### Tuesday, 23 October 2018

Side Meeting (MTG) A1 - Marriott 08:00 - 13:45 TBScience Plenary session 1 TB treatment shortening Chairperson: Frank Cobelens (Netherlands) Chairperson: Radojka Savic (United States of America) Registration day 1 08:00 - 08:30 Welcome day 1 08:30 - 08:35 Christian Lienhardt (France) **Opening** 08:35 - 08:45 Sarah Read (United States of America) Introductory WHO speaker: key questions, latest TB (MDR) epi data, 08:45 - 09:05 latest new drug trial/treatment results from new regimens Matteo Zignol (Switzerland) New strategies and models to find novel TB drug targets: in which 09:05 - 09:25 direction does basic science point? Wilbert Bitter (Netherlands) Animal models focusing on treatment shortening strategies: potential 09:25 - 09:45 and future directions Deepak Kaushal (United States of America) Mathematical modelling focusing on treatment-shortening strategies: 09:45 - 10:05 potential and future directions Emily Kendall (United States of America) Coffee and tea break 10:05 - 10:30 Within-host evolution of M. tuberculosis: implications for drug 10:30 - 10:50 resistance, treatment outcome and TB transmission Bouke C. de Jong (Belgium) New approaches to developing tests to monitor the response to 10:50 - 11:10 treatment and stratification of hosts: what studies are needed? Gerhard Walzl (South Africa) Can we stratify slow versus fast convertors: experience from Tanzanian 11:10 - 11:30 studies Martin Boeree (Netherlands) 11:30 - 11:50 Short panel discussion Michael Rich (United States of America) Cathy Bansbach (United States of America) Payam Nahid (United States of America) Mel Spigelman (United States of America) O/A 11:50 - 12:00

12:00 - 13:00

Lunch break

TB ReFLECT meta-analysis of all key fluoroquinolone treatment shortening trials  Radoika Savic (United States of America)	13:00 - 13:20
The CURE-TB Strategy Trial concept on stratified medicine trials in active tuberculosis	13:20 - 13:40
Payam Nahid (United States of America) Patrick Phillips (United States of America)	
Q/A & closing day 1 plenary	13:40 - 13:45

Poster discussion session (PD) 10:05 - 10:30

Poster Area - Marriott Hotel

### **TBScience2018 posters**

Please view the list of posters <a

href="https://www.professionalabstracts.com/TheUnion2018/iplanner/#/sessiondetail/486">here</a>.

Poster discussion session (PD) 12:00 - 13:00

Poster Area - Marriott Hotel

### **TBScience2018 posters**

3358	Diabetes and intermediate hyperglycaemia similarly impact tuberculosis blood transcriptomes, causing enhanced inflammatory and reduced interferon responses Jacqueline Cliff (United Kingdom)
3384	Clinical prediction tools to inform tuberculosis contact investigation Ruoran Li (United States of America)
3362	Discrimination of early tuberculosis disease from latent tuberculosis infection and uninfected individuals with a transcriptional blood signature during active community-based screening

Warwick J. Britton (Australia)

A role of genetic variants and expression of interleukin-12 receptor subunit beta2 in protection against tuberculosis

Naoto Keicho (Japan)

Quantifying tuberculosis transmission between native and foreign-born populations in the Netherlands between 2009 and 2017 using variable number tandem repeat (VNTR) typing

Zsófia Iglói (Netherlands)

Turn around to diagnosis and treatment initiation and associated health facility related factors among patients attending private clinics in Lagos, Nigeria

Victor Adepoju (Nigeria)

3480 Pharmacokinetics of ethionamide in children in an Indian setting

Aparna Mukherjee (India)

The prevalence of pulmonary tuberculosis and associated factors among prisoners in western Ethiopia

Muluken Birhanu (Ethiopia)

3371	Comparing the efficacy of drug regimens for pulmonary tuberculosis: meta-analysis of phase III trials  Geraint Davies (United Kingdom)
3374	Variant identification approach profoundly affects transmission links inferred in TB genomic epidemiology studies
	Katharine Walter (United States of America)
3240	Differences in metabolic risk factors for tuberculosis in close contacts with diabetes from two ethnicities impacting M. tuberculosis growth in peripheral blood mononuclear cells  Katharina Ronacher (Australia)
3285	Comparison of latent tuberculosis infection management between North Korean Refugees and South Koreans
	Beong Ki Kim (Korea, Republic of)
3420	<b>Development and evaluation of rapid, low cost and affordable TB diagnostics</b> Vinay Saini (India)
3026	Multi-biomarker test for point-of-care screening for active tuberculosis: a five country multicenter test evaluation
	Annemieke Geluk (Netherlands)
3404	Effect of OCT transporters genetic polymorphisms on the ethambutol pharmacokinetics, prediction from PBPK-model with IVIVE
	Md Masud Parvez (Korea, Republic of)
3333	Analysis of high molecular weight complexes (Antigen 60) of M.tuberculosis and M.bovis BCG: towards discovery of biomarkers with higher specificity
	Khayriyyah Mohd Hanafiah (Malaysia)
3303	Scoring TB severity from computerized-detection of lung lesions in CT scans for use in improving TB diagnostics and treatment
	Eduard Snezhko (Belarus)
3324	Improvements in the sensitivity of the Respiratory Aerosol Sampling Chamber (RASC): characterising exhaled bioaerosols from pulmonary TB patients
	Benjamin Patterson (South Africa)
3379	Active case finding of pulmonary TB in a European refugee camp setting: lessons learnt from a mass screening of contacts in Oinofyta Hotspot in Greece  Zisimangelos Solomos (Greece)
3426	Estimating age-mixing patterns in contacts relevant for the transmission of Mycobacterium tuberculosis and other airborne infections
	Nicky McCreesh (United Kingdom)
3133	Interruption of anti-tuberculosis drugs among adolescent and young adults ages 10-30 years at Kapkatet county hospital, Kenya  Cheruiyot Sambu (Kenya)
3366	The protective effect or not of BCG vaccine in children and adults in an endemic region Juliana Figueirêdo da Costa Lima Suassuna Monteiro (Brazil)
3464	Use of demand-driven approaches to improve the determination of TB burden amongst people living with HIV [PLHIV] across 28 health facilities in Nigeria

3395	Prevalence and risk factors of latent tuberculosis infection in South Korea: the Korean National Health and Nutrition Examination Survey, 2016  Kyung Hyun Oh (Korea, Republic of)
3507	An estimate of the burden, potential missed care and diagnostic practices for tuberculosis amongst children admitted to government hospitals in Kenya  Jacquie Oliwa (Kenya)
3473	Evaluation of the National Electronic Drug-Resistant Tuberculosis surveillance system in South Africa, 2009-2013  Nontobeko Mtshali (South Africa)
3386	Interferon Gamma Releasing Assay implementation on BCG vaccine effectiveness pilot study in Indonesia  Natalie Laurencia Kipuw (Indonesia)
3494	Challenges in childhood tuberculosis of Belarus Larissa Gorbach (Belarus)
3360	Mycobacterium tuberculosis Complex Lineages and demographical risk factors as determinants of disease phenotypes from a moderate Tuberculosis burden country Sahal Al-Hajoj Al-Nakhli (Saudi Arabia)
3372	The first genotyping and whole genome sequencing of Mycobacterium tuberculosis from Indonesian TB Prevalence Survey  Kindi Adam (Indonesia)

Side Meeting (MTG) 14:00 - 17:30

Rembrandt - Marriott

# TBScience Parallel session 3 Innovations in the production and use of surveillance data / $\mathsf{TSRU}$

Chairperson: Martien Borgdorff (Netherlands) Chairperson: Edine Tiemersma (Netherlands)

### Parallel session 3a: What is the use of infection testing?

<b>Update on current and new tools for infection testing</b> Madhukar Pai (Canada)	14:00 - 14:20
Renewed interest in tuberculin surveys? Philippe Glaziou (Switzerland)	14:20 - 14:40
What could we use infection testing for? Peter J. Dodd (United Kingdom)	14:40 - 15:00
Discussion	15:00 - 15:20
Coffee and tea break	15:20 - 15:40
Parallel session 3b: Innovation in sub-national burden estimation	
Sub-national burden estimation in Indonesia, using the prevalence distribution method	15:40 - 16:00
Muhammad Noor Farid (Indonesia)	

	Sub-national burden estimation in Brazil Nick Menzies (United States of America)	16:00 - 16:20
	Sub-national burden estimation using the MATCH analytical framework?  Mirjam Bakker (Netherlands)	16:20 - 16:40
	Oral abstract presentations	
3332	An evaluation of a systematic screening intervention among elderly populations in rural Cambodia  Monyrath Chry (Cambodia)	16:40 - 16:50
3244	Mixture analysis of tuberculin data to estimate incidence of Mycobacterium tuberculosis infection Palwasha Yousafzai Khan (Pakistan)	16:50 - 17:00
3368	High incidence of active tuberculosis in Eritrean and Somalian asylum seekers after arrival in the Netherlands: time for a screening programme for latent infection  Jossy van den Boogaard (Netherlands)	17:00 - 17:10
	Discussion and closing	17:10 - 17:30

Side Meeting (MTG) 14:00 - 17:00

Van Gogh-Monet - Marriott

# TBScience Parallel session 1 Reducing transmission: what is the scientific basis behind for the reduction of transmission and the initiation of appropriate therapy?

Chairperson: Michael Kimerling (Netherlands)

Chairperson: Paula Fujiwara (United States of America)

How next generation TB sequencing can be used to reduce transmission, improve diagnostics and epidemiological understanding of TB Sebastien Gagneux (Switzerland)	14:00 - 14:20
How can we translate next generation sequencing data to shorten anti- tuberculosis treatment? Jeffrey Tornheim (United States of America)	14:20 - 14:40
How does transmission take place? How do we identify the most transmitting patients? Robin Wood (South Africa)	14:40 - 15:00
Addressing institutional amplifiers of tuberculosis transmission Jason Andrews (United States of America)	15:00 - 15:20
Q/A	15:20 - 15:30
Coffee and tea break	15:30 - 15:50
Do a/oligosymptomatic incipient tuberculosis patients contribute to transmission?	15:50 - 16:10

Hanif Esmail (United Kingdom)

**Oral Abstract presentations** 

3095	The effect of Beijing lineage on TB transmissibility and disease progression  Alexander L. Chu (United States of America)	16:10 - 16:20
3478	Deriving Mycobacterium tuberculosis transmission between risk-groups in low-incidence setting using MIRU-VNTR fingerprints and WGS combined	16:20 - 16:30
	Hester Korthals Altes (Netherlands)	
3297	Can we find the missing men in clinics? Clinic attendance by sex and HIV status in rural KwaZulu-Natal, South Africa	16:30 - 16:40
	Wende Clarence Safari (South Africa)	
3274	Automated algorithm for early identification of rifampicin-resistant tuberculosis transmission hotspots in Rwanda	16:40 - 16:50
	Kamela Charmaine Ng (Belgium)	
	Q/A and closing parallel session 2	16:50 - 17:00

Side Meeting (MTG) 14:00 - 17:50

A1 - Marriott

# TBScience Parallel session 2 Highlighting the latest developments in the TB vaccine area

Chairperson: Richard White (United Kingdom) Chairperson: Tom Ottenhoff (Netherlands)

Andrew DiNardo (United States of America)

Field overview and what is in the clinical and preclinical tuberculosis vaccine global pipeline?  Georges Thiry PhD (France)	14:00 - 14:20
The potential epidemiological impact of new tuberculosis vaccines Rebecca Harris (United Kingdom)	14:20 - 14:40
Pulmonary BCG vaccination shows improved efficacy in preventing infection and creating a unique local immune profile in NHP Frank Verreck (Netherlands)	14:40 - 15:00
Newest data on intravenous BCG administration in non-human primate (NHP) models  Bob Seder (United States of America)	15:00 - 15:20
Coffee and tea break	15:20 - 15:40
Newest data on RhCMV based TB vaccines in non-human primate (NHP) and steps towards clinical testing Louis Picker (United States of America)	, 15:40 - 16:00
Oral abstract presentations	
Imprinted DNA methylation perturbations persist after successful antituberculosis therapy	16:00 - 16:10

Page 6 / 235

3500

3139	An incomplete vaccine? RD5-mediated secretion defect in BCG vaccine strains results in reduction of antigenic repertoire but little impact on protection  Louis S Ates (France)	16:10 - 16:20
	M72 prevention of disease trial: results of the primary analysis Marie-Ange Demoitie (Belgium)	16:20 - 16:40
	Impact of recent vaccine trial results - the way forward Mark Hatherill (South Africa)	16:40 - 17:00
	Panel Discussion 'What does the TB vaccine field need to do now?'  Ann Ginsberg (United States of America) Helen McShane (United Kingdom) Willem Hanekom (United States of America) Mark Hatherill (South Africa) Georges Thiry PhD (France) Johan Vekemans (Switzerland) Ole Olesen (Netherlands)	17:00 - 17:40
	Q/A and closing parallel session 3	17:40 - 17:50

Poster discussion session (PD) 15:20 - 15:50

Poster Area - Marriott Hotel

### **TBScience2018 posters**

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### Wednesday, 24 October 2018

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

Europe

### PGC01 Managing tuberculosis in children

Childhood TB is relatively poorly quantified and is plagued with difficulties in its diagnosis. Most TB control programmes in high-burden countries are oriented towards adult infectious cases and children with TB remain at the fringes of these activities. The renewed global effort for TB elimination means that paediatric TB can no longer be ignored and that there is a strong unmet need for training service providers to treat children with TB. The proposed post-graduate course on childhood TB comprises a training package developed in India by a group of national experts and international advisers.

This comprehensive course aims to equip physicians involved in child TB care with the knowledge and skills to diagnose and manage common forms of TB, including drug-resistant TB; preventive therapy and HIV-TB co-infection. The course ensures audience involvement through learning using interactive clinical case studies, sessions on chest skiagram reading and teaching videos.

The various sections of the course deal with the magnitude of the TB epidemic, childhood TB, the natural history of TB and TB diagnostics (tests and algorithm), and specific aspects of lymph node, pleural, abdominal, bone and joint and neuro TB, including diagnostics. Other sections cover anti-tuberculosis treatment, monitoring of TB treatment and management of adverse effects. It also provides information about specific conditions such as suspecting and managing drug resistance, HIV-TB co-infection, neonate care of mothers with TB and prevention of TB. The course has already been successfully used in India to train hundreds of paediatricians, largely through the support of the TB Alliance

The course will lead to improved knowledge and clinical practices of attendees and can also be used to inform programme managers about the package and its possible adaptation to the specific needs of other countries with childhood TB.

Coordinator: Varinder Singh (India) Coordinator: Sushil K Kabra (India)

### Introduction/opening comments by the Chair

Module 1: Defining the magnitude of the problem Module 2: A natural history of disease Soumya Swaminathan (Switzerland)

Module 3: Pulmonary TB diagnostics: Part 1 (Characteristic symptoms, chest radiology, skin tests, interferon-y release assays)

Varinder Singh (India)

Module 4: Tuberculosis diagnostics: Part 2 (Microbiology, etc.)

Tanu Singhal (India)

Module 5: Case-based pulmonary tuberculosis diagnostic algorithm

Sushil K Kabra (India)

Summary on Diagnostics by the Chair

Module 6: Lymph node tuberculosis diagnostics Module 7: Pleural TUB TB diagnostics Module 8: Abdominal tuberculosis diagnostics

Tanu Singhal (India)

Module 9: Neuro tuberculosis diagnostics Module 10: Bone and joint tuberculosis

Sushil K Kabra (India)

Module 11: Treatment of tuberculosis

Soumya Swaminathan (Switzerland)

Module 12: Treatment monitoring: defining response and non-response Module 13: Management of adverse effects

Varinder Singh (India)

Module 14: Drug-resistant tuberculosis Module 15: Special conditions/human immunodeficiency virus (HIV)/tuberculosis

Tanu Singhal (India)

Module 16: Special conditions: neonate care of a mother with tuberculosis Module 17: Prevention of tuberculosis

Concluding remarks by chairs

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

Antartica

# PGC02 TB prevention in children in high TB burden settings: implementing the child contact management (CCM) care cascade

Course objectives:

Develop Knowledge and build operational capacity to effectively implement and enhance the CCM care cascade in high tuberculosis (TB) burden settings.

Description and relevance:

As noted in Pillar 1 of the End TB Strategy, prevention has re-emerged as a core strategy for reaching TB control targets. This course is for stakeholders and healthcare workers who work in high TB burden 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 TB burden 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 treatment completion. This course aims to engage stakeholders globally by discussing barriers and facilitators that impact CCM at each care cascade step and by exploring various CCM strategies. Sharing evidence-based guidelines and reporting on implementation experiences is essential to improve CCM and ultimately eliminate paediatric TB. The course will also include expert guidance regarding drug-resistant (DR) child contact management and preventive therapy regimen options for DS- and DR-TB.

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

Expected outputs:

- 1. Understand the 2018 WHO CCM recommendations.
- 2. Distinguish the four distinct steps of the CCM care cascade.
- 3. Review barriers and facilitators that impact CCM at each step of the care cascade.
- 4. Explore various CCM strategies and their effectiveness.
- 5. Enhance knowledge of and capacity to design an effective CCM programme.
- 6. Investigate the most recent evidence regarding DR-TB CCM and preventive therapy regimens for DS-TB and DR-TB.

Chairperson: Anna Mandalakas (United States of America) Coordinator: Yaël Hirsch-Moverman (United States of America) Coordinator: Daria Szkwarko (United States of America)

Chairperson: H. Simon Schaaf (South Africa)

Introductions and overview of course

H. Simon Schaaf (South Africa)

The World Health Organization strategy for child contact management

Alexander Kay (Swaziland)

CCM overview: What are the main drivers of CCM? What are the various strategies?

Karen Du Preez (South Africa)

#### Regimens for preventive treatment

Lindsay Hatzenbuehler (United States of America)

### Preventive treatment considerations for multidrug-resistant tuberculosis

H. Simon Schaaf (South Africa)

### Programmatic examples of child contact management from the field

Yaël Hirsch-Moverman (United States of America)

### Breakout groups: common challenges and possible solutions in CCM

Daria Szkwarko (United States of America)

#### **Group discussion**

Anna Mandalakas (United States of America)

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

Oceania

# PGC03 Expanding TB public health workforce development to improve equitable access to best practice TB care and treatment for all: putting the TeleECHO Model into practice

#### Objectives:

The ECHO Institute's mission is to democratise medical knowledge and help get best practice care to underserved people all over the world. The ECHO (Extension for Community Healthcare Outcomes) tele-mentoring model is an innovative evidence-based education and training intervention designed to strengthen the knowledge and practice of clinical and programmatic teams in underserved communities. The model supports the development of communities of practice and learning that link national and international experts with site-level TB practitioners for workforce development and collaborative problem solving to improve quality of and access to care. The model is rapidly being adapted and implemented in a wide variety of global contexts.

In this post-graduate course we will introduce participants to the basic principles and components of the ECHO model for education and training, review examples of adaptation and implementation of the model in a variety of TB-epidemic contexts in both high and low-burden settings and transnational contexts, and guide participants through the development of their own initial design of an action plan for a TB ECHO programme for their local context.

Expected outputs/outcomes include: Each participant will begin the process of designing their own TB ECHO programme plan of action for their local context with guidance from the faculty using a standard work sheet as a template.

Each participant will acquire an understanding of the principles and components of the ECHO model for education, training and workforce development and the variety of ways it has been adapted to support state, national and tribal TB programmes, including DR-TB programs in Asia, Africa and the Americas.

Relevance: TB Programme Managers and educators who are working to strengthen national TB health workforce capacity will learn about an evidence-based, innovative and tested model for education, training, workforce development and programme quality improvement.

Chairperson: Lisa Chen (United States of America) Chairperson: Maureen Kamene Kimenye (Kenya)

Coordinator: Bruce Struminger (United States of America)

The experience of developing and implementing a paediatric MDR-TB ECHO programme in Kenya, the first paediatric-focused TB ECHO in the world

Ann Masese (Kenya)

The experience of developing and implementing an MDR-TB ECHO programme in India, a high-burden context

Rohit Sarin (India)

#### Viet Nam TB program

Viet Nhung (Viet Nam)

The experience of developing and implementing a TB ECHO programme in New Mexico, a low-burden context

Diana Fortune (United States of America)

The experience of implementing a binational/bilingual TB ECHO for the US and Mexico border region

Kathleen Moser (United States of America)

The experience of developing an MDR-TB ECHO programme in the country of Georgia Mari Buziashvili (Georgia)

The experience of developing an MDR-TB ECHO programme in the country of Mozambique Jamie Cowan (United States of America)

The experience of developing and implementing an MDR-TB/HIV ECHO programme in Uganda, a high-burden context

Akello Susan Adakun (Uganda)

Workshop (WS) 08:00 - 14:00

North America

# WS01 Strategic case finding: find and treat people with tuberculosis who are missed by routine health systems

In 2016, the WHO estimated that more than 4 million people with tuberculosis (TB) were missed by routine health systems. Despite a recent focus on reaching people who are missed, efforts to find them are often not adequately operationalised at the country level. This workshop will familiarise participants with different tools and approaches to detect and treat the people with TB who are missed. Participants will also receive tailored guidance on using the KNCV's Finding the Missing People with TB (FTMP) Guide and Stop TB's Guides for planning, implementing and monitoring case detection interventions. The workshop is intended for NTP district, NGO and CSO staff, donors and consultants who are involved in developing case detection policies and implementing interventions. This workshop is particularly recommended for delegates from countries not already supported through the Global Fund's Catalytic Investments for TB.

Specific objectives: by the end of this workshop, participants will be able to:

- 1. Share and analyse best practices and lessons learned in impactful TB case finding
- 2. Identify case detection gaps, understand barriers and prioritise interventions
- 3. Practice using the KNCV FTMP Guide and Stop TB Case Finding Guides for planning locally tailored interventions
- 4. Understand how to set up monitoring and evaluation (M&E) systems for successful TB case-finding interventions
- 5. Discuss opportunities for using the tools presented for in-country programming and planning

Skills and knowledge to be gained:

- 1. Learn about existing tools for optimising case-finding interventions
- 2. Gain strategic insights into how to apply KNCV's FTMP Guide and Stop TB Series of Guides to improve TB case-finding efforts at local and national levels
- 3. Know when and how to apply lessons learned in the workshop to fine-tune local interventions and plan for these

Expected outcomes:

Participants gain knowledge about best ways to identify opportunities in improved TB case finding.

Chairperson: Marleen Heus (Netherlands) Chairperson: Marina Smelyanskaya (Switzerland)

### Why focus on people with tuberculosis who are missed? Global responses to date

Miriam Faid (Switzerland)

### **Determine gaps and prioritise interventions**

Christiaan Mulder (Netherlands)

### Plan and monitor the implementation of case finding interventions at district level—using KNCV's FTMP guide

Max Meis (Netherlands)

### Plan and monitor the implementation of case finding interventions: using Stop TB's guides on effective case finding

Jacob Creswell (Switzerland)

### Monitoring and evaluation (M&E) for programmes to find and treat people with TB who are missed

Susan Bergson (Netherlands)

### Group work and guided discussion on using the tools presented

Marleen Heus (Netherlands)

### Discussion about implementation and sustainability of programming

Marina Smelyanskaya (Switzerland)

### **Scientific Programme**

Workshop (WS) 08:00 - 14:00

Central America

# WS02 Shifting the paradigm: the urgent need to implement human rights-based, community-driven responses to tuberculosis

To end TB, we must shift the paradigm of the global TB response. It is critical that we adopt an approach and design interventions that are people-centred. We know that many people with TB are unable to access diagnosis, treatment, care and support that they need-and for many of these people the most significant impediments are legal and policy barriers.

If we are committed to ending TB, concerted efforts must be made to identify legal and policy barriers experienced by people and vulnerable/marginalised communities affected by TB. We must also utilise a multi-stakeholder approach to ensure that the solutions identified in addressing these barriers are effectively implemented at all levels. This workshop will unpack the legal and policy barriers faced by people affected by TB and explore interventions that can reduce the impact of these barriers. The experiences of TB survivors and marginalised TB populations will be central to this process.

This workshop will enable participants to:

□•understand the relationship between human rights and TB

•explore how human rights barriers are particularly relevant to vulnerable and marginalised populations

□•learn of the existing legal environment and human rights tools (including the Stop TB Partnership legal environment assessment and the Global Fund Baseline) that can be used to analyse and strengthen country TB responses

□•unpack barriers in accessing TB services and brain-storm interventions and solutions to reduce the impact of these barriers

□•contribute to the TB survivor-led Declaration on the Rights and Responsibilities of People Affected by TB

□•analyse how the rights of people affected by TB are relevant in both public and private health settings

□ • articulate how strengthening community systems can contribute to more effective TB response.

Chairperson: Allan Maleche (Kenya)

Chairperson: Brian Citro (United States of America)

Coordinator: James Malar (Switzerland)

### Declaration on the rights and responsibilities of people affected by tuberculosis

Timur Abdullaev (Uzbekistan)

#### Human rights, tuberculosis and the Nairobi Strategy

Allan Maleche (Kenya)

### Effectively implementing TB legal environment assessments

Brian Citro (United States of America)

### The Global Fund human rights baseline assessments

Hyeyoung Lim (Switzerland)

### Legal environment assessments: tool and process

James Malar (Switzerland)

### **Scientific Programme**

#### Removing barriers to tuberculosis services in South Asia

Prabha Mahesh (India)

### Quality of care for people seeking care in the private sector, do we care enough?

Sreenivas Nair (Switzerland)

### Communities, rights and gender (CRG)—strengthening the tuberculosis response

Olive Mumba (Tanzania, United Rep.)

