable Development Goal 1 on TB: a statistical exploration / Cuantificación del impacto del objetivo de desarrollo sostenible 1 para la tuberculosis: una exploración estadística
Daniel Joseph Carter (United Kingdom) 16:00 - 16:06

Frank Mugabe (Uganda) 16:06 - 16:12

SOA-365-1 Many national TB programmes are out of step with international recommendations for testing, treatment and prevention: results of a 30-country survey / Muchos programas nacionales contra la tuberculosis están desfasados con respecto a las recomendaciones internacionales relativas a las pruebas de detección, el tratamiento y la prevención: resultados de una encuesta realizada en 30 países
Suvanand Sahu (Switzerland) 16:12 - 16:18

SOA-366-1 The use of sub-national TB modelling to inform decision making in South Africa / El uso del diseño regional de la tuberculosis para informar la toma de decisiones en Sudáfrica
Tom Sumner (United Kingdom) 16:18 - 16:24

SOA-367-1 Landscape assessment of TB program infrastructure for subnationally differentiated TB programme planning in 10 South and South-East Asian countries / Evaluación del paisaje de la infraestructura del programa de tuberculosis para la planificación regional diferenciada del programa de tuberculosis en 10 países del sur y sureste asiático
Christina Mergenthaler (Netherlands) 16:24 - 16:30

SOA-368-1 Setting the national tuberculosis research agenda: the experience of Ethiopia / Establecimiento de la agenda nacional de investigación sobre la tuberculosis: la experiencia de Etiopía
Daniel Fiseha (Ethiopia) 16:30 - 16:36

SOA-369-1 Ending tuberculosis in Israel: current progress and future challenges / Fin de la tuberculosis en Israel: evolución actual y retos de futuro
Daniel Chemtob (Israel) 16:36 - 16:42

SOA-370-1 Is it possible to achieve the end of tuberculosis in Colombia? / ¿Es posible lograr el fin de la tuberculosis en Colombia?
Lucelly López (Colombia) 16:42 - 16:48

SOA-371-1 Size and characteristics of the tuberculosis drug market in ten high-burden countries / Tamaño y características del mercado de los medicamentos contra la tuberculosis en diez países con una elevada tasa de incidencia
Shelly Malhotra (United States of America) 16:48 - 16:54
The Union 2017 - 48th Union World Conference on Lung Health,
11 - 14 October, 2017,
Guadalajara, Mexico

Scientific Programme

Symposium (SP)
16:00 - 17:30
Hall 3 - Events Ballroom

15. From bench to bassinet: scientific innovations in the fight against maternal-infant TB

New data from pregnant women and infants is improving our understanding of the pathogenesis and the management of TB in these two populations, each of which is critical to stopping the spread of the disease. Immunological and physiologic changes occur rapidly during pregnancy and the neonatal period, impacting TB transmission, disease course and drug metabolism. This symposium will feature emerging research on the diagnosis, treatment and prevention of TB in mothers and infants which will contribute to the elimination of TB globally.

Chair: Vanessa Rouzier (Haiti)
Chair: Amita Gupta (United States of America)

16:00 - 16:15
New insights into the pathogenesis of maternal TB from a cohort of pregnant Indian women
Jyoti Mathad (United States of America)

16:15 - 16:30
Dynamic pharmacokinetic modelling and new treatment trials in pregnant women
Paolo Denti (South Africa)

16:30 - 16:45
Harnessing maternal immunity: the role of breast milk IgA in TB pulmonary disease
Rogelio Hernandez-Pando (Mexico)

16:45 - 17:00
Early immune responses to M. tuberculosis and BCG vaccine in Kenyan infants
Lisa Cranmer (United States of America)

17:00 - 17:15
Gut microbiota and BCG vaccine immunogenicity in South African infants

17:15 - 17:30
Discussion

Symposium (SP)
16:00 - 17:30
Hall 4 - Events Ballroom

16. Childhood pneumonia in the sustainable development era: innovations targeting diagnosis and care in low-income settings

Despite noteworthy reductions in child pneumonia mortality in low-income settings over two decades, as of 2015 pneumonia remains the leading cause of death globally for children aged one to 59 months of age. Continued innovations are urgently needed to further reduce mortality in low-income countries. This symposium aims to gather leading child pneumonia experts working in low-income settings to provide updates on advances in key areas of child pneumonia care namely, pulse oximetry and oxygen treatment technology, the current state-of-the-art in lung imaging by chest radiography and ultrasound and innovations aimed at reducing household air pollution, a key risk factor for severe pneumonia.

Chair: Eric D. McCollum (Lesotho)
Chair: Gail Rodgers (United States of America)

16:00 - 16:15
Household air pollution and pneumonia in children: are cleaner-burning cookstoves part of the solution?
Kevin Mortimer (United Kingdom)
Scientific Programme

**Paediatric pulse oximeters for low-income countries: Lifebox Foundation experience**  
Nick Boyd  
16:15 - 16:30

**Oxygen for all - are we there yet?**  
Hamish Graham (Australia)  
16:30 - 16:45

**Update from the WHO Chest Radiography in Epidemiological Studies (CRES) project**  
Nick Fancourt (Australia)  
16:45 - 17:00

**Lung ultrasound: the future of childhood pneumonia diagnosis?**  
William Checkley (United States of America)  
17:00 - 17:15

Discussion  
17:15 - 17:30

**Symposium (SP)**  
16:00 - 17:30  
Hall 5 - Events Ballroom

### 18. Global Laboratory Initiative (GLI) TB diagnostic connectivity symposium

Over the few last years, there has been significant movement in the area of TB diagnostic connectivity. This has led to a clear understanding on the potential utility and role of diagnostic connectivity to optimise diagnostic and clinical services for TB.

In this session, an overview of the TB diagnostic connectivity landscape will be given as well as approaches on how to best utilise available diagnostic data, build capacity for data utilisation and how to link diagnostic data to patient care. New developments like the Ultra cartridge, multi-device connectivity and the GeneXpert Omni will be featured as well.

Chair: Wayne van Gemert (Switzerland)  
Chair: Kristian van Kalmthout (Netherlands)

**TB diagnostic connectivity: current state, progress and future**  
Kristian van Kalmthout (Netherlands)  
16:00 - 16:15

**Diagnostic data: what can we collect and how can we use it?**  
Patricia Campbell (United States of America)  
16:15 - 16:30

**Building capacity for practical and applicable use of diagnostic data: experiences from two countries**  
Mauro Tobin (Switzerland)  
16:30 - 16:45

**Linking diagnostic data to care: a success story from Kenya**  
Jeremiah Ogoro (Kenya)  
16:45 - 17:00

**Cepheid GeneXpert® Omni: a new era for diagnostic connectivity?**  
Vish Kulkarni (United States of America)  
17:00 - 17:15

Discussion  
17:15 - 17:30
EN-ES 08. Identifying factors to reach 90-90-90 goals

Chair: Silvia Kelbert (Tanzania, United Rep.)
Chair: Karen Du Preez (South Africa)

SOA-374-1 2
16:00 - 16:06
Tuberculosis patients from outside Kampala city carry a higher risk of unfavorable treatment outcomes
Aldomoro Burua (Uganda)

SOA-375-1 2
16:06 - 16:12
Effect of HIV status and antiretroviral treatment on treatment outcomes of tuberculosis patients in a rural primary healthcare clinic in South Africa
Jabulani Ronnie Ncayiyana (South Africa)

SOA-376-1 2
16:12 - 16:18
Revised estimate of TB mortality in England and Wales: the need to use both vital registration and national surveillance data
Colin Campbell (United Kingdom)

SOA-377-1 2
16:18 - 16:24
Long-term mortality among patients with tuberculosis is high in both patients with drug sensitive and multi-drug resistant tuberculosis
Marco Tovar (Peru)

SOA-378-1 2
16:24 - 16:30
Burden of tuberculosis, 1990-2016: findings from the Global Burden of Disease 2016 study
Hmwe Kyu (United States of America)

SOA-379-1 2
16:30 - 16:36
Understanding tuberculosis health system performance in Indonesia through subnational incidence estimation for 514 districts
Asik Surya (Indonesia)

SOA-380-1 2
16:36 - 16:42
Análisis de la letalidad por tuberculosis en Uruguay, periodo 2014 - 2015
Paula Lasserra (Uruguay)

SOA-381-1 2
16:42 - 16:48
Exploring quality of tuberculosis surveillance data in Afghanistan: a cross-sectional study
Ghulam Qader Qader (Afghanistan)

SOA-382-1 2
16:48 - 16:54
Why does a high proportion of Mycobacterium tuberculosis transmission occur outside households and known social contacts in high-incidence settings?
Nicky McCreesh (United Kingdom)
EN-ES 19. Cookstove intervention trials: research update and implications for clean household energy strategies / Estudios de intervención en cocinas: últimas investigaciones e implicaciones de cara a estrategias para una energía doméstica limpia

Nearly three billion people live in households depending on solid cooking fuels that cause indoor and ambient pollution and harm to health across the life course. Interventions to reduce these impacts have included providing improved solid fuel stoves or clean fuels and stoves. This symposium will provide an update and review of results from randomised cookstove intervention trials, including recent and earlier trials. Evidence will be presented concerning efficacy for reducing health risks as well as stove performance, preference, use and scalability. The implications for practice, future research and for reducing global air pollution health impacts will be discussed.

Casi tres mil millones de personas viven en hogares que dependen de combustibles sólidos para cocinar que provocan contaminación en el interior de la vivienda y en el exterior, y dañan la salud a lo largo de la vida. Las intervenciones para reducir estos impactos han incluido la entrega de cocinas con combustibles sólidos de mayor calidad o cocinas y combustibles limpios. Este simposio aportará datos actualizados y revisará los resultados de los estudios de intervención aleatorizados en cocinas, incluidos estudios recientes y previos. Se aportarán evidencias relativas a la eficacia en la reducción de los riesgos para la salud, así como el rendimiento, la preferencia, el uso y la escalabilidad de las cocinas. También se analizarán las implicaciones para la práctica, las investigaciones futuras y la reducción de los impactos globales sobre la salud de la contaminación atmosférica.

Chair: Rajendra Prasad (India)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker/Location</th>
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<tbody>
<tr>
<td>16:00 - 16:15</td>
<td>Health effects of biomass household air pollution (HAP) and results of an improved stove intervention trial in Michoacán, Mexico / Efectos sobre la salud de la contaminación del aire del interior de la vivienda por combustión de biomasa y resultados de un estudio de intervención con una cocina mejorada en Michoacán, México</td>
<td>Jóse Rogelio Pérez Padilla (Mexico)</td>
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<td>16:15 - 16:30</td>
<td>Design and implementation update for a multi-country randomised trial / Actualizaciones en el diseño y la implementación de un ensayo aleatorizado realizado en múltiples países</td>
<td>William Checkley (United States of America)</td>
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<tr>
<td>16:30 - 16:45</td>
<td>Adoption, preference and use of improved or clean cook stoves and fuels: lessons learned / Adopción, preferencia y uso de cocinas y combustibles mejorados o limpios: lecciones aprendidas</td>
<td>Caroline Ochieng (Sweden)</td>
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<tr>
<td>16:45 - 17:00</td>
<td>Cookstove intervention trials: what we have learned and implications for future research / Estudios de intervención en cocinas: qué hemos aprendido e implicaciones para la investigación futura</td>
<td>Kevin Mortimer (United Kingdom)</td>
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<tr>
<td>17:15 - 17:30</td>
<td>Discussion</td>
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Scientific Programme

Symposium (SP)
16:00 - 17:30
Hall 8 - Events Ballroom

20. Role of civil society in people-centred care: experiences from the TB Regional EECA Project (TB-REP): a major programme across Eastern Europe and Central Asia

What does people-centred care for TB mean? Ensuring the person with TB is at the centre of care and has support in order not to interrupt necessary treatment and complete the course is crucial for successful TB care. Civil society not only provides much needed advocacy efforts to ensure the right policies are in place for people-centred care, but also plays a vital role as service providers.

An interactive discussion bringing together the World Health Organization (WHO) and civil society to discuss experience of working collaboratively for improved people-centred TB care as well as presenting the challenges and successes under the Global Fund regional project TB-REP.

Chair: Paul Sommerfeld (United Kingdom)
Chair: Stela Bivol (Moldova)

- Multi-partner approach to people-centred TB prevention and care: WHO’s role and contributions and its linkages with civil society organisations
  Martin van den Boom (Denmark)
  16:00 - 16:20

- Civil society response for bringing the patient in the center of TB care
  Yuliya Chorna (Ukraine)
  16:20 - 16:40

- Focusing on essential interventions to increase patient adherence and building sustainability
  Oxana Rucsineanu (Moldova)
  16:40 - 17:00

- Defining the degree of people-centredness of TB care in eastern Europe and Central Asia from the patient perspective
  Timur Abdullaev (Uzbekistan)
  17:00 - 17:20

- Discussion
  17:20 - 17:30

Symposium (SP)
16:00 - 17:30
Hall 10 - Jalisco Hall

21. Addressing challenges of drug-resistant TB

Multidrug-resistant TB (MDR-TB) is a public health crisis claiming an estimated 250,000 lives globally in 2015. Many countries are currently in the process of remodelling MDR-TB care in line with the End TB strategy and updated treatment recommendations by the World Health Organization. National TB Programs worldwide as yet fail to fully utilise access to new TB treatment drugs and shorter regimens.

The overall objective of this session is to provide the participants with the status of MDR-TB in high priority countries, including status of national guidelines availability and implementation.

Chair: Hind Satti (Lesotho)

- Community-based MDR-TB care: lessons from field implementations in TB CARE II
  Refiloe Matji (South Africa)
  16:00 - 16:15

- Integrating new drugs - short treatment regimen in high-burden countries
  Hind Satti (Lesotho)
  16:15 - 16:30
**Scientific Programme**

**WHO guidelines for the use of new medicines for drug-resistant TB**
Dennis Falzon (Switzerland)  
16:30 - 16:45

**Bottleneck analysis of the drug-resistant TB continuum of care**
Alexander Moran (United States of America)  
16:45 - 17:00

**mHealth tools to support community-based programmes**
A.N.M. Al-Imran (Canada)  
17:00 - 17:15

**mHEALTH tools to support community based TB programs-experience from Pakistan**
Riaz Ahmed Memon (Pakistan)  
17:15 - 17:30

**Oral Abstract session (OA)**
16:00 - 17:30  
Hall 11 - Jalisco Hall

**05. Psychosocial support: impact on health seeking behaviour and treatment outcomes**

Chair: D'Arcy Richardson (United States of America)  
Chair: Manuel Sandoval (Mexico)

**OA-130-12**  
**Behavioural activation counselling as part of a psychosocial support package for people receiving treatment for MDR-TB in Nepal: a feasibility study**  
Sudeepa Khanal (Nepal)  
16:00 - 16:10

**OA-131-12**  
**Evaluating a nursing intervention to improve the quality of life of chronic MDR-TB patients hospitalized for a long time**  
Elena Tarasova (Russian Federation)  
16:10 - 16:20

**OA-132-12**  
**The impact of the Brazilian Family Health Strategy and the Conditional Cash Transfer on tuberculosis treatment outcomes in Rio de Janeiro: an individual-level analysis**  
Anete Trajman (Brazil)  
16:20 - 16:30

**OA-133-12**  
**Impact of hospitalization subsidy incentives on tuberculosis treatment outcomes: experience of Wuhan City, China**  
Guo Xi Chen (China)  
16:30 - 16:40

**OA-134-12**  
**Treatment adherence among persons receiving concurrent MDR-TB and HIV treatment in KwaZulu-Natal, South Africa**  
Fay Stephens (United States of America)  
16:40 - 16:50

**OA-135-12**  
**Using mathematical disease transmission models and population-level epidemiological data to analyse care-seeking behaviour in South Africa**  
Bradley Wagner (United States of America)  
16:50 - 17:00

**OA-136-12**  
**Self-verification and behavioral interventions via mobile phones drastically improves tuberculosis treatment success in a randomized control trial**  
Erez Yoeli (United States of America)  
17:00 - 17:10

**OA-137-12**  
**Wirelessly observed therapy is accurate and confirms more TB medication doses than directly observed therapy**  
Sara Browne (United States of America)  
17:10 - 17:20
Scientific Programme

Oral Abstract session (OA)
16:00 - 17:30
Hall 12 - Jalisco Hall

06. TB in vulnerable populations
Chair: Wendy Lee Wobeser (Canada)
Chair: Kevin Schwartzman (Canada)

OA-138-12 Evaluation of innovative active case finding strategies for TB case
detection in remote communities in Cambodia and India
Hojoon Sohn (Korea, Republic of)
16:00 - 16:10

OA-139-12 Pulmonary tuberculosis, a public health problem amongst Saharia, a
vulnerable tribal group in Madhya Pradesh, Central India
VG Rao (India)
16:10 - 16:20

OA-140-12 Tuberculosis among foreign-born persons within the first year after entry
to the United States, 2008-2015
Diya Surie (United States of America)
16:20 - 16:30

OA-141-12 Tuberculosis in Syrian immigrants in Turkey
Suha Ozkan (Turkey)
16:30 - 16:40

OA-142-12 Active TB case finding among marginalised and vulnerable populations of
India: results of targeted approach
Sripriya Pandurangan (India)
16:40 - 16:50

OA-143-12 Systematic screening for TB among high-risk populations in India: whom
to prioritize?
Bhavin Vadera (India)
16:50 - 17:00

OA-144-12 Successful integrated biomedical and social support for vulnerable
people affected by tuberculosis in Nicaragua
Manuel De Jesus Bravo Reyes (Nicaragua)
17:00 - 17:10

Short Oral Abstract session (SOA)
16:00 - 17:30
Hall 13 - Jalisco Hall

09. Leave no one behind - the hard work of finding cases
Chair: Carrie Tudor (Switzerland)
Chair: Alberto Garcia-Basteiro (Mozambique)

SOA-384-1 Yield of TB contact screening in North West England, 2012-2016: a
retrospective, descriptive study to inform reconsideration of the United
Kingdom’s 2016 TB guidelines
Tom Wingfield (United Kingdom)
16:00 - 16:06

SOA-385-1 Systematic screening of household contacts of tuberculosis cases in sub-
Saharan Africa: derivation of a predictive risk score
Leonardo Martinez (United States of America)
16:06 - 16:12

SOA-386-1 Impact of community health worker household TB screening on case
notification in Afghanistan: a data review
Mohammad Nazim Samadi (Afghanistan)
16:12 - 16:18
Scientific Programme

**SOA-387-1** Increasing TB case notification through a quality improvement intervention
Frank Mugabe (Uganda)

**SOA-388-1** Identifying high-risk individuals for tuberculosis screening in health facilities and communities: Western Kenya, 2015-2016
Courtney Yuen (United States of America)

**SOA-389-1** Should we screen contacts of non-pulmonary tuberculosis cases?
Sean Matthew Cavany (United Kingdom)

**SOA-390-1** Tuberculosis screening in asylum seekers in Germany: case characteristics and yield of screening
Nita Perumal (Germany)

**SOA-391-1** Is it possible to increase TB-notification from the private sector in India? Experience from nine cities
Preeti Shokeen (India)

**SOA-392-1** Gaps in TB screening at health facilities have contributed to a decline in TB case notification in Kampala city
Deus Lukoye (Uganda)

**SOA-393-1** Barriers to tuberculosis case detection and treatment in a densely populated rural area
Esther Somefun (Nigeria)

Symposium (SP)
16:00 - 17:30
Hall 14 - Jalisco Hall

**22. Accelerating toward elimination of paediatric TB through Child Contact Management (CCM)**

Isoniazid preventive therapy (IPT) has proven efficacy to prevent TB in children. Child contact management (CCM) is recommended in high-burden TB countries. This four-step care cascade includes identifying exposed child contacts, screening them, initiating IPT or TB treatment and ensuring completion of therapy. Many programmes have adopted CCM. However implementation remains limited. In 2015, only 7.1 per cent of eligible children aged less than 5 years initiated IPT. This session aims to engage stakeholders by discussing barriers and facilitators at each care cascade step and exploring CCM strategies. Sharing evidence-based experiences is essential to improve CCM and accelerate towards the elimination of paediatric TB.

Chair: Daria Szkwarko (United States of America)
Chair: Yael Hirsch-Moverman

**Child Contact Management (CCM) Systematic Review**
Daria Szkwarko (United States of America)

**Preventive treatment preferences among caregivers of child TB contacts in Lesotho**
Yael Hirsch-Moverman

**Challenges in ensuring preventive therapy for child contacts in Lima, Peru**
Courtney Yuen (United States of America)
The Union 2017 - 48th Union World Conference on Lung Health, 11 - 14 October, 2017, Guadalajara, Mexico

Scientific Programme

Road to TB elimination - contact management is critical in children in Pakistan
Hamidah Hussain (Pakistan)

Discussion

Encuentro: Testimonials
16:00 - 18:00

Hacerte la prueba es elegir la vida: modelo de servicios para diagnostico de VIH con enfoque intercultural y derechos humanos

Ante la grave afectación del VIH a la comunidad, a pesar de los avances técnicos y estimándose en miles de personas que viven con esta enfermedad y desconocen su condición, se pone de manifiesto la necesidad prioritaria de servicios para diagnostico de VIH con enfoque en derechos humanos, género e interculturalidad, que basados en los estándares internacionales permitan a las personas acceder a un diagnostico confiable, seguro, oportuno y gratuito. Se prioriza el acompañamiento que genere criterios suficientes para tomar las decisiones convenientes para el cuidado de su salud, brindando a toda persona que por diferentes circunstancias esté o haya estado más expuesta al virus, las intervenciones preventivas necesarias, que incluyan: información, entrega de insumos de prevención y acceso a la prueba rápida, todo lo anterior acorde a las condiciones sociales, culturales y económicas, favoreciendo así la conexión a los servicios de salud especializados para que la persona inicie su tratamiento. Esta estrategia se considera el escalón inicial en la reducción de la transmisión del VIH, por lo que se convierte en un referente obligado en salud.

Chair: Adriana Veronica Rodriguez Salguero (Mexico)

Hacerte la prueba es elegir la vida: servicios para diagnostico de VIH, gratuitos, confidenciales inmediatos y seguros
Adriana Veronica Rodriguez Salguero (Mexico)
Maria Dolores Navarro Soto (Mexico)

Member Meetings (Regional, Section, Sub-section, Working Group)
16:00 - 17:30

U Tobacco control section meeting

Tobacco control section meeting

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45

Europe Region Meeting

Regional meeting: Europe
Zohar Mor (Israel)

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45

North America Region Meeting
Scientific Programme

2017 NAR - regional meeting and report
Victoria Cook (Canada)

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45
Hall 6 - Events Ballroom

Latin America Region Meeting

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 19:15
Los Arcos

HIV section

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45
Fray Alcalde

Maternal and child lung health working group

Maternal and child lung health working group
Lisa Cranmer (United States of America)

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45
Cabanas I

TB and ethics working group

TB and Ethics Working Group
17:45 - 17:55

Member Meetings (Regional, Section, Sub-section, Working Group)
17:45 - 18:45
Cabanas II

Air pollution and lung health working group
EN-ES 08. Lancet respiratory medicine symposium on lung disease in resource-limited settings: advances in tuberculosis including LTBI and drug-resistant TB

Organised by: The Lancet

This session outlines interventions and implications for clinical practice when managing patients with active and LTBI using both existing and novel approaches.

Drug-resistant TB threatens to wipe out marginal gains made in global TB control over the last decade. This session, targeted at the practicing clinician, translational scientist, and clinician scientist, seeks to highlight several recent advances in the management of drug-sensitive and drug-resistant TB. The session will report several new advances, yet address practical issues facing clinicians at the coalface. The session will also cover the treatment of LTBI in the 21<sup>st</sup> century, an intervention imperative for the elimination of tuberculosis.

Chair: Keertan Dheda (South Africa)
Chair: Tawanda Gumbo (United States of America)

**Introduction and brief comments on the Lancet Symposium**
18:00 - 18:05
Keertan Dheda (South Africa)

**New insights into the pathogenesis of drug-resistant TB and implications for clinical practice**
18:05 - 18:25
Keertan Dheda (South Africa)

**Next generation whole genome sequencing for tuberculosis: ready for clinical practice?**
18:25 - 18:40
Megan Murray (United States of America)

**Therapeutic drug monitoring in clinical practice for drug sensitive and drug resistant TB: when, where and how?**
18:40 - 18:55
Tawanda Gumbo (United States of America)

**Key practice points: The short course WHO-recommended regimen and the use of new drugs like bedaquiline and delamanid**
18:55 - 19:10
Christoph Lange (Germany)

**New tools for TB elimination: treating latent tuberculosis in the 21st century**
19:10 - 19:30
Neil Schluger (United States of America)
03. STREAM trial (Evaluation of a Standardised Treatment Regimen of Anti-tuberculosis Drugs for Patients with Multidrug-resistant Tuberculosis): preliminary stage 1 results

Organised by: The Union and USAID

STREAM is the first large-scale, multi-country clinical trial to examine shortened regimens for multidrug-resistant tuberculosis (MDR-TB). Stage 1 of the trial sought to determine whether a 9-month treatment regimen that demonstrated cure rates exceeding 85% during a pilot program in Bangladesh could achieve similar success in other settings. This symposium will present initial Stage 1 results from this landmark trial focusing on efficacy, safety and health economics. The presentations will be followed by a panel to discuss the programmatic implications of the results.

Chair: José Luis Castro (France)
Chair: YaDiul Mukadi

STREAM trial: rationale and implementation
I D Rusen (United States of America) 18:00 - 18:15

Preliminary efficacy results of STREAM stage 1
Andrew Nunn (United Kingdom) 18:15 - 18:30

Preliminary safety results of STREAM stage 1
Patrick Phillips (United Kingdom) 18:30 - 18:45

Preliminary health economic analysis of STREAM stage 1
S Bertel Squire (United Kingdom) 18:45 - 19:00

Panel discussion 19:00 - 19:30

04. Achieve End TB Strategy: Innovation techniques of TB immunoprophylaxis, diagnostics and anti-TB therapy were developed in China

Organised by: China Anti-tuberculosis Association (CATA)

In order to disseminate techniques and progress of TB immunoprophylaxis, diagnostics, prevention and anti-TB therapy developed in China, Speakers will describe Immunoprophylaxis strategy of tuberculosis; application of systems biology and ‘omics’ in TB vaccine development in China; Recombinant Confusion Protein ESAT6-CFP10 as a Skin Test Reagent for Tuberculosis Diagnosis; Detection of heteroresistance in TB by a second generation drug-resistance assay; an automatic digital scanning and image analysis system which is used to test acid-fast stain sample of sputum smear; Effectiveness and safety of shortened anti-tuberculosis therapy with Mycobacterium vaccae in never-treated sputum smear negative pulmonary tuberculosis patients: a randomized controlled trial.

Chair: Xiaolin Wei (Canada)
Chair: Yan-Lin Zhao (China)

Scientific Bottleneck and Research Strategy of Tuberculosis Control and Prevention in China 18:00 - 18:10
Cheng Shiming (China)
The Union 2017 - 48th Union World Conference on Lung Health,
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Guadalajara, Mexico

Scientific Programme

**Tuberculosis infection and active disease development in rural China: a population-based multicenter prospective study (2013-2015)**
Lei Gao (China)
18:10 - 18:20

**Application of systems biology and ‘omics’ in TB vaccine development**
Lijun Bi (China)
18:20 - 18:30

**A New Diagnosis For Latent TB Infection—A Novel Skin Test :EC®**
Pu Jiang (China)
18:30 - 18:40

**Highly Sensitive Detection of Hetero-resistant Mutations in Mycobacterium Tuberculosis**
Li Qingge (China)
18:40 - 18:50

**An automatic digital scanning and image analysis system has been developed in China**
Zhao Yanlin (China)
18:50 - 19:00

**Mycobacterium tuberculosis Concentration Technology**
Xi Chen (China)
19:00 - 19:10

Satellite session (SS)
18:00 - 19:30

**EN-ES 06. Severe TB and other risk factors of TB mortality: is there a challenge to detect and prevent?**

Organised by: Communicable Diseases Intensive Care Association (INCURE)

Severe forms of tuberculosis are the main reasons of most cases of TB deaths or disability. Severe forms of TB include:
- *miliary TB*
- *caseous pneumonia*
- *extrapulmonary TB*
- *tuberculous meningitis.*

Moreover, tuberculosis is often combined with severe general condition of the patient, or the presence of severe comorbidities which worsen through the course of tuberculosis and/or limit the ability to take anti-TB drugs. Today, treatment of such patients is associated with a variety of challenges, the solution of which can save tens of thousands of lives each year.

Chair: Jeremiah Chakaya Muhwa (Kenya)
Chair: Yurii Feschenko (Ukraine)

**Severe TB: death rate and the main reasons**
Jeremiah Chakaya Muhwa (Kenya)
18:00 - 18:15

**Intensive antibiotics treatment to improve outcomes in TB meningitis**
Rovina Ruslami (Indonesia)
18:15 - 18:30

**Low concentration of isoniazid and rifampicin in serum as the reason for poor treatment results in TB patients**
Yurii Feschenko (Ukraine)
18:30 - 18:45

**Importance of intravenous chemotherapy of TB at the present stage**
Vladimir Krasnov (Russian Federation)
18:45 - 19:00
### Scientific Programme

**Efficacy and total costs of intravenous administration of anti-tuberculosis drugs in patients with multidrug-resistant tuberculosis**

Natalia Lytvynenko (Ukraine)

19:00 - 19:15

**Discussion**

19:15 - 19:25

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**05. Bending the curve - ending TB in the WHO South-East Asia region**

Organised by: The Union - Challenge TB India

WHO's South-East Asia Region has 26% of the world's population yet accounts for 41% of incident TB cases globally. The current decline in TB incidence must be accelerated here to achieve the End TB vision. India's new National Strategic Plan proposes bold strategies with commensurate resources to rapidly decline TB to attain the vision of a TB-free India. Optimal implementation of proven strategies and synergistic efforts of all stakeholders is key to end the TB epidemic. The symposium aims at sharing the potential impact of implementing high-impact interventions contextualised for each country in the Region, and the experiences in India

Chair: Jamhoih Tonsing (India)
Chair: Neerja Arora (India)

**Introduction**

Neerja Arora (India)

18:00 - 18:05

**The why & how of bending the curve in South East Asia region**

Sundari Mase (India)

18:05 - 18:20

**Strategies, Implementation and resource mobilisation for a TB Free India**

Sunit Khaparde (India)

18:20 - 18:35

**Models and tools for community and private sector engagement**

Sarabjit Chadha (India)

18:35 - 18:50

**Synergising partner contributions and optimising resources**

Imran Farooq (India)

18:50 - 19:05
07. Innovating TB Diagnostics: how can we maximize new opportunities and overcome existing challenges?

Organised by: BD

Solution based innovation is key to the fight to eliminate TB. During this session we will discuss the early pre-clinical trial results of BD MAX MDR-TB assay for MTB detection and RIF and INH resistance markers as well as the development work on Bedaquiline as a susceptibility reagent for BD BACTEC MGIT. We will then convene a panel of experts in TB to lead an interactive discussion and Q&A with the audience to discuss how we as a community of clinicians, scientists and advocates can best support the elimination of TB leveraging existing and new technology despite existing challenges.

Chair: Renuka Gadde (United States of America)

Opening remark
Courtney Maus (United States of America)

The need for 1st and 2nd line drug susceptibility testing
Salman Siddiqi (United States of America)

TB expert panel discussion: How can we maximise new opportunities and overcome the existing challenges in eliminating TB?
Renuka Gadde (United States of America)
Catharina Boehme (Switzerland)
Koné Kaniga (United States of America)
Madhukar Pai (Canada)
José Arturo Martínez (Mexico)

Q&A

Encuentro: Skills Building
Foro - Encuentro Expo
Scientific Programme

Encuentro: Art Display
18:00 - 21:00
Encuentro session room

Movie night

Movie night: Two great movies will be displayed:

From the Ashes from 18:00 to 19:20
By National Geographic
Director: Michael Bonfiglio

From the Ashes captures Americans in communities across the country as they wrestle with the legacy of the coal industry and what its future should be in the current political climate. From Appalachia to the West’s Powder River Basin, the film goes beyond the rhetoric of the “war on coal” to present compelling and often heartbreaking stories about what’s at stake for our economy, health, and climate.

(ESP) Este programa muestra a comunidades estadounidenses en su lucha con el legado de la industria del carbón, y cuál debería ser su futuro en el clima político actual. Desde Appalachia hasta la Cuenca del Río Powder del Oeste este documental presenta historias reales y a menudo desgarradoras sobre lo que está en juego para nuestra economía, salud y ambiente.

Lucky Specials from 19:30 to 21:00
By Discovery Learning Alliance
Director: Rea Rangaka

The Lucky Specials are a small-time cover band in a dusty mining town in southern Africa. Mandla The Lucky Specials are a small-time cover band in a dusty mining town in southern Africa. Mandla (Oros Mampofu) works as a miner by day, but is passionate about playing guitar and dreams of making it big in the music industry. When tragedy strikes, Mandla, his friend Nkanyiso (Sivenathi Mabuya) and the band must find the strength to make their dreams reality.
Friday, 13 October 2017

Member Meetings (Regional, Section, Sub-section, Working Group)
07:30 - 08:45
Hall 2 - Events Ballroom

TB section

Working group on TB and migration
Paul Nunn (United Kingdom)

07:30 - 07:40

Satellite session (SS)
07:30 - 08:45
Hall 8 - Events Ballroom

13. COPD: Public Health Problem and its Economic Impact

Organised by: AstraZeneca

The objective of the symposium is to present evidence of the impact that COPD represents in terms of public health for the Mexican population, as well as the economic impact that the disease represents for health institutions in México.

Reposition the need to prioritise COPD for its high impact on public health by opening the intercessional dialogue between HCP’s, Policy Makers, Health Authorities and Pharmacoeconomists.

Target audience:

- National and international policymakers
- Health authorities and health institutions
- HCP’s
- Payers

Chair: Jesús Felipe Gonzalez Roldan (Mexico)

Introduction and presentation of the panel
Jesús Felipe Gonzalez Roldan (Mexico)

07:30 - 07:45

Clinical Approach to COPD
Margarita Fernandez (Mexico)

07:45 - 08:00

Situation of COPD in Mexico
Jesús Felipe Gonzalez Roldan (Mexico)

08:00 - 08:15

Economic impact of COPD
Herman Soto (Mexico)

08:15 - 08:30

COPD in Latin America: Peru case

08:30 - 08:45
**Scientific Programme**

**Member Meetings (Regional, Section, Sub-section, Working Group)**
07:30 - 08:45
Los Arcos

**Adult and child lung health section**

**Conference**
07:30 - 07:40
Los Arcos
James Seddon (United Kingdom)

**Encuentro: Panel Discussion**
08:15 - 08:45
Encuentro session room

**EN-ES 53 Alianzas para el Diagnóstico Oportuno de Tuberculosis Pulmonar en la Jurisdicción Sanitaria No. IV en Cd. Obregón, Sonora, México**

Antecedentes: La tuberculosis (TB) es un padecimiento transmisible que es evitable a través de intervenciones de prevención primaria. Estrategias como la abogacía, comunicación y movilización social, que fortalezcan la detección oportuna y la adherencia terapéutica, y reduzcan el estigma asociado a la enfermedad.

Intervención: En el periodo Agosto - Diciembre de 2016, se reclutó a 13 promotores de salud que fueron asignados a localidades prioritarias de la Jurisdicción Sanitaria de Ciudad Obregón, Sonora, México, mediante concertación de acuerdos de colaboración específica, se establecieron 53 alianzas solidarias con empresas públicas, privadas y de la sociedad civil para fortalecer las actividades del programa contra la TB y acelerar hacia la eliminación.

Resultados: La detección de sintomáticos respiratorios aumentó 65% respecto al año 2015, y se incrementó en 67% la identificación de casos nuevos de TB respecto al año previo. También se observó un incremento de 68% en la detección, en Ciudad Obregón, Sonora, México, mientras la tasa de hospitalización disminuyó 6%. Los promotores también incrementaron las acciones de sensibilización y difusión, pues el volumen de pláticas informativas creció 16 veces respecto al año previo, brindando mensajes educativos a 22,513 personas.

Conclusiones: El recurso humano es necesario para ejecutar las acciones del programa. Los promotores de salud incrementan alianzas con diferentes sectores de la sociedad, lo que contribuye positivamente a fortalecer el capital social para hacer frente a la Tb.

Es importante que la población en general esté informada sobre los signos y síntomas de la tuberculosis pulmonar y la forma tan sencilla de diagnosticarla y tratarla gratuitamente. La mayoría de los médicos no piensan en tuberculosis, por lo que la sensibilización debe ser permanente a través de alianzas con los sectores público, privado y sociedad civil.

**53 Alianzas para el Diagnóstico Oportuno de Tuberculosis Pulmonar en la Jurisdicción Sanitaria No. IV en Cd. Obregón, Sonora, México**

María Isabel Munguía Ruiz (Mexico)

**Plenary session (PL)**
09:00 - 10:00
Plenary Hall - EN-ES

**EN-ES 02. Lived Experience of the impact of the tobacco industry's corporate abuse of economically disenfranchised groups**

Chair: Jeff Collin (United Kingdom)

**The Union Scientific Price**
09:00 - 09:05

**Women's tobacco use**
09:05 - 09:15
Lorraine Greaves (Canada)

**Legal and human rights implications of tobacco use**
09:15 - 09:25
Gustavo Sóñora (Mexico)

**The tobacco industry's corporate abuse of vulnerable groups**
09:25 - 09:35
Adriana Carvalho (Brazil)
Tobacco mourned my family
Alicia Yolanda (Mexico)

09:00 - 10:00
Encuentro: Panel Discussion
Encuentro session room

Plenary Broadcast
Live transmission from the plenary hall into the Encuentro session room

Oral Abstract session (OA)
10:30 - 12:00
Plenary Hall - EN-ES

EN-ES 10. The Union/CDC late-breaker session on TB
Chair: Brian J Baker (Kenya)
Chair: Wendy Lee Wobeser (Canada)

OA-2490-1 Tuberculin skin test conversion and primary progressive disease in South African infants and young children: a longitudinal birth cohort study
Leonardo Martinez (United States of America)

OA-3002-1 Improving tuberculosis laboratory capacity in Mexico: evaluation of a binational public-private strategy.
Diana Carlota Téllez Peralta (Mexico)

OA-2962-1 The yield and cost-effectiveness of mass digital chest X-ray screening for TB detection in South African correctional facilities
Hae-Young Kim (United States of America)

OA-2950-1 Rifampicin dosage and exposure are associated with superior activity in the PanACEA MAMS-TB study
Norbert Heinrich (Germany)

OA-3028-1 What is the true tuberculosis mortality burden? Differences in TB mortality estimates by WHO and IHME
Alberto Garcia-Basteiro (Mozambique)

OA-2905-1 Early safety and efficacy of bedaquiline and delamanid combination for drug-resistant TB in Armenia, India and South Africa
Catherine Hewison (France)
Scientific Programme

Symposium (SP)
10:30 - 12:00
Hall 2 - Events Ballroom

23. Cross-cutting issues in advancing research and development of new tools to end TB

Meeting the targets for eliminating TB as set forth in the UN Sustainable Development Goals and the World Health Organization’s End TB Strategy will require the introduction of new, more effective tools to prevent, diagnose and treat TB. Presenters in this session will discuss the urgent need to advance TB research and development (R&D) – with a particular focus on vaccines, drugs and diagnostics – and cross-cutting issues such as scientific innovations, community engagement, advancing a research agenda, and the importance of increased investment in R&D.

Chair: David Lewinsohn (United States of America)
Chair: Martina Casenghi (Switzerland)

10:30 - 10:50
Advancing a framework for action on TB research
Christian Lienhardt (Switzerland)

10:50 - 11:10
How scientific innovation can lead to the development of new tools to eliminate TB
Hanif Esmail (United Kingdom)

11:10 - 11:30
Community engagement in TB R&D
Kelvin Vollenhoven (South Africa)

11:30 - 11:50
Accelerating toward elimination will require increased investment in R&D
Michael Frick (United States of America)

11:50 - 12:00
Discussion

Oral Abstract session (OA)
10:30 - 12:00
Hall 3 - Events Ballroom

07. Active TB case finding and retrieving missing cases: engagement of community volunteers, civil society, pharmacists and other stakeholders

Chair: Ingrid Schoeman (South Africa)
Chair: Austin Obiefuna (Ghana)

OA-145-13 Enhancing active case finding among people living in the slums of Delhi, India: activity of project Axshya
Anne Marie Moeller (India)

OA-146-13 Interventions led to improved contribution of community tuberculosis care to tuberculosis case notification in two regions of Ethiopia
Zewdu Gashu (Ethiopia)

OA-147-13 Finding missing TB cases through outreach chest camps in peri-urban and rural areas of Pakistan
Irum Fatima (Pakistan)

OA-148-13 Bloggers’ penetration to increase community awareness about tuberculosis
John Sugiharto (Indonesia)

OA-149-13 Community pharmacists in the RNTCP enhanced TB detection and increased outreach of DOTS services in Durg District
Gayadhar Mallick (India)
**Scientific Programme**

**OA-150-13**  
Contribution of active case finding strategy in tuberculosis case detection among selected facilities in Swaziland, Shiselweni region  
Joyce Sibanda (South Africa)  
11:20 - 11:30

**OA-151-13**  
Complementing the biomedical approach with patient-led active case finding: large-scale intervention in the Democratic Republic of Congo  
Olivier Bahati Rusumba (Congo (Democratic Rep.))  
11:30 - 11:40

**OA-152-13**  
Tuberculosis contact investigation contributes over 5-fold to total cases notified in Kampala  
Deus Lukoye (Uganda)  
11:40 - 11:50

**Symposium (SP)**  
10:30 - 12:00  
Hall 4 - Events Ballroom

26. **Making the tobacco industry accountable - success stories and lessons learned for accelerating action**

At great cost to human life, health systems and governments the tobacco industry's interference in public health policies continues unabated as part of its strategy to increase tobacco addiction and profits in poorer countries. While numerous deceitful practices to derail tobacco control and undermine public health have been documented, only a small number of countries have implemented measures to prevent tobacco industry interference in health and tobacco tax policies.

This session aims to present success stories and lessons learned from countries where governments or civil society are actively protecting health policies from industry interference, including measures based on the Framework Convention on Tobacco Control (FCTC) Article 5.3.

**Chair:** Mira Aghi (India)  
**Chair:** Michelle Reyes-Palmones (Philippines)

- **Status report on global and national measures for protecting health policies from tobacco industry interference**  
  Anne Jones (Australia)  
  10:30 - 10:45

- **Making tobacco companies accountable in African countries - building capacity for monitoring, advocacy and policy change**  
  Daouda Adam (Chad)  
  10:45 - 11:00

- **Countering tobacco industry interference in sin tax and smokefree law in the Philippines: gains and lessons from civil society monitoring**  
  Maricar Limpin (Philippines)  
  11:00 - 11:15

- **Observing the observatory: results from Brazil following establishment of first regional tobacco industry observatory in 2016**  
  Silvana Rubano Turci (Brazil)  
  11:15 - 11:30

- **Why Philippines wants to revise its landmark joint memorandum circular on FCTC Article 5.3 after seven years: gains, challenges and gaps**  
  Alicia Dela Rosa-Bala (Philippines)  
  11:30 - 11:45

**Discussion**  
11:45 - 12:00
25. Gender and TB: programmatic considerations and tools

Men and women face different risk factors for TB and different barriers to successful TB diagnosis and treatment. In order to effectively combat the TB epidemic, gender needs to be considered in programming. In this session, participants will learn about differences regarding how men and women experience TB, with a focus on men; learn to use disaggregated data to gain a better understanding of the epidemic; be introduced to tools and approaches for integrating gender in TB programming; and hear about programme successes and lessons learned.

Chair: Elizabeth Pleuss
Chair: Virginia Nagy

- **Gender differences in the experience of TB**
  Elizabeth Pleuss  
  10:30 - 10:45

- **Understand the epidemic: using gender disaggregated data**
  Charlotte Colvin (United States of America)  
  10:45 - 11:00

- **Masculinities and TB: implications for programming**
  Jeremiah Chikovore (South Africa)  
  11:00 - 11:15

- **Integrating gender in TB programming: tools and resources**
  Niyati Shah (United States of America)  
  11:15 - 11:30

- **Integrating gender into TB programming: experiences and lessons learned through challenge TB in Tanzania**
  Vishnu Mahamba (Tanzania, United Rep.)  
  11:30 - 11:45

- **Discussion**
  11:45 - 12:00

EN-ES 24. Preventing a public good from becoming a market failure: sustainability of drug-resistant TB medicines markets and supply chains amidst decentralised financing and procurement

National governments are assuming more responsibility for financing and procuring drug-resistant TB (DR-TB) medicines. Regulatory, quality assurance and other procurement requirements of donors fall away with domestic financing and procurement, resulting in many changes including: the number of manufacturers supplying medicines, the quality and prices of medicines and supplier performance in delivering medicines to countries. Sustainability of the upstream market also depends upon robust national forecasting, inventory management and supply chain visibility. This symposium aims to: describe TB financing and procurement trends, provide projections on how financing and procurement trends will affect the DR-TB market size and function, describe country challenges and strategies in financing and procuring medicines and suggest recommendations on how to sustain market and access gains achieved over the past 15 years.

Chair: Prashant Yadav (United States of America)
Chair: Wim Vandevelde (South Africa)

- **Financing trends, sustainability strategies, and DR-TB lessons learned from the donor perspective**
  Michael Borowitz (Switzerland)  
  10:30 - 10:45
Scientific Programme

Procurement trends: estimating the minimum volume needed to sustain the global market of pre-qualified DR-TB medicines
Brenda Waning (Switzerland)  10:45 - 11:00

Financing and procurement of DR-TB medicines from the Georgian perspective: lessons learned with the transition from Global Fund to domestic financing
Irma Khonelidze (Georgia)  11:00 - 11:15

Financing and procurement of DR-TB medicines from the perspective of Swaziland: lessons learned with the transition from Global Fund to domestic financing
Weile Sikhondze (Swaziland)  11:15 - 11:30

Prescription for DR-TB medicines market sustainability: recommendations for donors, national TB programmes and other stakeholders
Sharonann Lynch (United States of America)  11:30 - 11:45

Discussion  11:45 - 12:00

Symposium (SP)
10:30 - 12:00  Hall 7 - Events Ballroom

EN-ES 27. Zoonotic TB: every TB case counts! Diagnostics, vaccines and surveillance: from the Americas to India

Mycobacterium TB is the primary causal agent of human TB worldwide. The official incidence estimates of zoonotic TB (ZTB) - caused by Mycobacterium bovis, the causal agent of bovine TB – are based only on global TB estimates. The main challenge lies with the Mycobacterium specie-unspecific diagnostic used in most of the high-burden TB countries. This bottle-neck is of particular resonance for developing countries, which are characterised by a high TB burden. There is now recognition that the success of the current elimination strategy must include ZTB. This symposium will discuss current scientific and evidence-based research on ZTB globally and the challenges with special emphasis on the Americas.

Chair: Alejandro Perera (Mexico)

Non-invasive diagnostic sampling for tuberculosis in humans and animals
Gerard Cangelosi (United States of America)  10:30 - 10:45

Transmission models for evaluating next generation vaccines and gnostics to combat human, animal and zoonotic tuberculosis
Frederick Quinn (United States of America)  10:45 - 11:00

Estimates of M. bovis disease in India: insights from the national anti-TB drug resistance survey
Patrick Moonan (India)  11:00 - 11:15

Whole genome sequencing of zoonotic tuberculosis offers a pathway for collaboration between agencies and countries
Suelee Robbe-Austerman (United States of America)  11:15 - 11:30

Improved diagnosis of bovine TB
Shu-Hua Wang (United States of America)  11:30 - 11:45

Discussion  11:45 - 12:00
10. HIV and TB: lessons from Africa

Chair: Keren Middelkoop (South Africa)
Chair: Nicola Zetola (Botswana)

SOA-394-1 Clinic-based urinary LAM as a biomarker of clinical disease, tuberculosis bacillary burden, and mortality among ART-naïve HIV-infected adults in South Africa
Paul Drain (United States of America)  
10:30 - 10:36

SOA-395-1 Subclinical tuberculosis among HIV positive adults in South Africa: a cohort study
Kristina Bajema (United States of America)  
10:36 - 10:42

SOA-402-1 Value of determine-TB LAM test as screening test and diagnostic tool for tuberculosis diagnosis in HIV-positive adults
Helena Huerga (France)  
10:42 - 10:48

SOA-403-1 Diagnostic accuracy, incremental yield and cost of determine TB-LAM and sputum induction for in seriously ill adults with HIV, cough and WHO danger signs
Tom Boyles (South Africa)  
10:48 - 10:54

SOA-396-1 Tuberculosis screening, incidence and isoniazid preventive therapy among HIV-infected patients before and after ART initiation, Kenya, 2003-2015
Herman Weyenga (Kenya)  
10:54 - 11:00

SOA-397-1 Pediatric isoniazid preventative therapy in HIV-positive patients at the Baylor Center of Excellence in Mbabane, Swaziland
Alexander Kay (Swaziland)  
11:00 - 11:06

SOA-398-1 High HIV prevalence among presumptive tuberculosis patients in an urban setting: lessons from Kampala city, Uganda
Deus Lukoye (Uganda)  
11:06 - 11:12

SOA-399-1 A descriptive analysis of PEPFAR’s TB-HIV portfolio: TB cases with known HIV status and TB-HIV co-infected cases on ART in East and Southern Africa
Catherine Nichols (United States of America)  
11:12 - 11:18

SOA-400-1 Pulmonary function before and after ART initiation in South African adults with pulmonary TB and HIV
Sara C Auld (United States of America)  
11:18 - 11:24

28. Tuberculosis en poblaciones especiales de America

Es conocido que la tuberculosis es facilmente diseminable entre poblaciones vulnerables, entre ellos poblaciones indígenas, personas privadas de su libertad y migrantes, para lo cual cada población requiere de estrategias específicas para su atención y control de la tuberculosis.

Chair: Anne Fanning (Canada)
Scientific Programme

10:30 - 10:45
Abordaje de la interculturalidad para la atención de la TB en comunidades indígenas
Brenda Medel (Mexico)

10:45 - 11:00
La tuberculosis en las prisiones de México
Dolores Arana (Mexico)

11:00 - 11:15
Tuberculosis en comunidades indígenas de Bolivia
Mirtha Del Granado (United States of America)

11:15 - 11:30
Tuberculosis en migrantes Mexicanos
Carlos Vera (Mexico)

11:30 - 11:45
Tuberculosis en trabajadores de la salud en México
Jose Sulca (Mexico)

Discussion

Symposium (SP)
10:30 - 12:00
Hall 10 - Jalisco Hall

29. Modelling to support acceleration toward elimination

There is an urgent need to accelerate efforts towards elimination now that the World Health Organization's End TB Strategy and the Stop TB Global Plan to End TB are in place.

Mathematical modelling is a critical tool for exploring the health impacts, cost-effectiveness and resource implications of future TB care and prevention options.

In this session we present new results on four key modelling initiatives, supporting acceleration toward elimination and a country-level National TB Programme perspective on the pros and cons of modelling for country-level decision making.

Chair: Sismanidis Charalampos (Switzerland)

The potential for new diagnostics to improve TB case detection: a transmission dynamic model of nine high-burden countries
Nicolas A Menzies (United States of America)

Informing decision-making for universal access to quality TB diagnosis? India: an economic-epidemic model
Hojoon Sohn (Korea, Republic of)

Modelling the cost of TB interventions at scale: applied cost functions
Gabriela Gomez (Netherlands)

Country-level modelling guidance
Finn McQuaid (United Kingdom)

A country perspective: modelling as a useful tool to help think about elimination?
Pak Asik (Indonesia)

Discussion
Oral Abstract session (OA)
10:30 - 12:00
Hall 11 - Jalisco Hall

08. State of the art - updates on childhood TB and lung health
Chair: Adrie Bekker (South Africa)

OA-153-13 Improved treatment outcomes in HIV-positive adolescents with TB compared to adults in Kenya
Sarah Puryear (United States of America)
10:30 - 10:40

OA-154-13 Childhood multidrug-resistant tuberculosis in the European Union and European Economic Area
Marieke van der Werf (Sweden)
10:40 - 10:50

OA-155-13 Pharmacokinetics of rifampicin in African children: evaluation of the new WHO dosing guidelines
Paolo Denti (South Africa)
10:50 - 11:00

OA-156-13 Hypoxaemia and the use of pulse oximetry and oxygen in Nigerian hospitals: preliminary results from a multi-country field trial
Hamish Graham (Australia)
11:00 - 11:10

OA-157-13 Feasibility, safety and tolerability of nasopharyngeal aspirates and string tests for diagnosis of TB with Xpert® MTB/RIF in HIV-infected children: ANRS 12229 PAANTHER 01 study
Dim Bunnet (Cambodia)
11:10 - 11:20

OA-158-13 HIV-infected children with antiretroviral therapy from infancy have lung function comparable to population norms
Sarah Benki-Nugent (United States of America)
11:20 - 11:30

OA-159-13 The World Health Organization´s symptom-based screening approach for child contacts: a prospective validation from sub-Saharan Africa
Leonardo Martinez (United States of America)
11:30 - 11:40

Symposium (SP)
10:30 - 12:00
Hall 12 - Jalisco Hall

30. Moving towards elimination: test and treat strategies for healthcare workers with TB infection in high-burden settings
Healthcare facilities in countries with high TB or TB/HIV burdens provide a potent environment for TB transmission, where 50% of healthcare workers (HCWs) in these settings test positive for latent TB infection (LTBI). Until recently, National TB Programs in high-burden countries have not prioritized HCW screening for TB infection. While infection control practices stand to be improved, the magnitude of LTBI infection in health facilities must be quantified to better understand current barriers and implementation strategies in HCW TB screening. This requires designing appropriate test and treat strategies for HCWs and determining implementation feasibility in the field setting.