### Stop TB Partnership—country and community support for impact

Viorel Soltan (Switzerland)

#### Coercion and criminalization in TB laws

08:00 - 08:10

John Stephens (United States of America)

Workshop (WS) 08:00 - 11:00

South America

# WS03 Bedaquiline and delamanid in MDR-TB patients—new insights from implementation in a multi-country project

Despite being approved for the treatment of MDR-TB patients for a number of years already, bedaquiline and delamanid use worldwide continues to increase at a glacial pace. In many countries, these drugs are reserved for the treatment of TB patients who are infected with highly-resistant strains such as XDR-TB. Many clinicians have not yet implemented the whole range of WHO-recommended situations where BDQ and DLM could be used. These include patients with toxicity to core second-line anti-tuberculosis drugs, patients with serious comorbidities or those at high risk for poor treatment outcomes. This workshop will bring together experts from several countries and their technical partners to discuss the current WHO recommendations and the latest evidence and experience from endTB projects on the use of BDQ and DLM in different types of patients.

Target audience: MDR-TB clinicians, NTP managers, policy makers, researchers, international technical partners.

### Objectives:

- 1. Understand the latest research on the relative toxicities of core second-line anti-tuberculosis drugs new/repurposed drugs
- 2. Discuss how to improve efficacy and mitigate toxicity of core second-line anti-tuberculosis drugs using BDQ and DLM
- 3. Discuss when and how to replace an injectable with BDQ or DLM in an MDR-TB regimen
- 4. Discuss how comorbidities influence the design of an MDR-TB regimen and whether to use BDQ or DLM.

Output: consensus on the types of MDR-TB patients who most benefit from BDQ and DLM, and ways to programmatically maximise the benefits of these drugs.

Chairperson: Kwonjune J. Seung (United States of America)

Chairperson: Fuad Mirzayev (Switzerland) Coordinator: Lice González-Angulo (Switzerland)

> Using bedaquiline or delamanid in patients with toxicity to core secondline drugs

Uzma Khan (United Arab Emirates)

Country experience on feasibility, acceptability and effectiveness of replacing SLIDs with new TB drugs

Catherine Hewison (France)

### Science and practice of delamanid use for the treatment of multidrugresistant tuberculosis

Michael Rich (United States of America)

Potential benefits of BDQ- and DLM-based treatment regimens in patients with uncomplicated/'non-severe' forms of MDR-TB

Kwonjune J. Seung (United States of America)

### Patient-centred care: the heart of the management of tuberculosis

Ernesto Jaramillo (Switzerland)

Workshop (WS) 08:00 - 14:00

Mississippi

# WS04 Adapting and adopting the SORT IT model: making public health programmes data-rich, information-rich and action-rich

This is a one-day workshop on operational research, and translation of research and data into public health policy. 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.

Chairperson: Anthony D Harries (United Kingdom) Chairperson: Rony Zachariah (Luxembourg)

Coordinator: Ajay Kumar Madhugiri Venkatachalaiah (India)

Coordinator: Srinath Satyanarayana (India)

Operational research, what, why and how? Rony Zachariah (Luxembourg)	08:00 - 09:00
The SORT IT model: operational research capacity building Anthony D Harries (United Kingdom)	09:00 - 09:45
Break	09:45 - 10:15
Expanding SORT IT: new regions, new themes, new methods Ajay Kumar Madhugiri Venkatachalaiah (India)	10:15 - 11:15
E-SORT IT and how it works Karapet Davtyan (Armenia)	11:15 - 11:30
IORT: Intermediate Operational Research Training in Rwanda Bethany Hedt-Gauthier (United States of America)	11:30 - 11:45
Discussion	11:45 - 12:00
Break	12:00 - 12:15
Data Impact Programme Adam Karpati (United States of America)	12:15 - 13:00
Data to Policy (D2P) Training and Mentorship Programme  Mohammed Khogali (United States of America)	13:00 - 13:45

### **Scientific Programme**

Member Meetings (Regional, Section, Sub-section, Working Group) 08:00 - 09:00

Amazon

### **TB and Mental Health Working Group**

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

Yangtze 1

## PGC06 Update on clinical and programmatic management of multidrug- and extensively drug-resistant TB (MDR-/XDR-TB)

MDR and XDR-TB pose a significant threat to TB control and challenge clinicians and programme managers world-wide given complexities of MDR-/XDR-TB diagnosis, treatment and case management. This course presents cutting edge strategies for the clinical and programmatic management of MDR-TB for the front-line clinician, nurse, epidemiologist, laboratory technician and programme manager based on the newly updated WHO guidelines. It will use case-based and didactic presentations to illustrate ways to implement the most recent internationally recommended practices to address DR-TB.

This course is directly related to the theme of the 49th Union World Conference, as the problem of MDR/XDR-TB can only be addressed through social and political solutions that directly impact the care and management of TB patients. A patient-centred approach will be necessary, and appropriate prevention and management of MDR/XDR-TB will be key in ending the TB epidemic. Objectives:

- Present the principles of MDR-TB prevention, diagnosis, treatment and care.
- Update on recent advances in the rapid diagnosis of drug resistance, new laboratory critical concentrations for drug susceptibility testing, and how these may be applied in the clinical settings
- Discuss evidence-based management of and controversial issues in the treatment of MDR/XDR-TB and MDR-TB-HIV and other special situations
- Present cutting edge strategies for the treatment of MDR/XDR-TB including new drugs and regimens
- Introduce programmatic management of MDR-TB
- Discuss the management of isoniazid-resistant TB
- Discuss the pharmacokinetics and pharmacodynamics of MDR/XDR-TB drugs
- Present the most effective strategies for the proper management of adverse reactions to second-line antituberculosis drugs
- Discuss prevention strategies for MDR/XDR-TB, particularly LTBI management
- Update on the ethics and human rights principles to guide TB prevention, diagnosis, treatment and care

Chairperson: Christine Ho (India) Chairperson: Ignacio Monedero (Spain) Coordinator: Sundari Mase (India)

Coordinator: Ernesto Jaramillo (Switzerland)

### Updated guidelines on phenotypic and genotypic tests for the diagnosis of drug-resistant tuberculosis

Christopher Gilpin (Switzerland)

### Using rapid molecular testing and new TB drugs in the treatment of MDR-TB: programmatic: a perspective

Malik Parmar (India)

### New guidelines for the management of isoniazid-resistant tuberculosis

Dennis Falzon (Switzerland)

### Pharmacokinetics/pharmacodynamics of tuberculosis medicines: outcomes of a WHO expert consultation

Kelly Dooley (United States of America)

### Designing a treatment regimen for multidrug-resistant tuberculosis according to the new WHO guidelines

Jose Caminero (Spain)

### Treatment of multidrug-resistant tuberculosis: human immunodeficiency virus co-infection and pregnancy

Barbara Seaworth (United States of America)

### Treatment of multidrug-resistant tuberculosis: paediatrics

H. Simon Schaaf (South Africa)

### Management of adverse drug reactions

Michael Rich (United States of America)

### Treatment and management of multidrug-resistant tuberculosis contacts (management of latent TB infection)

Sundari Mase (India)

### Patient-centred care in multidrug-resistant tuberculosis: ensuring sound ethics and protecting human rights

Ernesto Jaramillo (Switzerland)

### **Scientific Programme**

Workshop (WS) 08:00 - 14:00

Yangtze 2

# WS05 Delivering high-quality care to people with DR-TB: results and lessons learned from piloting a systematic, patient-centred supportive care package to improve outcomes in three countries

Objectives:

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□•Orient participants to the Comprehensive Supportive Care Package for People with DR-TB, including the framework and rationale

□•Share outcome and cost-benefit results of the Care Package pilot from China, South Africa and Ukraine

□ • Disseminate best practices and real-life examples of Package implementation to encourage global uptake

□•Give participants an opportunity to practice using the Package tools to plan implementation in their own settings

□•Provide participants resources they can access to successfully plan and implement supportive care for DR-TB at home

Expected outputs/outcomes:

Participants will be able to:

□•Describe the generic framework for the Supportive Care Package, its rationale, and how it can be adapted at all levels of the health system to specific programme and individual patient needs

\_•Discuss the experiences of pilot countries in implementing the care package, specifically what tips and advice can help them implement successfully at home

□•Adapt the supporting documents and tools received to plan, implement and evaluate supportive care services in their setting

□•Apply the materials and access the expertise needed to improve treatment outcomes for people with DR-TB in their setting through a systematic patient-centred approach.

### Relevance to target audience:

With such poor global performance in DR-TB treatment, it is time for more intensive and systematic efforts to help people with DR-TB reach cure. This workshop is for anyone who works with DR-TB care delivery at any level of the health system, from NTP DR-TB focal points to facility-level providers to community-based organisations that support out-patient treatment. The workshop presents an approach that ensures patient autonomy and addresses individual needs while recognising health system constraints (human resources and funding). It is fully aligned with global guidance and will help programmes operationalise that guidance for better outcomes, stronger systems and greater patient satisfaction.

To pre-register to this workshop, please send an email to <a href="mailto:tbcareii@urc-chs.com" target="\_blank">tbcareii@urc-chs.com</a>

Chairperson: Alex Golubkov (United States of America)
Coordinator: DArcy Richardson (United States of America)

Chairperson: Lindiwe Mvusi (South Africa)

Video messages from people with drug-resistant tuberculosis: the role of supportive care in treatment success 08:00 - 08:05

Context: The US Government National Action Plan to combat multidrugresistant tuberculosis 08:05 - 08:15

Alex Golubkov (United States of America)

An overview of the Comprehensive Supportive Care Package for people with drug-resistant tuberculosis  DArcy Richardson (United States of America)	08:15 - 08:30
The DR-TB Care Package Pilot: results and new questions Lisa V. Adams (United States of America)	08:30 - 09:10
Realities on the ground: results, best practices and challenges Li Ling (China) Christopher Radali (South Africa)	09:10 - 10:40
Comments on the pilot experience and scale-up plans in China Li Renzhong (China)	10:40 - 11:10
Best practices marketplace Svitlana Okromeshko (Ukraine)	11:10 - 11:20
Practical steps to implementation: work groups for Asia, Africa and Eastern Europe	11:20 - 12:50
Review of resources and how to access support for implementation	12:50 - 13:05
Wrap-up	13:05 - 13:10

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

Kilimanjaro 1

PGC05 CANCELLED-Air pollution and health: understanding the problem and advocating for solutions

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

Kilimanjaro 2

# PGC04 TBdata4action: making sense and use of routine tuberculosis data for management

The objective is to introduce a simple and user-friendly approach to explain how health staff and managers at facility, district and higher levels can 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 agree on action points targeting these challenges. The approach is implemented through strengthened supportive data-driven supervision using checklists with summary tables of routine data and quarterly performance review meetings. The course follows up on similar post-graduate courses held during Union conferences since 2015. It is based on a guide developed by The Union and TB CARE and piloted in Zimbabwe and which is used in Union international courses. Kenya and Sudan have run country-level courses and will also present their experiences. Expected outputs/outcomes:

Participants will learn of the importance of collecting and recording quality TB data, and how to analyse local routine data that is directly linked to TB management at facility, district and provincial levels through practical examples, carry out data-driven supportive supervision and performance review meetings and roll out this approach in their countries.

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

The approach is in line with the conference theme (human rights), as it contributes to better access to health and TB services.

Chairperson: Christopher Zishiri (Zimbabwe)

Chairperson: Enos Masini (Kenya) Coordinator: Einar Heldal (Norway)

Coordinator: Ronald Thulani Ncube (Zimbabwe)

### Key regarding the recording and reporting system, indicators to be monitored and recording and reporting tools

Christopher Zishiri (Zimbabwe)

How to tabulate and analyse data at the facility level, with exercises

Nicholas Siziba (Zimbabwe)

How to tabulate and analyse data at the district level, with exercises

Ronald Thulani Ncube (Zimbabwe)

How to tabulate and analyse data at the provincial level

Nqobile Mlilo (Zimbabwe)

How to perform data-driven supportive supervision and performance review meetings

Aiban Ronoh (Kenya)

How the data-driven supervision course was rolled out in Kenya

Brenda Mungai (Kenya)

Kenya: field experiences in using routine tuberculosis data

Timothy Malika (Kenya)

The Sudanese experience: challenges in catchment area

Mai Eltigany (Sudan)

### **Scientific Programme**

How to use digital health innovations to improve tuberculosis data recording and reporting—sharing practical country experiences

Patrick Hazangwe (Zimbabwe)

Workshop (WS) 08:00 - 11:00

Everest 1

# WS06 Strengthened community systems, partnerships and responses to tuberculosis in Global Fund-supported programmes

Communities play a vital role in extending the reach and impact of TB health services. The Global Fund's 2017-2022 strategy prioritises the strengthening of community systems as a central approach to ending the TB epidemic. Resourced community systems and responses have a unique ability to reach and mobilise those who are most vulnerable to and affected by TB, create demand and improve access to quality services. This workshop will explore how national programmes are collaborating with communities to strengthen community responses and systems, core components of the WHO End TB Strategy and the Global Plan to End TB.

Chairperson: Lucica Ditiu (Switzerland)

Chairperson: Christian Gunneberg (Switzerland)

Coordinator: Meghan Holohan (United States of America)

Coordinator: Eliud Wandwalo (Switzerland)

Overview of barriers to care and support in Global Fund TB grant implementation and scaling up the community response

Kate Thomson (Switzerland)

Kenya's experience in scaling up an integrated community health response and addressing barriers to care through the national TB strategic planning process

Maureen Kamene Kimenye (Kenya) Anne Goretti Karimi Munene (Kenya)

Understanding CRG and empowering communities to increase their engagement in the fight against TB in Cambodia

Choub Sok Chamreun (Cambodia)

How to ensure we are directing services to the right places: using data to inform implementation in Ghana

Frank Bonsu (Ghana)

Strengthening strategic partnerships between communities and the NTP leveraging community-based monitoring to inform the national response

Olive Mumba (Tanzania, United Rep.)

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

Everest 2

### PGC07 An introduction to national tuberculosis patient cost surveys

In accordance with the Sustainable Development Goals, the End TB Strategy has three ambitious goals to end the global TB epidemic by 2035-reduce TB incidence by 90%, reduce TB-related mortality by 95% and ensure that no TB-affected families experience catastrophic costs. The inclusion of a catastrophic cost indicator is new, reflecting the importance of alleviating the heavy financial burden of TB care as a key component of global TB elimination. To measure this indicator, high TB burden countries are carrying out nationally representative TB patient cost surveys, to determine the proportion of TB patients who spend 20% or more of their household annual income on TB diagnosis and care. These surveys will inform efforts to mitigate the direct and indirect costs of care by adapting care models and/or social protection interventions.

In this post-graduate course, we will outline the rationale for TB patient cost surveys and explain global progress in conducting such surveys. We will then work through the practical steps involved in designing and conducting a national TB patient cost survey and applying the results obtained to policy and practice. The following aspects of designing TB patient cost surveys will be discussed: sampling techniques; data collection, management and analysis; and ways to ensure results inform policy-making and practice. Additional research ideas will be discussed. Staff currently involved in TB patient cost surveys or those considering conducting a TB patient cost survey in the future will find the course highly relevant. At the end of the course, participants are expected to have a preliminary theoretical and practical understanding of the methods used to conduct a TB patient cost survey and its uses.

Chairperson: Nobu Nishikiori (Switzerland) Chairperson: Knut Lönnroth (Sweden) Coordinator: Andrew Siroka (Switzerland) Coordinator: Kerri Viney (Australia)

TB patient cost surveys: helping to advance better models of care, universal access and social protection in the context of the End TB Strategy: a dialogue

Diana Weil (Switzerland)

An overview of the global progress in conducting tuberculosis patient cost surveys

Nobu Nishikiori (Switzerland)

Basic design of the tuberculosis patient cost survey

Ines Garcia Baena (Switzerland)

Break

Sampling for a tuberculosis patient cost survey

Debora Pedrazzoli (Switzerland)

Data collection, management and analysis for a tuberculosis patient cost survey

Andrew Siroka (Switzerland)

Break

Dissemination of the findings of a tuberculosis patient cost survey: policy implications and options for research

Kerri Viney (Australia)

**Summary and conclusions** 

Knut Lönnroth (Sweden)

### **Scientific Programme**

Workshop (WS) 08:00 - 14:00

Atlantic 1

# WS07 Harnessing experiences from the introduction of BDQ, DLM and the STR to transform the quality of DR-TB management and prepare for future innovations in care

#### Description:

By March 2018, 80% of the 30 000 BDQ doses available for DR-TB through the 2015–2019 donation agreement between USAID and Janssen will have been ordered through the GDF. Similarly, DLM can be ordered from the GDF thanks to a Stop TB Partnership and Otsuka joint initiative, which has expanded at a significantly slower rate than BDO.

This workshop will share insights from countries that have expanded access to BDQ and DLM. Particular focus will be on learning from experience of implementing newer drugs to inform the introduction of future innovations, as well as how to ensure continued progress in transforming the quality of clinical care and aDSM to achieve better treatment outcomes. As countries continue to introduce STR, the use of BDQ, DLM and companion medicines is critical for those who are ineligible for STR; there is ongoing need to transform provision of care and use the introduction of BDQ, DLM and STR as an opportunity to make sustained programmatic improvements.

#### Objectives

- 1. Share practical experiences of countries in the programmatic introduction of BDQ, DLM and STR
- 2. Share experience of countries in strengthening DR-TB clinical management and aDSM
- 3. Discuss how experiences from the introduction of BDQ, DLM and STR should inform future strategies for expanding access to new innovations and strengthen clinical monitoring and management at country level
- 4. Provide updates on the BDQ donation programme and progress made on BDQ access

#### Expected outcomes

- 1. Learn the successes and challenges in the implementation of STR and new drugs
- 2. Recognise diversity of country contexts, partner involvement and NTP perspectives
- 3. Learn how to strengthen clinical management and aDSM from practical examples
- 4. Learn where to access technical resources to plan the implementation of STR and new drugs

Coordinator: Edmund Rutta (United States of America)

Coordinator: Vivian Cox (South Africa)

### Getting to the finish line: order status and patients enrolled on bedaquiline and delamanid

Brenda Waning (Switzerland)

Implementing new drugs and STR for DR-TB: what stakeholders should know about operational and clinical issues and pitfalls

Fraser Wares (Netherlands)

Implementing new drugs and STR for DR-TB: what stakeholders should know about operational and clinical issues and pitfalls

Gunta Dravniece (Netherlands)

Progress on India's ambitious plan to rapidly expand access to bedaquiline, delamanid and STR nationwide

Sunil Khaparde (India)

Using the introduction of BDQ to improve clinical care and outcomes of DR-TB patients in the Democratic Republic of Congo: lessons learned and remaining challenges

Michel Kaswa (Congo (Democratic Rep.))

Introduction and scale-up of new drugs for drug-resistant tuberculosis cases: PAHO region experiences

Rafael Lopez Olarte (United States of America)

Introduction and scale-up of new drugs for drug-resistant tuberculosis: PAHO region experiences

Rafael Laniado Laborin (Mexico)

Achieving national scale-up of bedaquiline and delamanid in South Africa: what can the world learn?

Norbert Ndjeka (South Africa)

Provision of sustained, coordinated clinical technical assistance to DR-TB clinicians, MDR-TB Coordinators and PMDT Programmes in the scale-up of new drugs and shorter regimens

Vivian Cox (South Africa)

Approaching the end of the Bedaquiline Donation Programme: what have we learned and where do we go from here?

YaDiul Mukadi (United States of America)

### **Scientific Programme**

Workshop (WS) 08:00 - 14:00

Atlantic 2

# WS08 Using knowledge from pharmacokinetics/pharmacodynamics (PK/PD) to support WHO TB treatment guidelines

An improved and reformated full-day workshop on pharmacometric approaches to design optimal regimens that suppress the emergence of multi-drug-resistant tuberculosis (MDR-TB) and minimise side effects. The workshop will feature keynote speakers giving an overview of the role of the PK/PD sciences in chemotherapeutics, optimisation of traditional regimens and redefining susceptibility breakpoints for the treatment of TB in adults and other special populations, including pregnant women, children and patients with diabetes mellitus. Experts in the field will present and review the latest evidence to support decision-making for both patient care in the clinic and for TB programme management in the field, at local and state levels.

**OBJECTIVES** 

□•Learn the basics of and updates on the PK/PD of existing and new anti-tuberculosis drugs

□•Engage clinicians, TB programme workers and other stakeholders by sharing practical experiences and examples where the implementation of PK/PD principles improved patient care and TB programme planning

□•Discuss methods for improving full integration of PK/PD studies in setting susceptibility breakpoints and treatment guidelines, as well as the dissemination of the resulting information

### **EXPECTED OUTCOMES**

□•Participants will acquire up to date knowledge of PK/PD principles and appreciate the role that the PK/PD sciences play in designing WHO-recommended susceptibility breakpoints of anti-tuberculosis drug and TB treatment guidelines.

□•Practical examples/vignettes (from preclinical models and clinical studies) from both developing countries and resource-limited settings where PK/PD principles have improved patient care and TB programme management.

□•Participants will learn how to access up-to-date information, resources and experts when confronted with problems related to dosing of TB drugs, select regimens for difficult-to-treat patients, as well as contribute data to improve outcomes in TB patients.

Chairperson: Tawanda Gumbo (United States of America)

Chairperson: Helen McIlleron (South Africa)

Coordinator: Jotam G. Pasipanodya (United States of America) Coordinator: Devyani Deshpande (United States of America)

Private/public partnerships to accelerate tuberculosis regimens design	08:00 - 08:35
Debra Hanna (United States of America)	

## Pharmacokinetics/pharmacodynamics principles of tuberculosis 08:35 - 08:50 drugs—the logic behind the madness

Eric Nuermberger (United States of America)

Tuberculosis drug delivery and drug penetration in lung cavities and	08:50 - 09:05
other difficult anatomical spaces	

Keertan Dheda (South Africa)

Genotype or phenotype—that is the question. Tales of MIC variability, critical concentrations, clinical breakpoints and mutations Claudio U. Koser (United Kingdom)	09:05 - 09:40
Machine-learning approach to setting breakpoints: lessons from quinolones  Jotam G. Pasipanodya (United States of America)	09:40 - 09:55
Tuberculosis outcomes after adaptive dosing and therapeutic drug monitoring Scott Heysell (United States of America)	09:55 - 10:10
Break	10:10 - 10:20
Paediatric tuberculosis and the pharmacokinetics/pharmacodynamics sciences: what do we know and what don't we know?  Peter Donald (South Africa)	10:20 - 10:55
Using pharmacokinetics/pharmacodynamics knowledge to support the WHO tuberculosis treatment guidelines  Dennis Falzon (Switzerland)	10:55 - 11:10
Dosing of anti-tuberculosis drugs in the pregnant woman Paolo Denti (South Africa)	11:10 - 11:25
Next generation therapeutic drug monitoring (TDM): using optimal sampling time points and the dried bloodspot sample Jan-Willem Alffenaar (Netherlands)	11:25 - 11:40

Side Meeting (MTG) 08:00 - 12:30

A1 - Marriott

# TBScience Plenary session 2 M. tuberculosis infection: acquisition, control and clearance

Chairperson: Michael Kimerling (Netherlands) Chairperson: William Worodria (Uganda)

Mark Hatherill (South Africa)

Registration day 2	08:00 - 08:30
Welcome day 2	08:30 - 08:35
Paula Fujiwara (United States of America)	
Novel PET/CT imaging techniques reveal dynamics and spectrum of latent tuberculosis infection	08:35 - 08:55
Gerhard Walzl (South Africa)	
New developments in refining and testing prospective correlates of risk of TB	08:55 - 09:15
Tom Scriba (South Africa)	
Targeted TB screening for treatment and prevention by host biomarker stratification	09:15 - 09:35

Factors controlling susceptibility to tuberculosis disease progression Robert Wilkinson (South Africa)	09:35 - 09:55
Factors controlling susceptibility to TB disease progression: other viral co-infections including cytomegalovirus  Helen Fletcher (United Kingdom)	09:55 - 10:15
The effect of diabetes on susceptibility to tuberculosis and outcome Reinout van Crevel (Netherlands)	10:15 - 10:35
Coffee and tea break TBScience day 2	10:35 - 11:00
Harnessing inflammation and trained immunity for TB vaccination: what distinguishes protective from harmful inflammation?  Mihai Netea (Netherlands)	11:00 - 11:20
Mycobacterial growth inhibition is associated with trained innate immunity Simone A Joosten (Netherlands)	11:20 - 11:40
TB vaccine POI trial results: BCG revaccination trial data suggest ability to clear M. tuberculosis infection in humans—implications Elisa Nemes (South Africa)	11:40 - 12:00
New hypotheses for the natural history of TB using models combining data from modelling, epidemiological, clinical and basic research Rein Houben (United Kingdom)	12:00 - 12:20
Closing remarks day 2	12:20 - 12:30

Community space: panel discussion 09:00 - 10:00

De Ontmoeting 1 (Community space)

# Reaching high risk and under-served populations through culturally sensitive health education strategies

Five speakers sharing examples:

Ineke Spruijt (The Hague, Netherlands):

Experiences with education on LTBI screening and treatment among Eritrean migrants in the Netherlands. Knowledge about TB and LTBI is limited among Eritrean migrants. Most migrants do not read written materials or have difficulty understanding the content, this talk explains how interactive education sessions proved useful and important.