Chair: Lisa V. Adams (United States of America)
Chair: Elizabeth Talbot (United States of America)

What we have learned from all the IGRA (Interferon-Gamma Release Assays) studies among healthcare workers in high-incidence countries
Madhukar Pai (Canada)
10:30 - 10:45
Scientific Programme

10:45 - 11:00
Barriers to testing and treating LTBI among healthcare workers in high-burden settings
Edward Nardell (United States of America)

11:00 - 11:15
Integrating LTBI within occupational health strategies in South Africa
Lindiwe Mvusi (South Africa)

11:15 - 11:30
LTBI test and treat global guidelines
Soy Ty Kheang (Cambodia)

11:30 - 11:45
Challenges to LTBI testing and treatment implementation in resource-limited settings
Tamar Gabunia (Georgia)

11:45 - 12:00
Discussion

Oral Abstract session (OA)
10:30 - 12:00
Hall 13 - Jalisco Hall

09. MDR-TB treatment: pharmacovigilance and adverse event outcomes from the field
Chair: Francesca Conradie (South Africa)
Chair: I D Rusen (United States of America)

OA-160-13 Setting up an active pharmacovigilance system for the endTB project
Nathalie Lachenal (France)

OA-161-13 Long-term safety and outcomes of prolonged delamanid treatment for MDR-TB: a cohort from Latvia and France
Lorenzo Guglielmetti (France)

OA-162-13 Adverse events over 6 months with delamanid in a programmatic setting in Khayelitsha, South Africa
Jennifer Hughes (South Africa)

OA-163-13 Safety of multidrug-resistant tuberculosis treatment amongst patients receiving bedaquiline in a compassionate use programme in Armenia and Georgia
Catherine Hewison (France)

OA-164-13 Risk factors for developing hypothyroidism among MDR-TB patients receiving Eto and/or PAS in Maputo, Mozambique
Iris Finci (Switzerland)

OA-165-13 Aminoglycoside-induced hearing loss: a profile of HIV-positive and HIV-negative drug-resistant tuberculosis patients in Kwa-Zulu Natal, South Africa
Shadrack Mngemane (South Africa)

OA-166-13 Addressing the under-reporting of adverse drug reactions to accelerate the elimination of drug-resistant tuberculosis
Yohanna Kambai Avong (Nigeria)

OA-167-13 Psychiatric comorbidity among drug-resistant tuberculosis patients
Chinmay Laxmeshwar (India)
Symposium (SP)
10:30 - 11:30

Health care provided to presumptive and Tuberculosis patients in Iraqi crisis area (internally displaced population, refugees and returnees)

National Tuberculosis control program in Iraq has an important and leading role in fighting against tuberculosis. Iraq faces many challenges and over the last years mostly related to fragile security status. The National TB control programme also faces many challenges in fighting TB during this period. For this reason, the Iraqi National Tuberculosis control program started to put new strategy and SOPs to fight TB.

National TB control program started to work in collaboration with Civil society such as Iraqi anti-TB association, and delivered care for internally Displaced Population, refugees and returnees to area liberated from ISIS, also delivered care to those people still in area captured by ISIS. Also engaged community including students in delivering care and get benefit from SMS program to communicate with patients in crisis area, and collaborate with many organization such as WHO, UNDP and IOM to achieve the goal (united together to end TB).

Coordinator: Mohammad Abdulrazaq (Iraq)
Chair: Samer Ameen (Iraq)

Encuentro: Panel Discussion
10:30 - 12:30

EN-ES Power of community engagement in research and beyond myth or reality?

Community engagement (CE) aims to empower communities to contribute to improving TB policies, through community participation in research. The STREAM study has been developing CE strategies to establish a sustainable and effective culture of community participation in health policies by means of engagement in its research. Community Advisory Boards (CABs) have been established in many STREAM sites and CE-Officers (CE-Off) were appointed, with the goal of improving transparency of research information and facilitating communication of the needs/perspectives of communities and key-affected populations.

This multi-country panel brings to discussion the issues raised out of the experiences of STREAM CABs in Georgia, Moldova and Mongolia. It will gather representatives (CAB coordinators and CE-Offs) from each site, each of whom will focus on a theme based on their challenges and accomplishments.

Three short rounds of questions will be triggered by study-related researchers to the sites’ representatives. Activists and researchers will engage in a rapid debate after each round of questions.

1st round poses specific questions to the CE-Offs on communication, exchange of information and building reliable/trustful partnerships among different sectors: communities, academia, governments.

2nd round will address the perspectives of both CAB Coordinators and CE-Officers on the means for effective change in TB policies, out of the CE activities by STREAM CABs.

Final round will focus on sustainability of CE on a medium, long run. CAB coordinators will respond according to their experiences and themes proposed.

After the three short rounds of debates, the floor will be opened, allowing a fruitful exchange of experiences with other international CABs and CE experiences.

A deliverable from the session will be shared at the end of the Union conference. It will be comprised of recommendations arising from the debates, which will be presented and agreed with all participants by the end of the panel discussion.

Coordinator: Jessica Nan (United States of America)
Coordinator: Ezio Tavora (Brazil)
Chair: Blessina Amulya Kumar (India)
Chair: Erica Lessem (United States of America)
Meet the expert session (MTE)
12:15 - 13:15
Hall 2 - Events Ballroom

01. Managing tuberculosis in pregnant women and newborns

This session will highlight some of the key knowledge, ongoing science and research gaps relevant to TB prevention and treatment in pregnant and postpartum women.

Amita Gupta, MD MHS is an Associate Professor of Medicine and International Health at Johns Hopkins University, USA. She conducts HIV/TB studies in India and globally as part of the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) and Adult AIDS Clinical Trials Networks (ACTG) focused on treatment and prevention of TB, including in pregnant women

Adrie Bekker, MBChB, MMed (Paeds), PhD is a neonatologist at Stellenbosch University, South Africa. She conducts TB and HIV pharmacokinetic studies in South African newborns as part of the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) network. She is a clinician at Tygerberg Hospital, Cape Town where she manages TB- and HIV-exposed and infected newborns.

Chair: Adrie Bekker (South Africa)
Chair: Amita Gupta (United States of America)

Managing tuberculosis in pregnant women and newborns. Part I
Amita Gupta (United States of America)

Managing tuberculosis in pregnant women and newborns. Part II
Adrie Bekker (South Africa)

Meet the expert session (MTE)
12:15 - 13:15
Hall 3 - Events Ballroom

02. Zoonotic TB at the human/animal interface in North America

International trade drives TB control programmes in livestock and regions with high zoonotic TB (ZTB) prevalence are often cordoned off from trade, paradoxically receiving less support for TB control and increasing the risk for zoonotic transmission. Current investigation practices of ZTB in humans do little to prevent new ZTB cases. We will discuss how we can use whole genome sequencing to coordinate information between veterinary and public health agencies to change this paradigm for mutual benefit

Chair: Suelee Robbe-Austerman (United States of America)
Chair: Alejandro Perera (Mexico)

Zoonotic TB at the human/animal interface in North America
Suelee Robbe-Austerman (United States of America)
Alejandro Perera (Mexico)
Scientific Programme

Meet the expert session (MTE)  
12:15 - 13:15  
Hall 5 - Events Ballroom

03. MDR-TB challenging cases and potential role of therapy to drug monitoring

Management of MDR-TB under programme condition  
Chen-Yuan Chiang (Taiwan)  
12:15 - 12:25

Management of difficult MDR-TB cases  
Francesca Conradie (South Africa)  
12:25 - 12:35

The role of therapeutic drug monitoring  
Jan-Willem Alffenaar (Netherlands)  
12:35 - 12:45

Meet the expert session (MTE)  
12:15 - 13:15  
Hall 6 - Events Ballroom

EN-ES 04. Xpert MTB/RIF is more sensitive than smear microscopy and allows for rapid diagnosis of Rifampicin Resistant-TB. Despite this, multiple RCTs have failed to show a benefit on patient relevant outcomes - does this call for a change in how we utilise GXP in resource limited settings?

Recent implementation studies suggest that the current role of GXP in diagnostic algorithms in high burden, low resource settings is not having an impact on TB outcomes, and as such use of this test in these settings requires a rethink  
Tom Boyles (South Africa)  
12:15 - 12:25

While recent RCTs have not demonstrated the anticipated benefit on patient outcomes, there are study design and implementation issues that may play a role in this, and we shouldn’t throw the baby out with the bath water.  
Claudia Denkinger (Switzerland)  
12:25 - 12:35

Encuentro: Art Display  
12:15 - 12:45  
Foro - Encuentro Expo

Meet the Artist: More than a decade of ideas, promoting the fight against tuberculosis in Mexico

Tuberculosis is a public health problem that has preoccupied not only health institutions but the community as a whole, including patients and their families. For this reason, for more than a decade, the National Program for the Fight against Tuberculosis has compiled and protected the dissemination work of several states. Approximately 200 unique pieces, made up by different artists and scientific minds are part of this collection to create a message, as an invitation for the community to be aware on the symptoms, causes, treatment and cure of TB. These pieces of art are showcased in conventions, business meetings, health fairs, World TB Day celebrations, among others as an invitation to accelerating toward elimination and make Mexico free of tuberculosis.

Coordinator: Martha Angelica Garcia Aviles (Mexico)  
Coordinator: Luisa Eugenia Loaiza Berman (Mexico)

More than a decade of ideas, promoting the fight against tuberculosis in Mexico  
Luisa Eugenia Loaiza Berman (Mexico)
EN-ES Using video-supported interventions to improve TB medication adherence

Video-support to TB treatment is one concept included in the 2015 WHO/ERS digital health target product profiles. This symposium will outline how synchronous and asynchronous video observed therapy and artificial intelligence via smartphones can support people prescribed medication for active TB, latent TB infection and associated comorbidities. The presentations will describe how the evidence base has rapidly advanced from small feasibility studies to RCTs, and is informing health policy. The global proliferation of affordable smartphones and tablet computers, coupled with expanded internet coverage, is also making it feasible to obtain data on programmatic implementation in diverse settings.

Chair: Richard S Garfein (United States of America)
Chair: Alistair Story (United Kingdom)

Collecting data to assess the performance of video-supported TB therapy: useful lessons
Richard S Garfein (United States of America)  
12:30 - 12:45

Experience in the UK and the RCT in London
Alistair Story (United Kingdom)  
12:45 - 13:00

VOT in patients with HIV-associated TB in Tijuana, Mexico
Fatima Muñoz (Mexico)  
13:00 - 13:15

VOT: from pilot to programmatic scale-up
Alena Skrahina (Belarus)  
13:15 - 13:30

Using a target product profile (TPP) to develop the technology and its evidence base for video-supported TB therapy
Dennis Falzon (Switzerland)  
13:30 - 13:45

Poster discussion session (PD)
12:45 - 13:45

Poster Area

19. Next generation sequencing versus PCR (polymerase chain reaction) based typing: what is all the fuss?

Row 17

Chair: Silvia Kelbert (Tanzania, United Rep.)

PD-664-13 Genetic diversity of clinical M. tuberculosis strains from Yangon and Mandalay Regions, Myanmar: using the MIRU-VNTR method
Wah Wah Aung (Myanmar)  
13:15 - 13:30

PD-665-13 Whole genome sequencing analysis of drug-resistant Mycobacterium tuberculosis in Peru
Zully M Puyen (Peru)  
13:30 - 13:45

PD-666-13 Whole genome sequencing analysis of Mycobacterium tuberculosis isolates from patients with drug-resistant tuberculosis in Japan
Nobuyuki Kobayashi (Japan)  
13:45 - 14:00

Raul Diaz (Cuba)  
14:00 - 14:15
Scientific Programme

PD-668-13 Development of a molecular epidemiology surveillance system for tuberculosis in Mexico
Roberto Zenteno-Cuevas (Mexico)

PD-669-13 High genetic diversity among Mycobacterium tuberculosis complex isolates circulating in the Central Region of Cameroon
Emmanuel Mouafo Tekwu (Ghana)

PD-670-13 Contribution of MIRU-VNTR genotyping to understand transmission dynamics of multidrug-resistant tuberculosis in patients from Medellin, Colombia
Teresa Realpe (Colombia)

PD-671-13 Direct MIRU-VNTR genotyping of Mycobacterium tuberculosis from Xpert® MTB/RIF remnants
Edson Mambuque (Mozambique)

PD-672-13 Estudio de la diversidad genética de aislados clínicos de Mycobacterium tuberculosis
Anabel Ordaz Vázquez (Mexico)

20. HIV-TB services: how can we do better?

Row 18

Chair: Katharina Kranzer (United Kingdom)

PD-673-13 Operational issues in HIV-screening among TB patients in central India: qualitative insights from healthcare providers and patients
Moumita Biswas (India)

PD-674-13 An improvement in identification of presumptive TB cases enhanced improved coverage of HIV testing and detection
James Mpunga (Malawi)

PD-675-13 High HIV-TB burden but suboptimal HIV services uptake for pediatric TB patients in public health facilities in Tanzania
Bernadette Ngeno (United States of America)

PD-676-13 Universal HIV test-and-treat does not translate into higher CD4 counts and ART in Malawian adults with smear-positive pulmonary TB
Derek Sloan (United Kingdom)

PD-677-13 Keeping mothers and babies alive: integrating TB case finding in prevention of mother-to-child transmission of HIV settings in Kenya
Rachael Muinde (Kenya)

PD-679-13 Lessons learned from diagnostic work-up of TB in a high HIV prevalence South African setting
Stephanie Gati (United States of America)

PD-681-13 Acceptability of a comprehensive clinic-based intervention to increase health care provider prescription of isoniazid preventive therapy in South Africa
Brooke Jarrett (United States of America)
Scientific Programme

PD-682-13  Improving isoniazid preventive therapy uptake among people living with HIV in ART facilities in Nigeria: continuous quality improvement approach
Isaac Alobu (Nigeria)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

21. Maximising results but minimising harm - adverse events in MDR-TB treatment
Row 19
Chair: Robert Horsburgh

PD-683-13  Structural and behavioural correlates of aminoglycoside hearing loss among HIV-positive and HIV-negative patients in Swaziland
Samson Malwa Haumba (Swaziland)

PD-684-13  Risk for baseline hearing loss among new drug-resistant tuberculosis patients in South Africa
Hyejeong Hong (United States of America)

PD-685-13  Drug-induced hypothyroidism during treatment for multidrug-resistant tuberculosis in Swaziland
Kees Keus (Swaziland)

Shadrack Mngemane (South Africa)

PD-687-13  Roll-out of audiometry at a national MDR-TB hospital in Tanzania: high rates of kanamycin-related ototoxicity progressive despite treatment modification
Stellah George Mpagama (Tanzania, United Rep.)

PD-688-13  Implementation of active Drug Safety Monitoring (aDSM) for monitoring adverse events in DR-TB treatment with bedaquiline in the Republic of Tajikistan
Mavluda Makhmudova (Tajikistan)

PD-689-13  Adverse drug reactions of chemotherapy with bedaquiline and linezolid in patient with drug-resistant tuberculosis
Ekaterina Belyaeva (Russian Federation)

PD-690-13  Ensuring active drug-safety monitoring and management (aDSM) for patients on bedaquiline and delamanid containing regimens in Georgia
Nino Lomtadze (Georgia)

PD-691-13  Management of QT prolongation and cardiac toxicity of new TB drugs in Europe: a cross-sectional TBnet survey
Lorenzo Guglielmetti (France)

PD-692-13  Adverse event profile of a DRTB infection treatment cohort: experience from the Indus Hospital TB program
Sara Siddiqui (Pakistan)
Scientific Programme

22. Using technology to advance drug-resistant TB care

Row 7

Chair: Einar Heldal (Norway)

**PD-693-13** Electronic reporting of adverse effects of second-line anti-tuberculosis drugs in Nigeria
Assefa Berhanemaskel (Ethiopia)

**PD-694-13** Effectiveness of mHealth technologies in the management of DR-TB DOTS at community level in Bangladesh
Sayeed Imtiaz (Bangladesh)

**PD-695-13** Advancing MDR-TB research through the multi-national TB Portals Program and online database platform
Jessica Taaffe (United States of America)

**PD-696-13** Kyrgyzstan’s approach to tackle DR-TB through early warning system for expedited uptake of new medicines
Jazgul Tunkatarova (Kyrgyz Republic)

**PD-698-13** A quantification and early warning system, QuanTB, helps to avoid TB medicines stock-outs in Uzbekistan
Ilkhombek Butabekov (Uzbekistan)

**PD-699-13** The costs and challenges of setting up a customized web-based electronic health records system for DR-TB in a low in-come country: lessons from Uganda
Denis Joel Sama (Uganda)

**PD-700-13** Lessons learned from the design, development, and deployment of End TB electronic medical records for MDR-TB across 16 countries
Catherine Hewison (France)

**PD-701-13** Impact of implementing an early warning system to improve TB medicine procurement in Ethiopia
Dagim Damtew (Ethiopia)

23. Extrapulmonary TB, vitamin D, treatment outcomes and Aspergillus

Row 21

Chair: Kevin Schwartzman (Canada)

**PD-702-13** High burden of genital TB among women with infertility in India: need for an intensified approach
Shilpa Naik (India)

**PD-704-13** A 13 year trend of tuberculosis treatment outcome among patients attending health facilities in Harari regional state, Harar, Ethiopia
Daniel Fisseha (Ethiopia)
**Scientific Programme**

**PD-705-13** Tuberculosis care across urban India's private health sector: a two-city, cross-sectional study  
Benjamin Daniels (United States of America)

**PD-706-13** Prevalence and risk factors of chronic pulmonary aspergillosis in patients with post-tubercular sequelae in India  
Rupak Singla (India)

**PD-708-13** Tuberculosis pericardica su asociación con tuberculosis diseminada conlleva alta mortalidad.

**PD-709-13** Role of medical thoracoscopy in the management of multiloculated empyema  
Kamran Khan Sumalani (Pakistan)

**PD-710-13** Bronchopleural complications after surgery in patients with pulmonary tuberculosis  
Odiljon Nematov (Uzbekistan)

**PD-712-13** Using serous fluid drainage flocky precipitate (SFDFP) as testing sample for diagnosing tuberculous serositis  
Liu Xuhui (China)

**Poster discussion session (PD)**  
12:45 - 13:45

**Poster Area**  
24. Los medicamentos correctos en la dosis adecuada en el momento adecuado - TB drugs: use them right

Row 22

Chair: Paolo Denti (South Africa)

**PD-713-13** Assessment of the quality of anti-tuberculosis medicines in Almaty, Kazakhstan, 2014  
Dilyara Nabirova (Kazakhstan)

**PD-714-13** Efficacy and safety of parenteral anti-tuberculosis therapy of patients with TB meningitis compared to standard treatment  
Mykhailo Kuzhko (Ukraine)

**PD-715-13** A study to compare efficacy of oral high dose rifampicin with standard dose rifampicin in tuberculous meningitis  
Anita Basavaraj (India)

**PD-716-13** Intravenous application of rifampicin and ethambutol in patients with TB treatment failure and impaired suction function of the small intestine  
Dmytro Butov (Ukraine)

**PD-717-13** Discontinuation of pyrazinamide in patients treated for MDR-TB in a clinical trial in Lima, Peru  
Bruno Martel (Peru)

**PD-718-13** Adaptation of GPP guidelines for TB vaccine research: a participatory approach  
Anne Schley (South Africa)

**PD-719-13** A pharmacokinetic study of super-boosted lopinavir/ritonavir in combination with rifampicin in HIV-1-infected patients with tuberculosis  
Catherine Boulanger (United States of America)
The Union 2017 - 48th Union World Conference on Lung Health, 11 - 14 October, 2017, Guadalajara, Mexico

Scientific Programme

PD-720-13  Daily 800 mg vs. 600 mg efavirenz in HIV patients treating tuberculosis with a rifampicin-based regimen: a randomised controlled trial
Mariana Xavier (Brazil)

PD-721-13  Right drugs for the right treatment of tuberculosis in the private sector: an unchecked issue
Imran Farooq (India)

PD-722-13  Active screening for hepatotoxicity: identifying time periods for targeted monitoring in tuberculosis patients
Meredith Milstein (United States of America)

Poster discussion session (PD)
12:45 - 13:45

25. Lungs matter - recent developments in adult lung health
Row 2
Chair: Thomas Matte (United States of America)

PD-723-13  Pulmonary hypertension in stable COPD patients and its effect on exercise capacity using the six minute walk test
Swetabh Purohit (India)

PD-724-13  Metabolic biomarkers for the opportune diagnosis of COPD in vulnerable population
Maribel Rodriguez Aguilar (Mexico)

PD-725-13  Perception of asthma control among in an out-patient clinic at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia
Tewodros Haile Gebremariam (Ethiopia)

PD-726-13  Knowledge and attitudes of health professionals on bronchial asthma in Niamey
Mourtala Mohamed Assao Neino (Niger)

PD-727-13  Respiratory function among workers in a vegetable oil mill in Benin
Menonli Adjobimey (Benin)

PD-729-13  Household air pollution and pneumonia in Malawian adults: a case-control study
Hannah Jary (United Kingdom)

Poster discussion session (PD)
12:45 - 13:45

26. Private sector engagement in TB care: lessons learned from low-income countries
Row 23
Chair: Nicola Zetola (Botswana)

PD-731-13  Private sector effectiveness in treating TB patients: a document review of the Kabul urban DOTS experience
Said Mirza Sayedi (Afghanistan)
Scientific Programme

PD-733-13  Public-private mix as an indispensable strategy to END TB: six years project experience in Ethiopia
Anteneh Kassa (Ethiopia)

PD-734-13  Can we engage large private hospitals to increase TB notifications from private sector in India?
Preeti Shokeen (India)

PD-735-13  Effects of engaging public and private health facilities in TB case finding in Afghanistan: urban DOTS implementation experiences
Azizullah Hamim (Afghanistan)

PD-736-13  Alianza programa tuberculosis de la jurisdicción sanitaria VII y consultorios de Farmacias Similares Fundación BEST
Carlos Gerardo Sánchez Oropeza (Mexico)

PD-737-13  A public-private mix intervention to enhance tuberculosis case finding in resource constrained industrial setting in Himachal, India
Ajay Kumar Singh (India)

PD-738-13  Urban TB control in Bandung, Indonesia: exploring the potential contribution of private practitioners to finding the missing cases
Asik Surya (Indonesia)

PD-739-13  “The Missing Million” TB patients in India: understanding enabling modes of reporting TB cases by the private sector
Gaurav Kumar (India)

PD-740-13  Outcomes of engaging a gynecological hospital in TB case notification and fertility status of women in Kabul city, Afghanistan
Ehsanullah Darwish (Afghanistan)

Poster discussion session (PD)
12:45 - 13:45  Poster Area

27. TB across key populations
Row 9

Chair: Alice Christensen (Tanzania, United Rep.)

PD-741-13  How can we increase the access of migrants to TB diagnosis and treatment in Kazakhstan?
Bakhtiyar Babamuradov (Kazakhstan)

PD-742-13  Underlying social determinants of tuberculosis risk in UK-born adults of white ethnic background in England: a nationwide community-based case-control study
Patrick Nguipdop-Djomo (United Kingdom)

PD-743-13  Systematic review of the contribution of key populations to the overall tuberculosis epidemic in South Africa
Lucy Chimoyi (South Africa)

PD-744-13  Tuberculosis and latent tuberculosis infection among refugees: an overview
Anete Trajman (Brazil)
**Scientific Programme**

**PD-745-13** Syrian refugees in Jordan and Lebanon: joint TB control initiative, 2015-2016  
Aleksandar Galev (Jordan)

**PD-746-13** Traditional healers’ perceptions about tuberculosis and prospects for control in pastoralist communities  
Bezawit Temesgen Sima (Norway)

**PD-747-13** Assessment of national tuberculosis burden, case detection rates and contact investigations among Syrian refugees: Jordan and Lebanon, 2015-2016  
Andrew T. Boyd (United States of America)

**PD-749-13** TB case notification rates among various key population groups in Ethiopia  
Nebiyu Hiruy (Ethiopia)

**28. Using media campaigns to raise awareness in tobacco control and to counter tobacco industry**

Row 2

Chair: Quan Gan (China)

**PD-751-13** Anticipating and Countering Tobacco Industry Arguments Against Tobacco Control Measures through Population Level Campaigns

**PD-752-13** An evidence based public campaign against waterpipe / hookah smoking in Turkey  
M P Tuba Durgut (Turkey)

**PD-753-13** Communication on health: the creation of a bulletin on tobacco industry strategies  
Filipe Vargas (Brazil)

**PD-754-13** #ReelVsReal: social media campaign to combat glamorous depiction of tobacco use in films and TV programs in India  
Dane Svenson (United States of America)

**PD-755-13** Efficiencies in achieving impact with at-risk audience segments through an anti-tobacco mass media campaign in India, Vietnam, Indonesia and Mexico  
Nalin Singh Negi (United States of America)

**PD-756-13** Solutions for Sustainable Funding Mechanisms for Communication Programs

**PD-757-13** Evaluation of first smokeless tobacco campaign in Myanmar  
Nalin Singh Negi (United States of America)

**29. Latent TB infection: The last frontier**

Row 24

Chair: Mark Hatherill (South Africa)
Scientific Programme

PD-758-13  Modelling latent TB infection control on TB transmission and elimination in Europe
Suzanne Verver (Netherlands)

PD-759-13  Low prevalence of tuberculin skin test boosting among community residents in a high tuberculosis burden setting
Juliet Sekandi (United States of America)

PD-760-13  Measuring the prevalence of latent TB infection in Ca Mau province
Phuong T.B. Nguyen (Viet Nam)

PD-761-13  Missed opportunities for TB prevention: the TB care continuum in adult primary care clinics at Denver health, an urban safety-net health system
Michelle Haas (United States of America)

PD-762-13  A case study in Ghana of the cascade of LTBI care
Joseph Obeng Baah (Ghana)

PD-764-13  Treatment of latent tuberculosis: a network meta-analysis-update
Dominik Zenner (United Kingdom)

PD-765-13  Closing the loop in child contact management: IPT completion outcomes in Western Kenya
Daria Szkwarko (United States of America)

PD-766-13  Treatment of presumed drug-resistant TB infection in household contacts in a high-burden setting
Amyn Malik (Pakistan)

PD-767-13  Surveillance of severe adverse events on once-weekly rifapentine plus high-dose isoniazid for latent tuberculosis infection treatment in Taiwan, 2016
Pei-Chun Chan (Taiwan)

Poster discussion session (PD)
12:45 - 13:45  Poster Area

30. Elevating knowledge in the field: an essential tool

Row 26

Chair: Riitta Dlodlo (Zimbabwe)

PD-768-13  Knowledge about and preparedness for tuberculosis management among health-care and social workers in refugee accommodations in Cologne, Germany
Britta Büchler (Germany)

PD-769-13  Scaled-up implementation and attrition risk evidenced in a TB guideline e-learning course for frontline staff of the Peruvian National Tuberculosis Programme
Luis Felipe Peralta (Peru)

PD-770-13  Innovative approaches to cascade nutrition in tuberculosis knowledge among health care workers in limited resource settings
Maureen Okoth (Kenya)

PD-771-13  Can sensitizing health care workers and directory of TB services increase TB case notification? Experience from Nigeria
Sani Useni (Nigeria)
Scientific Programme

PD-772-13 Reactivating TB services through training and mentoring in Mazabuka & Kafue Districts, Zambia
Lucy Mulemba Zulu (Zambia)

PD-773-13 Designing evaluation studies to optimally inform policy: factors to consider when making resource allocation decisions for health worker training program
Mishal Sameer Khan (Singapore)

PD-774-13 Awareness and education on tuberculosis prevention and control through the school health program in Kenya
Evelyn Kimani (Kenya)

PD-775-13 TB education intervention in school children plays a vital role in detection of presumptive TB cases in a South Indian district
Chinna Kiran Kumar Reddy Gali (India)

PD-776-13 From one to many: the multiplier effect of a school-based TB health education program
Soe Htut Aung (Myanmar)

PD-777-13 Building in-country technical capacity on TIME modelling through face-to-face training
Marek Lalli (United Kingdom)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

31. Protecting youth from the harms of tobacco use

Row 5
Chair: Xiaolin Wei (Canada)

PD-778-13 Patterns of poly-tobacco use among adults of the Southern California Children's Health Study: latent class analysis approach based on cigarette consumption in adolescence
Katia Gallegos-Carrillo (United States of America)

PD-779-13 The art of vaping business around schools in the city of Mandaluyong, Metro Manila, Philippines
Maria Loida Alzona (Philippines)

PD-781-13 Susceptibility to smoking and determinants among medical students: a representative nationwide study in China
Tingzhong Yang (China)

PD-782-13 Strategic implementation of tobacco-free school policy in the settings of constraints in the state of Delhi, India
Suresh Arora (India)

PD-783-13 Prohibition of cigarette selling within 100m of schools in metro Manila, Philippines: after 15 years
Michelle Palmones (Philippines)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45  
Poster Area

**32. Making virtual a reality: mHealth solutions to TB care**

Row 25

Chair: Bruce Struminger (United States of America)

**PD-784-13** Linking digital health to programmatic activities using the patient pathway: a promising approach  
Kristian van Kalmthout (Netherlands)

**PD-785-13** Anybody out there? Reach of SMS messages sent to household TB contacts in Kampala, Uganda  
Amanda J. Meyer (United States of America)

**PD-786-13** Video observed treatment for tuberculosis patients in Belarus  
Alena Skrahina (Belarus)

**PD-787-13** 99 DOTS: an innovative, low-cost TB treatment adherence monitoring system in India  
Sunil Khaparde (India)

**PD-788-13** Delivering twice daily delamanid: the video-DOT experience of the Armenian National Tuberculosis Program  
Naira Khachatryan (Armenia)

**PD-789-13** Technical validation of DataToCare® software to implement electronic medical records and improve the management of patients with tuberculosis in Rwanda  
Jean D'Amour Umazimpaka (Rwanda)

**PD-790-13** Utility and benefit of automated medication reporting in tuberculosis surveillance and patient-centered care  
Po-Wei Chu (Taiwan)

**PD-791-13** The online TB surveillance dashboard: an innovative tool for monitoring the TB epidemic in South Africa  
Ananta Nanoo (South Africa)

**PD-792-13** eRX: improving tuberculosis diagnosis using a mobile health application  
Rosa Yataco (Peru)

**PD-793-13** Mobile technology use improves tuberculosis treatment outcomes in Kabul city  
Said Mirza Sayedi (Afghanistan)

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Poster discussion session (PD)
12:45 - 13:45  
Poster Area

**33. Supply-side issues in tobacco control: production and industry**

Row 4

Chair: Anne Jones (Australia)

**PD-794-13** FCTC ratification and economic condition: lesson learned for Indonesia  
Abdillah Ahsan (Indonesia)
Scientific Programme

PD-797-13 Elimination of tobacco growing is possible: a case study from Karnataka India
P Prabhakara (India)

PD-798-13 Impact of tax measures on cigarette production in Pakistan
Muhammad Javed (Pakistan)

PD-799-13 Tobacco tax as sustainable funding for tobacco control programme: case study of Jakarta, Indonesia
Bernadette Fellarika Nusarrivera (Indonesia)

PD-800-13 Poorest of poor trapped in smokeless tobacco use: study from 140 countries
Ravi Mehrotra (India)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

34. What you see is what you get: understanding TB in children
Row 27

Chair: Karen Du Preez (South Africa)

PD-801-13 Nutritional indicators and food insecurity in children at risk of TB, Lima, Peru
Carolina Morán (Peru)

PD-802-13 Predictors of clinico-radiological outcome in children with probable intrathoracic tuberculosis
Aparna Mukherjee (India)

PD-803-13 Under-diagnosis of drug-resistant childhood TB compared to drug susceptible counterparts in three large regions of Ethiopia
Nebiyu Hiruy (Ethiopia)

PD-804-13 XDR-TB and pre-XDR TB among children in Kyiv, Ukraine
Natasha Rybak (United States of America)

PD-805-13 Prevalence of vitamin D deficiency among Indian children with tuberculosis and age-and sex-matched healthy controls
Arti Kinikar (India)

PD-806-13 Detection of respiratory viruses in South African children with suspected pulmonary TB
Anne-Marie Demers (South Africa)

PD-807-13 Correlation between gaps in childhood TB case notification and infant mortality rate in different states of India
Neera Arora (India)

PD-808-13 Role of two pediatric hospitals in tuberculosis case detection and treatment in Kabul, Afghanistan
Habibuddin Faqiryar (Afghanistan)

PD-809-13 Interim report on the use of a short, simplified regimen for the treatment of children with multidrug-resistant tuberculosis in Karakalpakstan, Uzbekistan
David Michael Lister (Uzbekistan)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45
Poster Area

35. Double trouble: the impact of diabetes and TB
Row 12
Chair: Anthony D Harries (United Kingdom)

PD-811-13 Is diabetes mellitus an independent risk factor for multidrug-resistant tuberculosis? A meta-analysis
Jian-Qing He (China)

PD-812-13 Limitations and challenges of implementing tuberculosis screening in diabetes mellitus care in Bangladesh
Zakia Sultana Siddique (Bangladesh)

PD-813-13 Diabetic screening of tuberculosis patients under the RNTCP in coordination with NPCDCS in Punjab State, India
Naresh Kumar Sharma (India)

PD-814-13 Outcomes of screening diabetic patients for tuberculosis in Afghanistan, 2016: a cross-sectional study
Ghulam Qader Qader (Afghanistan)

PD-816-13 Tuberculosis screening among diabetes mellitus patients attending the outpatient clinic of Insein General Hospital
Tin Mi Mi Khaing (Myanmar)

PD-817-13 Latent tuberculosis infection and recently diagnosed diabetes mellitus at a large urban hospital in the southeastern United States
Matthew J Magee (United States of America)

PD-818-13 Strengthening diabetes services to reach 90-90-90 indicators and targets of the end TB strategy
Archana Trivedi (India)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

36. Cost benefit analysis in TB investments; or people and products
Row 13
Chair: Evaline Kibuchi (Kenya)

PD-819-13 How much does it cost to engage civil society in interlinking the private sector with the national programme?
Manas Rout (India)

PD-820-13 Beyond symbolic engagement: tuberculosis and the First Nations Health Authority of British Columbia
Isa Wolf (Canada)

PD-821-13 The role of TB field promoters in TB response in three regions of Namibia: Oshana, Oshikoto and Kavango
Frieda Katuta (Namibia)
Scientific Programme

**PD-822-13**  A comprehensive TB care package for elderly TB patients to reduce economic burden and improve treatment adherence  
Haiying Fan (China)

**PD-823-13**  Role and impact of engaging key stakeholders in community TB outreaches; lessons from southwest Nigeria  
Nkem Chukwueme (Nigeria)

**PD-824-13**  Beyond Project Axshya ....... TB patients restored security through vocational training and welfare measures in Uttarakhand  
Deepak Ranjan Mishra (India)

**PD-825-13**  What role can non-governmental organisations play to sustain the ENGAGE TB approach: experience from a mapping exercise in Vihiga County, Kenya  
Gloria Okoko (Kenya)

**PD-826-13**  Community engagement for TB care and control: experience from a hilly state in India  
Deepak Ranjan Mishra (India)

Poster discussion session (PD)  
12:45 - 13:45

**37. Xpert implementation: realities in the field**

Row 15

Chair: Robert Makombe (South Africa)

**PD-827-13**  Using GxAlert report to troubleshoot the problems encountered in remote GeneXpert® laboratories  
Endale Mengesha (Ethiopia)

**PD-828-13**  Impact of rapid expansion of cartridge based nucleic acid testing on the diagnosis of drug-resistant TB cases in India  
Ranjani Ramachandran (India)

**PD-829-13**  Chronic GeneXpert maintenance challenges in Bangladesh  
Sarder Tanzir Hossain (Bangladesh)

**PD-830-13**  Assessment for 9 countries supported by the KNCV Tuberculosis Foundation of Xpert® MTB/RIF spare parts, modules and warranty coverage  
Jerod N. Scholten (Netherlands)

**PD-831-13**  Impact of Xpert® MTB/RIF on treatment initiation and outcomes of TB and MDR-TB patients in Vladimir TB Dispensary, Russia, 2012  
Julia Ershova (United States of America)

**PD-832-13**  Xpert utilisation rate and associated factors for suboptimal test uptake in South Nations Nationalities & Peoples Region, Ethiopia  
Pawlos Reji (Ethiopia)

**PD-833-13**  Early warning signs: a rapid gap analysis of linkages between GeneXpert cartridge use and TB patient diagnosis in Nigeria  
Oluwafunmilayo Omosebi (Nigeria)
Scientific Programme

**PD-834-13** The use of volunteers to optimise uptake of the Xpert® MTB/RIF assay in Nigeria  
Rupert Eneogu (Nigeria)

**PD-835-13** Internet access is the main deterrent to online reporting of GeneXpert® data in Kampala  
Denis Joel Sama (Uganda)

**Poster discussion session (PD)**  
12:45 - 13:45  
Poster Area

38. Solution to laboratory implementation challenges

Row 16  
Chair: Harry Hausler (South Africa)

**PD-836-13** Improved utilization of Xpert® MTB/RIF technology for TB diagnosis in Kampala  
Byaruhanga Raymond (Uganda)

**PD-837-13** Evaluation of OMNiGene® SPUTUM reagent for long-term transportation of samples for Xpert testing in a high TB-HIV burden setting  
Patrick Orikiriza (Uganda)

**PD-838-13** Effect of increased user fees in accessing new TB diagnostic services in the East Africa PHLN supported project sites: experience from Tanzania  
Erica Sandi (Tanzania, United Rep.)

**PD-839-13** TB viability microscopy optimisation  
Sumona Datta (United Kingdom)

**PD-840-13** Relationship of clinical diagnosis with final Xpert report in patients at Nuevo Civil Hospital, Guadalajara, Mexico  
Leopoldo Portillo-Gómez (Mexico)

**PD-841-13** Programmatic implementation of new tuberculosis diagnostics in resource-poor-settings: what is the added performance characteristic value over microscopy?  
Mambo Claude Muvunyi (Rwanda)

**PD-842-13** Comparison of randomized blinded rechecking for fluorescence light-emitting diode and Ziehl-Neelsen microscopy in three regions of Ethiopia  
Gonfa Ayana (Ethiopia)

**PD-843-13** Two years after the roll-out of Xpert® MTB/RIF in Brazil: reported errors  
Kleydson Bonfim Andrade (Brazil)

**PD-844-13** Innovations in Kyrgyzstan: TB sputum transport solutions  
Artur Niyazov (Kyrgyz Republic)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45

39. Searching high searching low: case finding strategies
Row 28

Chair: Tefera Agizew (Botswana)

PD-845-13  Outcome of intensified case finding for tuberculosis case detection in Munuki and Kator primary health care centres
Dawit Assefa (Ethiopia)

PD-846-13  Yield of repeat intensified tuberculosis case finding among HIV-infected adults in Uganda
Christina Yoon (United States of America)

PD-847-13  Strengthening efforts in contact-screening of drug-resistant TB patients will break the chain of transmission of infection in children
Moumita Biswas (India)

PD-848-13  Assessing routine screening of pediatric contacts of adults with tuberculosis disease, Tanzania
Surbhi Modi (United States of America)

PD-849-13  Yield of intensified TB case finding among HIV patients at Yunnan AIDS Care Center, Kunming, China
Ignacio Monedero (Spain)

PD-851-13  Does improving facility-community linkage help in finding cases in the community? Documenting efforts in areas with low case notification
Christine Mwamsidu (Kenya)

PD-852-13  Door-to-door active TB Case Finding (ACF) increased TB case notification, shortened diagnostic delay and put patients on early treatment in Rajnandgaon district, Chhattisgarh
Gayadhar Mallick (India)

PD-853-13  Innovative strategies towards improving TB case detection amidst economic recession: Zamfara State Experience, North Western, Nigeria
Hamisu Dama Alhassan (Nigeria)

PD-854-13  Working together to end TB through active case finding in Swaziland: ´The SDG aspiration of leaving no-one behind´
Joyce Sibanda (South Africa)

Poster discussion session (PD)
12:45 - 13:45

40. Advocacy, communication and social mobilisation for TB elimination; involving gender, children, peer educators, and civil society organisations
Row 14

Chair: Ingrid Schoeman (South Africa)

PD-855-13  Can engagement of rural health care providers in under-served areas of India make a difference in TB care and control?
Archana Trivedi (India)
Scientific Programme

PD-856-13 Assessing point of sale violations in Delhi for strategic advocacy on TAPS ban
Bhavna Mukhopadhyay (India)

PD-857-13 Gender disparities in timely access to tuberculosis treatment in Viet Nam and Malawi
Rein Houben (United Kingdom)

PD-858-13 Indonesia peer educator programme: from patient to champion
Asik Surya (Indonesia)

PD-859-13 Intensified outreach activities through Prachar Rath on PULSE TB: KHOJ-JANCH-NIDAAN-ABHIYAAN 2016 logo to reach out to the missing-one-million-TB-cases of India succeeded in Korba District, Chhattisgarh
Gayadhar Mallick (India)

PD-860-13 Political leadership in TB control: learning from the Zimbabwe experience
Paidamoyo Magaya (Zimbabwe)

PD-861-13 Public Interest Litigation as a tool for advancement of tobacco control, particularly a ban on Gutka
Bhavna Mukhopadhyay (India)

PD-862-13 Peer-support services for XDR-TB patients in group 5 drug treatment and adherence facilitation
Catalina Constantin (Romania)

PD-863-13 Establishing a community engagement programme: a product development partnership experience
Anja van der Westhuizen (South Africa)

Encuentro: Panel Discussion
13:00 - 14:00
Foro - Encuentro Expo

Intervención comunitaria en la atención de personas con TB-VIH en contexto de vulnerabilidad

Las situación que viven las personas afectadas por las dos enfermedades y que viven en contexto de vulnerabilidad, entre quienes se clasifican los habitantes de la Calle, las personas con coinfección TB-VIH, LGBTI, farmacodependientes, todos en su mayoría sin red de apoyo, hicieron que un equipo de instituciones y líderes de la sociedad civil de ambas enfermedades, unieran esfuerzos para diseñar e implementar estrategias que les permitiera lograr generar adherencia al tratamiento de TB y de VIH.

Estrategias centradas en: sensibilización, acompañamiento de las personas afectadas, gestión para: buscar albergues donde reciban y atiendan a los pacientes, buscar apoyo económico, brindar apoyo psicosocial, disminuir acceso a los tratamientos y gestión a la adherencia, auxilio de transporte, orientación a la ruta de atención y disminuir el riesgo de pérdida de los pacientes.

Los resultados obtenidos durante la implementación de este piloto en Colombia el cual inicio en mayo del 2015 ha permitido, pese a las difíciles condiciones de la población intervenida, abordar a aproximadamente 20 pacientes con TB-VIH y TB-MDR, quienes han recibido el apoyo de equipo mediante las diferentes intervenciones de más de 8 meses en promedio, factor determinante para lograr la mejoría de los pacientes.

Así mismo, este trabajo ha dejado un sin número de aprendizajes entre los que se pueden mencionar: reconocer la vulnerabilidad, respetar la dignidad humana, identificar como el contacto personal se constituye en una herramienta efectiva para el manejo del paciente, la necesidad de tener un trato humanizado, la voluntad política y administrativa, la intervención y el acompañamiento constante del profesional del área social o psicosocial.

Coordinator: Sandra Escandon (Colombia)
Intervención comunitaria en la atención de personas con TB-VIH en contexto de vulnerabilidad
Sandra Escandon (Colombia)

Symposium (SP)
14:00 - 15:30
Plenary Hall - EN-ES

EN-ES 34. Empaquetado genérico, qué ocurre.: Avances y desafíos en las Américas

El empaquetado genérico están ganando impulso en las Américas, a raíz de la victoria legal de Uruguay contra Philip Morris International (PMI). Actualmente se están discutiendo varias iniciativas legislativas en Uruguay, Brasil, Panamá, Chile y Canadá, la mayoría con apoyo legal, técnico y financiero de la Unión. Una o más de estas propuestas podrían convertirse en ley antes de la WLC en Guadalajara. Los altos funcionarios gubernamentales de estos países discutirán estrategias legales y políticas, desafíos y perspectivas en el camino hacia el empaquetado genérico en nuestra región.

Chair: Mirta Molinari (Mexico)

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
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<tbody>
<tr>
<td>Legislación de empaquetado genérico: Experiencias y desafíos</td>
<td>14:00 - 14:15</td>
</tr>
<tr>
<td>Celso Muniz (Chile)</td>
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<tr>
<td>Proyecto de ley sobre empaquetado genérico: desarrollo, aprobación e implementación</td>
<td>14:15 - 14:30</td>
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<tr>
<td>Norma Astudillo (Panama)</td>
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<tr>
<td>Presentación del empaquetado genérico en Uruguay: los pasos claves</td>
<td>14:30 - 14:45</td>
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<tr>
<td>Gustavo Sonora (Mexico)</td>
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<tr>
<td>La experiencia de Brasil en el proyecto de ley de empaquetado genérico</td>
<td>14:45 - 15:00</td>
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<tr>
<td>Tania Cavañate (Brazil)</td>
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<tr>
<td>Discussion</td>
<td>15:00 - 15:15</td>
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Symposium (SP)
14:00 - 15:30
Hall 2 - Events Ballroom

31. The role of public health licences to accelerate development and access to TB drugs

The agreement in January 2017 between the Medicines Patent Pool (MPP) and Johns Hopkins University for sutezolid was MPP’s first intellectual property licence for TB. This session will review the experience of MPP’s first TB licence and the importance of public health-oriented licences to ensure, not only the development of affordable products, but also to facilitate the clinical development of products further back in the clinical pipeline. It will also discuss what else needs to happen to facilitate and promote the development of new treatments for TB while ensuring affordability.

Chair: Greg Perry (Switzerland)
Chair: Fareed Abdullah (South Africa)

<table>
<thead>
<tr>
<th>Event</th>
<th>Time</th>
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<tbody>
<tr>
<td>The process of licencing TB drugs: experience of the medicines patent pool in sutezolid license</td>
<td>14:00 - 14:15</td>
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<tr>
<td>Chan Park (Switzerland)</td>
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<tr>
<td>The importance of public health orientated licences to ensure academic research benefits all</td>
<td>14:15 - 14:30</td>
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<tr>
<td>Merith Basey (United States of America)</td>
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</tbody>
</table>
Scientific Programme

Utilizing public health oriented licenses as a tool to facilitate the development of new regimens
Melvin Spigelman (United States of America)

14:30 - 14:45

The importance of data pooling in addition to IP pooling
Debra Hanna (United States of America)

14:45 - 15:00

The role of IP and data pooling to promote access for trials and beyond
Grania Bridgen (Switzerland)

15:00 - 15:15

Discussion

15:15 - 15:30

Symposium (SP)
14:00 - 15:30
Hall 3 - Events Ballroom

32. Enhancing the role of pharmacists in the TB care cascade

Pharmacists are a critical entry point to health care services in lower-and-middle-income countries. They can play a key role in enhancing the cascade of TB prevention and care. This symposium will highlight how pharmacists may be utilised to improve patients’ pathway to TB screening, notification, treatment initiation and adherence in order to achieve improved TB diagnostic and clinical outcomes. A range of intervention designs and findings from diverse resource-limited settings will be shared, including implementation challenges and mitigating strategies, with lessons learned for health systems strengthening and professional stewardship.

Chair: Amrita Daftary (Canada)
Chair: Madhukar Pai (Canada)

A global systematic review of pharmacy-based TB interventions
Madhukar Pai (Canada)

14:00 - 14:15

Pharmacists’ drug-dispensing practices: a call for professional stewardship in lower-and-middle-income countries
Srinath Satyanarayana (India)

14:15 - 14:30

Reducing TB diagnostic delay via public-private pharmacy partnerships: results of the IC-IMPACTS study, India
Amrita Daftary (Canada)

14:30 - 14:40

Pharmacists’ use of SMS messaging to improve TB re-treatment success in the IMPRESS Study, South Africa
Maharaj Bhavna (South Africa)

14:40 - 14:55

Engaging private pharmacists for TB control efforts in Chennai, South India
Ramya Ananthakrishnan (India)

14:55 - 15:10

Discussion

15:10 - 15:25
Symposium (SP)
14:00 - 15:30
Hall 4 - Events Ballroom


Poverty drives TB rates, limits access to care and impedes treatment success. The World Health Organisation’s (WHO) End TB Strategy mandates combatting the financial burden of TB and that, by 2025, no TB-affected households should incur catastrophic costs. Since 2015, a tool developed by WHO to measure catastrophic costs of TB-affected households has been rolled-out in multiple countries.
This symposium, delivered by WHO and key country-partners, will highlight country-level experiences of catastrophic costs measurement including: implementation and adaptation of the WHO tool; rates of catastrophic costs in TB-affected households; and the next steps of National TB Programmes to eliminate catastrophic costs.
Chair: Andrew Siroka (Switzerland)
Chair: Nobu Nishikiori (Switzerland)

Development of the WHO TB patient costs tool
Tom Wingfield (United Kingdom) 14:00 - 14:15

Implementation of the WHO TB patient costs survey in Viet Nam: policy implications and multi-sectoral actions
Nguyen Hoa (Viet Nam) 14:15 - 14:30

Implementation of the WHO TB costs survey in all TB-affected households in Timor Leste: a unique case study
Kerri Viney (Australia) 14:30 - 14:45

Implementation of the WHO TB costs tool in Ghana and linking with National TB Programme treatment outcome data
Debora Pedrazolli (United Kingdom) 14:45 - 15:00

Overview of the implementation of the WHO TB costs tool around the world so far and future expansion
Ines Garcia Baena (Switzerland) 15:00 - 15:15

Discussion 15:15 - 15:30

Short Oral Abstract session (SOA)
14:00 - 15:30
Hall 5 - Events Ballroom

11. Pearls and pitfalls: tales from the lab

Chair: Riitta Dlodlo (Zimbabwe)
Chair: Christopher Gilpin (Switzerland)

SOA-405-1 Prevalence of contamination among pediatric samples collected by gastric aspiration in Botswana
Andrew Steenhoff (United States of America) 14:06 - 14:12

SOA-406-1 Predominance of modern sublineage of Mycobacterium tuberculosis Beijing genotype among clinical isolates in Nepal
Ajay Poudel (Nepal) 14:12 - 14:18

SOA-407-1 Use of carbendazim in solid media as effective contamination control method for Mycobacterium tuberculosis cultures
Katty Lopez (Peru) 14:18 - 14:24
### Scientific Programme

<table>
<thead>
<tr>
<th>SOA-408-1</th>
<th>Prevalent non-tuberculous mycobacteria species among presumptive MDR-TB patients from peripheral health facilities referred for testing at KEMRI TB laboratory, Kisumu</th>
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<tbody>
<tr>
<td>3</td>
<td>14:24 - 14:30</td>
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<tr>
<td>Albert Okumu (Kenya)</td>
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<tr>
<th>SOA-409-1</th>
<th>Improving detection of tuberculosis in people living with HIV/AIDS using trained African giant pouch rats</th>
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<tr>
<td>3</td>
<td>14:30 - 14:36</td>
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<tr>
<td>Lena Fiebig (Germany)</td>
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<thead>
<tr>
<th>SOA-410-1</th>
<th>PCR en tiempo real, multiplex para diferenciación de miembros del complejo Mycobacterium tuberculosis</th>
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<td>14:36 - 14:42</td>
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<tr>
<td>Gloria Puerto Castro (Colombia)</td>
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<tr>
<th>SOA-411-1</th>
<th>Molecular bacterial load assay as a marker for treatment response late during treatment</th>
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<td>3</td>
<td>14:42 - 14:48</td>
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<tr>
<td>Nyanda Elias Ntinginya (Tanzania, United Rep.)</td>
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<tr>
<th>SOA-412-1</th>
<th>A portable electronic nose as a potential point-of-care screening device for pulmonary tuberculosis</th>
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<td>14:48 - 14:54</td>
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<tr>
<td>Sergio Poli (Venezuela)</td>
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### Short Oral Abstract session (SOA)

<table>
<thead>
<tr>
<th>SOA-414-1</th>
<th>Factors associated with unfavorable treatment outcomes among multidrug-resistant tuberculosis patients treated at a tertiary hospital in Tigray Region, Northern Ethiopia</th>
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<tbody>
<tr>
<td>3</td>
<td>14:00 - 14:06</td>
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<tr>
<td>Degu Jerene (Ethiopia)</td>
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<tr>
<th>SOA-415-1</th>
<th>Long-term outcomes of patients lost to follow-up from multidrug-resistant tuberculosis treatment in the country of Georgia</th>
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<td>3</td>
<td>14:06 - 14:12</td>
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<tr>
<td>Natalia Adamashvili (Georgia)</td>
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<tr>
<th>SOA-417-1</th>
<th>Contribution of private health facilities to the management of MDR-TB: experiences from Kampala, Uganda</th>
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<td>14:12 - 14:18</td>
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<tr>
<td>Samuel Kasozi (Uganda)</td>
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<tr>
<th>SOA-418-1</th>
<th>Improvement of MDR-TB outcomes over time</th>
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<td>3</td>
<td>14:18 - 14:24</td>
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<tr>
<td>Stalz Charles Vilbrun (Haiti)</td>
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<tr>
<th>SOA-419-1</th>
<th>Steady-state pharmacokinetics of cycloserine in patients with MDR-TB</th>
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<tr>
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<td>14:24 - 14:30</td>
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<tr>
<td>Richard Court (South Africa)</td>
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<tr>
<th>SOA-420-1</th>
<th>Lung tissue concentrations of linezolid among patients with drug-resistant tuberculosis</th>
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<td>14:30 - 14:36</td>
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<td>Russell Kempker (United States of America)</td>
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<tr>
<th>SOA-421-1</th>
<th>Impact of Xpert® MTB/RIF assay on MDR-TB treatment success rates in Ugu district, KwaZulu-Natal South Africa</th>
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<tr>
<td>3</td>
<td>14:36 - 14:42</td>
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<tr>
<td>Tamirirashe Christopher Mahwire (South Africa)</td>
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</table>
### Scientific Programme

**SOA-422-1**
MDR/XDR TB DEPOT: a novel, open-access bioinformatics tool to query and analyze large-scale radiological, genomic and clinical data from the multi-national TB Portals Program database

Eric Engle (United States of America)

**SOA-423-1**
Tratamiento para tuberculosis resistente a isoniacida no multidrogorresistente en el Perú, 2012–2014

José Cornejo (Peru)

**SOA-416-1**
Community-based MDR-TB diagnosis and management in Bangladesh

Kausari Jahan (Bangladesh)

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**Oral Abstract session (OA)**
14:00 - 15:30

**Hall 7 - Events Ballroom**

### EN-ES 11. The TB-HIV and diabetes late-breaker session

Chair: Amy Bloom (United States of America)
Chair: Haileyesus Getahun (Switzerland)

- **The Stephen Lawn TB-HIV Research Leadership Prize**
  14:00 - 14:10

- **OA-2971-1**
  Diabetes increases mortality during tuberculosis treatment and metformin use reverses this effect
  14:10 - 14:20
  Nicholas Degner (United States of America)

- **OA-2885-1**
  Feasibility and yield of routine bi-directional screening for tuberculosis and diabetes mellitus in primary health settings in Zimbabwe.
  14:20 - 14:30
  Shepherd Mufudzi Machekera (Zimbabwe)

- **OA-2837-1**
  A rise in TB mortality where people who use drugs and commercial sex work co-exist: a retrospective cohort study in a rural county in Kenya
  14:30 - 14:40
  Osman Abdullahi (Kenya)

- **OA-2927-1**
  Can HbA1c help to predict TB risk? Early results from an active TB case-finding project in Ebeye, Republic of the Marshall Islands
  14:40 - 14:50
  Richard Brostrom (United States of America)

- **OA-2887-1**
  ADPP Mozambique’s strategies to track and support index HIV cases and their contacts through community-based interventions have been protecting PLHIV against TB in Mozambique
  14:50 - 15:00
  Sugata Mukhopadhyay (Mozambique)

- **OA-3000-1**
  Detecting diabetes during latent TB testing
  15:00 - 15:10
  Angela Largen (United States of America)
35. Helping to realise the vision of zero suffering from the End TB Strategy with palliative care

Multidrug-resistant TB (MDR-TB) is a major source of morbidity and mortality globally and some forms of MDR-TB are highly lethal. Affected people suffer while on treatment or in its absence. The World Health Organization defines palliative care as the relief of suffering in people affected by life threatening conditions. This symposium will present policy perspective and experiences from countries mainstreaming palliative care in the management of MDR-TB.