Dawit Tesfay Haile (The Hague, Netherlands). Culturally sensitive education about TB is important to overcome stigma and misunderstandings. In the Eritrean culture information is given verbally and distinct cultural issues can complicate awareness and education. From his own perspective as an Eritrean refugee the speaker will reflect on these issues when designing education programs.

#### Hege S. Bjelkaroy (Drammen, Norway)

TB training program targeting migrant risk groups in Norway. Based on needs assessments among target groups, the program was developed to contain various written and visual forms of information, including a context-neutral animated film explaining TB and the Norwegian treatment system in a simple way, and translated into several languages.

### Mike Mandelbaum (Brighton, United Kingdom)

Multi-media communication resources to increase the uptake of latent TB testing and treatment among new entrants to England. TB Alert carried out research to gain an in-depth understanding of the media and communications preferences of various migrant populations and developed a range of multi-media health promotion resources to reach them.

Discussion session: The audience is encouraged to ask questions and share experiences so that we can inspire each other and find good solutions.

Chairperson: Hege S Bjelkaroy (Norway) Chairperson: Ingunn Nordstoga (Norway) Coordinator: Niesje Jansen (Netherlands) Coordinator: Linette McElroy (Canada)

Reaching high risk and under-served populations through culturally sensitive health education strategies Ineke Spruijt (Netherlands)	09:00 - 09:10
Reaching high risk and under-served populations through culturally sensitive health education strategies  Dawit Tesfay Haile (Netherlands)	09:10 - 09:25
Reaching high risk and under-served populations through culturally sensitive health education strategies Hege S Bjelkaroy (Norway)	09:25 - 09:35
Reaching high risk and under-served populations through culturally sensitive health education strategies  Mike Mandelbaum (United Kingdom)	09:35 - 09:45
Discussion & questions	09:45 - 10:00

### **Scientific Programme**

Member Meetings (Regional, Section, Sub-section, Working Group) 09:15 - 10:15

Amazon

### **TB** infection control

Community space: panel discussion 10:15 - 11:45

De Ontmoeting 1 (Community space)

### Combatting Global TB-HIV through effective and strategic community engagement

According the World Health Organization, the risk of developing tuberculosis (TB) is estimated to be between 16-27 times greater for people living with HIV than among those without HIV. Approximately 1/3 of the 34 million people living with HIV are infected with latent TB and 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. People living with HIV also face the potential of drug-resistant TB, including MDR-TB and extensively drug resistant TB (XDR-TB), both of which further complicate HIV and TB care and treatment. Integrating TB and HIV education around co-infection research is essential to reducing the impact of both epidemics. The Community Research Advisors Group (CRAG), the community advisory board to the U.S. CDC's Tuberculosis Trials Consortium (TBTC) and Community Partners (CP), 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. Since 2014, CP and CRAG have been working to address global issues of mutual concern in clinical TB-HIV research. Their efforts include TB-HIV research literacy and outreach; development of related tools; and new paradigms to improve community engagement in co-infection awareness, reducing stigma and better integration of TB and HIV research. As part of their efforts, CP and CRAG developed a slide deck to address some of the issues expressed by CABs/CAGs and communities around study modifications to highlight the importance of community engagement when HIV and TB studies are modified. During this interactive session, these slides will be premiered and attendees will participate in discussions around study modifications and the importance of developing and implementing new tools and approaches around community engagement in TB-HIV.

Chairperson: Russell Campbell (United States of America)

Combatting Global TB-HIV through effective and strategic community engagement Russell Campbell (United States of America)	10:15 - 10:25
Combatting Global TB-HIV through effective and strategic community engagement  Cynthia Chirwa (United States of America)	10:25 - 10:35
Combatting Global TB-HIV through effective and strategic community engagement  Marie Theunissen (United States of America)	10:35 - 10:45

Member Meetings (Regional, Section, Sub-section, Working Group) 10:30 - 11:30

Amazon

### **Countering Tobacco Industry Working Group**

### **Scientific Programme**

Poster discussion session (PD) 10:35 - 11:00

Poster Area - Marriott Hotel

### **TBScience2018 posters**

Please view the list of posters <a href="https://www.professionalabstracts.com/TheUnion2018/iplanner/#/sessiondetail/486">here</a>.

Workshop (WS) 11:30 - 17:30

South America

# WS09 Joint GLI-GDI workshop on challenges and opportunities for access to diagnostics, treatment and care

TB detection and the administration of effective treatment of all people with TB continue to be a challenge, particularly in settings with fragmented healthcare systems or in those with a significantly high burden of disease. Two Working Groups, the Global Laboratory Initiative (GLI) and the Global drug-resistant TB Initiative (GDI) are working towards building and strengthening laboratory and clinical management capacity and assisting countries in the uptake of tools for building and sustaining high-quality TB diagnostic networks and in the programmatic management of DR-TB.

Through this workshop, GLI and GDI seek to explore the challenges encountered in countries, highlighting the new tools for diagnosis, treatment and management of TB, including the management of drug resistance and TB-HIV, and above all, present existing approaches and strategies to ease and overcome these challenges. The workshop will also set the scene for discussions on how to facilitate and expand the implementation of current diagnostics and more effective targeted treatment, facilitate the delivery of an integrated, patient-centred approach at the core of care and support to all TB patients, and describe financing and procurement mechanisms to ease country transition to new tools. This session is intended for participants who wish to explore and gain greater insight into and understanding of the technical aspects of applying specific technologies and approaches, and to promote the right to life-saving diagnostics and treatment by implementing current tools.

Chairperson: Charles Daley (United States of America) Chairperson: Heather Alexander (United States of America)

Coordinator: Fuad Mirzayev (Switzerland)
Coordinator: Lice González-Angulo (Switzerland)

Requirements for NTRLs to prepare and conduct National Drug Resistance Surveys and National Prevalence Surveys

Petra De Haas (Netherlands) Elisa Tagliani (Italy)

Promoting a human rights-based approach to TB and MDR-TB: the TB, Human Rights and the Law Taskforce of the GDI Working Group

Brian Citro (United States of America)

Triage for treatment: global uptake of the shorter treatment regimen and second-line LPA: where are we now?

Maria Imelda (Mamel) D. Quelapio (Philippines)

Novel shorter multidrug-resistant tuberculosis regimens

Catherine Hewison (France)

Updated critical concentrations for drug susceptibility testing of drugs used in the treatment of drug-resistant tuberculosis

Alexei Korobitsyn (Switzerland)

Line-probe assays interpretation

Elisa Tagliani (Italy)

Diagnostic algorithms and current diagnostic tools: the case of lateral flow urine lipoarabinomannan assay

Martina Casenghi (Switzerland)

Sustainability of TB medicines, diagnostics markets and supply chains under domestic financing and procurement: GDF observations of country practices and challenges

Wayne van Gemert (Switzerland)

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

Everest 1

### PGC08 An introduction to tuberculosis modelling

This course is designed for individuals interested in modelling TB and the impact of TB care and prevention programmes. It will introduce participants to the basic structure, assumptions, principles, and concepts of TB modelling, including key aspects of the natural history of <em>Mycobacterium tuberculosis </em>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. The role of modelling in policy and decision-making will be highlighted and participants will be informed of the resources available from the TB Modelling and Analysis Consortium (www.tb-mac.org)

Chairperson: Hsien-Ho Lin (Taiwan)

Coordinator: Christopher Finn McQuaid (United Kingdom)

Coordinator: Richard White (United Kingdom)

### Lecture 1: An introduction to tuberculosis modelling

Richard White (United Kingdom)

### Practical 1: Setting up a model of M. tuberculosis

Emilia Vynnycky (United Kingdom)

### Paper Discussion: How to critically review a modelling paper

Hsien-Ho Lin (Taiwan)

### Lecture 2a: Tuberculosis modelling: interventions

Rein Houben (United Kingdom)

### Lecture 2b: Tuberculosis modelling: cost-effectiveness

Fiammetta Bozzani (United Kingdom)

### Practical 2: Modelling the impact and cost-effectiveness of tuberculosis interventions

Han Fu (United Kingdom)

### Summary of the day

Christopher Finn McQuaid (United Kingdom)

Member Meetings (Regional, Section, Sub-section, Working Group) 11:45 - 12:45

Amazon

### TB, HIV and Tobacco Use Working Group

### **Scientific Programme**

Community space: panel discussion 12:00 - 13:00

De Ontmoeting 1 (Community space)

### TB challenges in humanitarian settings: military conflict in Ukraine

Since 2014 Ukraine has become a protracted conflict emergency. Conflict-related conditions along the Line of Contact (LoC) between government-controlled areas (GCA) and non-government-controlled areas (NGCA) severely restrict access to health care for people in East Ukraine (Luhansk and Donetsk obl), including officially registered 1.6 million internally displaced people (IDP) and other mobile populations without official registration. Key issues for IDP access to TB services include: lack of specialized TB clinics due to main referral hospitals left in NGCA, loss of medical staff fleeing the conflict zone, the need to reside in GCA in order to be taken on treatment, low health prioritization, stigma and discrimination of IDPs at the place of their residence, many of them reside in urban settings, which complicate targeted TB detection intervention, poor awareness on TB, absence of services centered at patients needs, uncertainty resulted from current health and decentralization reforms taking place in Ukraine. Over 2017 LHSI gained support from Public Health Center and successfully advocated for inclusion of IDPs as new atrisk group into the GFATM proposal. Since 2018 IDPs ve become targeted by GF interventions to pilot possible TB detection and treatment at the GCA of Eastern part of Ukraine and at other oblasts with many IDPs residing in large cities. At this stage its important to build collaboration networks, find an effective solutions to ensure access to TB services of IDP, who, on the one hand, should enjoy equal rights t health like any other citizens of Ukraine, but, on the other hand, in real life experience difficulties at every step of TB cough-to-cure pathway. When failing to receive services at the territory of Ukraine, IDPs are looking for support at the neighboring counties, thus becoming refugees/migrants, contributing to MDR-TB challenge in Eastern Europe.

Chairperson: Ilona Yeleneva (Ukraine) Coordinator: Yana Terleieva (Ukraine)

TB challenges in humanitarian settings: military conflict in Ukraine Iryna Ieremenko (Ukraine)	12:00 - 12:10
<b>TB challenges in humanitarian settings: military conflict in Ukraine</b> Yana Terleieva (Ukraine)	12:10 - 12:20
TB challenges in humanitarian settings: military conflict in Ukraine llona Yeleneva (Ukraine)	12:20 - 12:30

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

Amazon

### **TB Control in Prisons Working Group**

Community space: panel discussion 13:15 - 14:15

De Ontmoeting 1 (Community space)

# Transitioning from donor support for HIV and TB in Europe: collective action for an effective response

Alarming rates of both HIV and TB in Eastern Europe and Central Asia occur against a backdrop of donor funding withdrawals currently supporting vital HIV and TB services.

The session will give examples of challenges countries face during transition from Global Fund support, and the strategies they use to mitigate the impacts. It will highlight tangible lessons for governments and civil society. Three case studies from Bulgaria, Estonia and Georgia will be presented followed by a discussion and Q&A. Audience members will be encouraged to participate.

Chairperson: Anete Cook (United Kingdom) Coordinator: Marine Ejuryan (Belgium)

### **Scientific Programme**

### Transitioning from donor support for HIV and TB in Europe: collective action for an effective response

13:15 - 14:15

Sharonann Lynch (United States of America) Nela Ivanova (Bulgaria) Tsira Chakhaia (Georgia) Cristina Enache (Romania) Raud Lindemann (Estonia)

Tech Innovation Zone 13:15 - 13:45

Tech Innovation Zone - Exhibition Area

### **Presentations @Tech Innovation Zone**

The Everwell Hub: an integrated technology platform for adherence and patient support 13:15 - 13:30

Andrew Cross (India) Nakull Gupta

"SureAdhere VOT: Revolutionizing directly observed therapy with mobile 13:30 - 13:45 technology"

Kelly Collins

Side Meeting (MTG) 13:30 - 17:30

A1 - Marriott

### FIND FIND and New Diagnostics Working Group Symposium

We invite you to join us at the joint FIND-NDWG Symposium to be held back-to-back with the Union World Conference on Wednesday 24 October at 1pm in The Hague, Netherlands. We are delighted to welcome as the keynote speaker Dr. Eric Goosby, UN Special Envoy on Tuberculosis, who will consider how the global community can translate the political commitments expressed in the UN High Level Meeting declaration into action with a focus on efforts to develop new diagnostics for ending the TB epidemic.

The detection gap of 3.6 million cases calls for the development and implementation of novel, more effective tools to enable early diagnosis of all forms of TB and stop individual suffering and ongoing transmission. Presenters will review progress made in the global TB diagnostics pipeline and exciting advances in R&D for new tests that have potential to improve TB diagnosis closer to patients.

The event will include a panel discussion on the theme "A new priority for TB diagnosis: active case finding strategies to catalyse country efforts". In this session, we will highlight the key role of active case finding as a complementary strategy to passive approaches to ensure early diagnosis and treatment of TB patients and reduce transmission. Panelists will discuss which risk groups should be screened as a priority and which interventions should be considered in order to maximize impact.

We look forward to seeing you in The Hague!

### Chairpersons

Catharina Boehme, FIND, and Daniela Cirillo, San Raffaele Scientific Institute: NDWG Co-Chairs

#### Venue

Ballroom A1, Marriott Hotel, Johan de Wittlaan 30, The Hague, The Netherlands

The preliminary agenda and further details are available <a href="https://www.finddx.org/news/find-at-49th-union-conference-on-lung-health/" target="\_blank">here</a>.

### **Scientific Programme**

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

Amazon

### MPOWER Research Group on Tobacco Control working group

Workshop (WS) 14:30 - 17:30

Europe

# WS10 How universal health coverage and TB responses combine to end TB: lessons learnt from country-level experiences

Description: The End TB Strategy aims at a 10% annual decline in TB incidence worldwide by 2025, using UHC to enhance the use of existing tools. TB responses and UHC are closely related and important elements of the UN's Sustainable Development Goals (SDGs). While the progress of UHC is indispensable to enhancing TB responses, TB responses have contributed to UHC as a specific approach at various levels. At the past two Union Conferences, we discussed how it had been possible to bring about a 10% decline in TB incidence and what should be done to accelerate the current TB decline under the End TB Strategy. In the coming workshop, we will focus on the interrelationship between TB and UHC, and on discussions of experiences from countries that use the six building block health system model.

Objectives: 1) to highlight the relationship between TB responses and progress in UHC, and factors that contributed to attaining UHC based on TB responses, using 1960s Japan as a proto-model that had achieved UHC, 2) to discuss the effect UHC progress has on TB responses, and how TB responses can be used for UHC expansion according to the current economic and disease situation in each country, and 3) to discuss how we could advance both UHC and TB control under the End TB Strategy

Expected outcomes: Participants understand which TB control activities are associated with six building blocks of health system and what effect UHC progress has on TB control. They become aware of the interrelation between TB response and UHC expansion. Discussion points from the workshop as well as the experiences shared among participants will be used in pursuing TB elimination and UHC in countries.

Chairperson: Seiya Kato (Japan) Chairperson: Knut Lönnroth (Sweden) Coordinator: Kosuke Okada (Japan)

Universal health coverage in the context of ending tuberculosis

Nobu Nishikiori (Switzerland)

Finland's success story, what did we do to ensure the rapid decline of tuberculosis?

Tuula Vasankari (Finland)

Universal health coverage and the Tuberculosis Programme in Thailand

Phalin Kamolwat (Thailand)

Public health centre, private sector and the universal health coverage in Japan

Kazuhiro Uchimura (Japan)

### **Scientific Programme**

Post-graduate course (PGC) 14:30 - 17:30

Antartica

# PGC10 Multimedia in tuberculosis research: a powerful tool for data collection, dissemination and agenda setting

#### Description

Film and photography are increasingly being employed by researchers, advocates, healthcare professionals and activists to engage with complex international health issues in innovative ways. Such multimedia forms can contribute to the evidence of the lived experience of actors in the field. The aim of this course is to provide a platform for multimedia contributions in the area of TB. This session will contribute to the understanding of how multimedia can be used in different phases of the research process, from data collection methods to agenda setting, dissemination of results, advocacy and human-centred care, and attitude and behaviour change.

#### Objectives

- Discussing multimedia possibilities for TB research: data collection, dissemination, advocacy, agenda setting, patient-centred care, stigma reduction
- Illustrating the process of how to use multimedia in the different phases of the research process
- Presenting work involving multimedia in TB research
- This post-graduate course will be filmed and turned into an online course

Chairperson: Anne Lia Cremers (Netherlands) Chairperson: Caroline Masquillier (Belgium)

#### Multimedia and data collection

Bettina Korn (Ireland)

### Multimedia and agenda setting

Marceline Tutu van Furth (Netherlands)

#### Multimedia and dissemination of research results

Anne Lia Cremers (Netherlands)

### Multimedia, advocacy and human-centred care

Paulina Siniatkina (Russian Federation)

### Multimedia and attitudes and behaviour change

Chapal Mehra (India)

Post-graduate course (PGC) 14:30 - 17:30

Oceania

# PGC11 Key components of an effective and sustainable tuberculosis infection control programme

TB transmission in health care and congregate settings, particularly where DR-TB and/or HIV are highly prevalent, continues to drive the TB epidemic. Even with increasingly available resources for TB infection control interventions, lack of updated knowledge and skills makes the development of effective and sustainable risk reduction programmes challenging. The course will describe a priority-based approach to TB infection control programme development, monitoring and evaluation, and introduce recently developed guidelines and recommendations

Chairperson: Nii Hanson-Nortey (Ghana)

Chairperson: Paul Jensen (United States of America) Coordinator: Grigory Volchenkov (Russian Federation)

### Occupational risk factors for tuberculosis among healthcare workers: policies and practices

Carrie Tudor (Switzerland)

### **Scientific Programme**

Administrative controls, including FAST (Finding, Actively, Separating and Treating)

Nii Hanson-Nortey (Ghana)

**Environmental controls: making natural and mechanical ventilation effective and affordable**Paul Jensen (United States of America)

Environmental controls: upper-room germicidal ultraviolet as an essential supplement to natural ventilation

Edward Nardell (United States of America)

**Coffee break** 

Laboratory biological safety: integration of controls

Matsie Mphahlele (South Africa)

Making personal respiratory protection programme feasible

Grigory Volchenkov (Russian Federation)

Measuring the impact of tuberculosis infection prevention and control interventions

Sevim Ahmedov (United States of America)

Review: What makes tuberculosis infection control programme effective? Q&A

Paul Jensen (United States of America)

Post-graduate course (PGC) 14:30 - 17:30

North America

### PGC12 How to perform contact investigations

By the end of the course participants should be able to:

- 1. Motivate when contact investigation is necessary
- 2. Determine and motivate priority and timing of contacts eligible for examination
- 3. Motivate the scaling up and/or the completion of contact investigation
- 4. Name essential indicators for monitoring and evaluation of contact investigation practices

TB contact investigation and preventive treatment of LTBI among close contacts of TB patients are promoted as effective interventions to prevent (the transmission) of TB, and the WHO recently issued new guidelines recommending the targeting of all close contacts for LTBI testing and treatment, including HIV-negative contacts aged >5 years. This policy has been practiced in the Netherlands for many decades following the stone-in-the-pond approach to prioritise TB contacts for examination. Based on this experience, KNCV Tuberculosis Foundation has developed an operational guide for countries who want to improve and step up contact investigation practices as recommended by the WHO.

This post-graduate course builds on the public TB services training course developed by KNCV Tuberculosis Foundation for workers who perform contact investigation in the Netherlands.

In this interactive post-graduate course, the basic principles of contact investigation are discussed step by step (including monitoring and evaluation), with the use of real-life examples of contact investigation from different countries. After initial presentations, there will also be scope for group work.

Finally, the applicability of contact investigation approaches in other (epidemiological) settings will be discussed in a plenary with the participants.

Chairperson: Connie Erkens (Netherlands) Coordinator: Niesje Jansen (Netherlands)

Leading principles of contact investigation in high- and low-burden settings

Connie Erkens (Netherlands)

#### Contact investigation in Ethiopia

Challa Negeri (Ethiopia)

#### **Contact investigation in the Netherlands**

Lisette Timmermans (Netherlands)

#### Coffee break

#### Risk assessment tool for priority settings: best practice from the Netherlands

Niesje Jansen (Netherlands)

Case study exercise

#### Tuberculosis (TB) outbreak in a nursery setting in the UK

Surinder Tamne (United Kingdom)

#### Monitoring and evaluation of the care cascade: discussion and closure

Connie Erkens (Netherlands)

Post-graduate course (PGC) 14:30 - 17:30

Central America

#### PGC13 An introduction to costing tuberculosis services

Estimating the costs of achieving End TB goals is essential for those advocating for increased resourcing, prioritising TB programme resources and planning sustainable financing. This post-graduate workshop will introduce participants to the different approaches for estimating the costs of TB strategies and services, provide an overview of concepts and current practice, as well as outline cost data and describe tools currently available. Participants will gain hands-on experience in working with cost data for different purposes and appraising cost data quality. We will highlight the use of cost data in TB programme planning and financing, and give a brief description of the resources available from the Global Health Costing Consortium (GHCC) in support of this effort. The workshop is for those who are new to economic costing, and provides an introduction and links to follow-on resources.

#### Objectives:

- 1. Provide an overview of TB cost data and key concepts
- 2. Introduce participants to the principles of costing TB services
- 3. Outline the main steps to be taken in designing a costing study
- 4. Outline analysis of cost data for different purposes
- 5. Highlight resources available from the Global Health Costing Consortium

#### Presenters:

Edina Sinanovic, University of Cape Town (UCT) Yoko Laurence, London School of Hygiene and Tropical Medicine (LSHTM) Anna Vassall, LSHTM Fiammetta Bozzani, LSHTM Lor Bollinger, Avenir Health

Chairs:

Chairperson: Anna Vassall (United Kingdom) Coordinator: Sedona Sweeney (United Kingdom)

Overview of costing

Edina Sinanovic (South Africa)

#### **Scientific Programme**

#### Principles and processes of cost estimation

Yoko Laurence (United Kingdom)

#### Tea

#### O&A

Anna Vassall (United Kingdom) Ines Garcia Baena (Switzerland)

#### Using cost data in priority setting

Fiammetta Bozzani (United Kingdom)

#### Costing data and resources

Lori Bollinger (United States of America)

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

Mississippi

## TB Education and Training Working Group

Workshop (WS) 14:30 - 17:30

Yangtze 1

# WS11 Ethnicity and health: building intercultural solutions for equitable TB care with indigenous peoples locally and in the Americas

Preamble: Where recorded and reported, TB rates have been much higher among Indigenous Peoples than among the non-Indigenous populations. To end TB, we need to lower this burden. Identified barriers are the HIV syndemic and antimicrobial resistance. But more challenging are community engagement and social interventions. Delivery of programmes in remote regions must be appropriate to the community, owned by them, evaluated and used to improve outcomes elsewhere.

Goal of the workshop: Our goal is to bring together persons working in the field of TB with Indigenous Peoples to improve TB care, increase community ownership and end TB among Indigenous Peoples.

Chairperson: Wilton Littlechild (Canada) Coordinator: Wendy Lee Wobeser (Canada)

#### The global burden of tuberculosis among indigenous peoples

Kefas Samson (Switzerland)

An Inuit First Nations and Métis perspective of tuberculosis in Canada, the importance of a local, community-based approach and governmental partnership: why ethical engagement is critical

Carrie Bourassa (Canada)

Indigenous tuberculosis: the challenges of disaggregating data and considerations from the perspective of a new policy on ethnicity and health for the Americas

Mirtha Del Granado (United States of America)

Meaningful and respectful engagement of persons living with TB - examples of reciprocal learning

Kathleen McMullin (Canada)

#### **Scientific Programme**

Lessons learned from a life of HIV activism - an Indigenous perspective

Trevor Stratton (Canada)

In'ati Is'ick: Holism, Harmony and Equalizing Relations within a First Nations Tuberculosis Program

Isa Wolf (Canada)

Special session (SPS) 14:30 - 17:30

Yangtze 2

#### **Global TB Caucus**

Global TB Caucus

Workshop (WS) 14:30 - 17:30

Kilimanjaro 1

# WS12 MATCH: a data-driven approach for enabling decisions to protect the right to access tuberculosis care

In order to achieve the SDG targets by 2030, it is imperative for NTPs to allocate resources more effectively for key populations and areas of continuous TB transmission, using available information to inform locally tailored approaches. In 2017, a new analytical approach to identify sub-national regions where people with TB are likely not diagnosed and treated was introduced in 13 high TB burden countries. The cornerstone of this approach was the strengthening of stakeholder capacities to use publicly available, user-friendly tools. The outcomes of these analyses are now being used to understand and interpret the main programmatic gaps and challenges and plan appropriate local interventions to reduce the TB burden. The analytical framework uses geographical information systems, integrating previously underutilised data sources, and spatial analysis techniques to identify target populations and TB transmission hot spots. At the end of the workshop, participants are expected 1) to appreciate the importance of using subnational data to effectively understand and interpret the main gaps and challenges in their TB programme; 2) to be able to interpret and evaluate health maps; 3) to describe and interpret spatial patterns (such as hotspots) of health indicators and epidemiological data; and 4) to understand data triangulation from various sources to explain variations in TB notifications and suggest appropriate actions.