Chair: Viet Nhung (Viet Nam)

**WHO perspective in palliative care in 2017** 14:00 - 14:20
Stephen Connor (United States of America)

**Palliative care in the management of XDR-TB in Khayelitsha, Western Cape, South Africa** 14:20 - 14:40
Jennifer Hughes (South Africa)

**Developing guidelines for mainstreaming palliative care into programmatic management of MDR-TB: the experience of Kyrgyzstan and South Africa** 14:40 - 15:00
Stephen Connor (United States of America)

**Integrating infection control and palliative care in Vietnam: a marriage that works?** 15:00 - 15:20
Viet Nhung (Viet Nam)

**Discussion** 15:20 - 15:30

36. The evolving landscape of multidrug-resistant TB (MDR-TB) trials in children

The aim of the session is to provide relevant stakeholders with emerging global consensus on paediatric research priorities, trial methods and future regimens for evaluation for the treatment of MDR-TB in children. Much needed critical emerging data updates will be provided on the pharmacokinetics of novel and existing drugs and formulations needed for future MDR-TB regimens in children, including the effect of formulation manipulation and child friendly formulations (delamanid, bedaquiline and levofloxacin). Finally, the role of community engagement and advocacy will be explored to improve the access of children to trials and strengthen participation of relevant stakeholders to design and implement MDR-TB trials in children.

Chair: Anneke Hesseling (South Africa)
Chair: James Seddon (United Kingdom)

**MDR-TB treatment children: current landscape and future prospects for treatment shortening trials** 14:00 - 14:15
Anthony Garcia-Prats (South Africa)

**Updates on delamanid pharmacokinetic and safety data in children with MDR-TB** 14:15 - 14:30
Jeffrey Hafkin (United States of America)

**Bio-availability of bedaquiline given whole or crushed: implications for dosing in children** 14:30 - 14:45
Elin M Svensson (Sweden)
**Scientific Programme**

**Early experiences of the acceptability and palatability of a novel child-friendly levofloxacin formulation in young children**  
Susan Purchase (South Africa)  
**14:45 - 15:00**

**The role of community engagement in MDR-TB trials in children**  
Musonda Simwinga (Zambia)  
**15:00 - 15:15**

**Discussion**  
**15:15 - 15:30**

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**Symposium (SP)**  
**14:00 - 15:30**  
**Hall 10 - Jalisco Hall**

**37. The role of autopsy studies in estimating burden of TB mortality**

There is a considerable uncertainty about the true mortality burden attributable to TB. In high-income countries, mortality estimates rely on vital registration systems, but these services are unavailable in most low-resource settings. As some studies have shown the mortality estimates based on the case fatality rate reported by National TB Programmes, or on verbal autopsies, usually provide poor quality estimates. Thus, complete diagnostic autopsies remain the gold standard tool to ascertain TB diagnosis at death. The potential and limitations of these methods, as well as new strategies to diagnose TB at death, will be discussed.

Chair: Quique Bassat (Spain)  
Chair: Frank Cobelens (Netherlands)

**14:00 - 14:20**  
**Measuring TB mortality in Kenya using verbal, full and minimally invasive autopsy: first results and future plans**  
Hannah Kirking (United States of America)

**14:20 - 14:40**  
**Minimally invasive tools for diagnosing tuberculosis at death. Results of a large post-mortem study in Maputo, Mozambique**  
Alberto Garcia-Basteiro (Mozambique)

**14:40 - 15:00**  
**Estimating TB mortality: approaches and challenges**  
Ellen MH Mitchell (Netherlands)

**15:00 - 15:20**  
**Measuring mortality due to HIV-associated tuberculosis in South Africa: using data from verbal & minimally-invasive autopsies, clinical records, and prospective research**  
Aaron Karat (United Kingdom)

**Discussion**  
**15:20 - 15:30**

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**Oral Abstract session (OA)**  
**14:00 - 15:30**  
**Hall 11 - Jalisco Hall**

**12. Stopping TB transmission: infection control in congregate settings**

Chair: Nii Nortey Hanson-Nortey (Ghana)  
Chair: Grigory Volchenkov (Russian Federation)

**OA-168-13 Novel approaches to TB infection control in private general hospitals in Georgia**  
Tamar Gabunia (Georgia)  
**14:00 - 14:10**
## Scientific Programme

<table>
<thead>
<tr>
<th>OA-169-13</th>
<th>Evaluation of tuberculosis infection control strategies in the University of the Philippines - Philippine General Hospital</th>
<th>14:10 - 14:20</th>
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<tr>
<td>Ruth Divine Agustin (Philippines)</td>
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<tr>
<th>OA-170-13</th>
<th>FAST strategy to prevent TB and diabetes co-morbidity and prevent TB transmission in congregate settings</th>
<th>14:20 - 14:30</th>
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<tbody>
<tr>
<td>Kausari Jahan (Bangladesh)</td>
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<tr>
<th>OA-171-13</th>
<th>Impact of a regional tuberculosis infection control pilot initiative, Dire Dawa, Ethiopia, Nov 2015-Nov 2016</th>
<th>14:30 - 14:40</th>
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<tr>
<td>Beniam Feleke (Ethiopia)</td>
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<tr>
<th>OA-172-13</th>
<th>Survey on knowledge and use of ultraviolet germicidal air disinfection among tuberculosis nurses in China</th>
<th>14:40 - 14:50</th>
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<tr>
<td>Xiu-Hua Wang (China)</td>
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<tr>
<th>OA-173-13</th>
<th>How fast does FAST strategy increase case detection: a facility case study in Osun, Nigeria</th>
<th>14:50 - 15:00</th>
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<tr>
<td>Chidubem Ogbudebe (Nigeria)</td>
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<th>OA-174-13</th>
<th>Hospital-based cough officer and 24 hours in a tuberculosis laboratory: acceptability and feasibility study, Beira Central Hospital, Mozambique</th>
<th>15:00 - 15:10</th>
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<tbody>
<tr>
<td>Miguelhete Lisboa (Mozambique)</td>
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<tr>
<th>OA-175-13</th>
<th>Molecular and spatial analysis of Mycobacterium tuberculosis transmission among internal migrants and residents in Shanghai, China</th>
<th>15:10 - 15:20</th>
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<tr>
<td>Chongguang Yang (United States of America)</td>
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**Symposium (SP)**

14:00 - 15:50  
Hall 12 - Jalisco Hall

38. Building and strengthening specimen transport and referral systems for TB testing networks: solutions through integration and innovation

Given that the tools for highly sensitive TB detection and comprehensive drug susceptibility testing (DST) do not yet exist at point-of-care (POC), an efficient specimen transport and referral network is critical in reaching the goals of increased TB case detection and universal DST as described in the End TB Strategy and Global Plan to End TB. In this symposium we will share current guidance and success stories in building efficient specimen transport and referral systems in integrated networks and using recent innovations, including alternative means of transport and use of sample transport media.

Chair: Wayne van Gemert (Switzerland)  
Chair: Alaine Umubyeyi Nyaruhirira (South Africa)

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<tr>
<td><strong>Tribute to Sabine Rüscher-Gerdes, 1949-2017</strong></td>
<td>14:00 - 14:20</td>
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<tr>
<td>Max Salfinger (United States of America)</td>
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<td><strong>Strengthening specimen transport and referral systems: the Global Laboratory Initiative perspective</strong></td>
<td>14:20 - 14:35</td>
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<tr>
<td>Alaine Umubyeyi Nyaruhirira (South Africa)</td>
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<td><strong>Lessons learned about specimen referral networks across Africa and Global Laboratory Initiative guidance</strong></td>
<td>14:35 - 14:50</td>
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<tr>
<td>Kameko Nichols (United States of America)</td>
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</table>
**Successful integrated specimen referral system across the laboratory network in Rwanda**  
J. Claude Ngabonziza S (Rwanda)  
14:50 - 15:05

**Building and strengthening specimen transport and referral systems for TB testing networks: solutions through integration and innovation - Uganda’s experience**  
Charles Kiyaga (Uganda)  
15:05 - 15:20

**Modelling an integrated TB-HIV sample transportation network using GPS coordinates in Ethiopia**  
Stephanie Denamps (United Kingdom)  
15:20 - 15:35

**Discussion**  
15:35 - 15:50

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**39. Pharmacokinetics and pharmacodynamics drugs used to treat other mycobacterial diseases: more difficult than TB!**

The burden due to nontuberculous mycobacteria is substantial. In fact, in many programmes, patients are usually diagnosed during treatment for multidrug-resistant TB. However nontuberculosis mycobacteria are difficult to treat in their own right. For example Mycobacterium abscessus has been given the moniker 'the antibiotic nightmare' because of the bacteria's natural drug resistance. Outcomes for patients are also very poor, with sputum culture conversion less than 50 per cent for the majority of organism. This session will focus how pharmacokinetics and pharmacodynamics (PK/PD) can be used to minimise drug-adverse events, individualise and optimise clinical outcomes of patients, based on in-vitro studies, and clinical studies in patients.

Chair: Tawanda Gumbo (United States of America)  
Chair: Jakko van Ingen (Netherlands)

**Introduction**  
Jotam G. Pasipanodya  
14:00 - 14:10

**Systematic review and meta-analyses of clinical outcomes of patients treated for nontuberculous mycobacteria**  
Patrick Moonan (India)  
14:10 - 14:25

**Treatment of mycobacterium avium complex: European experience**  
Jakko van Ingen (Netherlands)  
14:25 - 14:40

**Building an optimised regimen for Mycobacterium abscessus**  
Beatriz Ferro (Colombia)  
14:40 - 14:55

**Optimising treatment of Mycobacterium kansasii**  
Shashikant Srivastava (United States of America)  
14:55 - 15:10

**PK/PD approach to setting therapeutic targets and determining MIC predictive of patients outcomes**  
Devyani Deshpande (United States of America)  
15:10 - 15:25

**Discussion**  
15:25 - 15:30
Scientific Programme

Member Meetings (Regional, Section, Sub-section, Working Group)
14:00 - 15:30

Inter-regional meeting

Asia Pacific Region
Ral Antic (Australia) 14:00 - 14:10

Symposium (SP)
14:15 - 15:45

EN-ES Accelerating TB elimination: governance, architecture for urban health care

Provision of quality health services in urban areas is a global challenge because of the increasing urbanization and rapid growth of slums in cities. Acknowledgement of good governance practices is required to supplement the End TB strategy. In tandem with theme of the conference, the session outlines the need to adopt an epistemic approach to health care by highlighting good governance initiatives for TB elimination.

Objectives:
1. Highlight the importance of good governance for TB care
2. Explore the genesis of social capital as a determinant for TB elimination
3. Develop effective governance architecture for TB care in urban areas.

Chair: Sunil Khaparde (India)
Chair: Dr Sundari Mase (India)
Chair: Jamhoih Tonsing (India)
Coordinator: Shivani Chandra (India)

Community economics for TB control - social capital resurrection 14:15 - 14:30
Ashwani Khanna (India)
Dr. Kamble

Governance and poverty reduction - cash voucher scheme in TB care 14:30 - 14:45
Ignacio Monedero (Spain)
Jose Caminero Luna (Spain)

Public-private partnership for sustainable development in health care 14:45 - 15:00
Shivani Chandra (India)
Rhea Lobo (India)

E-governance in TB care 15:00 - 15:15
Devesh Gupta (India)
El apego al tratamiento es uno de los retos mayores de toda persona que padece una enfermedad, una visión integral podría ser la respuesta. Aunque existe pluralidad de ideas y enfoques, es importante generar alternativas que nos lleven a incrementar los niveles de adherencia, pero desde una perspectiva integral, trascendiendo los límites de la visión convencional de la salud: ésta como un proceso de bienestar total y no sólo la ausencia de la enfermedad. El apego no es sólo cuestión de tomar medicamentos, es un estilo de vida que incluye la calidad del mismo: alimentación, ejercicio, hábitos de vida sanos e higiénicos, control de emociones, asertividad, etc.

El apego al tratamiento representa, de igual manera, una visión global de prevención. Es decir, nuestra intervención también pretende reducir nuevos casos, disminuir los efectos negativos de quienes ya padecen la enfermedad y con ello el costo social que representan.

Por lo que, el apego al tratamiento, es una visión necesaria y muy importante en nuestras mesas de discusión.

Chair / Coordinador: José Manuel Salcedo Alfaro (Mexico)
Chair: María Verónica Chávez Macías (Mexico)

### EN-ES 47. Ending TB in children and adolescents in Latin America: country-level experiences of improving access to care

Few reports have been published on improving paediatric TB care in Latin America, and diagnosis, treatment, and prevention remain suboptimal for children and adolescents with TB. This session aims to inspire solutions to common challenges faced by children and adolescents with TB in Latin America. Following an epidemiologic and programmatic overview, speakers from Brazil, Peru and Argentina will present innovative ways in which their countries have addressed, or are working to address, gaps in care. At the end of the session, the chairs will moderate a discussion to facilitate idea exchange, feedback and collaboration among speakers and participants.

Chair: Silvia Chiang (United States of America)
Chair: Andrea Cruz (United States of America)
Scientific Programme

Prevention of childhood and adolescent TB in Argentina
Norma Gonzalez (Argentina)

17:00 - 17:15

Discussion

17:15 - 17:30

Symposium (SP)
16:00 - 17:30

40. Accelerating research and development of new TB vaccines

New, effective vaccines to prevent TB could significantly accelerate global efforts to eliminate the disease. Several approaches are being undertaken, from early stage research through to clinical trials in order to streamline and accelerate TB vaccine research and development (R&D) in a cost-efficient and cost-effective manner. This symposium will provide an overview of some of these approaches, as well as the potential public health impact of new TB vaccines and progress in TB vaccine R&D.

Chair: Ann Ginsberg (United States of America)
Chair: Blessina Amulya Kumar (India)

Potential public health impact of new TB vaccines
Richard White (United Kingdom)

16:00 - 16:20

TB vaccines in clinical development and approaches to clinical research
Dereck Tait (South Africa)

16:20 - 16:40

TB vaccines: WHO perspectives and preferred product characteristics
Johan Vekemans (Switzerland)

16:40 - 17:00

Controlled human infection model for TB vaccine R&D
Dirk Schnappinger (United States of America)

17:00 - 17:20

Discussion

17:20 - 17:30

Symposium (SP)
16:00 - 17:30

41. Ending TB epidemic with sound ethics

Involuntary detentions of people with TB, of migrants denied access to TB health services, health care workers operating in unsafe environments, people stigmatised and discriminated for having TB or patients without support to seek care and adhere to treatment, all compounded by the limited access to quality health services, bring the question of how to balance individual responsibilities, rights and liberties against the protection of public health and the reduction of inequities. This symposium will discuss the relevance of ethics in ending the TB epidemic.

Chair: Lee Reichman (United States of America)
Chair: Diego S. Silva (Canada)

Patient rights from the perspective of drug-resistant TB patients
Jens Seeberg (Denmark)

16:00 - 16:20

Ethics of preventive therapy in latent TB infection (LTBI)
Justin Denholm (Australia)

16:20 - 16:40
The World Health Organization's new TB ethics guidance: challenges and opportunities to raise awareness and training for action
Rajita Bhavaraju (United States of America)

Discussion

Symposium (SP)
16:00 - 17:30
Hall 4 - Events Ballroom

42. Improving the cascade of TB/HIV care and prevention in maternal and child health programmes

TB is a leading cause of morbidity and mortality among pregnant women, mothers and children, especially in areas with a high HIV burden. However routine TB services are not widely available in maternal and child health care settings. This symposium will review emerging data on the performance of TB screening among pregnant and breastfeeding women and the experience of isoniazid preventive therapy and treatment for drug-resistant TB. Additionally, this symposium will highlight operational approaches to implement TB services in maternal and child health care settings, including ensuring TB screening and treatment for children are optimised.

Chair: Haileyesus Getahun (Switzerland)
Chair: Lisa Cranmer (United States of America)

Symptom screening for active TB in pregnant women living with HIV: a systematic review
Sylvia LaCourse (United States of America)

Enhanced integration of TB/HIV services in reproductive, maternal, newborn and child health settings in Swaziland
Andrea Howard (United States of America)

Implementing TB intensified case-finding and Isoniazid Preventive Therapy in maternal and child health settings in Kenya

Managing drug-resistant TB in pregnancy: experience from South Africa
Francesca Conradie (South Africa)

Quality of routine TB evaluation for children at primary health care facilities in Uganda
Achilles Katamba (Uganda)

Discussion
Scientific Programme

Symposium (SP)
16:00 - 17:30
Hall 5 - Events Ballroom

43. An update on mycobacteria species infections and surveillance

There is a mutual benefit of developing and strengthening partnerships between animal and human health workers with regards the diagnosis, surveillance, prevention and control of zoonotic TB (ZTB). Through presentations, dialogue and collaboration among different stakeholders this symposium lays a scientific foundation to inform the current policy development efforts.

1. A dialogue between medical and veterinary fields to address challenges posed by ZTB.
2. To create global awareness of zoonotic TB and its impact to public health.
3. To highlight the incidence of its societal and clinical impact.
4. To launch the ZTB policy road map.

Chair: Alejandro Perera (Mexico)

Relational Sequencing TB (ReSeqTB): global effort to standardise and consolidate MTBC whole genome sequences through a collaborative data sharing platform
Marco Schito (United States of America) 16:00 - 16:15

Mycobacterium orygis: an emerging threat for cattle and primates in Southeast Asia
Zeaur Rahim (Bangladesh) 16:15 - 16:30

The Ibarapa Meje One Health initiative
Simeon Cadmus (Nigeria) 16:30 - 16:45

Bovine response to candidate anti-TB vaccines?
Prasad H. Krishna (India) 16:45 - 17:00

Working toward effective ZTB control in the resource-poor setting: opportunities and challenges
Thaddeus Miller (United States of America) 17:00 - 17:15

Discussion 17:15 - 17:30

Oral Abstract session (OA)
16:00 - 17:30
Hall 6 - Events Ballroom

EN-ES 13. Multi-country experiences in tobacco industry interference in tobacco control

Chair: Xiaolin Wei (Canada)
Chair: Dean Schraufnagel (United States of America)

OA-176-13 Monitoreo de la política de impuestos al cigarrillo en Colombia
Norman Maldonado (Colombia) 16:00 - 16:10

OA-179-13 Tobacco excise as a potential source of local health financing in Indonesia
Abdillah Ahsan (Indonesia) 16:10 - 16:20

OA-196-13 Tracking investments by financial institutions in tobacco companies: what tobacco control advocates need to know and do about it
Pranay Lal (India) 16:20 - 16:30
Scientific Programme

OA-197-13  Observational survey to explore the situation of unregulated tobacco traders in Bangladesh
            Syed Mahbubul Alam Tahin (Bangladesh)  16:30 - 16:40

OA-199-13  Counter tobacco companies interference by civil society and media
            Saifuddin Ahmed (Bangladesh)  16:40 - 16:50

OA-200-13  Use of tobacco in Brazilian reality shows: status and potential influence on low-income population
            Valeska Figueiredo (Brazil)  16:50 - 17:00

Oral Abstract session (OA)
16:00 - 17:30  Hall 7 - Events Ballroom

EN-ES 14. The Union student late-breaker session on lung health
Chair: Stacie Stender (South Africa)
Chair: Jeremiah Chakaya Muhwa (Kenya)
Chair: Norio Yamada (Japan)

The Union Young Investigator Prize  16:00 - 16:05

OA-2926-1  Sensitivity and specificity of a novel nanogold assay in detecting patients with active pulmonary TB
            Hesham El-Samadony (Egypt)  3

OA-2960-1  The changing face of pediatric tuberculosis in high-income, low-incidence countries: a 25-year conventional and molecular epidemiologic case study
            Angela Lau (Canada)  3

OA-2842-1  Impact of 2015 Southeast Asian haze crisis: particulate matter is associated with TB cases in Pekanbaru City, Riau Province, Indonesia
            Suyanto Unri (Thailand)  3

OA-2882-1  Insights into the effect of simvastatin on the immune response against Mycobacterium tuberculosis
            Paola Del Carmen Guerra de Blas (Mexico)  3

OA-2498-1  Drug resistant tuberculosis outbreak on Daru Island, Papua New Guinea: driven by a unique modern Beijing strain of Mycobacterium tuberculosis
            Arnold Bainomugisa (Australia)  3

OA-2867-1  The role of HIV co-infection in tuberculosis transmission in the low-incidence setting of England, Wales and Northern Ireland, 2010-2014
            Joanne Rebecca Winter (United Kingdom)  3

OA-2987-1  Molecular analysis of streptomycin-resistance associating genes on Mycobacterium tuberculosis isolates from Nepal
            Dipti Shrestha (Japan)  3

OA-2933-1  Molecular epidemiology of M. bovis among patients with pulmonary TB in Ethiopia
            Muluwork Getahun (Ethiopia)  3
OA-2911-1  Recommended age at BCG vaccination - modelling the impact on global paediatric TB mortality
Partho Roy (United Kingdom)

Symposium (SP)
16:00 - 17:30
Hall 8 - Events Ballroom

44. Finding the 'missing' TB patients: a role for patient-pathway analysis

Among the 'missing' TB patients are people who are actively seeking care but who have not encountered TB diagnostic and treatment services in the locations where they accessed health services. Using commonly available survey data, the patient pathway analysis (PPA) methodology was developed to improve knowledge about the alignment between care seeking and TB service availability. PPA may guide programmes to identify health systems alignment gaps that can be addressed through targeted programme interventions. Examples of country-level use of PPA results will be discussed including the Philippines, South Africa and Kenya.

Chair: Christy Hanson (United States of America)
Chair: Mike Osberg (United States of America)

Patient-pathway analysis: methods and global lessons learned  16:00 - 16:15
Christy Hanson (United States of America)

Philippines: using patient-pathway analysis to improve patient-centred TB care in a decentralised health system  16:15 - 16:30
Ana Marie Celina Garfin (Philippines)

Kenya: patient-pathway analysis informing a differentiated programme response to urban-rural variances in TB care seeking  16:30 - 16:45
Faith Ngari (Kenya)

South Africa: using care cascades to support seamless care across the public health sector  16:45 - 17:00
Pren Naidoo (South Africa)

Patient-pathway analysis as an input to priority-setting: Comments from the Global Fund  17:00 - 17:15
Eliud Wandwalo (Switzerland)

Discussion  17:15 - 17:30

Symposium (SP)
16:00 - 17:30
Hall 9 - Jalisco Hall

45. Innovative approaches to increase the performance of your health workforce

To strengthen the capacity of health care workers, health programmes require high training budgets. However direct funding for training is decreasing, the quality and impact of training programmes have been under discussion and there is a call for cheaper, less time-consuming and more effective capacity-building approaches. This symposium will show alternatives to traditional training including: blended learning programmes combining computer-based learning and onsite workshops; the use of mobile phones to share knowledge and improve problem solving skills; PhotoVoices, and participatory video, to raise awareness and come to action; and on the job learning, applying new skills and improving work practices.

Chair: Marleen Heus (Netherlands)
Chair: Liesbeth Oey (Netherlands)
Scientific Programme

Blended learning on TB/HIV diagnostics, treatment and care 16:00 - 16:15
Nadine Pakker (Netherlands)

Mobile phones to build the capacity of community health care workers in Kenya 16:15 - 16:30
Carolyne Wanyonyi (Kenya)

Learning on the job to improve TB infection control practices in health facilities in Malawi 16:30 - 16:45
Lameck Mlauzi (Malawi)

PhotoVoices to give a voice to TB patients and make TB care more patient-centred 16:45 - 17:00
Netty Kamp (Netherlands)

New technologies for self-training, potential to bridge the gap in developing countries 17:00 - 17:15
Ignacio Monedero (Spain)

Discussion 17:15 - 17:30

Oral Abstract session (OA)
16:00 - 17:30
Hall 10 - Jalisco Hall

15. TB transmission: models, sequences and coordinates

Chair: Martín Castellanos (Mexico)
Chair: Bradley Wagner (United States of America)

Jebson Zingwari (South Africa)

OA-182-13 Spatial-temporal analysis of mycobacterial load among primary health care facilities in Eastern Cape province, South Africa 16:20 - 16:30
Jabulani Ronnie Ncayiyana (South Africa)

Olusoji Daniel (Nigeria)

OA-184-13 Incorporating resource constraints into mathematical models of TB: an example of case finding in South Africa 16:40 - 16:50
Tom Sumner (United Kingdom)

OA-185-13 A prediction model of mortality after initial treatment outcome in multidrug-resistant tuberculosis patients 16:50 - 17:00
Meredith Milstein (United States of America)

OA-186-13 Pulmonary TB cases missed by primary health care clinics, Buffalo City Metropolitan Health District, Eastern Cape, South Africa 17:00 - 17:10
Andrew Medina-Marino (South Africa)
Scientific Programme

**OA-187-13** Feasibility assessment to select six European Union member states for conducting tuberculosis inventory studies and capture\* recapture modelling
Christina Mergenthaler (Netherlands) 17:10 - 17:20

**Short Oral Abstract session (SOA)**
16:00 - 17:30
Hall 11 - Jalisco Hall

**13. News and updates on latent TB infection**
Chair: Hendrik Simon Schaaf (South Africa)
Chair: Kevin Schwartzman (Canada)

**SOA-424-1** Predicting tuberculosis among adult household contacts: external validation of a tuberculosis risk score
Tom Wingfield (United Kingdom) 16:00 - 16:06

**SOA-425-1** Seasonality, HIV and invalid T-SPOT.TB results: piecing together the IGRA puzzle in childhood TB
Heather Highsmith (United States of America) 16:06 - 16:12

**SOA-426-1** Pre-immigration latent tuberculosis infection screening in new migrants to low-incidence countries: a cost-effectiveness analysis
Jonathon Campbell (Canada) 16:12 - 16:18

**SOA-427-1** Preventive treatment for contacts of multidrug-resistant tuberculosis: a systematic review
Dennis Falzon (Switzerland) 16:18 - 16:24

**SOA-428-1** Incidence and risk factors for tuberculosis infection in a high endemic region: a follow-up study among household and community contacts in Vellore, South India
Padmanesan Narasimhan (Australia) 16:24 - 16:30

**SOA-429-1** Factors associated to isoniazid-preventive therapy initiation and completion among household contacts &LT; 5 years old of tuberculosis patients
Larissa Otero (Peru) 16:30 - 16:36

**SOA-430-1** The cascade of care in LTBI in Indonesia
Rovina Ruslami (Indonesia) 16:36 - 16:42

**SOA-431-1** Strategies to reduce losses in the cascade of care of latent tuberculosis: a systematic review and meta-analysis
Saiedeh Moayed-Nia (Canada) 16:42 - 16:48

**SOA-432-1** Lack of TB knowledge among TST-positive household contacts of pulmonary cases: a missed opportunity
Andrea DeLuca (United States of America) 16:48 - 16:54

**SOA-433-1** Barriers and achievements in promoting preventive therapy for contacts of tuberculosis patients in Lima, Peru
Ana Millones (Peru) 16:54 - 17:00

**SOA-434-1** Potential clinical utility of borderline result with the T-SPOT®.TB test
Karen Rego (United States of America) 17:00 - 17:06
Scientific Programme

Symposium (SP)
16:00 - 17:30
Hall 12 - Jalisco Hall

46. TB in child migrants: addressing unique needs to stride towards elimination

Child migrants may face higher TB exposure due to overcrowded living conditions and increased vulnerability to HIV, malnutrition and developmental delay propagated by marginalisation. TB diagnostic delays among child migrants may be associated with limited healthcare access, parental education, health seeking behaviours, cultural beliefs and stigma. Coupled with diagnostic and treatment challenges characteristic of child TB, these hazards can place child migrants at risk of missed diagnosis and treatment failure amplified by suboptimal continuity of care typical of migration. Absence of TB prevention and control strategies targeting child migrants can result in poor TB outcomes and thwart progress towards elimination.