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

#### Introduction to the approach

Lucie Blok (Netherlands)

#### Integrating data to address key operational questions

Mirjam Bakker (Netherlands)

#### Geographical analysis and data triangulation

Ente Rood (Netherlands)

#### From information to intervention

Jacob Creswell (Switzerland)

#### **Scientific Programme**

Post-graduate course (PGC) 14:30 - 17:30

Kilimanjaro 2

# PGC09 Gender integration for tuberculosis—essential elements for achieving sustainable health outcomes

Evidence shows that advancing gender equality is essential for health and well-being across the globe. This practical and participatory course is designed to help colleagues working in TB to understand how gender dynamics influence health outcomes and how to effectively address gender gaps and opportunities in global health programmes and services.

During this course, participants practice using a range of tools to strengthen gender integration in TB programming. Attendees develop strategies to monitor and evaluate whether and how programmes are effectively contributing to gender equality and improved outcomes.

Participants of this course will learn ways in which gender dynamics affect health and well-being, why addressing gender equality is critical to TB health programming, and how to use gender integration tools to help everyone advance gender equality and global health goals.

Learning Objectives Course participants will:

□•Improve and apply knowledge of how gender dynamics influence health outcomes related to TB

□•Identify strategies and use effective tools to strengthen gender integration throughout the health programme cycle

Develop strategies to monitor and evaluate gender equality outputs and outcomes in global health activities.

Coordinator: Niyati Shah (United States of America)

#### Gender 101

Elizabeth Pleuss (United States of America)

#### Introduction to gender analysis

Niyati Shah (United States of America)

### Gender analysis: practical exercise

Virginia Nagy (United States of America)

#### Data, monitoring and evaluation

Charlotte Colvin (United States of America)

#### **Scientific Programme**

Workshop (WS) 14:30 - 17:30

Everest 2

# WS13 Updated World Health Organization policies on the management of tuberculosis

Objectives of the workshop are to present the processes and methods applied by the WHO in the development of policy and to present updated WHO recommendations on the clinical and programmatic aspects of TB diagnosis, prevention, treatment and care.

Participants in this workshop will learn about updates on evidence-based recommendations for the diagnosis and treatment of DS-TB, DR-TB, TB patient care and support, and innovations 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 policy implementation.

Chairperson: Linh Nguyen (Switzerland)

Chairperson: Charles Daley (United States of America)

Coordinator: Ernesto Jaramillo (Switzerland)

# Why and how of World Health Organization guidelines development process

Ernesto Jaramillo (Switzerland)

# Updated and consolidated guidelines on the programmatic management of latent TB infection (LTBI)

Molebogeng X RANGAKA (Switzerland)

#### **Updating World Health Organization infection control policy**

Fuad Mirzayev (Switzerland)

### Treatment of isoniazid and multidrug-resistant tuberculosis

Dennis Falzon (Switzerland)

# Pharmacokinetics, pharmacodynamics (PK/PD) and critical concentrations of tuberculosis medicines

Kelly Dooley (United States of America) Christopher Gilpin (Switzerland)

Workshop (WS) 14:30 - 17:30

Atlantic 1

# WS14 New imaging approaches for improving the diagnosis of paediatric intrathoracic TB and implications for research

Children constitute up to a fifth of the TB caseload in high-incidence countries. Diagnostic imaging plays a critical role in the detection of intrathoracic TB. HIV co-infection can confound radiological diagnosis. Radiography is very useful, but is subject to variable technical quality, and requires expertise that is not ubiquitous for correct interpretation. Ultrasonography, computed tomography, magnetic resonance imaging, positron-emission tomography and single-photon emission computerised tomography provide better visualisation of anatomical abnormalities. Additional solutions include point-of-care imaging teleradiology and CAD of radiological abnormalities on digital imaging. This symposium will update clinicians on these imaging modalities, their support solutions and promising research directions. At the end of the session, there will be a roundtable for audience questions to generate further discussion on key gaps in research needed to improve TB diagnosis in children and to inform policies on the roles and limitations of the various diagnostic imaging modalities and support solutions in resource-limited and resource-rich settings.

Chairperson: Jeffrey R Starke (United States of America) Chairperson: Carlos M Perez-Velez (United States of America) Coordinator: Renee Browning (United States of America)

Introduction to the Workshop: new imaging approaches for improving the diagnosis of paediatric intrathoracic TB and implications for research Patrick Jean-Philippe (United States of America)	14:30 - 14:35
Utility and limitations of radiography, point-of-care ultrasonography and teleradiology in intrathoracic TB in HIV+/- children Savvas Andronikou (South Africa)	14:35 - 15:00
Questions & Answers	15:00 - 15:05
Roles and pitfalls of computed tomography and magnetic resonance imaging in intrathoracic TB in HIV+/-children Pierre Goussard (South Africa)	15:05 - 15:30
Questions & Answers	15:30 - 15:35
Computer-aided detection with radiography and CT for intrathoracic TB in HIV+/-children: possibilities and pitfalls  Sameer Antani (United States of America)	15:35 - 16:00
Questions & Answers	16:00 - 16:05
Positron emission tomography and single-photon emission computerised tomography (SPECT) in intrathoracic TB in children Sanjay K Jain (United States of America)	16:05 - 16:30
Questions & Answers	16:30 - 16:35
End-of-session roundtable discussion	16:35 - 17:30

#### **Scientific Programme**

Workshop (WS) 14:30 - 17:30

Atlantic 2

#### WS15 Optimising tuberculosis care in challenging settings

Although new TB screening and diagnostic tools such as TB lipoarabinomannan and Xpert, new drugs for MDR-TB and LTBI and short treatment regimens are now available to ensure improved TB case detection, early treatment initiation and better treatment outcomes in patients, the use of new tools and drugs can only be successful if certain conditions are met. It is not always easy to implement these policies and tools in settings facing geographical, political, security, administrative and cultural challenges.

The objective of this workshop is to identify the challenges that make it difficult to provide high-quality TB care in different settings and discuss possible lessons learnt using five case studies of field experiences. This workshop aims to look at all aspects of TB management, including the implementation of current policies and guidelines for diagnosis, treatment and patient care.

The workshop aims to identify barriers and practical steps required to overcome these, the ultimate goal being to reach treatment success goals through the optimisation of existing tools and innovative methods to bring care to communities in difficult conditions.

A report would be produced at the end of the workshop with TB service implementers and other key stakeholders. The report would provide guidance on how the latest evidence-based tools, treatments and policies could be used to maximise benefits for TB patients, communities and NTPs.

Chairperson: Suvanand Sahu (Switzerland) Coordinator: Isaac Chikwanha (Switzerland)

# TB Screening and linkage to care for displaced populations and nomadic populations in North Eastern Nigeria

Stephan John (Nigeria)

# Providing tuberculosis care in conflict-affected settings: the experience of MSF Spain in East Africa

Laura Moreto Planas (Spain)

Challenges of providing care for DS- and DR-TB patients in extreme remote geographical settings in a remote rural district of Papua New Guinea

Tonia Marquardt (Papua New Guinea)

Regulatory challenges to the use of new drugs and the shorter treatment regimen: an experience from India  $\,$ 

Syed Imram Farooq (India)

Tuberculosis control challenges in Kajiado: linking remote nomadic communities to tuberculosis care

Timpiyian Leseni (Kenya)

Presention 14:30 - 14:40

Sifrash Meseret Gelow

#### **Scientific Programme**

Community space: panel discussion 14:30 - 16:00

De Ontmoeting 1 (Community space)

# AIDS2018 and UNION2018: increased Dutch commitment to end AIDS and TB by 2030

In 2018, the Netherlands is hosting both the International AIDS Conference and the Union World Conference on Lung Health. It's also the year of the first UN High Level Meeting on Tuberculosis.

These conferences show that acceleration is urgent. TB is the number 1 killer of people living with HIV. If discovered in timely fashion, people living with HIV can be fully cured from TB. Even better, we can prevent TB among people living with HIV.

During this session, we will discuss the Dutch engagement in the TB and HIVresponse. Are the Dutch living up to their leadership role in TB and HIV, or should we do more? Civil society, community representatives, Global Fund and the Ministry of Foreign Affairs will discuss.

**Panelists** 

[]•Louise van Deth
<em>Aidsfonds</em>

[]•Kitty van Weezenbeek
<em>KNCV Tuberculosis Foundation</em>

[]•Dianne Stewart
<em>The Global Fund</em>

□•Renet van der Waals <em>Ministry of Foreign Affairs of the Netherlands</em>

[]•Wim Vandevelde
<em>GNP+</em>

□•Allan Maleche <em>KELIN</em>

Moderator

Peter van Rooijen

This session is organized by Aidsfonds, in cooperation with KNCV Tuberculosis Foundation and International Civil Society Support (ICSS).

Coordinator: Michaël Kensenhuis (Netherlands) Chairperson: Peter van Rooijen (Netherlands)

# AIDS2018 and UNION2018: increased Dutch commitment to end AIDS and 14:30 - 14:40 TB by 2030

Louise van Deth (Netherlands) Kitty van Weezenbeek (Netherlands) Dianne Stewart (Switzerland) Renet van der Waals (Netherlands) Wim Vandevelde (South Africa) Allan Maleche (Kenya)

Community space: panel discussion 14:30 - 16:00

De Ontmoeting 2 (Community space)

#### TB vaccine research literacy workshop

Informed and engaged communities and advocates are essential to the research and development of new, more effective and accessible vaccines to prevent TB. Community engagement in vaccine research provides an important mechanism for researchers to partner with local communities and ensure that those who will ultimately use new TB vaccines are meaningfully engaged in their development; and advocates and civil society are crucial to help raise awareness of the need for new TB vaccines and to build support and mobilize the necessary resources to advance TB vaccine R&D. In order for advocates and communities to effectively fill these important roles, it is essential that they understand TB vaccine research and are informed about the latest data and developments. This workshop seeks to build the vaccine research literacy and capacity of civil society and affected communities, providing them with a more in-depth understanding of issues in TB vaccine R&D and an overview of recent data, and discuss how civil society and affected communities can partner with the research community to advance development of new, safe, effective and accessible TB vaccines.

Coordinator: Jennifer Woolley (United States of America) Chairperson: Blessina Kumar (India)

Chairperson: David Lewinsohn (United States of America)

	Summary and Closing	15:55 - 16:00
	Questions and Discussion: Advocacy for New TB Vaccines Michael Frick (United States of America) Blessina Kumar (India)	15:30 - 15:55
	Overview of recent clinical trial results Mark Hatherill (South Africa)	15:10 - 15:30
	Overview of State of Field of TB Vaccine Research Ann Ginsberg (United States of America)	14:50 - 15:10
	<b>TB Vaccines and the Global Plan to End TB</b> David Lewinsohn (United States of America)	14:35 - 14:50
	Welcome and Introduction to WGNV David Lewinsohn (United States of America)	14:30 - 14:35
. David Lewinson (officed States of America)		

Member Meetings (Regional, Section, Sub-section, Working Group) 15:30-16:30

David Lewinsohn (United States of America)

Amazon

### **Asthma Management Working Group**

Tech Innovation Zone 15:30 - 16:00

Tech Innovation Zone - Exhibition Area

#### **Presentations @Tech Innovation Zone**

SmartSpot Quality
Dean Sher
Anest Myburgh

SHOEBOX Audiometry 15:45 - 16:00

#### **Scientific Programme**

Member Meetings (Regional, Section, Sub-section, Working Group) 15:45 - 17:15

Mississippi

#### **MDR-TB Working Group**

The DR-TB Working Group continues to focus its activities on the roll-out of new drugs and regimens, with special attention to the 9-month regimen. The WG will be meeting at the Hague on Wednesday October 24 at 15:45 in the Mississippi Room. The WG has also organized a panel discussion on "Best MDR TB management - how to get the most out of available and future science" on Friday October 26 at 12:15 in Yangtze 2. Discussants will include Vivian Cox, Alberto Piubello, Celina Garfin and Lorenzo Guglielmetti.

Community space: panel discussion 16:05 - 17:30

De Ontmoeting 1 (Community space)

#### In solidarity: research and advocacy to decriminalize HIV and TB

Few diseases throughout history have elicited the social, political, and legal responses that HIV and TB have garnered. One of the most alarming responses is the deployment of penal systems to punish people with HIV and TB. Seventy-two countries have adopted punitive legal sanctions on people with HIV known as "HIV criminalization laws." While TB is not specifically targeted by criminal laws in the same way as HIV, transmission of the bacteria is subject to prosecution under crimes against the person laws. De facto TB criminalization also occurs through civil and administrative laws and regulations that impose criminal sanctions. In these environments, people with HIV and TB may be subject to involuntary therapies, forced isolation and detention, and imprisonment exceeding 30 years in some cases. Criminalization of HIV and TB is appallingly unscientific, resulting in extreme punishments for "exposing" others by means that pose little to no risk of transmission. Proponents claim the punishment of disease promotes public health, but the evidence tells a different story: these laws deter testing, treatment, and disclosure while fueling stigma and discrimination. If we are to reach the ambitious goals of improving HIV treatment drastically by 2020 and ending TB by 2035, we must mobilize research and advocacy communities to end HIV and TB criminalization. This interactive session will bring together the HIV and TB movements to declare disease is not a crime.

Chairperson: Brian Minalga (United States of America) Chairperson: Brian Citro (United States of America)

In solidarity: research and advocacy to decriminalize HIV and TB Dean Lewis (India)	16:05 - 16:15
In solidarity: research and advocacy to decriminalize HIV and TB Allan Maleche (Kenya)	16:15 - 16:25
In solidarity: research and advocacy to decriminalize HIV and TB Karabo Rafube (South Africa)	16:25 - 16:35
In solidarity: research and advocacy to decriminalize HIV and TB John Stephens (United States of America)	16:35 - 16:45
In solidarity: research and advocacy to decriminalize HIV and TB Robert Suttle (United States of America)	16:45 - 16:55

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

Amazon

## Air Pollution and Lung Health Working Group

# **Scientific Programme**

Plenary session (PL) 17:30 - 19:00

KWA Plenary Hall

## **Inaugural session**

Please note that the doors will close at 17:45.

Plenary session (PL) 17:45 - 19:00

De Ontmoeting 1 (Community space)

## Live stream Inaugural session

Plenary session (PL) 19:00 - 20:00

KWA Plenary Hall

## **Welcome reception**

### Thursday, 25 October 2018

Satellite session (SS) 07:30 - 08:45

Europe

# SS01 Scalable MTB and resistance testing on a polyvalent platform for centralized laboratories serving both low Incidence and high burden settings

Organised by: Roche Molecular Diagnostics

Mycobacterium tuberculosis (MTB) remains a serious global health threat, particularly among people who are infected with HIV. While diagnostic strategies are expanding, polyvalent centralized testing will be an important component to future successes. A prospective accuracy evaluation was conducted to determine the sensitivity and specificity of the cobas® MTB assay in a high burden HIV population. Specimens tested included matched raw sputum and sediment among adults with presumptive TB in Johannesburg, South Africa. The performance of cobas was compared to the standard of care Cepheid GeneXpert® MTB/RIF and the commercially available Abbott RealTime MTB assays. A total of 294 patients were enrolled (59.9% HIV+). Among smear +/culture + patients, cobas identified 73/73 (100%) patients with TB from sediment and 72/73 (98.6%) from raw sputum. Among the smear -/culture + patients, cobas identified 17/22 (77.3%) from sediment and 18/22 (81.8%) from raw sputum. Specificity was 95.5% and 97% for sediment and raw sputum. Among the HIV positive cohort, specificity was 94.4% and 95.3% in sediment and raw sputum. These results demonstrate that cobas® MTB for use on the cobas® 6800/8800 Systems is a viable alternative that enables automated, high-throughput, and polyvalency for laboratories serving high burden HIV populations.

This session will provide an overview of two studies that evaluated cobas<sup>®</sup> MTB and cobas<sup>®</sup> RIF/INH for use on the cobas<sup>®</sup> 6800/8800 Systems from sputum and sediment specimens. The first study examined assay performance in a high burden HIV population. The second study evaluated assay sensitivity and specificity at the National Reference Center in Germany serving both low incidence and high burden settings.

Chairperson: Elisabeth Marlowe

Chairperson: Rodney Arcenas (United States of America)

Welcome and opening comments Allison Kuchta (United States of America)	07:30 - 07:45
<b>TB diagnostics emerging needs and changing paradigms</b> Nazir Ismail (South Africa)	07:45 - 08:00
Evaluation of cobas® MTB and cobas® MTB-RIF/INH tests in a high burden HIV patient population	08:00 - 08:15
Lesley Scott (South Africa)	
Closing and Q&A Allison Kuchta (United States of America)	08:15 - 08:30

#### **Scientific Programme**

Satellite session (SS) 07:30 - 08:45

Antartica

#### SS02 Advancing host-directed therapies for tuberculosis

Organised by: National Institutes of Health/National Institute of Allergy and Infectious Diseases (NIH/NIAID)

Despite more than a century of research, TB continues to kill millions of people every year, and cases of MDR- and XDR-TB are on the rise. In addition, even in cases of microbiological "cure", up to half of patients may be left with residual lung dysfunction due to irreversible TB-induced lung inflammation. One emerging area of research is the development of therapies that target host factors involved in the response to infection or those with broad anti-inflammatory and immunomodulatory properties, with the goal of increasing the effectiveness of currently available antibiotic regimens and improving long-term outcomes of lung function. This satellite session will cover recent developments in the field of host-directed therapies (HDT) for TB, including a discussion of immune regulatory pathways and immune cell types that have been targeted successfully to enhance host clearance of mycobacteria and/or reduce lung inflammation in pre-clinical models. A roadmap will be provided for clinical evaluation of novel HDT agents against TB, with an emphasis on the repurposing of drugs developed for other diseases, given the reduced costs associated with their clinical application in resource-limited settings.

Chairperson: Petros Karakousis (United States of America)

Chairperson: Robert Wallis (South Africa)

Statins as adjunctive host-directed therapy for tuberculosis Petros Karakousis (United States of America)	07:30 - 07:40
AMP kinase activation as HDT for tuberculosis Hardy Kornfeld (United States of America)	07:40 - 07:50
Ongoing clinical trials of HDTs for tuberculosis Robert Wallis (South Africa)	07:50 - 08:00
HDTs 'on trial' for MDR TB - timing and the need for real world data Markus Maeurer (Portugal)	08:00 - 08:10
New avenues for discovery and development of HDTs for TB Richard Hafner (United States of America)	08:10 - 08:20

Member Meetings (Regional, Section, Sub-section, Working Group) 07:30 - 08:45

South America

### **Zoonotic Sub-Section and Working Group**

Satellite session (SS) 07:30 - 08:45

Mississippi

#### **Satellite**

Satellite session (SS) 07:30 - 08:45

Yangtze 1

#### SS03 Breaking the silos: multi-sectoral action for tuberculosis elimination

Organised by: Challenge TB Project- The Union South East Asia India

TB has a devastating impact not only on the health and wellbeing of people around the world, but also on the economic growth and stability of the countries. According to a recent research commissioned by the Global TB Caucus, if global efforts to tackle TB continue at the same rate of progress, from 2015–2050, 28 million people will lose their lives to TB, at a global economic cost of \$983 billion. Recognizing the need to accelerate the response, the World Health Organization is calling for a radical new approach to tackle TB. The social and economic drivers of the epidemic mean that TB cannot be beaten by the health sector alone; instead "a dynamic, global, multisectoral approach" is needed. For accelerated efforts for TB elimination, it is more important than ever to develop creative alliances between governments, academic, civil society and private sectors.

Chairperson: Amy Paitek (United States of America) Chairperson: Paul Jensen (United States of America)

Beyond drugs and diagnostics: Integration Now! Taanya Mathur (India)	07:30 - 07:40
Battling tuberculosis in the world of work: a multi-stakeholder approach Afsar Syed Mohammad (Switzerland)	07:40 - 07:50
Approaches in establishing country-level multi-sectoral coordination Mechanisms—an experience from India Raghuram Rao (India)	07:50 - 08:00
Catalytic funding for comprehensive actions to end tuberculosis Mohammed Yassin (Switzerland)	08:00 - 08:10
Challenge TB—opening up new avenues for partnerships Imran Syed (India)	08:10 - 08:20
TB Free Pata Project: a unique CSR initiative Chandra Tripathi (India)	08:20 - 08:30

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

Oceania

#### **HIV Section**

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

North America

#### **TB and Ethics Working Group**

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

Central America

#### **Maternal and Child Lung Health Working Group**

#### **Scientific Programme**

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

Kilimanjaro 1&2

#### **Nurses & Allied Professionals Sub-section**

Community space: panel discussion 08:00 - 09:00

De Ontmoeting 1 (Community space)

### Strategies to address access barriers to DR-TB drugs

In the lead up to the UN High-Level Meeting on TB, negotiations hinged on the rights of countries to procure or produce generic versions of patented drugs, which had been agreed to 17 years earlier in the WTO 2001 Doha Declaration on the TRIPS Agreement and Public Health. The question facing the TB community is two-fold: what are the barriers to affordable access to DR-TB drugs and what strategies can help?

Of those that fell ill with multidrug-resistant (MDR) forms of TB in 2017, only 25% began MDR-TB treatment. Nearly 90% of people in need of bedaquiline and/or delamanid, nearly 5 years after receiving inclusion in WHO guidelines, had access to the drugs in 2017.

Given the new WHO recommendations making bedaquiline a core drug of MDR-TB treatment, it is important to understand and address the barriers to scale-up, including drug prices and regulatory issues. In order to increase access to treatment, steps should be taken by governments, manufacturers, global health actors, and communities to ensure timely registration, affordable prices, including generics, and scale-up of all-oral effective treatments.

The objectives of this panel are to:

- (i) Provide information on the price, registration, and access landscape of DR-TB drugs;
- (ii) Share experiences of overcoming intellectual property barriers to access, including in HIV and HCV advocacy movements
- (iii) Share perspectives for what needs to happen at country and global levels to ensure equitable and affordable access to current and future DR-TB drugs;

State of access and strategies to improve registration, price negotiation, and procurement	08:00 - 08:20
Christophe Perrin (France)	
Patent oppositions, licensing and others strategies from the HIV and HCV movements	08:20 - 08:40
Fifa Rahman (United Kingdom)	
Access standards for current and emerging DR-TB drug	08:40 - 09:00
Sharonann Lynch (United States of America)	

#### **Scientific Programme**

Meet the expert session (MTE) 08:00 - 09:00

De Ontmoeting 2 (Community space)

#### Perspectives on TB advocacy in high burden TB countries

Union Community Advisory Panel (UCAP) members will share perspectives about the role of stigma in TB care and the importance of high level engagement with civil society and TB communities.

Highlighting the importance of engaging with national key stakeholders and partners to influence policy and the effective engagement with TB communities and civil society

Chairperson: Austin Obiefuna (Ghana) Chairperson: Blessina Kumar (India) Chairperson: Ingrid Schoeman (South Africa)

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

KWA Plenary Hall

## Plenary 1 Human rights-based approach to lung health

Chairperson: Michael Frick (United States of America)

Tuberculosis, human rights and international law
Coco Jervis (Netherlands)

09:00 - 09:20

The ethics of immigration and health 09:20 - 09:40

Farhang Tahzib (United Kingdom)

Data sovereignty: experience of North American indigenous people 09:40 - 10:00

Carrie Bourassa (Canada)

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

De Ontmoeting 1 (Community space)

#### Live stream plenary session

#### **Scientific Programme**

Side Meeting (MTG) 10:00 - 13:00

A1 - Marriott

# Advancing TB research through data science and informatics for public health impact

Big data approaches have great potential to advance TB research and generate novel insight for public health impact. Globally, there is a wealth of TB patient and pathogen-associated data from biomedical research, clinical trials, and routine surveillance that can be leveraged for large scale, comprehensive, and interdisciplinary analyses. This symposium will feature perspectives from multiple stakeholders on the technical, logistical, and policy issues associated with this type of work.

Register here <a href="http://www.cvent.com/events/advancing-tb-research-through-data-science-informatics-for-public-health-impact/event-summary-8f2b6cf0e0bb4ff0a6af465789767b6e.aspx">http://www.cvent.com/events/advancing-tb-research-through-data-science-informatics-for-public-health-impact/event-summary-8f2b6cf0e0bb4ff0a6af465789767b6e.aspx</a>.

Location: The Hague Marriott Hotel

Room: A1 - Ground floor

Coordinator: Jessica Taaffe (United States of America)

Community space: panel discussion 10:15 - 11:45

De Ontmoeting 1 (Community space)

## It takes a village to raise a child, smoke-free

Whilst in the early 2010s, in the Netherlands tobacco control (TC) was not considered a key priority in the public and political domain, including a polarized view on the topic in society, this changed in recent years. The Dutch Cancer Society, the Dutch Heart Foundation and the Lung Foundation Netherlands joined forces and started a campaign 'towards a Smoke-free Generation' (SFG) (in Dutch: 'op weg naar een Rookvrije Generatie'). The objective is to allow parents to raise their children free from exposure to tobacco smoke and the temptation to start smoking. So that all children who are born from 2017 onwards, will choose to never start smoking. A common roadmap, following the lifeline of a child born in 2017, was developed to illustrate which measures and activities by the national government, municipalities and (civil) society are necessary to achieve a SFG. The key is to use a positive frame and the invitation to join the movement. Polarization is largely taken away. No one wants their children to start smoking. The first results are now starting to show. There is an increased sense of urgency and public support for TC initiatives targeted at protecting youth. Moreover, a growing number of individuals and organizations - from an increasingly broad range of sectors - take action. In two years more than 150 playgrounds, 300 sport fields, 50 kid farms and 30 swimming pools became smoke-free, and it seems this is just the beginning. Even the first smoke-free amusement park, smokefree street and a couple of smoke-free pancake restaurants are a fact. Anybody can help to get child environments smoke-free. No obligation, all done by the community. Get introduced into the way we work and start your own smoke-free movement!

To get more information about the smoke free generation, take a look at the <a href="https://www.longfonds.nl/rookvrije-generatie" target="\_blank">project</a>.

Chairperson: Karianne Djoyoadhiningrat-Hol (Netherlands)

Coordinator: Robert van de Graaf (Netherlands)

It takes a village to raise a child, smoke-free

10:15 - 10:25

Robert van de Graaf (Netherlands)

Short Oral Abstract session (SOA) 10:30 - 12:00 KWA Plenary Hall SOA01 Multidrug-resistant tuberculosis: patients and programmes Chairperson: Paula Fujiwara (United States of America) Chairperson: Lorenzo Guglielmetti (France) SOA01-100 Suitability of the shorter duration multidrug-resistant tuberculosis 10:30 - 10:37 0-25 regimen for patients receiving treatment in settings with limited rapid susceptibility testing Stellah George Mpagama (Tanzania, United Rep.) SOA01-100 A patient-centred psychosocial support intervention for DR-TB patients: 10:37 - 10:44 challenge TB Project's experience in Bangladesh 1-25 Shayla Islam (Bangladesh) SOA01-100 The palliative care needs of patients with drug-resistant tuberculosis in 10:44 - 10:51 2-25 the southern sub-district of Cape Town Shannon Odell (South Africa) SOA01-100 Managing drug-resistant tuberculosis in refugees and migrants: 10:51 - 10:58 partnership in Jordan, 2012-2018 3-25 Md Saiful Oavvum (Iordan) SOA01-100 Programmatic introduction of new TB drugs in Ethiopia: lessons in the 10:58 - 11:05 4-25 stepwise approach for national scale-up Andargachew Kumsa (Ethiopia) SOA01-100 Implementation of community-based drug resistant TB treatment in 11:05 - 11:12 5-25 Southern Swaziland and national implications Siphiwe Mavis Ngwenya (Swaziland) 11:12 - 11:19 SOA01-100 Implementation of biomedical and social support for people affected by 6-25 multidrug-resistant tuberculosis in Guinea Souleymane Hassane Harouna (Guinea) SOA01-100 Impact of strong support in improving drug supply management of TB 11:19 - 11:26 7-25 and related supplies in Tigray, Ethiopia Degu Jerene (Ethiopia) SOA01-100 Effectiveness of thematic TB health education on outcomes for 125 11:26 - 11:33 pulmonary MDR-TB patients 8-25 Renzhong Li (China) SOA01-100 Half of rifampicin-resistant tuberculosis patients received new 11:33 - 11:40 9-25 tuberculosis drugs in a decentralised setting, South Africa Anja Reuter (South Africa) SOA01-101 'Missing million': a pilot study to assess the potential of offering upfront 11:40 - 11:47 chest X-ray for sputum smear-negative TB cases to reduce the gap 0 - 25Ganesh Chandra Mallick (India)

Symposium (SP) 10:30 - 12:00

Europe

# SP01 Children exposed to tuberculosis have rights too! Improving child contact identification

The WHO recommends CCM for preventing progression of TB disease in children in high TB burden settings. The first step is the identification of all exposed children aged < 15 years living in the same household with an adult TB patient. One barrier is defining household and exposure. Most household definitions underestimate the number of child contacts because children are exposed to adults outside their household and may spend significant time with them (e.g., caregivers). This session will engage stakeholders by discussing barriers/facilitators to the identification of child contacts. Sharing evidence-based experiences is essential to identifying strategies that will ultimately eliminate paediatric TB.

Chairperson: Daria Szkwarko (United States of America) Chairperson: Yaël Hirsch-Moverman (United States of America)

Very low yield of child TB contacts to adult TB cases in Lesotho

Yaël Hirsch-Moverman (United States of America)

Child contact identification: a comparison between urban and rural populations in Kenya Ann Masese (Kenya)

TB contact management experience from Pakistan: a household with a child TB patient can have more children with TB

Hamidah Hussain (Singapore)

Child contact screening and management in high TB setting in Papua province, Indonesia Trisasi Lestari (Indonesia)

Reduced losses in the latent tuberculosis care cascade in Regional Prospective Observational Research in Tuberculosis (RePORT-) Brazil

Solange Cavalcante (Brazil)

Discussion

Symposium (SP) 10:30 - 12:00

Antartica

# SP02 Social and programmatic solutions to engage marginalised populations—the case of indigenous communities

Socio-cultural interventions are critical to the adequate provision of TB services. Insufficient understanding by TB programmes about traditional values, disease perspectives and of indigenous practices have resulted in the erection of barriers. Creating alliances to incorporate community skills into healthcare systems helps provide better care and support to those affected by TB, thus bridging inequities in healthcare access and facilitating health case use by marginalised groups. The symposium's goal is to provide the audience with a better understanding of not only the challenges of, but also the opportunities for, working with indigenous communities by using innovative methods rooted in culturally relevant contexts.

Chairperson: Latha Rajan (United States of America) Chairperson: Aditi Basnet (United States of America)

Tuberculosis in indigenous communities: global and Peruvian evidence

Carlton Evans (Peru)

Integrating novel approaches to enhance tuberculosis elimination efforts in indigenous communities

Victoria J Cook (Canada)

TB in indigenous peoples: achieving meaningful results through culturally appropriate interventions

Pamela Orr (Canada)

A holistic approach to tuberculosis control by incorporating traditional perspectives of indigenous people

Paulo Cesar Basta (Brazil)

Discussion

Symposium (SP) 10:30 - 12:00

Oceania

#### SP03 Monitoring the tobacco industry: a vital factor in tobacco control

Putting a stop to the production of tobacco products, which will virtually signify the end of the harm caused by tobacco to people, will happen only when the tobacco industry is closed down. Curtailing the activities of the tobacco industry essentially begins with monitoring the industry. Currently functioning monitoring observatories sanctioned by the WHO FCTC Secretariat are located in Brazil, Sri Lanka and South Africa; these liaises with the FCTC Knowledge Hub in Thailand. This symposium will bring together these partners to present their knowledge/experience in industry monitoring, and their knowhow in transforming surveillance findings into effective tobacco control advocacy/action.

Chairperson: Mahesh Rajasuriya (Sri Lanka)

Step up in the monitoring the tobacco industry: models in monitoring tobacco industry and the way forward in working together

Bungon Ritthiphakdee (Thailand)

**Observatory on the tobacco industry: strategies in Brazil two years after launching** Silvana Rubano Turci (Brazil)

Capacity building in tobacco industry monitoring by the Africa Observatory: infrastructure for sustainable tobacco industry monitoring

Lekan Ayo-Yusuf (South Africa)

Industry monitoring in South Asia and the role of the Sri Lankan observatory in advocacy and action

Manuja Perera (Sri Lanka)

**Discussion** 

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

North America

# SOA02 Xpert optimisation and sustainability towards universal testing

Chairperson: Lesley Scott (South Africa) Chairperson: Nazir Ismail (South Africa)

SOA02-101 1-25	Implementation of Xpert MTB/RIF in a tertiary referral hospital: a retrospective evaluation of successful and unsuccessful outcome from Lagos, Nigeria Olumide Lawal (Nigeria)	10:30 - 10:37
SOA02-101 2-25	Test and treat TB: using Xpert MTB/RIF as primary test by health extension workers in Ethiopia Gemeda Bora (Ethiopia)	10:37 - 10:44
SOA02-101 3-25	Xpert MTB/RIF Ultra: early implementation in high TB and Low HIV prevalent country—Pakistan Experience Sabira Tahseen (Pakistan)	10:44 - 10:51
SOA02-101 4-25	Optimizing TB diagnosis and GeneXpert utilization using a courier for specimen transport in Akwa Ibom State, Nigeria: a two-year review Chukwuemeka Austin Ihesie (Nigeria)	10:51 - 10:58
SOA02-101 5-25	Implementation of sample referral for drug resistant TB diagnosis and treatment follow up: Bangladesh experience Sarder Tanzir Hossain (Bangladesh)	10:58 - 11:05
SOA02-101 6-25	Lessons learned and surveillance of GeneXpert repair service provision and maintenance at the country level, 2016-2017  Jerod N. Scholten (Netherlands)	11:05 - 11:12
SOA02-101 7-25	South Africa's experience in national implementation of Xpert MTB/RIF Ultra Puleng Marokane (South Africa)	11:12 - 11:19
SOA02-101 8-25	GeneXpert Omni falls short when compared to target product profiles for a diagnostic tool to be placed in remote healthcare facilities  Kathleen England (Switzerland)	11:19 - 11:26
SOA02-101 9-25	Xpert/RIF utilization rate improved through strong monitoring and innovative interventions in Tigray Region, Northern Ethiopia  Degu Jerene (Ethiopia)	11:26 - 11:33
SOA02-102 0-25	Xpert MTB-RIF guided diagnosis and treatment of drug-resistant tuberculosis patients in West-Java, Indonesia Bony Wiem Lestari (Indonesia)	11:33 - 11:40
SOA02-102 1-25	Impact of Xpert MTB/RIF implementation on time to treatment initiation among people with multi-drug resistant tuberculosis in Karachi, Pakistan Saira Khowaja (Pakistan)	11:40 - 11:47
SOA02-102 2-25	Xpert networks: understanding barriers to optimization and sustainability towards universal testing Kathleen England (Switzerland)	11:47 - 11:54

Symposium (SP) 10:30 - 12:00

Central America

# SP04 Building a competent workforce for decentralised, quality and patient-centred DR-TB care

To find and treat more DR-TB patients and improve treatment results, decentralised and quality DR-TB care is needed. This requires a competent workforce, with access to up to date guidelines, drugs, appropriate infrastructure and supportive supervision. This symposium will showcase good practices from a variety of countries on how NTPs have built and are maintaining their decentralised DR-TB workforce, and will look at the feasibility and effectiveness of a combined on-job training, including clinical mentoring, supportive supervision and use of DR-TB benchmarking tools. The presentation also highlights how local practices are shared with other DR-TB teams and how they feed the national DR-TB policies and procedures.

Chairperson: Marleen Heus (Netherlands) Chairperson: Kateryna Gamazina (Ukraine)

# How training and mentoring have accelerated the decentralisation of quality DR-TB care in Tanzania ${\sf T}$

Johnson Lyimo (Tanzania, United Rep.)

# Successful decentralisation of DR-TB care through capacity building of DR-TB teams in Nigeria

Sani Useni (Nigeria)

#### The role of advisory bodies to build capacity of DR-TB staff in Ukraine

Olga Pavlova (Ukraine)

# Implementation of the programmatic management of DR-TB benchmarking tool to improve quality of DR-TB care in Indonesia

Yusie Luciana Permata (Indonesia) Nurjannah Sulaiman (Indonesia)

#### Access to quality DR-TB care for children with tuberculosis in Kyrgyzstan

Aimgul Duishekeeva (Kyrgyz Republic)

Discussion

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

South America

### SOA03 Hospital-based infection control and prevention; reports from the field

Chairperson: Max Meis (Netherlands) Chairperson: Maryse Wanlin (Belgium)

# SOA03-102 Hospital-based cough officer and 24-hour TB laboratory reduce delays in diagnosis, treatment and TB mortality in Beira, Mozambique: quasi-

experimental study
Miguelhete Lisboa (Mozambique)

# SOA03-102 Healthcare worker interactions with TB patients during clinical care: 10:37 - 10:44 4-25 findings from two high burden countries. 2014

findings from two high burden countries, 2014

Michele L. Pearson (United States of America)

# SOA03-102 Use of N95 respirators amongst health workers in Akwa Ibom and Kano 10:44 - 10:51 5-25 State

Ifiok Ekanim (Nigeria)

SOA03-102 6-25	Health promotion through surgical mask use among TB patients and visitors at Xinjiang Chest Hospital, China Jinshan Ma (China)	10:51 - 10:58
SOA03-102 7-25	Efficiency of the FAST strategy for tuberculosis diagnosis and treatment in a resource-limited hospital in Viet Nam Hien Le (Viet Nam)	10:58 - 11:05
SOA03-102 8-25	Implementation, scale-up and impact of FAST strategy in South African hospitals: what lessons have we learnt?  Matsie Mphahlele (South Africa)	11:05 - 11:12
SOA03-102 9-25	Results of a 2-year pilot project on health care worker tuberculosis surveillance in Nigeria; April 2016 - March 2018 Bethrand Odume (Nigeria)	11:12 - 11:19
SOA03-103 0-25	Perception of the risk of tuberculosis transmission for health care workers at a public hospital in Lima, Peru Dylan B Tierney (United States of America)	11:19 - 11:26
SOA03-103 1-25	Infection control in MDR decentralised sites in South Africa Annatjie Peters (South Africa)	11:26 - 11:33
SOA03-103 2-25	Implementation of a healthcare worker tuberculosis screening programme: experience from a regional initiative in Dire Dawa, Ethiopia Getinet Lenjiso (Ethiopia)	11:33 - 11:40

Symposium (SP) 10:30 - 12:00

Mississippi

### SP05 Optimisation of standard drugs in the treatment of tuberculosis, finally?

The standard drug regimen for DS-TB has been used in its current form for almost 50 years. In the last few decades, there have been controversies about the right dose of rifampicin, isoniazid and pyrazinamide and the potential emergence of MDR-TB due to underdosing. In this symposium, expert speakers will discuss the optimal dosages of the three most important drugs. The session will end with a pro/con discussion of the most prominent class of drugs-the rifamycins. At the end of the Symposium, participants will have an idea of how current treatment guidelines may be adjusted in the near future.

Chairperson: Andreas Diacon (South Africa) Chairperson: Geraint Davies (United Kingdom)

#### What is the right dose of rifampicin?

Rob Aarnoutse (Netherlands)

## What is the right dose of pyrazinamide?

Kelly Dooley (United States of America)

#### What is the right dose of isoniazid?

Peter Donald (South Africa)

#### Pro/con rifampicin against optimally dosed rifapentine, which, when and how?

Susan Dorman (United States of America)

## Pro/con rifampicin against optimally dosed rifapentine, which, when and how?

Martin Boeree (Netherlands)

#### Discussion

Short Oral Abstract session (SOA) 10:30 - 12:00 Amazon SOA04 Tuberculosis in migrants in Europe Chairperson: Zohar Mor (Israel) Chairperson: Connie Erkens (Netherlands) SOA04-103 Missed opportunities for TB control: a population-based cohort study of 10:30 - 10:37 primary care access and TB among migrants in the UK 3-25 Luis C. Berrocal-Almanza (United Kingdom) SOA04-103 Seeking help in a hostile environment: experiences of healthcare access 10:37 - 10:44 4-25 amongst UK migrants with TB Jessica Louise Potter (United Kingdom) SOA04-103 Is it worth screening for comorbidities when screening for tuberculosis? 10:44 - 10:51 5-25 Lessons from the UK's refugee resettlement programme Morris Chivwaba Muzyamba (United Kingdom) SOA04-103 Tuberculosis screening of new migrants to the Netherlands: asylum 10:51 - 10:58 6-25 seekers have a higher risk of tuberculosis Connie Erkens (Netherlands) SOA04-103 Epidemiology of lymph node tuberculosis in Denmark from 2007 through 10:58 - 11:05 2016: a review of 489 cases 7-25 Victor Dahl Mathiasen (Denmark) SOA04-103 Systematic screening for active tuberculosis in asylum seekers in Italy: a 11:05 - 11:12 8-25 three-year results evaluation Marina Tadolini (Italy) SOA04-103 New algorithm for screening immigrants for latent tuberculosis infection 11:12 - 11:19 (LTBI) in Norway—testing only with intention to treat 9-25 Trude Arnesen (Norway) SOA04-104 Clustering of Mycobacterium tuberculosis analyzed by WGS in the 11:19 - 11:26 0-25 metropolitan area of Rome, Italy Angela Cannas (Italy) SOA04-104 TB case finding and treatment in cooperation with charities and 11:26 - 11:33 1-25 volunteer organizations: experience from Tyumen Region, Russia Elena Tarasova (Russian Federation)

Symposium (SP) 10:30 - 12:00

Yangtze 1

# SP06 Pharmacokinetics and pharmacodynamics of drugs used in the treatment of non-tuberculous mycobacterial infections

The incidence and prevalence of NTMI is globally on the rise. NTMI treatment is challenging, as it often requires prolonged treatment over several months to years, and is frequently associated with toxicities. Treatment outcomes are modest at best and poor in the majority of patients. Furthermore, recruitment of sufficiently powered randomised clinical trials is virtually impossible for any NTMI. This session will focus on PK/PD-based approaches to optimise clinical outcomes in patients with NTMI. We will also highlight efficient methods to develop novel combination regimens in pre-clinical studies with higher probability of success in clinical trials in humans.

Chairperson: Jakko van Ingen (Netherlands)

Chairperson: Devyani Deshpande (United States of America)

Buruli ulcer

Rie Yotsu (Japan)

Novel combination treatment for the treatment of Mycobacterium kansasii

Shashikant Srivastava (United States of America)

Pharmacokinetic-pharmacodynamics-derived treatment regimens for pulmonary Mycobacterium avium complex—towards a short course chemotherapy

Clinical and preclinical development of new treatments for non-tuberculous mycobacteria: it takes two to tango

Jakko van Ingen (Netherlands)

Discussion

Symposium (SP) 10:30 - 12:00

Yangtze 2

#### SP07 Quality of tuberculosis care - moving from evidence to action

Multiple studies have reported that poor adherence to International Standards for TB Care is widespread. The End TB Strategy 80:90:100 goals cannot be achieved without improving the quality of care delivered to TB patients. Health systems worldwide are investing in quality management programmes to sustain ongoing cycles of measurement and improvement using formal quality improvement methods. Quality management has become a central component of the HIV/AIDS response, but has had limited penetration into NTPs. The overall objective is to highlight lessons learned in and best practices of implementing quality management from the HIV world and early adopters in TB.

Chairperson: Adithya Cattamanchi (United States of America) Chairperson: Christy Hanson (United States of America)

What high-quality care means—a patient perspective

Deepti Chavan (India)

Recommendations from Lancet Global Health's Commission on high-quality health systems in the SDG era and The Lancet TB Commission

Madhukar Pai (Canada)

Lessons learned from the implementation of quality management in HIV/AIDS programmes across 15 PEPFAR-funded countries: the HEALTHQUAL experience

Bruce Agins (United States of America)

**Using the International Standards of Tuberculosis Care to define quality of care indicators** Adithya Cattamanchi (United States of America)

### Integrating quality management into the South African National TB Programme

Lindiwe Mvusi (South Africa)

Discussion

Oral Abstract session (OA) 10:30 - 12:00		Kilimanjaro 1&2	
OA01 Wil	l we get there? Challenges to ending tuberculosis		
	Kitty van Weezenbeek (Netherlands) Riitta Dlodlo (Zimbabwe)		
OA01-201- 25	Tuberculosis-entry screening for asylum seekers aged < 18 years: an evaluation of more than 34 000 cases  Bert Wolters (Netherlands)	10:41 - 10:52	
OA01-202- 25	The TB care cascade for rifampicin-resistant TB: adherence to the South African Department of Health algorithm for the management of MDR-TB patients  Elise De Vos (Belgium)	10:52 - 11:03	
OA01-203- 25	Implementation of a revised screening and diagnostic algorithm following a tuberculosis prevalence survey leads to improved tuberculosis case notification in Uganda  Frank Rwabinumi Mugabe (Uganda)	11:03 - 11:14	
OA01-204- 25	Improving government funding to end tuberculosis through sustainable financing methods and reforms: what is the cost?  Frances Ilika (Nigeria)	11:14 - 11:25	
OA01-205- 25	India's commitment to end TB by 2025: advances and way forward Moumita Biswas (India)	11:25 - 11:36	
Oral Abstract session (OA) 10:30 - 12:00 Everest 1&2			
OA02 Tul	OA02 Tuberculosis infection: from latent to eliminated		
Chairperson: Donald Enarson (Canada) Chairperson: E Jane Carter (United States of America)			
OA02-206- 25	Toward safe and reachable preventive therapy for latent tuberculosis infection: a multicentre randomised controlled trial in Taiwan Jann-Yuan Wang (Taiwan)	10:30 - 10:41	
OA02-207- 25	BRIEF TB treatment of latent TB infection with one month of isoniazid and rifapentine in HIV-infected people: interaction of treatment and CD4 count	10:41 - 10:52	
	Susan Swindells (United States of America)		

OA02-208- 25	Impact of maternal isoniazid preventive therapy timing on acquisition of infant TB infection in the IMPAACT P1078/TB APPRISE trial  Amita Gupta (United States of America)	10:52 - 11:03
OA02-209- 25	The yield of active tuberculosis from screening migrant populations for latent tuberculosis infection: a systematic review and meta-analysis  Akanksha Mimi Malhotra (United Kingdom)	11:03 - 11:14
OA02-210- 25	Model-based cost-effectiveness of state-level tuberculosis interventions in California, Florida, New York and Texas Youngji Jo (United States of America)	11:14 - 11:25
OA02-211- 25	Evaluation of a long-acting bedaquiline formulation in a mouse model of latent tuberculosis infection  Nicole Ammerman (United States of America)	11:25 - 11:36
OA02-212- 25	Defining adequate contact for transmission of Mycobacterium tuberculosis in an urban African environment  Maria Eugenia Castellanos Reynosa (United States of America)	11:36 - 11:47

Symposium (SP) 10:30 - 12:00

Atlantic

#### SP08 Time to change tuberculosis treatment outcome definitions?

Current treatment outcomes are defined using a combination of microbiological endpoints and adherence. Failure requires a change of drugs, while cure requires information on multiple sputum smears/cultures within a specified time period. These requirements are often not aligned with the best clinical practice, and lack a crucial observation period after the end of treatment. The European consortium, TBnet, proposed new definitions that are agnostic about the duration of treatment, independent of drug resistance, and include a one-year follow-up period after treatment completion.

Objectives: To discuss the need for and the applicability of new TB outcome definitions from the viewpoint of key stakeholders.

Chairperson: Frank van Leth (Netherlands) Chairperson: Berit Lange (Germany)

The multidrug-resistant tuberculosis epidemic: measuring burden and treatment outcomes Frank Cobelens (Netherlands)

Rationale for a revision of the multidrug-resistant tuberculosis outcome definitions Christoph Lange (Germany)

Feasibility of applying the new treatment outcome definitions in a high prevalence setting: experience from Latvia

Liga Kuksa (Latvia)

What implications do the new treatment outcome definitions have for the designing of future clinical trials?

Patrick Phillips (United States of America)

Is it time to change tuberculosis treatment outcome definitions? A roundtable discussion Carole Mitnick (United States of America)

**Discussion** 

#### **Scientific Programme**

Community space: art display

11:00 - 14:00 De Ontmoeting meeting point

#### Louder than TB installation

At the conference, the <a href="http://www.louderthantb.org/" target="\_blank">Louder Than TB</a> Campaign proposes to draw attention to how partners are Declaring our Rights in the fight against TB. Led by TB Alliance, the Louder than TB Campaign proposes to exhibit an interactive installation where conference attendees are invited to participate and add their voice. As part of the installation, we will highlight the impact of the campaign in specific countries as well as the need to continue to focus on the development of new tools to address the growing threat of resistance to TB drugs.

Chairperson: Irina Usherenko (United States of America)

Community space: skills building

12:00 - 13:00

De Ontmoeting 1 (Community space)

## PROMISE, smoke-free pregnancy and parenting

Birth care professionals play an important role in smoking cessation among pregnant women and young mothers. Recent research shows that professionals want to support smokers to quit, but that they need more tools, especially regarding lower-educated and lower health literate women. Also the transfer to and cooperation with maternity care and youth health care regarding smoking cessation is not optimal. That is why the Long fund, Trimbos Institute and Pharos started the research project 'PROMISE'.

In this workshop the first results of PROMISE and the broader applicability will be discussed. Participants are allowed to work with a carbon monoxide meter themselves. A wallpaper interactive session will also discuss various propositions about smoke-free pregnancy and the national embedding of our research results.

More information: In three regions, use, appreciation and (directional) effects of PROMISE were studied, among both birth care professionals and lower-educated pregnant women. A total of 110 midwives and gynecologists, 65 maternity care professionals and 24 youth health care professionals participate in the study. Currently, 150 pregnant women are included.

PROMISE is based on the existing V-MIS intervention, supplemented with the results of a preliminary study among lower educated pregnant women and birth care professionals. PROMISE included, for example, motivational interviewing with lower-educated and lower health literate people, a carbon monoxide meter and easy to read booklets with cartoons.

The preliminary study provided insight into various problems, wishes and needs among both birth care professionals and lower-educated pregnant women and young mothers.

The first results of the main study are expected at the end of 2018 and will be presented.

The outcomes of this project will provide input for improved smoking cessation care in birth care. Results of PROMISE will be embedded in existing, national programs.