Chair: Poonam Dhavan (Switzerland)
Chair: Anna Mandalakas (United States of America)

- What is the evidence on migrant child health and TB? 16:00 - 16:15
  Poonam Dhavan (Switzerland)

- Child TB screening strategies for accompanied and unaccompanied children 16:15 - 16:30
  Kathleen Moser (United States of America)

- Expanding access to integrated childhood TB care and prevention in Uganda 16:30 - 16:45
  Moorine Sekadde (Uganda)

- Challenges and successes of implementing child TB services among migrant and refugee children: the sweet relief of child friendly TB formulations 16:45 - 17:00
  Immaculate Kathure (Kenya)

- Promoting the well-being of immigrant children through direct services and advocacy 17:00 - 17:15
  Alan Shapiro (United States of America)

- Discussion 17:15 - 17:30

Oral Abstract session (OA)
16:00 - 17:30
Hall 13 - Jalisco Hall

16. MDR-TB: treatment outcomes using new drugs

Chair: Chen-Yuan Chiang (Taiwan)
Chair: Wim Vandevelde (South Africa)

- OA-188-13 Culture conversion and reversion of multidrug resistant tuberculosis patients receiving bedaquiline in a compassionate use programme in Armenia and Georgia 16:00 - 16:10
  Catherine Hewison (France)

- OA-189-13 The use of bedaquiline to treat patients with multi- and extensively drug-resistant tuberculosis in Belarus 16:10 - 16:20
  Alena Skrahina (Belarus)

- OA-192-13 Outcomes of multidrug-resistant tuberculosis patients receiving bedaquiline in a compassionate use programme in Armenia and Georgia 16:20 - 16:30
  Mathieu Bastard (Switzerland)
Scientific Programme

OA-191-13  Concomitant use of bedaquiline and delamanid in patients with pulmonary XDR-TB and additional resistance to other second-line drugs in Kazakhstan
Michael Rich (United States of America)

OA-190-13  Bedaquiline and linezolid-based regimens for fluoroquinolone-resistant MDR-TB: how much better is it?
Mathieu Bastard (Switzerland)

OA-193-13  Delamanid for rifampicin-resistant tuberculosis: an observational cohort study from Khayelitsha, South Africa
Erika Mohr (South Africa)

OA-194-13  Drug resistant TB burden among contacts of drug resistant TB patients: results from routine program implementation in three regions of Ethiopia
Nebiyu Hiruy (Ethiopia)

Encuentro: Skills Building
16:00 - 16:40

La movilidad no motorizada nos beneficia a todos
La movilidad es indispensable en nuestro actuar cotidiano, si bien podemos elegir diferentes modos de transporte, los problemas generados por la desmesurada presencia de automóviles nos perjudican a todos, afortunadamente la solución está en nuestras manos.
Chair: Malintzin Negrete Pimienta (Mexico)

La movilidad no motorizada nos beneficia a todos
16:00 - 16:40
Malintzin Negrete Pimienta (Mexico)
EN-ES 1st Meeting of Ibero-American Network for Infantile TB "Reducing the Incidence and the suffering of children by tuberculosis"

Diminishing the historical carelessness in the world about the infancy tuberculosis epidemic, whose magnitude is unknown and it constitutes a real emergency for its attention. It's evident that the burden in children is more severe than expected (10-20% of the total), due to the difficulty of its diagnosis, a status that is aggravated because a large part of the population has adjacent social conditions of poverty and inequity; families with poor knowledge of the disease, living in communities with deficient and limited health services. Besides, there are no research and care programs for children at risk for TB and frequently there are no systems of registration and notification of cases. Most of the times there is a close adult with active TB as a source of contagion. The symptoms of TB in children are confused with other common diseases, so the diagnosis goes unnoticed, therefore babies and young children are at high risk of developing severe forms of disseminated TB and even death. There is no accurate and universally accepted test for the diagnosis of infancy tuberculosis. There are no data on multidrug-resistant TB burden and HIV / TB comorbidity in children. Nonetheless, it is encouraging that child TB now occupies an important plane of world attention to be taken out of the shadows. The Ibero-American Network for Infantile Tuberculosis is an initiative to unite wills and joint efforts of scientists and other interested people of the region, given the urgent need to investigate and develop better options for the diagnosis, treatment and control of childhood TB. In the short term, this should give as a result, the necessary evidence to innovate actions and strategies to respond the challenges of reducing the disease incidence, mortality and prevent childhood suffering due to tuberculosis.

Coordinator: Arturo Plascencia Hernandez (Mexico)
Chair: Gladys Abreu Suarez (Cuba)
Chair: Napoleon Gonzalez Saldaña (Mexico)

1st Meeting of Ibero-American Network for Infantile TB "Reducing the Incidence and the suffering of children by tuberculosis"

Gladys Abreu Suarez (Cuba)
Edilberto Rodolfo González-Ochoa (Cuba)
Yaxsier De Armas Rodriguez (Cuba)
Jacobus H de Waar (Venezuela)
Paula Andrea Duque (Colombia)
Larissa Otero (Peru)
Eduardo Briones de la Blanca (Spain)
Napoleon Gonzalez Saldaña (Mexico)
Arturo Plascencia Hernandez (Mexico)

Una nariz electronica versus el algoritmo de Graham para el diagnostico de Tuberculosis en ninos

Luisa Quesada (Venezuela)
**Symposium (SP)**
17:00 - 18:00

**MSF: 5 urgent improvements to DRTB treatment**

Cure rates for drug-resistant TB (DR-TB) remain abysmal at 50% and 26% for MDR-TB and XDR-TB, respectively. This session will cover the latest implementation research, evidence, and arguments for essential improvements to DR-TB treatment that can help to reach more people and improve treatment outcomes. This includes: reducing the burden on people with TB through decentralized, ambulatory care, and use of shorter and optimized regimens including use of new classes of drugs. Also, we will review the best practices for ensuring procurement of quality affordable medicines and finally, discuss the need for a paradigm shift in how medicines are developed that can result in a pan-TB regimen.

We will also review the findings from MSF and Stop TB Partnership’s latest Out of Step 2017 report. The report surveys DR-TB treatment policies and practices in 30 countries, and exposes areas where countries are “out of step” with WHO recommendations for TB and DR-TB management.

Coordinator: Sharonann Lynch (United States of America)

**Speakers:**
- Jay Achar (United Kingdom)
- Catherine Hewison (France)
- Christophe Perrin (France)
- Sharonann Lynch (United States of America)

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**Satellite session (SS)**
18:00 - 19:30

**09. Bedaquiline roll-out-sharing experience from India and other countries**

Organised by: The Union - Challenge TB India

Bedaquiline has been introduced in several countries for the treatment of severe forms of DR-TB. Encouraging evidence from South Africa indicated the drug’s safety, effectiveness, and importance in treating DR-TB. The USAID funded and KNCV led Challenge TB Project facilitates introduction of new drugs and shorter regimens in 23 countries, including India.

NTP India rolled out Bedaquiline Conditional Access Programme at six sites, where 538 DR-TB cases were put on Bedaquiline by June 2017. Nation-wide Bedaquiline access is planned by end of 2017.

The symposium aims at sharing processes, challenges and solutions for successful roll-out of new drugs.

Chair: Sunil Khaparde (India)
Chair: Fraser Wares (Netherlands)

**Introduction**
18:00 - 18:10
Neerja Arora (India)

**My journey-from XDR TB to 20000 feet above the ground**
18:10 - 18:20
Saurabh Rane (India)

**The Union’s perspective for the implementation of the Shorter Treatment Regimen for MDR-TB**
18:20 - 18:30
Alberto Piubello ( Niger)

**Challenges and successes in introducing bedaquiline and delamanid in South Africa**
18:30 - 18:40
Norbert Ndjeka (South Africa)

**National experience in Bdq CAP, how we prepared to roll out new drugs and regimens in India**
18:40 - 18:50
VS Salhotra (India)
USAID’s experiences and perspective of introduction of new drugs and regimens for DR-TB
Mukadi YaDiul (United States of America)

18:00 - 18:10

WHO global action plan for the prevention and control of NCDs 2013-2020 – progress and challenges
Douglas Bettcher (Switzerland)
Roberto Iglesias (Brazil)

18:10 - 18:20

Reaching Universal Health Coverage through better integration of TB and NCD care
Jacob Creswell (Switzerland)

18:20 - 18:30

Clean air for a healthy, sustainable future for all
Neil Schluger (United States of America)

18:30 - 18:40

The burden of NCD co-morbidities: a call to action for lung health practitioners
Dean Schraufnagel (United States of America)

18:40 - 18:50

A person centred response: by the people, for the people
Rafael Camacho Solis (Mexico)

11. Advancing New Technologies and Approaches to Novel TB Regimen-Development
Organised by: Otsuka Novel Products GmbH

Rapid advancements are taking place in the field of new TB drug and regimen development, particularly in combination with recently developed anti-TB medications. This symposium will focus on three areas: 1) late-breaking data on results from the delamanid phase 3 clinical trial and an integrated analysis of delamanid’s global clinical trial database 2) updates on the development of the new anti-TB compound OPC-167832 and 3) a panel discussion on cutting-edge approaches to TB regimen development with leaders in the field from the Critical Path to TB Drug Regimens (CPTR) and the University of California San Francisco (UCSF).

Chair: Lawrence Geiter (United States of America)
**Scientific Programme**

**Delamanid Global Clinical Database and Phase 3 Trial Results**  
Lawrence Geiter (United States of America)  
18:00 - 18:20

**Early Programmatic Experiences with Delamanid for MDR-TB and an Update on Clinical Development of OPC-167832**  
Rajesh Gupta (United States of America)  
18:20 - 18:40

**Optimizing Innovation: Cutting-edge Approaches to Novel TB Regimen-Development**  
Debra Hanna (United States of America)  
18:40 - 19:00

**Optimizing Innovation: Cutting-edge Approaches to Novel TB Regimen-Development**  
Patrick Phillips (United Kingdom)  
19:00 - 19:20

**Discussion**  
19:20 - 19:30

**Satellite session (SS)**  
18:00 - 19:30 Hall 8 - Events Ballroom

**12. TB care for communities in emergency contexts: addressing the challenges of treatment disruption and minimising development of drug resistance**

Over 65 million are forcibly displaced from home; in Africa in 2015 alone, 9,500 daily flee their homes. The Syrian conflict has displaced half the population. The Iraqi protracted war has displaced 3.3 million. Population displacement, coupled with health infrastructure and system destruction poses challenges to control of TB inside these countries and in neighboring countries.

The speakers will share overviews of the impact of conflict and displacement on TB incidence and prevalence, highlight the main challenges related to TB control among crisis-affected populations, and share good practices and models to address TB in humanitarian emergencies in different countries.

Chair: Susan Cookson (United States of America)  
Chair: Aleksandar Galev (Jordan)

**Challenges in management of TB for Internally Displaced Populations (IDPs) in Iraq**  
Nedal Odeh (Iraq)  
18:00 - 18:20

**Syrian Refugees in Jordan and Lebanon: Joint TB control initiatives among the international communities and national programs**  
Saiful Qayyum (Jordan)  
18:20 - 18:40

**Assessment of tuberculosis burden, treatment, and detection rates among Syrian refugees—Jordan and Lebanon, 2015-2016**  
Andrew T. Boyd (United States of America)  
18:40 - 19:00

**The Syrian civil war: Impact on TB care delivery inside Syria**  
Ghada Mujhazi (Syrian Arab Republic)  
19:00 - 19:10

**The Global Fund response to TB care in emergencies**  
Mohammed Yassin (Switzerland)  
19:10 - 19:20

**Discussion**  
19:20 - 19:30
Scientific Programme

Encuentro: Participatory Activity
18:15 - 19:15
Foro - Encuentro Expo

Rodando por el Pulmón

Bike ride lead by BICINEMA an NGO that promotes bicycle as a sustainable transportation and links the bicycle to cultural activities.
Leave from Foro Expo to corredor Chapultepec in a rodada of bicycles for about 40 - 50 minutes and come back to Foro Expo.
This activity will provide a nice ride where participants will be able to see more of Guadalajara. (The ride will go no fast than 15 km /hour).
At Encuentro we will have a registration counter for the delegates that would like to participate on the “rodada”
Chair: Roi Sedano (Mexico)

Encuentro: Participatory Activity
19:15 - 21:00
Foro - Encuentro Expo

Film screening - BICINEMA

A projection of short films that were presented at the International Bike Film of Guadalajara will be shown.
BICINEMA is an NGO that promotes bicycle as a sustainable transportation and links the bicycle to cultural activities such as the Cinema. They have brought to Guadalajara, The International Bike film since 2010.
During this activity, BICINEMA will also provide popcorn and tea for participants.
Chair: Roi Sedano (Mexico)

Member Meetings (Regional, Section, Sub-section, Working Group)
19:30 - 20:30
Hall 10 - Jalisco Hall

GENERAL ASSEMBLY

General Assembly of The Union
19:30 - 19:40
Jeremiah Chakaya Muhwa (Kenya)
Saturday, 14 October 2017

Admin or Side Meetings (MTG)
08:00 - 09:00
Los Arcos

CCSA 2
Encuentro: Networking Activity
08:15 - 08:45
Encuentro session room

EN-ES Patient-centred care - What does it mean? Should patients be mere recipients? How can it be made a reality?

Patient-centred care is increasingly becoming an oft-discussed term. Is it merely a term? Or does it hold relevance for a patient? Is it being practiced? What does it entail for a patient to receive care centred around him/her?
The dichotomy in making patient-centred care a reality is the increasing dependence on technology for diagnosis and treatment. Technology affords opportunity for greater accuracy in diagnosis; it also however distances the patient from the doctor. Gradually the patient becomes a mere disease, an organ and a object of specialisation.
The reality of patient-centred care is far removed from this situation. A patient is far more than being an organ or a disease. S/he is in fact, often a complex, unique combination of factors that need customised care.
TB+Diabetes+Hypertension - how is this handled? If the doctor depends on technology alone, patient-centred care is severely compromised.
Thus it is important for partnerships to be created between patients and their doctors in order to ensure customised treatment for each patient. It requires that the doctor has complete information of all conditions that the patient is being treated for and works along with the patient equipping him/her with treatment literacy for each disease, its complications and side-effects and how to manage them.
It is imperative for doctors to draw patients into conversations vital to their (patient) well-being. It is important to adopt a ‘family physician’ approach which also has integrated technology into the process. It is important that each patient is an advocate for him/herself. And that doctors LISTEN to voices and not just stethoscopes.
The session is intended for a fish-bowl format in order to enable a vibrant and inclusive discussion.

Coordinator: Bharathi Ghanashyam (India)
Coordinator: Archana Trivedi (India)

Speaker:
Bharathi Ghanashyam (India)
Archana Trivedi (India)

Plenary session (PL)
09:00 - 10:00

EN-ES 03. Accelerating lung health over the life course

Chair: E Jane Carter (United States of America)
Chair: Héctor Raúl Pérez Gómez (Mexico)

PRINCESS CHICHIBU MEMORIAL TB GLOBAL AWARD 09:00 - 09:05
Time for a quality revolution in tuberculosis care 09:05 - 09:15
Madhukar Pai (Canada)
Scientific Programme

Minimally invasive autopsy: The rebirth of post-mortem methods for mortality surveillance in poor countries 09:15 - 09:25
Quique Bassat (Spain)

Diagnostics challenges and best practices 09:25 - 09:35
Catharina Boehme (Switzerland)

Addressing the needs of TB patients 09:35 - 09:45
Enrique Delgado (Panama)

Encuentro: Panel Discussion
09:00 - 10:00
Encuentro session room

Plenary Broadcast
Live transmission from the plenary hall into the Encuentro session room

Encuentro: Art Display
10:00 - 10:20
Foro - Encuentro Expo

Meet the Artist: Campaña Hazla de Tos por aire limpio

Es una presentación del material gráfico para sensibilizar y provocar que la sociedad exija su derecho a un aire limpio.
Esta campaña se llevó acabo del 2012 al 2015 por la BICIRED (www.bicired.org) logrando que la actualización de las normas de medición del aire estén más cercanas a lo recomendado por la Organización Mundial de la Salud (OMS).

La BICIRED es una red nacional, plural, horizontal y sin fines de lucro, de organizaciones y colectivos ciudadanos locales y nacionales que trabajan en beneficio de la movilidad en bicicleta en las vialidades urbanas del país.

Chair: Yeriel Salcedo Torres (Mexico)

Encuentro: Testimonials
10:15 - 11:15
Encuentro session room

EN-ES Salud en Fibrosis Quística

Queremos dar a conocer que somos una Asociación que se formó hace más de 18 años por iniciativa de Jesús Rafael Martínez Marroquín paciente con Fibrosis Quística quien invitó a un grupo de padres de familia con hijos que padecían esta enfermedad, de esta manera se formó la ASOCIACION REGIMONTANA DE FIBROSIS QUITICA, A.C. para así dar apoyo a estos pacientes y sus familias por medio de consultas médicas, estudios de laboratorio, medicamentos y lo que soliciten los médicos especialistas que los atienden.
También queremos hacer de su conocimiento que se formó la ALIANZA PARA TRATAMIENTO DE LA FIBROSIS QUÍSTICA EN LA REPÚBLICA MEXICANA,A.C., con la cual nos ayudaríamos a tener mayor cobertura para conseguir nuevos antibióticos para los pacientes con Fibrosis Quística.
Esta ALIANZA está integrada por la Asociación de Guadalajara, Jalisco; León , Guanajuato; Morelos, y Nuevo León.

Coordinator: Silvia Cristina Marroquin Benavides (Mexico)

Salud en Fibrosis Quística
Silvia Cristina Marroquin Benavides (Mexico)
EN-ES 14. TB care: who pays, how much, and to what end?

Chair: Carol Nawina (Zambia)
Chair: Jacob Creswell (Switzerland)

SOA-435-1  How affordable is TB care? Findings from a nationwide TB patient cost survey in Ghana  10:30 - 10:36
Debora Pedrazzoli (United Kingdom)

SOA-436-1  Feedback from TB-affected households receiving a socio-economic intervention in Peruvian shantytowns: acceptability of social versus economic support according to poverty level  10:36 - 10:42
Tom Wingfield (United Kingdom)

SOA-437-1  Socio-economic scenarios of tuberculosis in Brazil  10:42 - 10:48
Kleydson Bonfim Andrade (Brazil)

SOA-438-1  A cross-sectional study to analyse patient costs during extra-pulmonary tuberculosis diagnosis and treatment  10:48 - 10:54
Hazera Muyeena (Bangladesh)

SOA-439-1  Analysing clinical and cost data for effective use of domestic resources for TB: the case of Ukraine  10:54 - 11:00
Alexandr Katsaga (Canada)

SOA-440-1  TB pay-for-performance programme under universal health insurance versus conventional DOTS program for patient-centered care in Taiwan  11:00 - 11:06
Cheng-Yi Lee (Taiwan)

SOA-441-1  Pre and post-diagnosis costs of tuberculosis to patients on DOTS in districts of Southwest Ethiopia: a longitudinal study  11:06 - 11:12
Abyot Asres (Ethiopia)

SOA-442-1  Cost-effectiveness analysis of pulmonary tuberculosis case finding strategies among high-risk communities in Kampala, Uganda  11:12 - 11:18
Juliet Sekandi (United States of America)

SOA-443-1  Cost-effectiveness of including determine TB-LAM test to diagnose tuberculosis in HIV-positive symptomatic patients  11:18 - 11:24
Nadia Yakhelef (France)

SOA-444-1  Promotion and operation for upfront GeneXpert testing of suspected pediatric tuberculosis patients in India: cost analysis in the health systems perspective  11:24 - 11:30
Sophie Huddart (Canada)

SOA-445-1  Estimation of resource constraints in the scale-up of intensified case finding in South Africa  11:30 - 11:36
Fiammetta Bozanni (United Kingdom)
56. Epidemiología de la tuberculosis en las Américas

La evolución de la Tuberculosis en las Américas ha tenido diversos alcances de acuerdo a la carga de la enfermedad en los distintos países, así como en el seguimiento de indicadores clave para el control de esta. En este simposium se presentan los alcances sobre la enfermedad en dos países de alta carga y dos de baja carga de la enfermedad así como sus desafíos hacia la eliminación.

Chair: Mirtha Del Granado (United States of America)
Chair: Miguel Salazar (Mexico)

- **Desafíos hacia la eliminación de la TB en El Salvador**
  Julio Garay (El Salvador)
  10:30 - 10:50

- **Alcances y desafíos para el control de la tuberculosis en México**
  Martín Castellanos (Mexico)
  10:50 - 11:10

- **Avances y retos para el control de la tuberculosis en Perú**
  César Bonilla (Peru)
  11:10 - 11:30

- **El control de la tuberculosis en Costa Rica**
  Mata Saidy (Costa Rica)
  11:30 - 11:50

**Discusión**
11:50 - 12:00

18. Training healthcare workers

Chair: Linette McElroy Hawkes (Canada)
Chair: Bruce Struminger (United States of America)

- **OA-208-14 Introduction of a systematic TB contact investigation model with facility-level self-performance monitoring in Malawi**
  Godwin Nyirenda (Malawi)
  10:30 - 10:40

- **OA-209-14 Evaluation of nurses' knowledge of TB and MDR-TB before and after training**
  Carrie Tudor (Switzerland)
  10:40 - 10:50

- **OA-210-14 Training and involvement of 'Slum Community Volunteers' in urban TB control: intervention to overcome slum TB in West Bengal**
  Pallab Bhattacharyya (India)
  10:50 - 11:00

- **OA-211-14 Role of medical colleges in achieving End TB strategy in India: recent achievements and future prospects**
  Venkatesh Roddawar (India)
  11:00 - 11:10

- **OA-212-14 Blended learning for capacity building of health care workers in TB-HIV: results of a comparative study in Ethiopia**
  Degu Jerene (Ethiopia)
  11:10 - 11:20

- **OA-213-14 Education for active case finding of tuberculosis in prisons: lessons learnt**
  Deny Sanchez (Colombia)
  11:20 - 11:30
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OA-214-14  A survey of the tuberculosis workforce in the country of Georgia  11:30 - 11:40
Daniel Garcia (United States of America)

Mishal Sameer Khan (Singapore)

Symposium (SP)
10:30 - 12:00  Hall 5 - Events Ballroom

49. Quality of TB drugs - evidence and policy action
The pharmacokinetics of anti-TB drugs have a significant impact on the effectiveness of treatment regimens. Rifampicin remains one of the most important drugs in the treatment of drug-sensitive TB and has been used increasingly in fixed-dose combinations (FDCs). Despite the convenience of FDCs and their potential to improve patient adherence, recent studies indicate that the bioavailability of rifampicin may be reduced in FDCs. The objective of this session is to review evidence on factors affecting quality and bioavailability of rifampicin and to identify strategies for effective utilisation of quality assured drugs within National TB programmes.

Chair: Neeraj Kak (United States of America)
Chair: Yogan Pillay (South Africa)

Quality concerns about rifampicin within anti-tuberculosis fixed dose combinations: a summary of the evidence  10:30 - 10:45
Neeraj Kak (United States of America)

Strategies for ensuring the Quality of FDCs in National Tuberculosis Programs  10:45 - 11:00
Tamar Gabunia (Georgia)

Addressing factors lowering the bioavailability of rifampicin in FDCs and non-FDCs in Southern Africa countries  11:00 - 11:15
Brian Kaiser (Switzerland)

Evidence gaps and research agenda for monitoring rifampicin bioavailability and pharmacokinetics  11:15 - 11:30
Giorgio Roscigno (Switzerland)

New approach for routine monitoring of anti-TB drugs through bioavailability and pharmacokinetics studies  11:30 - 11:45
Helen McIlleron (South Africa)

Discussion  11:45 - 12:00
Symposium (SP)
10:30 - 12:00
Hall 6 - Events Ballroom

50. Depression: a neglected co-morbidity impeding End TB strategy

The purpose of this symposium is to address the burden and impact of major depressive disorder (depression) on TB outcomes and the essential role it plays in the Global End TB Strategy. Three groundbreaking studies explore how depression-related immunosuppression may increase risk for TB reactivation, whereas another longitudinal study demonstrates how untreated depression is associated with increased mortality, treatment default, disability and poorer quality of life.

Chair: Adam Karpati (United States of America)
Chair: Jamhoih Tonsing (India)

- Depression and the End TB Strategy 10:30 - 10:45
  Annika Sweetland (United States of America)

- Depression and risk of TB: a nationwide population-based cohort study 10:45 - 11:00
  Kyung-Hyun Oh (Korea, Republic of)

- Impact of untreated depression on TB treatment outcomes, disability and quality of life in Ethiopia: a cohort study 11:00 - 11:15
  Fentie Ambaw (Ethiopia)

- Intrinsic relations between immune system and nervous system may be associated with major depressive disorder in pulmonary TB 11:15 - 11:30
  Afranio Kritski (Brazil)

- Relation between the glutamatergic pathway and inflammatory processes during pulmonary TB and its association with major depression disorders 11:30 - 11:45

Discussion 11:45 - 12:00

Symposium (SP)
10:30 - 12:00
Hall 7 - Events Ballroom

51. La enfermedad pulmonar obstructiva crónica en México

La EPOC ocupa los primeros cinco lugares de morbilidad y mortalidad en el mundo y su prevalencia en personas mayores de 40 años de edad es más del 10%. A pesar de la complejidad para medir su prevalencia, se puede afirmar que en muchos países desarrollados está aumentando, que es mayor en fumadores que en exfumadores, en individuos de más de 40 años de edad y es mayor en hombres que en mujeres; sin embargo, el perfil etario va cambiando, actualmente los datos muestran que el 70% de los pacientes son menores de 65 años.

Chair: Jóse Rogelio Pérez Padilla (Mexico)
Chair: Rafael Hernández (Mexico)

- Manejo de la EPOC en el Primer Nivel de Atención 10:30 - 10:50
  Rafael Hernández Zenteno (Mexico)

- Daños a la Salud por EPOC en México 10:50 - 11:10
  Robert Camargo (Mexico)

- Epoc y comorbididades 11:10 - 11:30
  Rosaura Benitez Pérez (Mexico)

- Deshabitación tabaquica como prevención de la EPOC 11:30 - 11:50
  Justino Regalado Pineda (Mexico)
52. Implementing and sustaining the appropriate biosafety in TB laboratories: ZN smears through to drug susceptibility testing (DST) cultures

Despite significant investments in infrastructure upgrades, particularly at reference laboratory levels, many countries still have unsafe working environments (microscopy/GeneXpert to culture and DST). Adequate operation and maintenance of biosafety equipment (BSCs, centrifuges, HVAC systems) and provision of personal protective equipment (PPE) such as respirators, gloves, etc is lacking. Best practices are essential, yet they are not well understood. Administrative, environmental and PPE must be in place to ensure worker safety and quality diagnostic results. This session will highlight effective approaches to solving issues faced by laboratories and demonstrate synergy of biosafety with infection control in the process of achieving quality and accreditation.