Chairperson: Karianne Djoyoadhiningrat-Hol (Netherlands)

Coordinator: Linda Springvloet (Netherlands)

PROMISE, smoke-free pregnancy and parenting

12:00 - 12:10

Linda Springvloet (Netherlands)

PROMISE, smoke-free pregnancy and parenting

12:10 - 12:20

Naima Abouri (Netherlands)

Special session (SPS) 12:15 - 13:15

KWA Plenary Hall

## **TBScience2018 Rapporteur session**

Chairperson: Tom Ottenhoff (Netherlands)

Recent research into TB treatment shortening Frank Cobelens (Netherlands)	12:15 - 12:25
Latest developments and results from the TB Vaccine area Richard White (United Kingdom)	12:25 - 12:35
Innovations in the production and use of surveillance data: the use of infection testing; and innovation in subnational burden estimation Edine Tiemersma (Netherlands)	12:35 - 12:45
Mtb infection: acquisition, control and clearance Michael Kimerling (Netherlands)	12:45 - 12:55

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

Europe

#### **Europe Region meeting**

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

Antartica

#### **Asia Pacific Region meeting**

#### President's report

Ral Antic (Australia)

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

Oceania

### **Latin America Region meeting**

E-poster session (EP) 12:15 - 13:15

North America

# EP01 Diagnosis, prevalence and molecular epidemiology of bovine and zoonotic tuberculosis

Chairperson: Fred Quinn (United States of America)

EP01-100- Rapid differentiation of Mycobacterium bovis by loop mediated isothermal amplification assay

Thoko Flav Kapalamula (Japan)

EP01-102- Mycobacterial infections in sedentary and trade cattle in Ogun State, Southwestern Nigeria

Hezekiah Adesokan (Nigeria)

EP01-103- Molecular epidemiology of camel tuberculosis in camels in Northeast Nigeria

Enenche Francis Ejeh (Nigeria)

Feriele Messadi Akrout
Prevalence of bovine tuberculosis in Iraqi cattle using tuberculin skin test on live cattle and lesion on slaughtered cattle Ruqaya Ali (Iraq)
Prevalence and risk factors of bovine tuberculosis in buffaloes in the Rawalpindi, Pakistan Irum Perveen (Pakistan)

E-poster session (EP) 12:15 - 13:15

Central America

#### **EP02** Highlights across the tuberculosis section

Chairperson: Paul Nunn (United Kingdom)

EP02-107- 25	A systematic review and meta-analysis of clinical manifestations of tuberculosis among the elderly and the non-elderly patients—an update Kiyohiko Izumi (Japan)
EP02-108- 25	A structural and epidemiological approach to delay resistance acquisition in bedaquiline: last line resort to treat MDR-TB  Malancha Karmakar (Australia)

EP02-109- Risk of tuberculosis in patients prescribed medical immunosuppressive therapy in British Columbia, Canada: retrospective cohort study

James Johnston (Canada)

EP02-110- Impact of sputum smear results after two months of treatment on the treatment outcome of pulmonary tuberculosis

Layth Al-Salihi (Iraq)

EP02-111- Tuberculosis incidence among health care workers undergoing routine screening, Dire Dawa, Ethiopia

Beniam Feleke (Ethiopia)

EP02-112- Lifting TB out of the shadows through an active case finding strategy in Swaziland: a community participatory approach

Joyce Sibanda (South Africa)

EP02-113- A comparative assessment of treatment outcomes by intervention in tribal population and NTP data

Brajaraj S Ghosh (India)

EP02-114- Do cough monitors in high load district hospitals help to reduce delays in identifying presumptive TB patients? Experience from India

Sripriya Pandurangan (India)

EP02-115- Latent tuberculosis infection and dyslipidemia: prevalence estimates from the US NHANES, 2011-2012

Argita Salindri (United States of America)

EP02-116- Improving TB patient support: designing digital health solutions for case managers in Kyrgyzstan

Muratbek Ahmatov (Kyrgyz Republic)

Pharmacists as gatekeepers into TB care: implications for the diagnostic cascade

Amrita Daftary (Canada)

E-poster session (EP) 12:15 - 13:15

South America

# EP03 Preventive therapy and intensified case finding among people living with HIV/AIDS (PLWH)

Chairperson: Peter MacPherson (United Kingdom)

EP03-119- Gaps in the intensified case finding and isoniazid preventive therapy cascade among PLHIV in Lesotho

Andrea Howard (United States of America)

EP03-120- Intensified case finding for TB and isoniazid preventive therapy uptake among HIV patients in Kilifi, Kenya

Clare Obonyo (Kenya)

EP03-121- High uptake of IPT with integration of TB-HIV services in RMNCH settings in Manzini region, Swaziland

Andrea Howard (United States of America)

EP03-122- National TB prevalence rate among people living with HIV in Nigeria in 2016

Amos Fadare Omoniyi (Nigeria)

EP03-123- Finding and treating missing persons with TB disease through systematic screening and staff empowerment in two high burden districts in Malawi

Anthony Abura (Malawi)

EP03-124- Contribution of systematic screening for symptoms of TB among a population newly

25 accessing healthcare services

Tsotleho Maramane (Lesotho)

EP03-125- Taking TB preventive therapy implementation to a national scale: the Nigeria PEPFAR

25 programme experience

Stanley Meribe (Nigeria)

EP03-126- Patient's choice improves confidence and intention to complete TB prevention therapy in a

routine HIV programme setting in Uganda

Fred C Semitala (Uganda)

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

Yangtze 1

## Africa Region meeting

25

### **Scientific Programme**

Meet the expert session (MTE) 12:15 - 13:15

Yangtze 2

#### MTE10 HIV Meet the Expert session

3HP is a highly-effective, short course regimen that should be used for TB prophylaxis among patients with and without HIV infection, right? But is it so simple? Dr. Dooley invites you to a discussion about the clinical aspects of 3HP for TB prevention in HIV-infected persons, including safety, efficacy, drug-drug interactions, and how/if to use it with commonly-used antiretrovirals.

Roll-out of 3HP: what are the practical implications?

Dr. Charalambous will discuss the practical issues regarding the roll-out of 3HP in the programmatic setting. These include issues around patient management such as: identification of eligible patients, testing for LTBI, screening for TB, monitoring for adverse events, data monitoring and evaluation of the programme.

#### Preventive therapy in PLWH and the role of 3HP

12:15 - 13:15

Salome Charalambous (South Africa) Kelly Dooley (United States of America)

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

Kilimanjaro 1&2

### Middle East Region meeting

#### **Scientific Programme**

Community space: skills building 12:30 - 13:00

De Ontmoeting 2 (Community space)

#### A practical guide in dealing with stigma - learning from conversations of resilience

The Global Coalition of TB Activists (GCTA) is a global platform bringing together affected community members and ensuring that community is involved in all TB processes. Since its inception in October 2013, the GCTA has contributed significantly to the global TB agenda through its network of over 300 members affected by TB achieving a number of significant milestones along the way.

We have tried to unpack the TB stigma experiences of people across the globe, starting with women. GCTA has published an internationally acclaimed book called 'Women and Stigma - Conversations of Resilience in the War Against TB'. Learnings of the deep-rooted effects of stigma were tremendous.

Concept: Through our extensive membership base and capacity-building workshops at regional and national level across the globe in the past year, we have found that stigma continues to be the biggest barrier to access. We propose to have a panel discussion that focusses on the effects of stigma as a barrier to access and how to address the two main kinds of stigma – self-stigma and community stigma. The discussion starts with an interactive activity based on different scenarios (related to a person with and without TB) and its probable resulting path. On the panel will be specialists who have researched stigma and will share their findings. There will also be community representatives on the panel who will share their personal experience with stigma.

Conc	lusion:

Stigma is a huge barrier to access and can have a debilitating effect, at times, more difficult than the disease itself to overcome.
□•Yet with the management strategies to address and minimise stigma, it can be over come.
□•Treatment literacy, counseling and awareness are important to address stigma.

Chairperson: Blessina Kumar (India) Chairperson: Rhea Lobo (India)

A practical guide in dealing with stigma - learning from conversations of resilience	12:30 - 12:40
Phumeza Tisile (South Africa)	
A practical guide in dealing with stigma - learning from conversations of resilience  Prabha Mahesh (India)	12:40 - 12:50
A practical guide in dealing with stigma - learning from conversations of resilience	12:50 - 13:00
Naomi Wanjiru (Kenya)	

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#### **Scientific Programme**

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

Poster Area

# PS03 Clinical aspects of multidrug-resistant tuberculosis treatment safety and toxicity

Atlantic 2

25

Chairperson: Sarah Brode (Canada)

PS03-423- Trends in CRP, D-dimer and fibrinogen during therapy for HIV-associated multidrugresistant tuberculosis

Patrick Cudahy (United States of America)

PS03-424- Ototoxicity monitoring in patients given injectable agents for treatment of multidrugresistant tuberculosis in China: a survey of eight TB centers

Yanhua Song (China)

PS03-425- The incidence of leukopenia in patients treated for drug-susceptible tuberculosis

25 Mark Nomden (Netherlands)

PS03-427- Treatment and pregnancy outcomes of pregnant women exposed to second-line anti-

tuberculosis drugs in South Africa

Idah Mokhele (South Africa)

PS03-428- Multidrug-resistant tuberculosis and concurrent hepatitis C virus infection: an additional

challenge in the complex management of patients

Paola Mencarini (Italy)

PS03-429- Role of clinical features, microbiology, histopathology and molecular diagnostic test in the

diagnosis of cutaneous tuberculosis

Poonam Puri (India)

PS03-430- Serum uric acid levels in patients on anti-tuberculosis treatment in Douala, Cameroon

Bertrand Hugo Mbatchou Ngahane (Cameroon)

PS03-432- Adverse drug events in patients receiving treatment for multidrug-resistant tuberculosis in

25 a tertiary referral hospital in Italy

Paola Mencarini (Italy)

PS03-433- Clinical risk factors associated with multidrug-resistant tuberculosis in Mali: a ten-year

25 cross-sectional study

Bocar Baya (Mali)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

### PS04 Staying ahead of tuberculosis: a life's journey

Atlantic 2

Chairperson: Anete Trajman (Brazil)

PS04-434- Do hospitalized DR-TB patients at treatment initiation achieve better treatment outcomes than those under ambulatory care? Experiences from Uganda

Raymond Byaruhanga (Uganda)

PS04-436- 25	Is the profile of TB patients in India changing? Karuna Sagili (India)
PS04-437- 25	Treatment success rates for patients with tuberculosis receiving care in health facilities severely affected by Hurricane Matthew, Haiti, 2016  Macarthur Charles (Haiti)
PS04-438- 25	Improvement of DR-TB detection and management in the 8 provinces supported by Challenge TB in DR Congo Stephane Mbuyi (Congo (Democratic Rep.))
PS04-439- 25	The impact of TB retreatment regimens in treatment and post-treatment outcomes: a 7-year follow-up study in China $ \text{Jian Du (China)} $
PS04-440- 25	Tuberculosis among household contacts of drug-resistant TB patients in TB centre in Gaborone, Botswana  Cynthia Caiphus (Botswana)
PS04-441- 25	Population pharmacokinetic model and limited sampling strategies of levofloxacin in tuberculosis patients  Simone H J van den Elsen (Netherlands)
PS04-442- 25	Comparison of pulmonary impairment after tuberculosis in patients treated with moxifloxacin-based regimens vs. standard rifampin-isoniazid-pyrazinamide-ethambutol Thaddeus Miller (United States of America)
PS04-443- 25	How do tuberculosis patients really take their treatment? A detailed, quantitative approach Helen R. Stagg (United Kingdom)

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

Poster Area

# PS01 Drugs, bugs, biomes and biomarkers

Atlantic 2

Chairperson: Rumina Hasan (Pakistan)

	Mycobacterial growth inhibition is associated with trained innate immunity
25	Simone A Joosten (Netherlands)

PS01-401- 25	Predictive value of interferon- $\gamma$ responses in treatment outcomes of tuberculosis patients: a prospective cohort study in a TB-endemic area
	Jia-Yih Feng (Taiwan)

PS01-402-	Complement component C1q as serum biomarker to detect active tuberculosis
25	Simone A Joosten (Netherlands)

PS01-403-	HIV and TB perturb the immune regulatory and cytotoxic subpopulations of NKT cells
25	Tomoki Nishiguchi (United States of America)

PS01-404- Complementary bio-informatics approaches to analyze TB-specific immune function Priyanka Narvekar (United States of America)

PS01-405- 25	Interleukin-6, interleukin-13 and interferon-γ as potential biomarkers for treatment failure in pulmonary tuberculosis Akshay Gupte (United States of America)
PS01-406- 25	Pre-treatment patients with active tuberculosis have a perturbed oral, airway and gut microbiome  Charissa Naidoo (South Africa)
PS01-407- 25	Aerosol spectinamide-1599 therapy against tuberculosis Mercedes Gonzalez-Juarrero (United States of America)
PS01-408-	Metformin as host-directed therapy for tuberculosis treatment
25 PS01-409- 25	Anti-mycobacterial activity of methanolic extract of Penicillium sp. against multidrug- resistant Mycobacterium tuberculosis Irum Perveen (Pakistan)
PS01-410- 25	Tuberculous lymphadenitis is associated with changes in the microbiome at the site of disease Charissa Naidoo (South Africa)
PS01-411- 25	MIC of sitafloxacin, a new fluoroquinolone, against multidrug-resistant M. tuberculosis Charoen Chuchottaworn (Thailand)

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

Poster Area

#### PS06 Latent tuberculosis infection: treatment considerations

Atlantic 2

Chairperson: Edward Nardell (United States of America)

PS06-456- 25	Uptake of and adherence to tuberculosis preventive therapy: are challenges and opportunities the same everywhere? A comparison between two Asia-Pacific countries
	Christel H A van den Boogaard (Australia)

PS06-457- Factors associated with completion of IPT in a cluster-randomized trial of symptom-based vs. TST-based screening of household TB contacts aged under 5 years

Nicole Salazar-Austin (United States of America)

PS06-458- Quality of life of patients on treatment for latent tuberculosis infection: a mixed-methods study in Stockholm, Sweden

Jad Shedrawy (Sweden)

PS06-459Isoniazid preventive therapy uptake in under five children using TB contact investigation as entry point over a 5-year period in Amhara region, Ethiopia, 2013-2017

Beza Belayneh (Ethiopia)

PS06-460- Modelling the cost-effectiveness of testing and treating for incipient TB
 Suzanne Verver (Netherlands)

PS06-461- Evaluation and follow-up of the cause of adverse events with latent tuberculosis treatment by single nucleotide polymorphism

Yi-Wen Huang (Taiwan)

PS06-462- Latent tuberculosis infection treatment outcomes with daily isoniazid: consistent

25 improvement in British Columbia, 1989-2013

Jonathon Robert Campbell (Canada)

PS06-463- Improved coverage of IPT among household contacts of PTB cases: lessons learnt from

25 Malawi

Lameck Mlauzi (Malawi)

PS06-464- Drug interactions in patients treated for latent TB infection

25 Janez Toni (Slovenia)

PS06-465- When prevention is dangerous: perceptions and experiences of isoniazid preventive therapy

in KwaZulu-Natal, South Africa

Jody Boffa (South Africa)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

#### PS09 Social, mental and behavioural determinants and tuberculosis

Atlantic 2

Chairperson: Ethel Maciel (Brazil)

PS09-490- India, tuberculosis, and poverty: changes over time and mediating variables

Leonardo Martinez (United States of America)

PS09-491- Proximate risk factors in patients with bacteriologically confirmed drug-resistant TB in

25 South Africa

Lindy Dickson-Hall (South Africa)

PS09-492- Tobacco smoking and tuberculosis treatment outcome in a West African setting

25 Cecilie Blenstrup Patsche (Denmark)

PS09-493- Alcohol consumption affects successful treatment outcome among tuberculosis patients in

25 Guinea Bissau, West Africa

PS09-494- Alcohol use disorder, drinking patterns, and tuberculosis treatment failure in Indian

25 patients

Samyra Cox (United States of America)

Frauke Rudolf (Guinea-Bissau)

PS09-495- The impact of alcohol consumption on tuberculosis treatment outcomes: a systematic

review and meta-analysis

Elizabeth Ragan

PS09-496- TB among alcoholics in informal settlements of Nairobi, Kenya

**25** Elizabeth Wambua (Kenya)

PS09-497- Determination of the initial level of IFN-y in patients with disseminated forms of MDR-TB in

25 combination with alcohol dependence syndrome

A. Aleksa (Belarus)

PS09-498- Substance use trends among people with tuberculosis, United States, 2007-2016

Scott Alan Nabity (United States of America)

#### **Scientific Programme**

PS09-49925 Prevalence of depression among patients with tuberculosis and diabetes/prediabetes in Lima, Peru

Dalicxa Garcia (Peru)

PS09-500- Alcohol use and clinical presentation of tuberculosis at the time of diagnosis in Puducherry and Tamil Nadu, India

Elizabeth Ragan

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

Poster Area

#### PS16 Factors associated with tobacco use: have they changed with time?

Atlantic 1

PS16-562- Smoking among medical interns and their perceptions about training on tobacco smoking in the medical curriculum, Bangladesh

PS16-563- Tobacco consumption among Class III & IV employees of health care setup in Gujarat: a cross-sectional study

Himanshukumar Nayak (India)

PS16-566- Prevalence of tobacco use among priests and their willingness to spread anti-tobacco messages among devotees in Delhi

PS16-567- Tobacco use and its consequences: perceived health effects among adolescents
Prashanth Shenov (India)

PS16-568- Knowledge, attitude and practice of Georgian population regarding the MPOWER measures
Lela Sturua (Georgia)

PS16-569- Factors influencing the tradition of smokeless tobacco use in rural communities of Bangladesh

Umme Arifin (Bangladesh)

PS16-571- How the Philippine government tracked results relative to the Sin Tax Law of 2012
Lindsley Jeremiah Villarante (Philippines)

PS16-572- Impact analysis and changing attitudes of smokers after implementing graphic health warnings in Bangladesh

Shameem Haider Patwary (Bangladesh)

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

Poster Area

#### PS07 Child tuberculosis: leaping forward

Atlantic 2

Chairperson: Elisabetta Walters (South Africa)

PS07-466- Performance of a novel stool-based TB diagnostic test in children diagnosed with TB in inpatient and out-patient settings in Mbeya, Tanzania

Jason Bacha (United States of America)

PS07-467- 25	Identification of new cerebrospinal fluid and blood-based biomarkers for the diagnosis of tuberculous meningitis in children  Masilo Charles Manyelo (South Africa)
PS07-468- 25	Potential of the urine lateral flow lipoarabinomannan assay to improve the diagnosis of tuberculosis in symptomatic HIV-positive children in Cameroon  Florian Sauter (Cameroon)
PS07-469- 25	Incidence and factors associated with susceptibility to anti-tuberculosis drug-induced liver injury in children during the two-month intensive phase of therapy  Fajri Gafar (Netherlands)
PS07-470- 25	Outcomes of empiric tuberculosis treatment in children in Kampala Uganda, 2010-2015 Eric Wobudeya (Uganda)
PS07-471- 25	Xpert MTB/RIF implementation leads to more accurate diagnosis and rational use of antibiotics among children in Oromia, Ethiopia  Degu Jerene (Ethiopia)
PS07-472- 25	Accuracy of two non-sputum based tuberculosis diagnostic tests (Xpert MTB/RIF in stool and urine LAM) in children at increased risk of severe or disseminated tuberculosis Patrick Orikiriza (Uganda)
PS07-473- 25	The impact of a childhood tuberculosis training program on knowledge among front-line health workers and childhood TB notifications in the provinces of The Gambia  Alhagie .M. Jallow (Gambia)
PS07-475- 25	Molecular detection of Mycobacterium tuberculosis in pediatric stool samples Annelies Mesman (United States of America)
PS07-476- 25	Under-reporting of childhood tuberculosis in Indonesia: subsample analysis of inventory study in Indonesia in 2017 Charalampos Sismanidis (Switzerland)

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

Poster Area

#### **PS08 Patient-centred care**

Atlantic 2

Chairperson: Kerrie Shaw (Australia)

PS08-477- Effect of a patient support model for patients with MDR-TB and introduction of bedaquiline in China: a pilot study

Xiuhua Wang (China)

PS08-478- Organization of patient-centred TB services: experience in Tajikistan
Asliddin Rajabov (Tajikistan)

PS08-479- Strengthening patient satisfaction through ancillary patient care services in Wuhan, China Li Zhong (China)

PS08-480- Engaging private providers for TB screening, treatment and reporting in Ho Chi Minh City, Viet Nam

Andrew James Codlin (Viet Nam)

PS08-481- 25	Satisfaction of tuberculosis patients with the service provided by the health system Nebiyu Hiruy (Ethiopia)
PS08-482- 25	Patient-centred nurse care plan as a successful intervention in complicated tuberculosis patients Rosa Herrera (Mexico)
PS08-483- 25	Engaging private sector in TB care and control: a sustainable and scalable approach across 7 cities in India under urban interventions of project Axshya Sudha Goel (India)
PS08-484- 25	Coordination and partner support improved the performance of tuberculosis control in Tigray, Ethiopia  Degu Jerene (Ethiopia)
PS08-485- 25	Greater patient satisfaction achieved with a drug-resistant tuberculosis supportive care package in China Ling Li (China)
PS08-486- 25	Comprehensive reform of the TB healthcare system in Kyrgyz Republic Ainura Ibraimova (Kyrgyz Republic)
PS08-487- 25	Different patient management models in TB designated hospitals in China: a national survey Wei Shu (China)
PS08-488- 25	Patient-pathway analysis of tuberculosis services in Cameroon C Titahong (Cameroon)
PS08-489- 25	Effectiveness of a motivational interviewing approach in a directly observed therapy programme on tuberculosis outcomes among patients with tuberculosis and diabetes in Kelantan, Malaysia  Wan Mohd Zahiruddin (Malaysia)

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

Poster Area

#### PS05 Latent tuberculosis infection screening: challenges and opportunities

Atlantic 2

Chairperson: Robert Makombe (South Africa)

PS05-445- Coverage and yield of voluntary LTBI screening among asylum seekers in Stockholm County: a record linkage study

Joanna Nederby Ohd (Sweden)

PS05-446- Mediators of paediatric tuberculosis infection in Mbabane, Swaziland
Mackenzie Hicks (United States of America)

PS05-447- Estimated prevalence and distribution of latent tuberculosis infection in Australia, 2006-2016

Justin Timothy Denholm (Australia)

PS05-448- 25	Exploring the prevalence of tuberculosis infection among healthcare workers in Afghanistan: a cross-sectional study Ghulam Qader Qader (Afghanistan)
PS05-449- 25	Screening and treatment for latent tuberculosis infection in a small Public Health Service department of TB control (Zaanstreek-Waterland) in the Netherlands  Marlies Mensen (Netherlands)
PS05-450- 25	The impact of home visits on screening of child TB contacts and subsequent initiation of IPT: the experience of a clinic in Dili, Timor-Leste  Nicole Hersch (Australia)
PS05-451- 25	Contact tracing at a large referral hospital in Papua New Guinea Henry Welch (Papua New Guinea)
PS05-452- 25	Latent tuberculosis infection in healthcare workers in low- and middle-income countries: an updated systematic review  Lika Apriani (Indonesia)
PS05-453- 25	Prevalence of positive interferon gamma release assays and one-year conversion rates in nursing and medical students in Bandung, indonesia  Lika Apriani (Indonesia)
PS05-454- 25	Tuberculosis risk by time since U.S. entry among foreign-born residents of Washington State  Danae Black (United States of America)
PS05-455- 25	Challenges in TB diagnosis in pregnant women: findings from a cohort study in Pune, India Mallika Alexander (India)

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

Poster Area

#### PS17 Curbing the tobacco epidemic: policy and practice

Atlantic 1

Chairperson: Anne Jones (Australia)

PS17-573- Government school teachers' knowledge on FCTC and the NATA Act in Gampaha district, Sri Lanka

Sampath Damika De Seram (Sri Lanka)

PS17-574- Psychological empowerment for tobacco control in a rural low-income setting in Sri Lanka

Manuja Perera (Sri Lanka)

PS17-575- Second-hand smoke practices among schoolgoing adolescents in a hilly district in the Himalayan region

Dineshwar Singh (India)

PS17-577- Anti-tobacco legislation and youth tobacco use: comparison of Kenya Global Youth Tobacco Surveys 2007 and 2013

Valerian Mwenda (Kenya)

PS17-578- 25	effective use of provisions under the Drugs and Cosmetics Act of India for curbing the use of Electronic Nicotine Delivery Systems in Punjab, India  Sonu Goel (India)
PS17-579- 25	Did the Gutkha ban impact sale of other smokeless tobacco in the states of West Bengal and Kerala in India?  Nirmalya Mukherjee (India)
PS17-580- 25	Curbing the prevalence of beginner smokers by enacting national regulations on a total tobacco advertising, promotion and sponsorship ban in Indonesia  Triningsih Triningsih (Indonesia)
PS17-581- 25	Tobacco advertisements, promotion and sponsorships: tobacco companies continue the business of lies and deception in India Ramesh Chand (India)
PS17-582- 25	Assessing the policy attention accorded to tobacco control in Uganda's health policies ove a 10-year period, 2004-2014 Henry Zakumumpa (Uganda)
PS17-583- 25	Tobacco-free school and colleges: a study of the adoption and implementation of tobacco free policies in the Punjab, India  Areet Kaur (India)
PS17-584- 25	Articulating children and human rights violations from tobacco production to consumption in India Govind Kumar Tripathi (India)

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

Poster Area

#### PS02 Community engagement to reach and support people with tuberculosis

Atlantic 2

Chairperson: Blessina Amulya Kumar (India)

PS02-412- Community involvement supports successful treatment outcomes among patients with TB: evaluation of community-based TB care projects in Myanmar

Hnin Sabai Htut (Myanmar)

PS02-413- Local NGO engagement in the fight against TB: experience of eight provinces in Democratic Republic of Congo

Tatiana Sanda Aksenenkova (Congo (Democratic Rep.))

PS02-414- Tremendous increase of community contribution in tuberculosis case detection in Tanzania, 2016-2017

Lilian Ishengoma (Tanzania, United Rep.)

PS02-970- A Community-Based Active Tuberculosis Case Finding Program in the Philippines: Social Capital predictors of positive outcomes

Siwon Lee (Philippines)

PS02-415- Community contribution to halting the lost to follow-up phenomenon of TB cases: efforts in Maputo city, Mozambique

Joaquim Manhique (Mozambique)

PS02-416- 25	Contribution of community health committees in detecting new TB cases in the Sughd Oblast, Tajikistan  Zumrad Maxumova (Tajikistan)
PS02-417- 25	Community engagement a highly effective approach to increase TB case finding in four districts in Nias Island, Indonesia Elvi Solita Siahaan (Indonesia)
PS02-418- 25	Community-based active tuberculosis case finding in rural settlements in Homa-Bay County, Kenya: a feasible and effective strategy to find missing TB cases Carolly Otieno Migwambo (Kenya)
PS02-419- 25	Targeted outreach to uplift community health (TOUCH) for active case finding and treatment adherence  Prachi Shukla (India)
PS02-420- 25	Community-based DOTS to find missing cases: experience in four provinces in Mozambique Juliana Lara Kitchener Conjera (Mozambique)
PS02-421- 25	Community engagement to enhance case detection of people affected by tuberculosis in Burundi Michel Sawadogo (Burundi)
PS02-422- 25	Contact Investigation by community cadre in public primary health care in Surakarta city and Jember district in Indonesia  Firza Asnely Putri (Indonesia)

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

Poster Area

#### PS10 Innovative diagnostics—looking into the future

Atlantic 1

Chairperson: Jean Claude Semuto Ngabonziza (Rwanda)

Chairperson:	jean Claude Semuto Ngabonziza (Kwanda)
PS10-501- 25	Diagnostic performance of loop-mediated isothermal amplification for tuberculosis Alma Palparan (Philippines)
PS10-502- 25	Phenotypic discrimination of mycobacteria using fluorescence staining techniques Evelin Dombay (United Kingdom)
PS10-503- 25	<b>Evaluation of PURE-TB-LAMP for the diagnosis of pulmonary tuberculosis in Lusaka, Zambia</b> Eddie Solo (Zambia)
PS10-504- 25	Thin-layer chromatography to support therapeutic drug monitoring of moxifloxacin in resource-limited settings  Arianna Pranger (Netherlands)

PS10-50525 Mycobacterium tuberculosis complex growth in sputum cultures with and without supplementation of resuscitation promoting factors

Edward Coker (Gambia)

PS10-506- Quantifying Mycobacterium tuberculosis RNA in mask samples of pulmonary tuberculosis patients

Ambreen Shaikh (India)

PS10-510- PS10-511- Online resource for GWAS analysis for large annotated DR-TB database: identification unique genomic markers for M. tuberculosis strains circulating in Belarus Andrei Gabrielian (United States of America)  PS10-512- Does effective heat inactivation of sputum specimens compromise detection of Mycobacterium tuberculosis via real-time PCR?	PS10-507- 25	Validation of the FluoroType® MTBDR assay using respiratory samples  Doris Hillemann (Germany)
25 Leopold Bitunguhari (Rwanda)  PS10-510- 25 Performance of RealTime MTB RIF/INH resistance and GenoType MTBDRplus V2 assay identification of drug-resistant Mycobacterium tuberculosis complex using isolates Anura David (South Africa)  PS10-511- 25 Online resource for GWAS analysis for large annotated DR-TB database: identification unique genomic markers for M. tuberculosis strains circulating in Belarus Andrei Gabrielian (United States of America)  PS10-512- Does effective heat inactivation of sputum specimens compromise detection of Mycobacterium tuberculosis via real-time PCR?		
identification of drug-resistant Mycobacterium tuberculosis complex using isolates Anura David (South Africa)  PS10-511- Online resource for GWAS analysis for large annotated DR-TB database: identification unique genomic markers for M. tuberculosis strains circulating in Belarus Andrei Gabrielian (United States of America)  PS10-512- Does effective heat inactivation of sputum specimens compromise detection of Mycobacterium tuberculosis via real-time PCR?		Performance of new diagnostic tests for tuberculosis in hospitalized patients in Rwanda Leopold Bitunguhari (Rwanda)
<ul> <li>unique genomic markers for M. tuberculosis strains circulating in Belarus         Andrei Gabrielian (United States of America)     </li> <li>PS10-512- Does effective heat inactivation of sputum specimens compromise detection of         Mycobacterium tuberculosis via real-time PCR?</li> </ul>		
25 Mycobacterium tuberculosis via real-time PCR?		
juun Anaga (i Ciu)		·

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

Poster Area

#### PS11 Dutch courage: how resistant are we to diagnosing drug resistance?

Atlantic 1

Chairperson: Stella Van Beers (Netherlands)

Chairperson: Julian Villalba (United States of America)

PS11-513- Pyrazinoic acid, a biomarker for pyrazinamide resistance in Mycobacterium tuberculosis using NMR

Patricia Sheen (Peru)

PS11-514- The era of pre-XDR and XDR-TB in Mozambique: mutations in genes associated with resistance to fluoroquinolones and injectables

Khalide Azam (Mozambique)

PS11-515- Genetic mutations associated with isoniazid resistance in tuberculosis in Mongolia

Narmandakh Erdenegerel (Mongolia)

PS11-516- Prevalence of isoniazid resistance and mutations associated with isoniazid resistance in rifampicin-resistant and -susceptible clinical isolates

Sabira Tahseen (Pakistan)

PS11-517- Validation of the Genoscholar® NTM+MDRTB assay for screening of rifampicin and isoniazid resistance in Mycobacterium tuberculosis

Alma Palparan (Philippines)

PS11-518- Baseline fluoroquinolone resistance among MDR-TB isolates. Are we armed enough to eliminate TB disease?

Rohini Sharma (India)

PS11-519- 25	The dynamics of M. tuberculosis drug resistance isolated from pulmonary TB patients at the Central TB Research Institute, Moscow, 2012-2017  Tatyana Smirnova
PS11-520- 25	Linezolid resistance amongst patients with treatment failure for drug-resistant tuberculosis at two sites in South Africa
	Sean Wasserman (South Africa)
PS11-521- 25	Susceptibility to streptomycin in extensively drug-resistant strains isolated from tuberculosis patients in Peru, 2011-2017  Zully Puyen Guerra (Peru)
PS11-522- 25	First- and second-line drug resistance pattern in new extra-pulmonary TB cases: prospective study in a tertiary care hospital in Pakistan  Sabira Tahseen (Pakistan)
PS11-523- 25	Drug resistance detection in M. tuberculosis strains isolated during a national TB prevalence survey in Mongolia Borolzoi Tsetsegtuya (Mongolia)
PS11-524- 25	First national anti-tuberculosis drug resistance survey in Burkina Faso Souba Diandé (Burkina Faso)

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

Poster Area

#### PS13 Found-not found reported-not reported with and without private providers

Atlantic 1

Chairperson: Enos Masini (Kenya)

PS13-533- 25	Under-reporting of tuberculosis by private providers in Indonesia: subsample analysis of an inventory study, 2017
	Kristina Tobing (Indonesia)
PS13-534-	Is private sector a contributor to missing TB cases? An experience from India

23	Sripriya Pandurangan (India)
PS13-535- 25	Patient health care system interactions before and after tuberculosis diagnosis in Taiwan: an individual patient pathway analysis using health insurance data
	Chu-Chang Ku (United Kingdom)

PS13-536- 25	Placement of TB screeners in large private practices as part of an enhanced case-finding intervention to increase TB case notification in Punjab, Pakistan
	Farah Naureen (Pakistan)

PS13-538-	The level of under-reporting of tuberculosis cases in Indonesia in 2017
25	Feri Ahmadi (Indonesia)

PS13-539-	Socio-demographic and health care profile of hospitalized TB patients
25	Nancy Satpathy (India)

PS13-540- 25	registered population, 1992-2016 Sijia Dong (China)
PS13-541- 25	Tuberculosis among foreign-born persons in Japan Yasunori Ichimura (Japan)
PS13-542- 25	Evaluation of the impact of TB bacteriological confirmation on case notification rates in Swaziland $$
PS13-543- 25	Modelling the impact of India's national strategic plan for tuberculosis Juan F Vesga (United Kingdom)

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

Poster Area

# PS12 Why tuberculosis kills in the 21st century? Lessons learnt from Brazil and beyond

Atlantic 1

Chairperson: Sarabjit Chadha (India)

PS12-525- 25	Human Development Index and its associations with tuberculosis mortality in a Brazilian municipality: an ecological study
	Ricardo Alexandre Arcêncio (Brazil)

	Mapping progress towards elimination of TB deaths in Brazil, 2001-2015
25	Jennifer Ross (United States of America)

PS12-527-	Undiagnosed tuberculosis deaths in Antananarivo; Madagascar, from 1996 to 2015
25	Iulio Rakotonirina (Madagascar)

PS12-528-	Social determinants, their variation in the urban space and association with tuberculosis
25	deaths in the Amazon region. 2006-2015

Ricardo Alexandre Arcêncio (Brazil)

PS12-529-	Impact of living conditions on tuberculosis mortality in Brazil, 2002-2015
25	Marcio Natividade (Brazil)

PS12-530- Predictors of mortality in a cohort of hospitalized patients treated for tuberculosis in Rwanda

Leopold Bitunguhari (Rwanda)

PS12-531- Epidemiological profile of tuberculosis mortality in Southern Brazil
Simoni Pimenta Oliveira (Brazil)

PS12-532- Evaluation of tuberculosis patients who died during 2010-2015 in Samsun Province, Turkey

25 Seref Ozkara (Turkey)

#### **Scientific Programme**

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

Poster Area

#### **PS14** Away from home: tuberculosis in migrants

Atlantic 1

Chairperson: George Giovinazzo (Canada)

PS14-544- Association between prior incarceration and tuberculosis in Lima, Peru
Meredith Blair Brooks (United States of America)

PS14-545- Cross-border tuberculosis patient referral from Japan to the Philippines, 2009-2018

25 Akihiro Ohkado (Japan)

PS14-546- Tuberculosis among internally displaced persons in North-Eastern Nigeria

Stephan John (Nigeria)

PS14-547- Syrian refugees in Jordan: TB control for displaced vulnerable populations, 2012-2017

25 Md Saiful Qayyum (Jordan)

PS14-548- Innovative approaches to identifying migrant mineworkers with TB: experience from a pilot

25 program

Laura Tomm-Bonde (Mozambique)

PS14-549- Engaging adolescent girls to increase the uptake of TB screening services among females

25 Kiran Sohail Azeemi (Pakistan)

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

Poster Area

#### PS15 "On the job" and tuberculosis

Atlantic 1

Chairperson: Delia Goletti (Italy)

PS15-551- Intensifying TB screening among healthcare workers: lessons learnt from Mozambique

25 Alejandro Soto (Mozambique)

PS15-552- Barriers and solutions to TB and HIV care: lessons from current and past Mozambican

25 mineworkers

Linda Manjate (Mozambique)

PS15-553- Workers' compensation for occupational tuberculosis in health workers in South Africa: a

25 survey and qualitative study

Rodney Ehrlich (South Africa)

PS15-554- Targeted Intervention amongst truckers: key achievements and learning to strengthen TB

prevention and care in mobile populations

Vivek Lal (India)

PS15-555- Recent epidemiological trend of TB and LTBI among health care workers in Japan

25 Lisa Kawatsu (Japan)

PS15-556- Targeted interventions led to improvements in TB case finding among selected mining

workers in six high-priority districts in Ethiopia

Solomon Negash (Ethiopia)

PS15-557- 25	Systematic TB screening in communities of mineworkers: lessons from a regional intervention in Southern Africa  Sameer Sah (United Kingdom)
PS15-558- 25	TB outreach screening at Karatina Town bus stage, Nyeri County, Kenya Stephen Kamau (Kenya)
PS15-559- 25	How workplaces can address TB care and prevention for workers: a field report from Bihar Anupama Srinivasan (India)
PS15-560- 25	Tuberculosis control in the garment industries through partnership programme: achievements and challenges in Bangladesh perspective Sardar Munim Ibna Mohsin (Bangladesh)
PS15-561- 25	Mineworkers on the move: implications for TB control in Zambia David Mwakanzaga (Zambia)

Community space: panel discussion 13:15 - 14:15

De Ontmoeting 1 (Community space)

## What is the pathway to developing more effective collaboration between civil society and academia in applied health research?

There is an urgent need for applied health research exploring how to use existing and new tools to maximise the impact of TB prevention and care programmes. This research needs to build expertise in how to most effectively reach affected communities and support individual patients. NGOs and other civil society actors can play a critical role in applied research, as they bring a deep understanding of affected communities, along with the trust of and access to those communities. This session aims to explore the roles that civil society can play in academia-led applied health research, provide examples of effective collaboration and discuss barriers that can hinder civil society's involvement. Through presentations and a forum for open discussion (agenda below), this session aims to identify pathways towards more effective collaboration in applied heath research. Session coordinated by 'UK Academics and Professionals to End TB' (www.ukaptb.org) and TB Alert (www.tbalert.org).

- 1. Why is applied health research critical to the fight against TB, and why must civil society and academia partner to deliver this effectively? (Professor Tony Harries, The Union)
- 2. What are examples of good practice for civil society involvement in applied health research projects, and how can these principles be applied more broadly in research? (Dr Irene Ayakaka, Makerere University, Uganda; Dr Musonda Simwinga, Zambart, Zambia; Dr Bakhtiyar Babamuradov, Project HOPE, Kazakhstan)
- 3. How can TB services fail patients, and how can the engagement of TB-affected persons in applied health research help overcome this? (Louie Zepeda-Teng, ACT Asia Pacific, TDF (Tropical Disease Foundation) Philippines)
- 4. What challenges face civil society interested in working in applied health research? (Sameer Sah, TB Alert, UK)
- 5. Open panel discussion: What is the path forward for developing more effective collaboration between civil society and academia in applied health research?

Coordinator: Rebecca Harris (United Kingdom) Coordinator: Mike Mandelbaum (United Kingdom) Chairperson: Bertie Squire (United Kingdom)

What is the pathway to developing more effective collaboration between 13:15 - 13:25 civil society and academia in applied health research?

Anthony D Harries (United Kingdom)

What is the pathway to developing more effective collaboration between 13:25 - 13:35 civil society and academia in applied health research?

Irene Ayakaka (Uganda)

What is the pathway to developing more effective collaboration between civil society and academia in applied health research?	13:35 - 13:45
Musonda Simwinga (Zambia)	
What is the pathway to developing more effective collaboration between civil society and academia in applied health research?	13:45 - 13:55
Bakhtiyar Babamuradov (Kazakhstan)	
What is the pathway to developing more effective collaboration between civil society and academia in applied health research?	13:55 - 14:05
Sameer Sah (United Kingdom)	
How can TB services fail patients, and how can the engagement of TB-affected persons in applied health research help overcome this?	14:05 - 14:15

Community space: networking activity 13:15 - 14:45

De Ontmoeting 2 (Community space)

#### Strengthening advocacy worldwide through cross-cultural inspiration

How to engage politicians for the sustainable development goals? How to deal with populist politics? And how to show the added value of civil society engagement? These are some of the current day challenges that advocates are confronted with. A multi-cultural perspective and cross-fertilization between local, national and global advocacy aims to bring advocates together and share experiences to inspire reinforced advocacy as TB advocates need to take country level resource mobilization for TB and health post UN HLM on TB to the next level. In this community space session the Public Affairs-Academy (hosted by Van Oort) and with the collaboration of its partner NGOs (including KNCV Tuberculosis Foundation) seek to bring together NGOs to find answers to the political questions of our time. Through inspiration, sharing best practices and ways networking, we strive to strengthen civil society advocacy throughout the world. Program lay-out:

□•Introduction by Clingendael (think-tank on global affairs) on challenges to civil society advocacy. Speaker to be announced.

•Presentation of specific practices by the Global TB Caucus (in parliamentary advocacy) and KNCV Tuberculosis Foundation (in TB advocacy at GF or global health advocacy in the Netherlands). By Matt Oliver (Global TB Caucus Secretariat) and Beatrijs Stikkers (Advisor Public Affairs, KNCV). Speakers to be confirmed.

□•Plenary discussion on the prerequisites and new modalities for successful advocacy, led by the PA-academy (Dutch platform on public affairs development). By Frans Weerkamp (trainer PA-academy).

To broaden up the discussion and to learn from other fields and backgrounds, NGOs, lobbyists and advocates from all over the world and from different fields of expertise are invited.

Chairperson: Frans Weerkamp (Netherlands)

Tech Innovation Zone 13:15 - 13:45

Tech Innovation Zone - Exhibition Area

#### **Presentations @Tech Innovation Zone**

Qure.ai 13:15 - 13:30

emocha Mobile Health Inc.

#### **Scientific Programme**

	emocha Mobile neath inc.	13.30 - 13.43
Oral Abstract 14:00 - 15:30		KWA Plenary Hall
OA03 Clin	ical investigation for tuberculosis	
	Andrew Nunn (United Kingdom) Faiz Ahmad Khan (Canada)	
OA03-213- 25	Sustained high rate of successful treatment outcomes: interim results of 75 patients in the Nix-TB clinical study of pretomanid, bedaquiline and linezolid  Francesca Conradie (South Africa)	14:00 - 14:11
OA03-214- 25	Double-blinded randomized controlled trial of double or triple dose oral rifampicin for tuberculous meningitis  Sofiati Dian (Indonesia)	14:11 - 14:22
OA03-215- 25	Meta-analysis of rifampicin exposure and mortality in three Phase II tuberculosis meningitis trials Elin M Svensson (Netherlands)	14:22 - 14:33
OA03-216- 25	Prevalence of baseline versus acquired pyrazinamide resistance during MDR treatment Gabriela Torrea (Belgium)	14:33 - 14:44
OA03-217- 25	A randomized controlled clinical trial of Diammonium Glycyrrhizinate Enteric-coated Capsule for the prevention of antituberculosis drug- induced liver injury Lu Xia (China)	14:44 - 14:55
OA03-218- 25	Risk of relapse after 9-month regimen for multidrug-resistant tuberculosis in francophone Africa Valérie Schwoebel (France)	14:55 - 15:06
OA03-219- 25	Bedaquiline for multidrugresistant TB, including extensively or pre- extensively drug-resistant pulmonary Mycobacterium tuberculosis, in adolescent patients Ronelle Moodliar (South Africa)	15:06 - 15:17
OA03-220- 25	Sub-therapeutic rifampicin concentration is associated with unfavourable treatment outcomes in pulmonary tuberculosis patients on thrice weekly regimens in India  Geetha Ramachandran (India)	15:17 - 15:28

Oral Abstract session (OA) 14:00 - 15:30

Europe

13:30 - 13:45

#### **OA04** Anti-tuberculosis treatment in patients with comorbidities

Chairperson: Joan-Pau Millet (Spain) Chairperson: Ralf Otto-Knapp (Germany)

OA04-221- 25	Toxicity of TB treatment in HIV-positive patients and treatment outcome: a case-control study	14:00 - 14:11
	Conor Tweed (United Kingdom)	
OA04-222- 25	Effects of rifampicin dose increase and co-administration of efavirenz- based antiretroviral therapy on rifampicin pharmacokinetics in HIV- tuberculosis co-infected patients: ANRS 12292 Rifavirenz trial Maryline Bonnet (France)	14:11 - 14:22
OA04-223- 25	Linezolid pharmacokinetics in South African patients with drug-resistant tuberculosis and high rates of HIV co-infection	14:22 - 14:33
	Sean Wasserman (South Africa)	
OA04-224- 25	Hepatitis C and drug-resistant tuberculosis co-morbidities: no longer an untreatable combination	14:33 - 14:44
	Ohanna Kirakosyan (Armenia)	
OA04-225- 25	Rifampicin alters metformin plasma exposure but not blood glucose levels in diabetic tuberculosis patients	14:44 - 14:55
	Lindsey te Brake (Netherlands)	
OA04-226- 25	The impact of glycaemic control on tuberculosis treatment outcomes Fiona Pearson (United Kingdom)	14:55 - 15:06
OA04-227- 25	The effect of intensified clinical monitoring on glycemic control in patients with combined diabetes and tuberculosis in Indonesia: a randomized trial	15:06 - 15:17
	Raspati Koesoemadinata (Indonesia)	

Symposium (SP) 14:00 - 15:30

Antartica

# SP09 Towards optimisation of Xpert networks: sharing tools, approaches and experiences

Optimal coverage, functioning and utilisation of Xpert networks are critical for providing timely access to rapid and accurate diagnosis. To close the detection gap, the scale up and refinement of Xpert networks require careful planning and strategic approaches to the placement of instruments, taking into account accessibility for patients and of samples, availability of sufficient testing capacity, effective use of instrument capacity, rational sample transportation networks and rapid result return capability. This session will review lessons learned and effective approaches for the establishment and optimisation of efficient Xpert networks for improved diagnostic and treatment services.

Chairperson: Heather Alexander (United States of America)

Chairperson: Martina Casenghi (Switzerland)

Xpert MTB/RIF as the primary test for all presumptive TB patients: improved service utilisation and case finding in four regions of Ethiopia

Ephrem Tolossa (Ethiopia)

Mapping and analysis of a country laboratory network to strengthen the national TB control programme

Stella Van Beers (Netherlands)

Data-driven approaches to optimising the Xpert network in Uganda

Deus Lukoye (Uganda)

Xpert expansion in Nigeria: a lesson in strategic partnerships

Bassey Nsa (Nigeria)

Evolution of South Africa's Xpert MTB/RIF programme: Xpert Ultra and the multi-disease diagnostic landscape

M. Pedro da Silva (South Africa)

Discussion

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

Oceania

#### SOA05 Integrating support across the tuberculosis care cascade

Chairperson: Fernando Sanches (Brazil) Chairperson: Enos Masini (Kenya) SOA05-104 Understanding reasons for delays in treatment start in Papua New 14:00 - 14:07 Guinea through qualitative research 2-25 Giulietta Luul Balestra (France) SOA05-104 Institutionalization of community-based treatment supporters in 14:07 - 14:14 3-25 Kyrgyzstan improves TB treatment adherence and provides more patientcentred care Dasha Migunov (United States of America) SOA05-104 Evaluating therapeutic food support and tuberculosis treatment 14:14 - 14:21 outcomes in Kenya: a historical cohort study 4-25 Eunice Mailu (Kenya) SOA05-104 Application of nursing assessment and management job aid on patients 14:21 - 14:28 5-25 side effects in MDR-TB treatment in China Aimin Guo (China) SOA05-104 Beyond routine treatment: person-centric home-based care and support 14:28 - 14:35 for people with drug-resistant TB 6-25 Vivek Lal (India) SOA05-104 Comprehensive patient support as part of the programmatic 14:35 - 14:42 7-25 implementation of new drugs and regimens in Kyrgyz Republic Muratbek Ahmatov (Kyrgyz Republic) SOA05-104 Implementing a comprehensive patient support system for drug-resistant 14:42 - 14:49 8-25 TB patients diagnosed in the private sector in Mumbai, India Ravdeep Gandhi (Indonesia) 14:49 - 14:56 SOA05-104 Strengthening the patient-centred care of economically stricken patients 9-25 through financial support in-order to accelerate all TB case finding: a **BRAC** experience Sardar Munim Ibna Mohsin (Bangladesh) SOA05-105 Building and protecting mutual trust between TB patients and their 14:56 - 15:03

providers to promote adherence and retention in care: a qualitative

Stephanie Law (Canada)

0-25

SOA05-105 1-25	A supportive care package for drug-resistant tuberculosis reduces loss to follow-up in Yichang City, China Xiaojun Liu (China)	15:03 - 15:10
SOA05-105 2-25	Interventions to improve retention in care among patients with drug- resistant tuberculosis: a systematic review Stephanie Law (Canada)	15:10 - 15:17
SOA05-105 3-25	Finding the missing cases of TB in Kenya: translating knowledge to action  Drusilla Nyangahu (Kenya)	15:17 - 15:24

Oral Abstract session (OA) 14:00 - 15:30

00 - 15:30 North America

# OA05 Epidemiology of tobacco use and effects and some quick facts behind tobacco farming

Chairperson: Pranay Lal (India) Chairperson: Myra Wisotzky (United States of America)		
OA05-228- 25	Impact of environmental tobacco smoke on wheezing disorders and early childhood caries among children aged 30-60 months  Rekha Shenoy (India)	14:00 - 14:11
OA05-229- 25	Use of smokeless tobacco by low socio-economic populations and risk factors associated with it Md Shahjahan (Bangladesh)	14:11 - 14:22
OA05-230- 25	Prevalence of precancerous lesions and conditions amongst Indian tobacco users: systematic review and meta-analysis Sahana Shetiya (India)	14:22 - 14:33
OA05-231- 25	Preventing cancers through mobile phones—a potential medium for delivering tobacco cessation intervention for college students: a randomised control trail	14:33 - 14:44
OA05-232- 25	Why do farmers cultivate tobacco? A case study from Sri Lanka Andibuduge Ishara Buddhika (Sri Lanka)	14:44 - 14:55
OA05-234- 25	Factors influencing farmers turning into tobacco cultivation in the Khulna division of Bangladesh	15:06 - 15:17
OA05-235- 25	Using green supply chain management to overshadow environmental and health costs of tobacco farming by the tobacco industry: a case study of Sri Lanka	15:17 - 15:28

Pestheruweliyanaralalage Shehara Obin Simoni Cooray (Sri Lanka)

#### **Scientific Programme**

Symposium (SP) 14:00 - 15:30

Central America

### SP10 Pharmacokinetics and pharmacodynamics (PK/PD) based dosing for children with tuberculosis

Of the one million children impacted by TB worldwide each year, >30,000 develop MDR-TB. Although the regimens and treatment doses used for childhood TB are directly copied from those used in adults, the nature of the TB disease and drug metabolism in children is vastly different. This session will focus on a deeper understanding of these differences, particularly, in disease presentation, pathology and drug metabolism and the importance of considering each of these when designing new anti-tuberculosis regimens specifically for children.