Chair: Alaine Umubyeyi Nyaruhirira (South Africa)
Chair: Paul Jensen (United States of America)

- **How does biorisk management relate to the implementation of biosafety**
  - Christopher Gilpin (Switzerland)  
  - 10:30 - 10:45

- **How do we balance risk, biosafety and sustainability?**
  - Paul Jensen (United States of America)  
  - 10:45 - 11:00

- **Challenges and solutions for high-and-moderate-risk TB laboratories**
  - Grigory Volchenkov (Russian Federation)  
  - 11:00 - 11:15

- **Facility projects and the feasibility of successful risk management**
  - Jeff Serle (United States of America)  
  - 11:15 - 11:30

- **Design considerations, operation and maintenance of biosafety level three (BSL3) laboratories - the South African experience**
  - Zibusiso Muziwandile Masuku (South Africa)  
  - 11:30 - 11:45

**Discussion**  
11:45 - 12:00
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OA-203-14 Development and preliminary evaluation of an innovative serological test for rapid detection of active tuberculosis
Pierre-Alain Rubbo (France)

OA-204-14 Evaluation of an MDR-TB assay for detection of Mycobacterium tuberculosis and rifampicin and isoniazid resistance on the BD MAX™ System
Michael Porter (United States of America)

OA-205-14 Ability of genotypic methods to diagnose the level of isoniazid resistance among multidrug-resistant clinical isolates of Mycobacterium tuberculosis
Alexandra Aubry (France)

OA-206-14 Bm2Dx: the tuberculosis biomarker database
Samuel Schumacher (Switzerland)

OA-207-14 Mycobacterium tuberculosis-specific T-cells profile strongly identifies subjects with active disease
Ana Gruss (Uruguay)

Symposium (SP)
10:30 - 12:00  Hall 10 - Jalisco Hall

53. Reducing catastrophic costs for people with TB through patient-centred care

Catastrophic costs associated with TB are to be eliminated in two and a half years according to the END TB strategy. However, many components of TB care, especially multidrug-resistant TB (MDR-TB) treatment, add to the costs. Bending the cost curve and treatment burden downward for people with TB is a priority. This includes strategies to lower toxicity drugs, decentralize models of care, shorten treatment regimens and other interventions to reduce catastrophic and out-of-pocket costs of treatment for patients. We look at the impact of different interventions in different contexts and analyse the barriers to bringing about change.

Chair: Lynette Mabote (South Africa)
Chair: Wim Vandevelde (South Africa)

Personal experience and a call to end catastrophic TB costs in Kenya
Nobu Nishikiori (Switzerland)

Interventions to reduce catastrophic and out-of-pocket costs of TB diagnosis and treatment
Norbert Ndjeke (South Africa)

Improving DR-TB care and reducing burden on patients in South Africa
Karapet Davtyan (Armenia)

Ambulatory treatment of DR-TB in Armenia
Karapet Davtyan (Armenia)

Bending the cost curves for patients: shorter regimens, lower toxic drugs, and same-day ambulatory care of DR-TB
Tetyana Pylypenko (Uzbekistan)

Discussion
54. Quantifying gaps in pediatric TB diagnosis and treatment

An estimated one million children developed TB in 2015, but over 60 per cent were undiagnosed or unreported to health systems. Substantially improving the diagnosis and treatment of pediatric TB requires an understanding of where the largest gaps exist and the impact that can be expected from different interventions. However there is a general dearth of high-quality pediatric TB data to inform these assessments. This session discusses current efforts to quantify the gaps that exist in the diagnosis and treatment of childhood TB at the global and country levels.

Chair: Courtney Yuen (United States of America)
Chair: Helen E. Jenkins (United States of America)

- **Considerations when applying a care cascade model to evaluate child TB care**
  Karen Du Preez (South Africa) 10:30 - 10:45
- **Estimated burden of adolescent tuberculosis in the 30 high tuberculosis-burden countries**
  Silvia Chiang (United States of America) 10:45 - 11:00
- **Measuring the consequences of untreated childhood TB and MDR-TB**
  Helen E. Jenkins (United States of America) 11:00 - 11:15
- **Findings of a national inventory study of child TB in Pakistan**
  Courtney Yuen (United States of America) 11:15 - 11:30
- **Missed diagnoses and post-diagnosis treatment delays in pediatric TB: observations from Peru**
  Molly Franke (United States of America) 11:30 - 11:45
- **Discussion**
  11:45 - 12:00

55. Post-exposure management of households exposed to drug-resistant TB: lessons from the field

Each year half a million people develop multidrug-resistant TB (MDR-TB). To control this evolving disaster individuals will need to be identified who have both a. TB disease and who propagate the epidemic and b. asymptomatic infection who are at high risk of future TB disease progression.

One of the most effective strategies for identifying both groups is to screen, treat and follow individuals who live with those diagnosed with MDR-TB. To date this rarely happens. This symposium will present the experiences of post-exposure management in a number of field settings.

Chair: James Seddon (United Kingdom)

- **Effectiveness of regimens for the treatment of drug-resistant TB infection: results from a meta-analysis in household contacts**
  Sundari Mase (India) 10:30 - 10:50
- **Post-exposure management of household contacts of MDR-TB in Tajikistan**
  Jatinder Singh (Tajikistan) 10:50 - 11:10
Scientific Programme

Yield of a pilot post-exposure intervention in drug-resistant TB households in Karachi
Hamidah Hussain (Pakistan)

11:10 - 11:30

The ACTG IMPAACT PHOENIx feasibility study: implications for country programmes
Amita Gupta (United States of America)

11:30 - 11:50

Discussion

11:50 - 12:00

Symposium (SP)
10:30 - 12:00

Foro - Encuentro Expo

Prevenção de infecciones respiratorias con vacunas

Las vacunas son el medio más común para inmunizar a una persona contra una infección. Las vacunas han logrado erradicar exitosamente enfermedades en ciertas áreas. Las vacunas funcionan administrando a una persona una sustancia que contiene partes muy pequeñas o una forma debilitada de un agente infeccioso, como un virus o bacteria. Suele hacerse a través de una inyección. Quienes padecen una enfermedad pulmonar, corren un mayor riesgo de desarrollar infecciones en las vías respiratorias y es importante que se protejan en el mayor grado posible, recibiendo las vacunas que les recomiende su profesional sanitario.

Los temas que vamos a tratar en esta sesión son:
- Epidemiología de las infecciones respiratorias altas y bajas
- Influenza AH1N1 en 2009 en el OPD HCG
- Inmunoprevención neumocócica y para influenza
- Neumonia neumocócica

Chair: María del Rayo Morfín Otero (Mexico)
Chair: Marina de Jesúis Kasten Monges (Mexico)

10:30 - 10:40

Prevención de infecciones respiratorias con vacunas. Part I
Angel Israel Nuño Bonales (Mexico)

10:40 - 10:50

Prevención de infecciones respiratorias con vacunas. Part II
Marina Kasten (Mexico)

10:50 - 11:00

Prevención de infecciones respiratorias con vacunas Part III
Esteban González Díaz (Mexico)

Encuentro: Panel Discussion
11:30 - 12:30

EN-ES Los besos más dulces saben a sal

Somos una organización que se fundó desde el año 2001, nuestra causa son los pacientes con fibrosis quística para su mejoramiento de calidad de vida y ayudar a encontrar la cura.

El tema de los besos más dulces saben a sal, hace alegoría a una condición física de estos pacientes.
En este panel queremos dar a conocer ¿Qué es la fibrosis quística?, ¿Cómo se trata en México? y ¿Qué esperanza hay para los pacientes?

Coordinator: Ludivina Calderón (Mexico)
05. Industry interference with public health- article 5.3, alcohol, food and pharma industries

Speaker: Jeff Collin (UK)

Interference from the tobacco industry has long been recognised as the principal challenge to the development of effective tobacco control policies. Consequently, FCTC Article 5.3 seeks to exclude the industry from the policy process and identifies a fundamental conflict between industry interests and public health goals. Yet other producers of other unhealthy commodities, notably alcohol, and ultra-processed food, are still widely seen as potential partners in health initiatives. This presentation examines strategic and structural similarities and differences across tobacco, alcohol and ultra-processed food industries, and considers implications for health governance in the context of the SDGs.

Unhealthy Commodity Producers and Health Governance: Corporate Connections, Conflicts of Interest and Policy (In)Coherence

Jeff Collin (United Kingdom)

06. TB and immigrant populations

TB and immigrant populations

Poonam Dhavan (Switzerland)

Meet the Artist: TB + cartel + prevention = Mexico free of tuberculosis, Semblance of the transformation of the cartel in Mexico

For a long time, the poster was one of the most popular tools for communication. The poster in Mexico has helped the fight against Tuberculosis and it helped some communities to learn about the symptoms of tuberculosis, to identify the places to go for a treatment, to look for new cases and to keep people alive.

Since the 1990s, cartel competitions have been held between schools, and communities have run their own contests in alliances with mayors, the municipalities and health practitioners. The winners of these competitions are awarded with goods for their households.

The collection is composed by 50 lithographs posters of 90 * 60 on recycled materials, crafts and photographs. We are bringing a sample of this great national collection to raise awareness and accelerating toward elimination.

Coordinator: Martha Angelica Garcia Aviles (Mexico)
Coordinator: Maria Alejandra Chaparro Anzu (Mexico)
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**TB + cartel + prevention = Mexico free of tuberculosis, Semblance of the transformation of the cartel in Mexico**  
Luisa Eugenia Loaiza Berman (Mexico)

Meet the expert session (MTE)  
12:45 - 13:45  
Encuentro session room

**EN-ES Experts on treatment of consumption and damage associated with tobacco use, the role of non-governmental organizations**

To show in the international scope, the experience of 34 years in the multidisciplinary treatment for the implementation of non-governmental organizations that integrate different profiles of health personnel, as well as the challenges, areas of opportunity and challenges in development.

Meet the expert session

Chair: Maria angelica Ocampo ocampo (Mexico)

- **Experts on treatment of consumption and damage associated with tobacco use, the role of non-governmental organizations**  
  Maria angelica Ocampo ocampo (Mexico)  
  12:45 - 13:00

- **Experts on treatment of consumption and damage associated with tobacco use, the role of non-governmental organizations**  
  Maria Elma Correa Acevedo (Mexico)  
  13:00 - 13:15

- **Experts on treatment of consumption and damage associated with tobacco use, the role of non-governmental organizations**  
  Catalina Casillas Suarez (Mexico)  
  13:15 - 13:30

**Poster discussion session (PD)**  
12:45 - 13:45  
Poster Area

**41. Detect, report and treat: an echo from Suriname to South Africa**

Row 3

Chair: Anand Date

- **PD-864-14 Treatment cascade analysis for TB in Suriname: evaluation of the performance of the NTP, 2010-2015**  
  Eric Commiesie (Suriname)

- **PD-865-14 Pre-treatment loss to follow-up patients, Chongwe district, Zambia, 2016**  
  Seiya Kato (Japan)

- **PD-866-14 Impact of DOTS implementation on TB treatment outcome in Suriname, 2010—2015**  
  Eric Commiesie (Suriname)

- **PD-867-14 Culture of mycobacteria for diagnosis of tuberculosis retreatment cases in Brazil**  
  Artemir Coelho de Brito (Brazil)

- **PD-868-14 TB among elderly patients reported in Kenya in 2015**  
  Drusilla Nyangahu (Kenya)
Scientific Programme

PD-869-14  The effect of Bolsa Família Programme on the tuberculosis cure rate in Brazil: a propensity score matched analysis  
Daniel Joseph Carter (United Kingdom)

PD-871-14  Transition to web and case based reporting system under India’s RNTCP: is data quality assured in cohort reporting?  
K B Tumane (India)

Ananta Nanoo (South Africa)

PD-873-14  Experiences and perspectives on extra pulmonary tuberculosis in 15 provinces of Afghanistan, 2015 - 2016  
Said Mirza Sayedi (Afghanistan)

Poster discussion session (PD)  
12:45 - 13:45  
Poster Area

42. You can't treat what you don't diagnose: considerations in MDR-TB diagnosis and molecular epidemiology

Row 1

Chair: Catharina Boehme (Switzerland)

PD-874-14  Prevalence of discordance between phenotypic and genotypic testing for rifampicin resistance: a clinical dilemma  
Nunurai Ruswa (Namibia)

PD-875-14  Eligibility assessment for shortened MDR-TB treatment with commercially-available rapid molecular tests  
Lorenzo Guglielmetti (France)

PD-876-14  Universalization of rapid MDR-TB testing is associated with decreased mortality  
Marco Tovar (Peru)

PD-877-14  The effects of Xpert® MTB/RIF testing and GxAlert on RR/MDR-TB diagnosis and linkage to care in Mozambique  
Claudia Mutaquiha (Mozambique)

PD-878-14  The correlation of genotypic resistance with phenotypic drug resistance for guiding treatment decisions  
Valeriu Crudu (Moldova)

PD-879-14  Deciphering the physiological state of drug-resistant Mycobacterium tuberculosis strains  
Caroline Pule (South Africa)

PD-880-14  Whole genome sequencing analysis of drug resistance-conferring mutations and lineages/sublineages of M. tuberculosis circulating in Hanoi, Viet Nam  
Nuyyen Thi Le Hang (Viet Nam)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45
Poster Area

43. Challenges to the implementation of drug-resistant TB treatment on the ground
Row 6
Chair: Philipp du Cros (United Kingdom)

PD-881-14  Resultados de cohortes de tratamiento en pacientes con tuberculosis resistente a fármacos en México, 2010—2013
Nallely Saavedra (Mexico)

PD-882-14  Successful adoption of the shorter MDR-TB regimen for accelerated national scale-up In Swaziland
Debrah Vambe (Swaziland)

PD-884-14  Implementation approach for the successful introduction of bedaquiline in countries: from guidelines to action
Dumebi Mordi (United States of America)

PD-885-14  DR-TB treatment enrolment patterns and treatment initiation delay among DR-TB patients in Lagos, southwestern Nigeria
Bolanle Olusola-Faleye (Nigeria)

PD-886-14  Improvement of the medical care system for TB patients, Ukraine
Inna Motrych (Ukraine)

PD-887-14  Catastrophic during-treatment costs for drug-resistant tuberculosis patients with and without social protection: a patient survey in Rio de janeiro, Brazil
William Rudgard (United Kingdom)

PD-888-14  Magnitude of tuberculosis among contacts of multidrug-resistant tuberculosis patients in north-eastern Tanzania
Godfather Kimaro (Tanzania, United Rep.)

PD-889-14  Implementation of bedaquiline for the treatment of (pre) XDR-TB under programmatic conditions: experience in Indonesia
Asik Surya (Indonesia)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

44. TB drugs, and rock 'n' roll - updates on our understanding of TB drugs
Row 5
Chair: Jeffrey Hafkin (United States of America)

PD-890-14  Single nucleotide polymorphisms predict fluoroquinolone effectiveness against M. tuberculosis
Marva Seifert (United States of America)

PD-891-14  Accelerating access to delamanid for rifampicin-resistant tuberculosis in Khayelitsha, South Africa
Jennifer Hughes (South Africa)
Scientific Programme

PD-892-14  Linezolid dosing for treatment of pulmonary multidrug-resistant tuberculosis: a meta-analysis of existing data
Derek Sloan (United Kingdom)

PD-893-14  Threats to affordable quality second-line TB drugs in Eastern Europe/Central Asia as the Global Fund shifts to national procurement
Asker Ismayilov (Kyrgyz Republic)

PD-894-14  The impact of pyrazinamide resistance on the treatment outcome of patients with multidrug-resistant tuberculosis in Karakalpakstan, Uzbekistan
Johanna Kuhlin (United Kingdom)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

45. The bug, the host, and points between
Row 8
Chair: Lisa Cranmer (United States of America)

PD-895-14  Do drug-tolerant phenotypes dominate sputum prior to treatment? Clearance of M. tuberculosis DNA suggests not
Nicholas Walter (United States of America)

PD-896-14  An approach based on Hidden Markov Models (HMM) to analyze variability of toxin-antitoxin systems in lineages of Mycobacterium tuberculosis complex
Juan Sebastian Solano (Colombia)

PD-897-14  Methylation of genes regulating vitamin D metabolic pathway and tuberculosis
Jianming Wang (China)

PD-898-14  Association of human cytomegalovirus infection with anti-mycobacterial antibodies and tuberculosis
Lisa Stockdale (United Kingdom)

PD-899-14  Polymorphisms of TLR1 were associated with latent tuberculosis infection and pulmonary tuberculosis
Jian-Qing He (China)

PD-901-14  BCG vaccination promotes early clearance of Mycobacterium tuberculosis infection by innate immune mechanisms
Ayesha Verrall (New Zealand)

PD-902-14  Maximising impact of the TB vaccine pipeline: mathematical modelling to inform target product profiles using China as a case study
Rebecca C Harris (United Kingdom)

PD-903-14  Elevated levels of macrophage migration inhibitory factor in serum of Ghanaian TB patients compared to latently infected and uninfected household contacts
Gloria Ivy Mensah (Ghana)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45
Poster Area

46. Knock Knock? Who is there? Household and contact case finding. Know, share, act!
Row 23
Chair: Paul Nunn (United Kingdom)

PD-905-14 Challenges in household contact screening: lessons from the PPM project in Pakistan
Arif Noor (Pakistan)

PD-906-14 Household contact non-uptake of tuberculosis clinical evaluation in a high burden district in South Africa
Gladys Kigozi (South Africa)

PD-907-14 Clinical, programmatic and epidemiological significance of wide-scale implementation of tuberculosis contact investigation in Ethiopia
Degu Jerene (Ethiopia)

PD-908-14 Tele-screening as a cost-effective method for improving contact investigation in difficult-to-reach communities
Milton Mutanga (Namibia)

PD-909-14 Optimizing tuberculosis contact investigation in a high burden urban setting: a qualitative study
Diana Marangu (Kenya)

PD-911-14 Rapid reduction of tuberculosis prevalence among adults after three-year implementation of community-wide screening in Ca Mau, Viet Nam
Thu Anh Nguyen (Viet Nam)

PD-912-14 Indonesia 'Knock on the Doors' TB campaign to 'reach the unreached' TB patient
Asik Surya (Indonesia)

PD-913-14 Community-based active case finding approaches increased tuberculosis case notification in peri-urban areas in Myanmar
Sandar Aye (Myanmar)

PD-914-14 Does active case finding really help to eliminate tuberculosis? Findings from Sun Quality Health Clinics' TB client registers in Myanmar
Ye Kyaw Aung (Myanmar)

Poster discussion session (PD)
12:45 - 13:45
Poster Area

47. Diagnosis and treatment: updates on paediatric TB
Row 25
Chair: Devasena GNANASHANMUGAM (United States of America)

PD-915-14 Early experiences of the acceptability and palatability of a novel child-friendly levofloxacin formulation in young children
Susan Purchase (South Africa)
Scientific Programme

PD-916-14  Effect of gastric aspirate pH on recovery of Mycobacterium tuberculosis
Ronald Odero (Kenya)

PD-917-14  Progressive uptake of newer diagnostics by health care providers through advocacy strategies in India
Neeraj Raizada (India)

PD-918-14  Caracterización de pacientes con tuberculosis infantil tratados con medicamentos de segunda línea, Lima, Perú
Jose Enrique Villarreal Palomino (Peru)

PD-919-14  Delays and barriers to early treatment initiation for childhood tuberculosis in India
Chhaya Valvi (India)

PD-920-14  TB diagnosis and treatment outcomes among children in Tanzania, January 2012-December 2014
Wanze Kohi (Tanzania, United Rep.)

PD-921-14  ‘Probable’ pediatric TB with no clinical diagnosis: factors associated with lack of clinical diagnosis
Ann Miller (United States of America)

PD-922-14  Stability of anti-tuberculosis drugs in pediatric-friendly formulations
Blaine Butler (United States of America)

PD-923-14  Comparable yield of TB in children and adults among presumptive tuberculosis patients who underwent Xpert testing in Ethiopia
Nebiyu Hiruy (Ethiopia)

PD-924-14  Does the determine-TB LAM test have potential value in tuberculosis diagnosis among severely malnourished children?
Helena Huerga (France)

Poster discussion session (PD)
12:45 - 13:45

48. Looking after little lungs: updates in child lung health

Row 10

Chair: Laura Olbrich (Germany)

PD-925-14  Perceptions of social functioning among HIV-infected children assessed for chronic lung disease and their caregivers in Malawi
Heather Alexander (United States of America)

PD-926-14  How to introduce pulse oximetry into secondary level hospitals in Nigeria: mixed methods evaluation of a field trial
Hamish Graham (Australia)

PD-928-14  Pneumonia risk stratification scores for children in low-resource settings: a systematic literature review
Katrina V Deardorff (United States of America)
Scientific Programme

PD-930-14  The Cooking and Pneumonia Study (CAPS) in Malawi: a cross-sectional assessment of carbon monoxide exposure and carboxyhemoglobin levels in 1932 under-fives
Deborah Havens (United Kingdom)

PD-931-14  Investigation of severe acute respiratory illness outbreak among children aged <5 years at a county hospital, Kenya, 2016
Eunice Omesa (Kenya)

PD-932-14  Determinación de asma en escolares mexicanos y asociación con características antropométricas: resultados preliminares
Blanca Nohemí Zamora Mendoza (Mexico)

PD-933-14  Household, environmental and medication exposures and chronic lung disease in HIV-infected children
Heather Alexander (United States of America)

Poster discussion session (PD)
12:45 - 13:45

49. TB and co-morbidity: where are we?
Row 12
Chair: Yan Lin (China)

PD-935-14  The impact of cancer development on the risk of mycobacterial disease in patients with rheumatoid arthritis: a nationwide cohort study in Taiwan
Wei-Juin Su (Taiwan)

PD-936-14  Multi-morbidity of cardiovascular risk factors among South African patients with drug-resistant tuberculosis
Erin Whitehouse (United States of America)

PD-937-14  Chronic airflow obstruction after successful treatment of multidrug-resistant tuberculosis in Lima, Perú
Anthony Byrne (Australia)

PD-938-14  Prevalence of co-infection with Streptococcus pneumoniae among patients with suspected pulmonary tuberculosis
Deepali Joon (India)

PD-939-14  Analysis of anti-tuberculosis drug resistance in high-risk groups
Liang Fu (China)

PD-940-14  Burden and presentation of depression among newly diagnosed individuals with tuberculosis in primary care settings in Ethiopia
Fentie Ambaw Getahun (Ethiopia)

PD-941-14  Prevalence of major depressive disorder among patients with suspected pulmonary tuberculosis treated at a primary health centre in metropolitan Rio de Janeiro, Brazil
Karina Silva (Brazil)
Scientific Programme

Poster discussion session (PD)  
12:45 - 13:45

**50. Latent TB infection: testing and perceptions**

Row 4

Chair: Michael Kimerling (Netherlands)

**PD-942-14** Estimating the optimal induration cut-off point from tuberculin skin testing through mixture modeling: analysis of two high-risk populations in sub-Saharan Africa  
Henok Woldu (United States of America)

**PD-943-14** Concordance of the tuberculin skin test and QUANTIferon® assays in recent skin test converters: results from a longitudinal study in sub-Saharan Africa  
Maria Castellanos (United States of America)

**PD-944-14** Discordances between TST and IGRA to detect latent tuberculosis infection in paediatric contacts of drug-resistant tuberculosis patients  
Helena Huerga (France)

**PD-946-14** A new for skin test reagent that can efficiently diagnose LTBI  
Jiang Pu (China)

**PD-947-14** Immunological features in children of different ages with latent tuberculosis infection and tuberculosis  
Semen Ananiev (Russian Federation)

**PD-948-14** Knowledge, perceptions and practices of physicians and nurses about tuberculosis transmission and prevention in three Brazilian capitals  
Anete Trajman (Brazil)

**PD-949-14** Methods for estimating LTBI prevalence in foreign-born persons age five years and older in local U S jurisdictions  
Jeffrey Collins (United States of America)

Poster discussion session (PD)  
12:45 - 13:45

**51. Human rights and ethics**

Row 11

**PD-950-14** Gender differences in health care providers' management of persons with pulmonary TB symptoms and disease: a standardized patient study  
Srinath Satyanarayana (India)

**PD-951-14** Compulsory isolation and treatment for TB in Norway, 1995-2016  
Tore W Steen (Norway)

**PD-952-14** Law and tuberculosis at a cross roads  
Banuru Prasad (India)

**PD-953-14** Inclusive human experience from TB and HIV for overcoming these stigmatising health conditions  
Debashish Kundu (India)
PD-954-14 Are female TB patients being neglected in tribal India?  
Swati Saruk (India)

PD-956-14 Empowering TB patients on the rights and responsibilities  
Subrat Mohanty (India)

PD-957-14 Tuberculosis patients got their political rights in Panchayat elections under local self-governance after 52 years in Odisha, India  
Sashi Kanta Nayak (India)

PD-959-14 Gender differences in the outcomes of an economic support intervention to improve tuberculosis treatment, Nigeria  
Vivian Ibeziako (Nigeria)

Poster discussion session (PD)  
12:45 - 13:45  
Poster Area

52. Sustainable role of civil society organisations and communities in TB diagnosis, care and control

Row 18

Chair: Wim Vandevelde (South Africa)

PD-960-14 Private sector notifications increase by 123% within a year with civil society support and administrative initiatives in Jharkhand, India  
Sashi Kanta Nayak (India)

PD-961-14 Communicating linkages between lung health issues and sustainable development is integral to Agenda 2030  
Rahul Kumar Dwivedi (India)

PD-962-14 Community health volunteers´ contribution in improving TB case notification rate through household contact investigation: Amref Global Fund TB project in Kenya  
Tabitha Abongo (Kenya)

PD-963-14 Bridging the gap between the community and health services: taking the services to the doorsteps of the community  
Sripriya Pandurangan (India)

PD-964-14 The Barcelona Tuberculosis Photovoice Project: understanding the lived experience of TB through photography  
Enrique Delgado (Panama)

PD-965-14 Carrot and stick approach in engaging pharmacists in TB care and control: experiences from PRATAM Project, India  
Vikas Panibatla (India)

PD-966-14 Innovando la atención de las enfermedades respiratorias en el primer nivel de atención: un modelo con enfoque preventivo  
Adela Reyes Herrera (Mexico)

PD-967-14 Application of the ENGAGE-TB approach in Côte d’Ivoire  
Lou Tana Yapi Irie (Côte D’Ivoire)
**Scientific Programme**

**PD-968-14**  Model of civil society engagement to improve TB-HIV collaboration at TB clinic  
Yakub Gunawan (Indonesia)

**Poster discussion session (PD)**  
12:45 - 13:45  
**Poster Area**

**53. Nursing care to improve patient care**

Row 27  
Chair: Lisa True (United States of America)

**PD-969-14**  Comprehensive nursing care for people affected by drug-resistant tuberculosis receiving bedaquiline treatment in Peru  
Sara Perea (Peru)

**PD-970-14**  Effect of family centered extended nursing on psychology in multidrug resistant tuberculosis patients  
Xiao Man Zhou (China)

**PD-971-14**  Patient-centered counseling and impact on TB awareness among TB-inpatients at Xinjiang Chest Hospital, China  
Xing Yi (China)

**PD-972-14**  Impact of stigma on quality of life in MDR-TB patients  
Elena Khasanova (Russian Federation)

**PD-973-14**  Patient support groups as a means of improving quality and retention in DR-TB care  
Vivian Ibeziako (Nigeria)

**PD-974-14**  Patient centred ‘single-window services´ model of care for TB-HIV: a case study from India  
R Munje (India)

**PD-975-14**  The Axshya Kiosks, an innovative model for increasing access to TB information and service: experience from India  
Sajna Sarasita Nayak (India)

**PD-976-14**  Patient delays in TB care seeking in a complex emergency situation: the experience of Somalia  
Susan Murithi (Kenya)

**PD-977-14**  Gridlock from diagnosis to treatment of multidrug-resistant tuberculosis in Tanzania: patient perspectives from focus group discussions  
Stellah George Mpagama (Tanzania, United Rep.)

**PD-978-14**  Pathways to anti-tuberculosis treatment initiation among cases on directly observed treatment short course in districts of southwestern Ethiopia: a cross-sectional study  
Abyot Asres (Ethiopia)

**PD-979-14**  Informal timing and patient-friendly flexi-DOT effective in increasing treatment adherence of tuberculosis patients and generating awareness in among communities in five urban centres in Chhattisgarh  
Gayadhar Mallick (India)
Scientific Programme

Poster discussion session (PD)
12:45 - 13:45

54. Vulnerable populations: homeless to migrants

Row 26

Chair: E Jane Carter (United States of America)

**PD-980-14**  Role of trained community volunteers in TB active case finding among key affected populations in eight states of India
David Livingstone (India)

**PD-981-14**  TB diagnosis and treatment in homeless populations in Brazil
Kleydson Bonfim Andrade (Brazil)

**PD-982-14**  Systematic screening of active tuberculosis cases among urban slum dwellers in Jharkhand, India: a community-based study
Rajeev Pathak (India)

**PD-983-14**  Búsqueda de casos de tuberculosis en personas privadas de la libertad en México
Arana Saldaña (Mexico)

**PD-984-14**  Expanding TB diagnosis and community-based tuberculosis management: addressing vulnerable ethnic populations and tea garden workers in Bangladesh
Mohammad Shahrrear Farid (Bangladesh)

**PD-985-14**  Contribution of active contact screening to TB case detection in Urban DOTS supported provinces in Afghanistan
Azizullah Hamim (Afghanistan)

**PD-987-14**  Increasing TB disease awareness, diagnostic and linkage to care into harm reduction programme in Georgia
Irma Khonelidze (Georgia)

**PD-988-14**  Evidence-based community engagement to accelerate TB case finding among migrant communities: Thailand’s experiences
Nyan Win Phyo (Thailand)

**PD-989-14**  Mycobacterium tuberculosis causante de enfermedad activa en pueblos indígenas de Colombia, 2009—2016
Claudia Llerena Polo (Colombia)

Poster discussion session (PD)
12:45 - 13:45

55. Expert use of Xpert: developing the evidence base

Row 15

Chair: Alaine Umubyeyi Nyaruhiira (South Africa)

**PD-990-14**  Role of Xpert® MTB/RIF assay for diagnosis of bacteriologically confirmed TB cases: National TB Prevalence Survey 2015-2016, Bangladesh
Sayeedur Rahman (Bangladesh)
Scientific Programme

PD-991-14  Category-wise burden of DR-TB diagnosed through Xpert® MTB/RIF: experience from Bangladesh  
Sarder Tanzir Hossain (Bangladesh)

PD-993-14  Diagnostic value of Xpert® MTB/RIF in urinary tuberculosis in an HIV-negative population  
Yu Chen (China)

PD-994-14  Performance of GeneXpert®MTB/RIF in the detection of TB-TB/RR in Kinshasa, DRC  
Angel Bele (Congo (Democratic Rep.))

PD-995-14  Trend analysis of Xpert EQA results for facilities enrolled in the CDC-supported EQA program in Zambia  
Taurai Machawi (Zambia)

PD-996-14  Xpert® MTB/RIF assay testing in the diagnosis of patients with tuberculosis; experience under programmatic conditions in Tanzania  
Esther Ngadaya (Tanzania, United Rep.)  
Taurai Machawi (Zambia)

PD-997-14  The epidemiological impact of universal access to quality tuberculosis care: a simulation study  
David W Dowdy (United States of America)

PD-998-14  Sensitization for clinicians followed by weekly service monitoring contributes to improved uptake of Xpert in Tigray Region, Ethiopia

PD-999-14  Accuracy of different Xpert® MTB/RIF implementation strategies in programmatic settings at regional referral hospitals in Uganda: evidence for country wide roll-out  
Winters Muttamba (Uganda)

Poster discussion session (PD)  
12:45 - 13:45

56. Infection control: ending transmission

Row 16

Chair: Ronald Thulani Ncube (Zimbabwe)

PD-1000-1  Better reporting format of time indicators for improving patient-centered care: case studies from Nigeria and Viet Nam  
Hien Le (Viet Nam)

PD-1001-1  ‘Cover your Cough’ pantomime had high media coverage  
Şeref Özkara (Turkey)

PD-1002-1  Good habits start young: ‘Cover Your Cough’ -school intervention program in Yangon, Myanmar  
Khaung Myitzu Hane (Myanmar)

PD-1003-1  Use of the FAST model to prevent transfer of anti-tuberculosis drug resistance in two hospitals in Russia  
Ann Miller (United States of America)

PD-1004-1  M. tuberculosis transmission from a non-citizen migrant to Israeli citizens during nursing home outbreak  
Zohar Mor (Israel)
**Scientific Programme**

**PD-1005-1** Car screens for TB protection: smoke screens or infective barriers?
4
Elana van Brakel (South Africa)

**PD-1007-1** Outcomes of tuberculosis infection control measures in public health facilities in Afghanistan: a document review
4
Ghulam Qader Qader (Afghanistan)

**PD-1008-1** Firefighting in MDR-TB control: assessment of infection control status of households in Southern Ethiopia
4
Dawit Assefa (Ethiopia)

**Poster discussion session (PD)**
12:45 - 13:45

**57. MICs, MAC, and immunity**

Row 17
Chair: Tom Boyles (South Africa)

**PD-1009-1** Towards a TB biomarkers database: a systematic review of biomarkers for active tuberculosis diagnosis
4
Emily MacLean (Canada)

**PD-1010-1** Gestión en vigilancia a la resistencia de medicamentos antituberculosos en 8 ciudades de Colombia, 2014 - 2016
4
Claudia Llerena Polo (Colombia)

**PD-1011-1** Serum biomarkers in children and adolescents: a tool for differential diagnosis of latent and active TB?
4
Christian Schmidt (Brazil)

**PD-1012-1** Evaluation of TrueLab for rapid, simple and cost effective detection of M. tuberculosis in EPTB specimens
4
Chaitali Nikam (India)

**PD-1014-1** Minimum inhibitory concentrations of TB drugs
4
Marinus Barnard (South Africa)

**PD-1015-1** Qualitative characteristics of drug susceptibility of Mycobacterium avium-intracellulare complex (MAIC)
4
Marina Makarova (Russian Federation)

**PD-1016-1** Resistance patterns of rifampicin resistant strains of M. tuberculosis isolated in Tajikistan
4
Marija Jonevska (Tajikistan)

**PD-1017-1** The reliability of PZA and other drug susceptibility testing against MTB in Japan
4
Akiko Takaki (Japan)

**Symposium (SP)**
13:30 - 15:00

**TB Education and training materials discussion session**
EN-ES 15. Tobacco cessation and integration in TB control

Chair: Chris Bullen (New Zealand)
Chair: Huan Shitong (China)

SOA-447-1
High prevalence and nicotine dependence among TB patients who are smokeless tobacco users compared to smokers
Om Bera (India)
14:00 - 14:06

SOA-448-1
Use of Tobacco Dependence Screener to diagnose smokeless tobacco dependence in India
Aishwarya Lakshmi Vidyasagar (United Kingdom)
14:06 - 14:12

SOA-449-1
Effectiveness of a brief counseling and behavioral intervention for tobacco cessation in primary care
Rajmohan Panda (India)
14:12 - 14:18

SOA-450-1
Tobacco cessation counselling and treatment adherence among tobacco consuming TB patients in Kalburgi (Gulburga) District, Karnataka
Chinna Kiran Kumar Reddy Gali (India)
14:18 - 14:24

SOA-451-1
What price and non-price factors are crucial to elicit a quit response among bidi smokers?
Ashish Kumar Pandey (India)
14:24 - 14:30

63. Situación epidemiológica y control de la tuberculosis infantil en América Latina

La población infantil representa una lata vulnerabilidad para el desarrollo de tuberculosis, pero sobre todo con serios desafíos para los países de América Latina en cuanto a su detección oportuna, diagnóstico y tratamiento adecuado.

Chair: Lucia Alvarez (Mexico)

Introducción
Lucia Alvarez (Mexico) 14:00 - 14:05

TB extrapumonar en pediatría
Greta Muñoz (Ecuador) 14:05 - 14:25

Diagnóstico y tratamiento de la tuberculosis en niños...logros y desafíos
Lucia Alvarez (Mexico) 14:25 - 14:45

TB farmacorrresistente en niños
Paris Cerecer Callu (Mexico) 14:45 - 15:05

Tratamiento de la TB latente en niños contactos de casos de TB sensible y resistente
Francisco Mestanza (Peru) 15:05 - 15:25

Discusión 15:25 - 15:30
Scientific Programme

Oral Abstract session (OA)
14:00 - 15:30
Hall 3 - Events Ballroom

19. More TB drugs, less rock and roll! Quizás algún mariachi
Chair: Lynette Mabote (South Africa)
Chair: Patrick Phillips (United Kingdom)

OA-216-14 Evaluation of high-dose rifapentine plus clofazimine in the first-line regimen for tuberculosis in the mouse model of chemotherapy
Vikram Saini (United States of America)
14:00 - 14:10

OA-217-14 Bioequivalence of dissolved vs. whole bedaquiline tablets: implications for dosing in children
Jeannine du Bois (South Africa)
14:10 - 14:20

OA-219-14 RNA sequencing and inhibition of efflux pump genes involved in second-line drug resistance in Mycobacterium tuberculosis
Lesibana Malinga (South Africa)
14:30 - 14:40

OA-220-14 Tuberculosis clinical trials and safety halts: evaluating for bias in effect estimates
Meredith Milstein (United States of America)
14:40 - 14:50

OA-221-14 Effectiveness and safety of shortened anti-tuberculosis therapy with Mycobacterium vaccae in never-treated sputum smear-negative pulmonary tuberculosis patients: a randomized controlled trial
Shiming Cheng (China)
14:50 - 15:00

OA-222-14 Final analysis of a study providing early access to bedaquiline (BDQ, TMC207) for (pre) XDR Mycobacterium tuberculosis
Andrei Mariandyshev (Russian Federation)
15:00 - 15:10

OA-223-14 Low total tuberculosis drug activity correlates to low plasma concentrations of rifampicin
Katarina Niward (Sweden)
15:10 - 15:20

Symposium (SP)
14:00 - 15:30
Hall 5 - Events Ballroom

59. Using knowledge from pharmacokinetics and pharmacodynamics (PK-PD) studies to adapt TB treatment
The presentations will highlight how the most recent knowledge of PK-PD medicines used in TB treatment regimens - particularly second-line agents for drug-resistant strains - can be used to improve clinical care. The symposium will provide the participants with an opportunity to discuss this with key experts in the field and also to follow how the World Health Organization intends to update its implementation material following a technical workshop on the subject convened by the WHO Global TB Programme in April 2017.
Chair: Radojka Savic (United States of America)
Chair: Dennis Falzon (Switzerland)

Interpreting PK-PD data in TB care
Tawanda Gumbo (United States of America)
14:00 - 14:15

PK/PD of TB treatment in children
Helen McIlreron (South Africa)
14:15 - 14:30
Scientific Programme

Modelling of PK-PD data on TB medicines to fill in knowledge gaps 14:30 - 14:45
Radojka Savic (United States of America)

Therapeutic drug monitoring to help optimise TB treatment: when, where, how, which 14:45 - 15:00
Jan-Willem Alffenaar (Netherlands)

Using PK/PD data to shape TB drug development 15:00 - 15:15
Geraint Davies (United Kingdom)

Discussion 15:15 - 15:30

Short Oral Abstract session (SOA)
14:00 - 15:30  Hall 6 - Events Ballroom

16. TB laboratory services: lessons from the field
Chair: E Jane Carter (United States of America)
Chair: Alaine Umubeyi Nyaruuirra (South Africa)

SOA-452-1 4 Attaining universal access to DST for tuberculosis patients in Uganda: experience from Kampala city on optimal utilisation of Xpert® MTB/RIF 14:00 - 14:06
Aldomoro Burua (Uganda)

SOA-453-1 4 Digitalization of microscopy centres in Andhra Pradesh (AP), India: E-Lab Register 14:06 - 14:12
Sreenivas A Nair (India)

SOA-455-1 4 Clinical impact of the Xpert® MTB/RIF assay among sputum smear-negative multidrug-resistant tuberculosis patients in Georgia 14:18 - 14:24
Maia Kipiani (Georgia)

SOA-456-1 4 Cost analysis of field application of a novel sample transport and decontamination reagent in Ethiopia and Peru 14:24 - 14:30
Radhika Pradip Tampi (United States of America)

SOA-457-1 4 Experiencia del uso del portalab MODS para el diagnóstico de TB y TB-MDR en la sierra y selva central de Junín, Perú 14:30 - 14:36
Jorge Coronel (Peru)

SOA-458-1 4 Increasing access to TB services through government-led clinical mentorship in Kafue district, Zambia 14:36 - 14:42
Lucy Mulemba Zulu (Zambia)

SOA-459-1 4 Cold chain vehicle specimen transportation system for TB culture improved quality of laboratory service in Ethiopia 14:42 - 14:48
Mulukn Melese (Ethiopia)

SOA-460-1 4 Non-invasive sampling for molecular diagnosis of tuberculosis 14:48 - 14:54
Angélique Kany Kany Luabeya (South Africa)

SOA-461-1 4 Evaluation of a panel in support of validation and quality control of the Xpert® MTB/RIF test 14:54 - 15:00
Carlos Arturo Vázquez-Chacón (Mexico)
SOA-491-1  Field evaluation of OMNigene SPUTUM reagent in Kyrgyzstan for the detection of Mycobacterium tuberculosis  
Janet Robinson (Thailand)

Symposium (SP)  
14:00 - 15:30  
Hall 7 - Events Ballroom

60. Preparación y respuesta ante una pandemia de influenza en México

El objetivo de la Preparación del Sistema de Salud de México para una Gripe Pandémica, es mejorar los procesos de preparación y respuesta así como fortalecer la protección frente a la gripe, la atención médica y las medias preventivas como la vacunación y la educación al personal de salud y población general. Con el objetivo de disponer de un sistema justo y transparente, equitativo, eficiente y eficaz en el acceso a las diferentes estrategias que ayuden a hacer frente a un problema de salud de esta magnitud.

Chair: Jorge Salas Hernández (Mexico)  
Chair: Justino Regalado Pineda (Mexico)

Vigilancia epidemiológica de la influenza  
Robert Camargo (Mexico)

Preparación y respuesta ante una nueva pandemia de influenza  
Alejandro Lopéz Samano (Mexico)

Beneficios de la implementación de la vacuna de la influenza en México  
Jesús Felipe Gonzalez Roldan (Mexico)

Atención Medica ante una pandemia de influenza  
Justino Regalado Pineda (Mexico)

Discusión

Symposium (SP)  
14:00 - 15:30  
Hall 8 - Events Ballroom

61. Ethical considerations in TB and migration

Migration is a social determinant of health with important associations with TB infection and disease. In the realm of migration health, ethical issues can be significant but often overlooked in both national and local contexts. Ethical considerations cannot be neglected in providing TB prevention, treatment and care for various migrant populations. This symposium will present updated World Health Organization ethical guidelines for TB and migration and will highlight ethical issues that commonly emerge, using specific migration health contexts. The session will seek to reinforce one of the key principles of the End TB Strategy namely, human rights, ethics and equity.

Chair: Poonam Dhavan (Switzerland)  
Chair: Justin Denholm (Australia)

Guidance on ethics of TB prevention, care and control: what does the 2017 update of WHO guidelines have to say about migration?  
Diego S. Silva (Canada)

Migration to a low-incidence TB setting: ethical challenges and experiences from Australia  
Justin Denholm (Australia)
Scientific Programme

Finding the right data on migrants and mobile populations as a key population in TB: ethical considerations 14:45 - 15:00
James Malar (Thailand)

At the intersection of TB and migration: globalisation vs. equity 15:00 - 15:15
Deliana Garcia (United States of America)

Discussion 15:15 - 15:30

Short Oral Abstract session (SOA)
14:00 - 15:30
Hall 9 - Jalisco Hall

17. TB in healthcare workers

Chair: Paul Jensen (United States of America)
Chair: Nii Nortey Hanson-Nortey (Ghana)

SOA-462-1 An innovative approach to TB surveillance among health care workers: results from a pilot project in Nigeria 14:00 - 14:06
Bethrand Odume (Nigeria)

SOA-463-1 Prevalence of and risk factors for latent tuberculosis infection among health care workers in Viet Nam, 2014 14:06 - 14:12
Binh Nguyen (Viet Nam)

SOA-464-1 Outcomes and incidence of tuberculosis among health care workers in two refugee camp facilities in Kenya: a retrospective cohort study 14:12 - 14:18
Jacqueline Limo (Kenya)

SOA-465-1 Interferon-gamma release assay positivity among healthcare workers in Lima, Peru 14:18 - 14:24
Dylan Tierney (United States of America)

SOA-466-1 Resultados de la evaluación de casos de tuberculosis pulmonar en trabajadores de la salud en México del 2013 al 2015 14:24 - 14:30
Jose Sulca (Mexico)

SOA-467-1 Latent tuberculosis infection and TB disease among healthcare workers in Thailand, 2014 14:30 - 14:36
Theerawit Tasaneeyapan (Thailand)

SOA-468-1 Systematic TB screening for HCWs in Tanzania: implications for policy and TB care and prevention 14:36 - 14:42
Willy Mbwala (Tanzania, United Rep.)

SOA-469-1 High rates of exposure to tuberculosis patients among HIV-infected healthcare workers in Botswana 14:42 - 14:48
Sanghyuk Shin (United States of America)

SOA-471-1 Active tuberculosis case finding among health care workers in Mtwara region, Tanzania 14:48 - 14:54
Benedicta Masanja (Tanzania, United Rep.)

SOA-470-1 Evaluation of plasma cluster technology in tuberculosis hospital 14:54 - 15:00
Nestani Tukvadze (Georgia)
57. Nursing interventions for support of patients with multidrug-resistant TB

The implementation of patient-centred care is an integral part of the World Health Organization's End TB Strategy. Nurses play an important role in patient support and holistic patient-centred care for TB and MDR-TB patients. The objective of this session is to share experiences on the implementation of patient support and patient-centred care in various settings.

Chair: Carrie Tudor (Switzerland)

- **Pilot job aide to assist nurses in assessing and addressing side effects among patients on treatment for drug-resistant TB**
  Ann Raftery (United States of America)
  14:00 - 14:15

- **Assessing MDR-TB patients for depression and nursing interventions to support them: experiences from Russia**
  Tatiana Fedotkina (Russian Federation)
  14:15 - 14:30

- **Supporting binational MDR-TB case management on the US-Mexico border to improve patient outcomes**
  Catalina Navarro (United States of America)
  14:30 - 14:45

- **Association between TB-related stigma and medication adherence among TB patients in China: the role of nurses in reducing stigma towards patients**
  14:45 - 15:00

- **An essential patient care package for drug-resistant TB**
  D'Arcy Richardson (United States of America)
  15:00 - 15:15

- **Discussion**
  15:15 - 15:30

18. Thinking holistically - many contributors to improving TB treatment outcomes

Chair: Ignacio Monedero (Spain)
Chair: Sergio Quintero (Mexico)

- **Xpert rifampicin-susceptible tuberculosis: findings from an integrated TB-HIV surveillance system in South Africa**
  Ananta Nanoo (South Africa)
  SOA-472-1 14:00 - 14:06

- **Pulmonary impairment and its determinants in TB patients in Maputo, Mozambique**
  Celso Khosa (Mozambique)
  SOA-473-1 14:06 - 14:12

- **Beneficial effects of BCG vaccination in outcomes for patients diagnosed with TB: observational study using the Enhanced Tuberculosis surveillance system, 2009-2015**
  Sam Abbott (United Kingdom)
  SOA-474-1 14:12 - 14:18

- **Examining factors driving performance of tuberculosis control programme in Enugu State, Nigeria: a case-based health systems analysis**
  Daniel Ogbuabor (Nigeria)
  SOA-475-1 14:18 - 14:24
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SOA-476-1  
4  
14:24 - 14:30  
Tablet-based TB symptom screening pilot at a hospital out-patient department and polyclinic in Johannesburg, South Africa: challenges and cost  
Renu Gajee (South Africa)

SOA-477-1  
4  
14:30 - 14:36  
Relapse with standard 6-month tuberculosis therapy: an individual patient data meta-analysis  
Kamila Romanowski (Canada)

SOA-478-1  
4  
14:36 - 14:42  
TB implementation cascades: from better analysis to improved efficiency  
Clemens Benedikt (United States of America)

SOA-479-1  
4  
14:42 - 14:48  
Comparative analysis of the ethambutol (EH) - rifampicin (RH) switch on treatment outcomes of tuberculosis patients in Mulago National Referral Hospital  
Deus Lukoye (Uganda)

SOA-480-1  
4  
14:48 - 15:00  
The diagnostic accuracy of unadjusted CRP compared to CRP adjusted for hematocrit for active TB among patients in the END TB study  
Zelda Sandra Mwebe (Uganda)

SOA-481-1  
4  
14:54 - 15:00  
Sedimentation rate and suPAR in relation to disease activity and mortality in patients with active tuberculosis - a comparison between two inflammatory biomarkers  
Hannah Schulman (Sweden)

Symposium (SP)  
14:00 - 15:30  
Hall 13 - Jalisco Hall

62. Prospects for elimination of multidrug-resistant TB

There have been recent successes to control and eliminate multidrug-resistant TB (MDR-TB) but important barriers remain. Scientific progress has included improved regimens and a wider availability of rapid drug-resistance testing, but these advances have not been uniformly rolled out. Elimination will not only require better treatment, but also active case finding, interruption of transmission and increased investment. The feasibility and challenges of these key areas will each be addressed by speakers with expertise in field studies and programmatic implementation.

Chair: Robert Horsburgh  
Chair: Grania Bridgen (Switzerland)

MDR-TB treatment in the high-resource setting: cure is possible  
Christoph Lange (Germany)

Accessing MDR-TB exposed households: the PHOENiX MDR-TB feasibility study  
Gavin Churchyard (South Africa)

Manufacturing XDR through MDR-TB treatment  
Elizabeth Schnaubelt (United States of America)

Elimination of MDR-TB: what will it cost?  
Emily Kendall (United States of America)

The role of policy adoption and implementation for Elimination of MDR-TB  
Isaac Chikwanha (Switzerland)

Discussion  
15:10 - 15:25
Scientific Programme

Encuentro: Performance
14:00 - 15:00

Presentación del libro: Alimencórpolis
Exposición de obra artística del libro Alimencórpolis con Memo Plastilina
Plan emergente por la salud.
Chair: Lupita Cruz (Mexico)

Encuentro: Skills Building
14:00 - 15:00

TB and Pregnancy Jeopardy
There is little known about the intersection of TB and reproductive health. Please join us for an interactive jeopardy game that focuses on learning more about this little known subject. In order to decrease morbidity and mortality of mothers and their children from TB we need to learn and advocate for changes in our health system and approaches. This game will help inform individuals of key facts so they can become advocates. Hosts will lead teams to answer quiz questions. Everyone will get a chance to learn and receive a prize!
Coordinator: Alice Christensen (Tanzania, United Rep.)
Coordinator: Silvia Kelbert (Tanzania, United Rep.)
Chair: Jyoti Mathad (United States of America)

Encuentro: Panel Discussion
15:30 - 16:00

Batangas provincial multi-sectoral alliance building synergies to end TB battle in Batangas province (Philippines)
Intervention or Response: With USAID/Philippines technical assistance, the Province of Batangas with a population of 2,710,816 located in Southern Part of the Philippines, respectively organized a multi sectoral alliance to help in monitoring and implementation of TB Program. The initiative consisted of engaging institution and advocacy program in control of TB; providing orientation and on cause, transmission, control, prevention and cure; formulating strategic plan that defines the PMSA's organizational structure; roles of each member: as capability building, resource mobilization, monitoring, supervision and evaluation, policy making, accreditation; projects and activities; monitoring and mentoring of all public and private health staff. Members of the MSA composed of Provincial Governor as Chairman, Provincial Health Office Staff, Department of Interior and Local Government, Planning Office, Social Welfare Office, Deans and Teachers of School and Universities, Hospital Chief and Staff, Private Companies, Jails and Prisons, Faith Based Organization, Armed Forces, Chief of Police, Civic Organization, Professional Medical, Nursing, and Midwife Society, Volunteer Health Workers and Cured Patients.
Results and Lesson Learned: With the Creation of Provincial Multisectoral Alliance it helped increase the number of local government units with policies in support of TB Program from 18% (6/34) in 2012 to 74% (25/34) in 2016, the number of certified and accredited DOTS facilities from 9% (3/34) in 2013 to 94% (32/34) in 2016 and referrals from private and public partners from 14% (965/6,831) in 2013 to 55% (4231/7637) in 2016. From 2013 after a year PMSA was created, the province case detection rateconsistently surpassed the National Target of 90%. The Department of Education, a PMSA member tested 500 school children for TB and helped enroll 30 found positive for the disease and 35 school teachers were enrolled for treatment . The Municipal and Provincial Jail has arranged with DOTS facilities for the diagnosis of 30% (46/1500).
Coordinator: Rosalie Masangkay (Philippines)
Coordinator: Rosvilinda Ozaeta (Philippines)
**Scientific Programme**

**Batangas provincial multi-sectoral alliance building synergies to end TB battle in Batangas province (Philippines)**
Rosalie Masangkay (Philippines)

Plenary session (PL)
16:00 - 17:00
Plenary Hall - EN-ES

**EN-ES Rapporteur Session**

Speakers:

Wendy Wobeser, Programme Secretary, Tuberculosis Section (Canada)
Linette McElroy Hawkes, Programme Secretary, Nurses and Allied Professionals Sub-section (Canada)
Alejandro Perera Ortiz, Programme Secretary, Zoonotic Tuberculosis Sub-section (Mexico)
Alaine Umubuye Nyaruhirira, Programme Secretary, Bacteriology and Immunology Sub-section (South Africa)
Keren Middelkoop, Programme Secretary, HIV Section (South Africa)
James Seddon, Programme Secretary, Adult and Child Lung Health Section (United Kingdom)
Omara Dogar, Programme Secretary, Tobacco Control Section (United Kingdom)
Mercy Annapoorni, Civil Society Representative (India)

Chair: Stacie Stender (South Africa)

**Encuentro: Panel Discussion**
16:00 - 17:00
Encuentro session room

**Rapporteur Broadcast**
Live transmission from the plenary hall into the Encuentro session room

Plenary session (PL)
17:00 - 17:45
Plenary Hall - EN-ES

**EN-ES Closing Session**

The local conference legacy – Accelerating Progress in Mexico
Mr Elías Octavio Iniguez, Member of Parliament (Mexico)

Accelerating progress for regional change
Ms Carolina Moran, Internal Monitor, Socios en Salud, and TB survivor (Peru)

Looking ahead
Dr Jeremiah Chakaya Muhwa, President of The Union (Kenya)
Mr Jose Luis Castro, Executive Director of The Union (France)

Welcome to The Hague
Margriet Leemhuis, Ambassador of the Netherlands in Mexico (Netherlands)
Kitty van Weezenbeek, Executive Director of KNCV Tuberculosis Foundation (Netherlands)
Scientific Programme

**Encuentro: Panel Discussion**
17:00 - 18:00
Encuentro session room

**Closing Session Broadcast**
Live transmission from the plenary hall into the Encuentro session room