Chairperson: Tania Thomas (United States of America) Chairperson: Anthony Garcia-Prats (South Africa)

Pharmacokinetics and pharmacodynamics in designing clinical trials in children Anthony Garcia-Prats (South Africa)

Pharmacokinetics of first-line anti-tuberculosis drugs in children from rural Tanzania Tania Thomas (United States of America)

Ensuring children benefit from scientific progress: the paediatric tuberculosis pipeline report

Lindsay Mckenna (United States of America)

Safe and repurposed drugs for the treatment of drug-resistant tuberculosis in children Devyani Deshpande (United States of America)

Discussion

Symposium (SP) 14:00 - 15:30

South America

### SP11 Global Laboratory Initiative (GLI) tuberculosis diagnostic connectivity symposium

Tuberculosis (TB) diagnostic connectivity solutions can advance the linkage between the laboratory and clinical approaches to patients. The different types of information provided by these connectivity solutions in real-time provide an unprecedented opportunity to facilitate treatment and patient management efforts, and in turn, improve health systems and strengthen efforts to end TB.

In this symposium, a global overview of connectivity solutions, country case studies, capacity building and future perspectives are presented. Lessons learned from different settings are used to illustrate how connectivity solutions are contributing towards strengthening in-country diagnostic capacity and providing field practitioners with comprehensive, real-time information for decision-making.

Chairperson: Kaiser Shen (United States of America) Chairperson: Kristian van Kalmthout (Netherlands)

Global perspectives on the implementation of diagnostic connectivity solutions: best practices and learning experiences from the field

Kristian van Kalmthout (Netherlands)

Linking diagnostic data to patient care, a success story from Kenya Jeremiah Ogoro (Kenya)

**Building capacity for practical and applicable use of connectivity** Si Thu Aung (Myanmar)

#### **Scientific Programme**

Harnessing systems integration: multi-device connectivity in Mozambique

Jamie Cowan (United States of America)

Interpreting the meaning of diagnostic data: the TB Data Fellowship Programme

Alaine Umubyeyi Nyaruhirira (South Africa)

**Discussion** 

Symposium (SP) 14:00 - 15:30

Mississippi

#### SP12 Pathways to ensure impact of innovations

Technological innovations and corresponding policies to accelerate TB elimination are becoming increasingly available; however, innovations can fully realise their potential only if the majority of poor and vulnerable people worldwide have access to them. The fifth "Global Priority Indicator" target for monitoring implementation of the End TB Strategy is >90% uptake of new diagnostics and drugs.

This symposium aims to inform participants how to identify different types of innovations with common pathways and timelines to scale-up the role of modelling in accelerating uptake, and funding mechanisms for the introduction, scale-up and sustainability of innovations from over a decade of TB-related innovations.

Chairperson: Kitty van Weezenbeek (Netherlands) Chairperson: YaDiul Mukadi (United States of America)

Innovation for tuberculosis elimination: pathways from introduction to nationwide access—a multi-country analysis

Agnes Gebhard (Netherlands)

Innovation for tuberculosis elimination: getting started through non-governmental organisations and flexible funders

Mustapha Gidado (Nigeria)

Modelling and mainstreaming of innovations

Viet Nhung Nguyen (Viet Nam)

Funding for innovation scale-up: daring donors and pre-loading scale-up and risk management

Mohammed Yassin (Switzerland)

Innovation for tuberculosis elimination: local funding for scale-up and continued innovation

**Discussion** 

Symposium (SP) 14:00 - 15:30

Amazon

#### SP13 EU—collaborative TB-HIV activities in the WHO European Region

In the WHO European Region 26,000 cases are diagnosed annually with TB and HIV co-infection. Collaborative TB-HIV activities, a key component of the WHO End TB Strategy, are therefore needed to reduce the TB-HIV burden. The level of collaboration between TB and HIV was established and best models of integrated care identified within the framework of the Wolfheze workshops. This symposium reviews the current epidemiological situation regarding co-infection, presents the results of a survey conducted by the Wolfheze Working Group on TB-HIV collaborative activities, presents the patient perspective and describes two country experiences.

Chairperson: Michael Kimerling (Netherlands) Chairperson: Daria Podlekareva (Denmark)

The current situation of TB-HIV in the WHO European Region

Martin Van Den Bum (Denmark)

Results from two surveys on TB-HIV collaborative activities in the WHO European Region Gerard de Vries (Netherlands)

The social support for tuberculosis patients is key to treatment adherence

Roza Idrissova (Kazakhstan)

Use of bedaquiline to treat drug-resistant TB-HIV co-infected individuals in Ukraine Olga Pavlova (Ukraine)

Assessing the feasibility, acceptability and outcomes of implementing routine LTBI testing for patients with HIV: insights from the UK  $\,$ 

Manish Pareek (United Kingdom)

Discussion

Symposium (SP) 14:00 - 15:30

Yangtze 1

## SP14 National TB prevalence surveys: digital innovations and their applicability in routine TB control efforts

Lessons learnt about digital innovations from recently conducted national TB prevalence surveys will be shared and their applicability in routine TB control efforts discussed.

Chairperson: Nico Kalisvaart (Netherlands) Chairperson: Eveline Klinkenberg (Netherlands)

Namibia TB Prevalence Survey-digital innovations: CAD4TB and tracking participants (monitoring of field flows and household members)

Nunurai Ruswa (Namibia)

Mozambique TB Prevalence Survey-digital innovations: GXAlert, digital online applications for re-reading chest X-rays and Medical Panel Discussion

Eudson Bambo (Mozambique)

Swaziland TB Prevalence Survey-digital innovations: integrated laboratory (Digital imaging South Africa) system

Tafuma Zanamwe (Swaziland)

Application of digital innovations in routine surveillance: the example of the District Health Information System 2 case-based system introduced in Tanzania

Pamela Kisoka (Tanzania, United Rep.)

**How digital innovations from TB prevalence surveys can assist routine TB control** Eveline Klinkenberg (Netherlands)

Discussion

Symposium (SP) 14:00 - 15:30

Yangtze 2

# SP15 High-impact interventions for tuberculosis case finding: global updates and successful country examples

Finding missing people with TB is a global priority. However, the best combination of interventions likely to improve case finding is a topic of heated debate worldwide. The search for high-impact interventions continues to dominate both local and international priority agendas. Two often difficult to reconcile goals are how to cut TB transmission in the community while simultaneously improving case finding. In this symposium, we will:

- 1) discuss high-impact interventions for TB case finding in high-burden settings
- 2) identify high-impact interventions appropriate to the level of disease burden

Chairperson: Pedro Suarez (United States of America)

Chairperson: Yared Kebede Haile (Ethiopia)

The experience of implementing high-priority case-finding strategies in Ethiopia

What is the place of new technologies in finding missing people with tuberculosis? Alaine Umubyeyi Nyaruhirira (South Africa)

Targeting urban slums for finding missing people with tuberculosis in Kabul, Afghanistan Ghulam Qader (Afghanistan)

Wide-scale use of cartridge based nucleic acid amplification tests in Mumbai City, India, contributed to an eight-fold increase in case notifications from the private sector

**Discussion** 

Oral Abstract session (OA)

14:00 - 15:30 Kilimanjaro 1&2

#### OA06 Multidrug-resistant tuberculosis: pearls and wisdom

Chairperson: Vivian Cox (South Africa)

Chairperson: Robert Horsburgh Jr. (United States of America)

OA06-236- Treatment outcomes of delamanid-containing regimens for multidrug-25 resistant tuberculosis in Japan 14:00 - 14:11

Nobuyuki Kobayashi (Japan)

OA06-237- Comparing early treatment outcomes in patients on bedaquiline-based 14:11 - 14:22

25 regimens vs. conventional multidrug-resistant tuberculosis regimens at

regimens vs. conventional multidrug-resistant tuberculosis regimens at primary health care facilities in Cape Town, South Africa

Dawood da Costa (South Africa)

OA06-238- 25	Extension of bedaquiline and delamanid combination beyond 24 weeks for MDR-TB treatment Gabriella Ferlazzo (South Africa)	14:22 - 14:33
OA06-239- 25	Exploring the barriers to and facilitators of enrolment for free DR-TB treatment in Nigeria using the access concept Ogoamaka Chukwuogo (Nigeria)	14:33 - 14:44
OA06-240- 25	Community-based approach to reduce initial loss to follow-up for DR TB in Nelson Mandela Bay Metro, Eastern Cape Province  Thendo Ramaliba (South Africa)	14:44 - 14:55
OA06-241- 25	Contribution of the spectinamide 1810 to the standard and new drug regimens in a murine relapse model of tuberculosis Gregory Robertson (United States of America)	14:55 - 15:06
OA06-242- 25	Adverse events during treatment of multidrug-resistant tuberculosis in Viet Nam: a cohort event monitoring study  Dinh Hoa Vu (Viet Nam)	15:06 - 15:17
OA06-243- 25	Shorter regimen for multidrug-resistant tuberculosis patients in Mozambique  Mathieu Bastard (Switzerland)	15:17 - 15:28

Symposium (SP) 14:00 - 15:30

Everest 1&2

# SP16 The Strategic Initiative to Find the Missing People with TB: unprecedented efforts to detect and notify additional 1.5 million people with TB in 13 countries

In 2016, of 10.4 million people who fell ill with TB, 6.3 million were reported as receiving treatment and 4.1 people were missed by routine health services. The Strategic Initiative to find the Missing People with TB is supported by Global Fund's Catalytic Investments and implemented by 13 countries with support from Stop TB Partnership and the WHO in collaboration with partners. Supporting case detection interventions are based on the principle of following people in their health-seeking efforts. The symposium showcases different case detection approaches in select countries, experiences and interim results.

Chairperson: Eliud Wandwalo (Switzerland)

Chairperson: Virginia Nagy (United States of America)

Implementing the Strategic Initiative: how Stop TB Partnership and the WHO provide technical support to countries in finding their missing people with TB

Jacob Creswell (Switzerland)

Accelerating and expanding successful TB case detection and case holding in India: premising interventions on a patient-centric and rights-based fundament

Kuldeep Singh Sachdeva (India)

'Know your epidemic, key populations and hotspots': ensuring a people-centred approach to improve TB case detection and notification in South Africa

Lerole David Mametja (South Africa)

Successfully engaging general practitioners, private hospitals and clinics for improved TB case detection: how IRD Global contributes to Pakistan's impressive gains

Aamir Khan (Pakistan)

Finding the missing people with TB in Kenya: innovative interventions from civil society organisations as local solutions for underserved and key population groups

Ulo Benson (Kenya)

Discussion

Symposium (SP) 14:00 - 15:30

Atlantic

## SP17 Preclinical models for tuberculosis drug development and testing—what can be predicted?

Treatment of TB needs shortening by implementing more potent drugs and regimens. In order to achieve this ambitious goal, we need to have preclinical tools that are translational and predictive of clinical outcome. Both the PreDiCT-TB consortium and the Critical Path to TB Drug Regimens (CPTR) are intended to realise this goal. The five lecturers in this session are representatives of the different phases of preclinical drug development and represent both the PreDiCT-TB and CPTR initiatives. Symposium attendees will be granted a unique insight into the diversity of current state-of-the-art preclinical research and the future of TB drug development.

Chairperson: Jurriaan de Steenwinkel (Netherlands)

Chairperson: Koen Andries (Belgium)

New concepts and tools in the research of tuberculosis drug development research Stephen H. Gillespie (United Kingdom)

New techniques to increase through-put in screening

Wilbert Bitter (Netherlands)

The current landscape and new applications of mouse efficacy models for tuberculosis Anne J. Lenaerts (United States of America)

Pharmacometric models to assist decision-making in tuberculosis drug development Ulrika S.H. Simonsson (Sweden)

Doing drug development differently

Geraint Davies (United Kingdom)

Discussion

Community space: skills building 14:30 - 16:00

De Ontmoeting 1 (Community space)

#### Breaking down the barriers to TB/HIV care - tools and approaches addressing selfstigma and stigma in health care institutions

Stigma and discrimination are recognised as some of the most commonly identified barriers to fight the TB epidemic[1]. Jaramillo, et al (2017) stated that "Reducing TB stigma is essential because it hinders care seeking, contact tracing, outbreak investigations, treatment initiation, adherence and quality of care. Moreover it degrades social capital, may contribute to catastrophic costs, and deprives people with TB of their rights and the respect of others."[2]

KNCV Tuberculosis Foundation and The Work for Change have developed two new TB stigma reduction packages and piloted them in collaboration with AFEW in Health Care Facilities providing TB and TB-HIV care in Almaty, Kazakhstan. The first package, 'From the Inside Out - Dealing with TB related self-stigma and shame', focusses on persons affected by TB, while the second, 'The Allies Approach - Tuberculosis stigma reduction for health care institutions', is addressing tuberculosis stigma in health care workers and facilities. This package is called 'the Allies Approach' because it seeks to foster a dynamic mutually-supportive alliance between patients and providers.

In this session we are sharing our experiences of implementing both tools in Kazakhstan and provide an opportunity of experiencing the tools and a selection of sessions first-hand.

The tools were developed to be easily accessible, adaptable and flexible to fit a multitude of environments and audiences. The training session are divided into short (30 min) interactive modules.

[1]Coleman CH, Jaramillo E, Reis A, Selgelid M, Organization. WH. Guidance on ethics of tuberculosis prevention, care and control. 2010;38.

[2]Jaramillo E, Savinand S, Van Weezenbeek C.: End Stigma and discrimination. Int J TB Lung Dis [Internet]. 2017;21(TB Stigma Supplement). Available at:http://www.ingentaconnect.com/contentone/iuatld/ijtld/2017/00000021/a00111s1/art00002;jsessionid=1fg17aea9yr61.x-ic-live-02#

Chairperson: Kathy Fiekert (Netherlands) Chairperson: Ieva Leimane (Netherlands) Coordinator: Nadine Ferris France (Ireland) Coordinator: Anke Van Dam (Netherlands)

Welcome and Introduction to TB stigma - "a recipe for stigma" exercise Kathy Fiekert (Netherlands) Sarah van de Berg (Netherlands)	14:30 - 14:40
From the inside out - self-stigma reduction exercise Nadine Ferris France (Ireland) Ian Hodgson (Ireland)	14:40 - 15:00
Allies Approach - Health facility stigma reduction exercise leva Leimane (Netherlands) Maria Idrissova (Netherlands)	15:00 - 15:20
Experience sharing and Q&A - Using Photovoices, From the inside out and the Allies approach in Kazakhstan Netty Kamp (Netherlands)	15:20 - 16:00

#### **Scientific Programme**

Community space: panel discussion 15:00 - 16:00

De Ontmoeting 2 (Community space)

### Pilot phase is ended! - Shift from silo applications to system approach for better health to end TB in India

Countries like India continue to face proliferation of uncoordinated digital health projects. To achieve universal health coverage through digital tools, monitoring of different objectives, quality care, coverage, investments and development of local ICT should be essential. Availability of necessary network and infrastructure is essential for digital health ecosystem. Demand driven platforms should be developed in form of design process from strategy to comprehensive digital platform. Initiative to be taken on identification, supporting pilots and impactful innovations in low resource settings. Digital health atlas should be available which can have evidence based recommendations. Box approach adopted causes duplication and re-innovations. Non- coordinated investments are made for technology based solutions. Through digital transformation, solution mind-set should be converted to system approach. This will include digital information structure, system integration and interoperability. Plethora of EMR, HMIS, LMIS developed. A shift from silo application to system approach is required.

- $\cdot$  Strategic tool should be developed so that information communication technology bring change and is not used as gadget.
- Digital system to follow certain protocol. Social innovations should be unique and digital tools get to be used as default.
- $\cdot$  Collective approach should be done between donor & implementers, common architecture & coordinating investments.
- · Best practices from other sectors like commerce & bank should also be looked into.

There should be coordinated care of digital pathways with patient centred model. This should include financing, service delivery & quality services. There should be multi-sectoral, multidisciplinary, collaboration under National digital strategy. Certain protocol and regulations are needed for data privacy and data management is equally important for patient security information. Healthcare industry is lagging in cybersecurity. The participatory activity in form of fish bowl discussion will describe the current and potential ways to develop effective National level digital strategy and data security system.

Chairperson: Archana Trivedi (India) Chairperson: Bharathi Ghanshyam (India)

Pilot phase is ended! - Shift from silo applications to system approach for better health to end TB in India

Archana Trivedi (India)

#### **Scientific Programme**

Side Meeting (MTG) 15:30 - 21:00

A1 - Marriott

#### **TB Nursing Care around the World**

- 15.30 Registration, with coffee/tea & Dutch biscuits
- 15.45 15.50 Welcome Niesje Jansen, KNCV Tuberculosis Foundation
- 15.50 16.10 '99DOTs has supported over 20,000 patients! Find out how.' Prakash Sonawane, India
- 16.15 16.35 'A nursing perspective on active case finding' Mareta Hauma, Republic of the Marshall Islands
- 16.40 17.00 'My fight against TB. A journey with nurses.' Deepti Chavan, India
- 17.00 17.15 Coffee & tea break
- 17.15 17.35 'Dignity integral in patient care?' Carmen Lopez, Canada
- 17.40 18.00 'Activities to support TB successes!' Jojo Moyo, Zambia
- 18.05 18.25 'All in one care' Niesje Jansen, The Netherlands
- 18.30 18.45 'The future is knowledge sharing.' Linette Mc-Elroy, Chair of the NAPS, Canada
- 18.45 21.00 'Caring & sharing' Closed network meeting for nurses

Chairperson: Carrie Tudor (Switzerland) Chairperson: Alies de With (Netherlands)

Tech Innovation Zone 15:30 - 16:00

Tech Innovation Zone - Exhibition Area

#### **Presentations @Tech Innovation Zone**

Presentation of the DataToCare software - a connectivity solution for laboratory network -

15:30 - 15:45

Julie Vanvolsem Olajumoke Arinola

#### **Artificially Intelligent Point-of-Care TB Screener**

15:45 - 16:00

Yunju Ra

#### **Scientific Programme**

Symposium (SP) 16:00 - 17:30

KWA Plenary Hall

## SP18 Eliminating catastrophic costs due to TB: policy translation of findings from TB patient cost surveys

The WHO's End TB Strategy places great emphasis on ensuring universal access to quality TB care and enhancing social protection in accordance with the 2020 target of ensuring that "no TB-affected family faces catastrophic cost due to TB".

To monitor progress towards this milestone, the WHO recommends baseline and periodic measurement of TB patient costs through national surveys. These surveys can inform efforts and discussions on how TB service delivery and financing mechanisms can be improved.

This symposium will present country experiences in disseminating findings from TB patient cost surveys, engaging key stakeholders and informing national policies and actions to eliminate catastrophic TB patient costs.

Chairperson: Diana Weil (Switzerland) Chairperson: Viet Nhung Nguyen (Viet Nam)

TB patient cost surveys: translating findings into policy and actions to eliminate catastrophic TB patient costs

Nobu Nishikiori (Switzerland)

Multi-sector actions to address catastrophic patient costs due to tuberculosis in Kenya Enos Masini (Kenya)

Ghana's first national TB patient cost survey: national stakeholder consultation for the dissemination of survey findings, policy dialogue and action planning

Frank Bonsu (Ghana)

Results and policy implications of the tuberculosis patient cost survey in Mongolia

**Discussion** 

Symposium (SP) 16:00 - 17:30

Europe

## SP19 Reaching all of those in need by extending active tuberculosis case finding in the community

There is an urgent need to provide TB services to all people who are in need in the community. The aim of the symposium is to present up to date research findings from recent reviews, ongoing research studies and the implementation of active TB case finding initiatives designed to find TB missing cases and reduce the TB burden.

Participants will be able to learn about updates on research findings and exchange ideas on innovative approaches to active case finding to improve case detection and reduce the TB burden.

Chairperson: Guy B. Marks (Australia) Chairperson: Linh Nguyen (Switzerland)

Active case finding approaches supported by TB REACH: the good, the bad and the ugly Jacob Creswell (Switzerland)

Cluster randomised controlled trials (RCTs) of active case finding for TB in Viet Nam Guy B. Marks (Australia)

**TREATS:** evaluating the impact of universal testing and treatment for HIV and TB together Helen Ayles (Zambia)

IMPACT-TB: building sustainable strategies for active tuberculosis case finding in Asia Maxine Caws (Nepal)

From evidence to action for elimination—understanding the context when developing and implementing active TB case-finding policies

Olivia Biermann (Sweden)

**Discussion** 

Oral Abstract session (OA) 16:00 - 17:30

Antartica

#### **OA07 Highlights from the laboratory**

predict treatment response

Asif Mohmmed (India)

Chairperson: Kathleen England (Switzerland) Chairperson: Jean Claude Semuto Ngabonziza (Rwanda) OA07-244- Routine performance and clinical significance of Xpert MTB/RIF in 16:00 - 16:11 tuberculous meningitis: a prospective cohort study from Indonesia 25 Reinout van Crevel (Netherlands) OA07-245-Diagnostic yields of the urine LF-LAM and sputum Xpert MTB/RIF assays 16:11 - 16:22 for the detection of TB among adult out-patients newly diagnosed with **HIV in Cameroon** Alix Leclerc Mtack Ngouanom (Cameroon) OA07-246- Molecular characterization of mutations associated with resistance to 16:22 - 16:33 second-line tuberculosis drugs among rifampicin-resistant tuberculosis 25 patients in Mongolia, 2016 Tumenbayar Oyuntuya (Mongolia) OA07-247- Redefining MDR-TB: comparison of M. tuberculosis clinical isolates from 16:33 - 16:44 Russia and Taiwan Ruwen Jou (Taiwan) OA07-248-Diagnostic performance of a five-marker predictive model for differential 16:44 - 16:55 25 diagnosis between intestinal tuberculosis and Crohn's disease Feng Wang (China) OA07-249- Experience of new algorithm for TB diagnosis in BRAC implementing 16:55 - 17:06 area: screening by X-ray and confirmed by GeneXpert Sardar Munim Ibna Mohsin (Bangladesh) OA07-250- A study of variability in minimum inhibitory concentrations of 17:06 - 17:17 Mycobacterium tuberculosis isolates against first-line anti-tuberculosis drugs in global settings with differing rates of drug-resistant tuberculosis Derek Sloan (United Kingdom) OA07-251- miRNAs as molecular tool for diagnosis of pulmonary tuberculosis and to 17:17 - 17:28

Short Oral Abstract session (SOA)

16:00 - 17:30 Oceania **SOA06 Tuberculosis infection: critical advances** Chairperson: Anete Trajman (Brazil) Chairperson: Julio Croda (Brazil) SOA06-105 Isoniazid preventive treatment is effective in children and adolescents 16:00 - 16:07 aged 5-19 years in impoverished Peruvian desert shantytowns 4-25 Matthew | Saunders (United Kingdom) SOA06-105 Prevalence of latent tuberculosis infection among household and non-16:07 - 16:14 household social contacts of tuberculosis cases and their matched 5-25 controls in an urban African setting Robert Kakaire (United States of America) SOA06-105 Does movement between treatment centres impact on treatment 16:14 - 16:21 6-25 completion rates for asylum seekers with latent TB infection? Anna Schwappach (United Kingdom) SOA06-105 Adverse events in adults treated for LTBI with daily rifampin or isoniazid: 16:21 - 16:28 combined results of phase 2 and phase 3 randomized controlled trials 7-25 Jonathon Robert Campbell (Canada) SOA06-105 TST results and confirmation by IGRA are highly dependent on the 16:28 - 16:35 8-25 purified protein derivative used Christiaan Mulder (Netherlands) SOA06-105 Prevalence of latent TB infection in five year old children in Ca Mau, Viet 16:35 - 16:42 9-25 Nguyen Thu Anh (Viet Nam) SOA06-106 Latent tuberculosis infection: animated into action. Developing novel 16:42 - 16:49 0-25 health promotion tools with migrant communities for a national screening programme Matthew Burman (United Kingdom) SOA06-106 Contact management of drug-susceptible TB patients in Landhi and 16:49 - 16:56 Korangi towns in Karachi, Pakistan 1-25 Maria Jaswal (Pakistan) SOA06-106 Yield of repeated tuberculosis screening among HIV patients: 16:56 - 17:03 2-25 implications for tuberculosis preventive therapy Tefera Agizew (Botswana) SOA06-106 Access to isoniazid preventive treatment of tuberculosis household 17:03 - 17:10 contact children in three Colombian cities 3-25 Dione Benjumea (Colombia)

Short Oral Abstract session (SOA) 16:00 - 17:30

North America

#### SOA07 From local to global in tuberculosis care and prevention

Chairperson: Ivan Solovic (Slovakia) Chairperson: Olivia Oxlade (Canada)

SOA07-106 5-25	Geographic variation in strains of the Mycobacterium tuberculosis complex and implications for tuberculosis epidemiology  Jennifer Ross (United States of America)	16:07 - 16:14
SOA07-106 6-25	Epidemiologic considerations in age-structured models of TB transmission Kathryn Snow (Australia)	16:14 - 16:21
SOA07-106 7-25	Differential risk of progression to tuberculosis disease in men and women: findings from 9 cohort studies involving 21033 individuals with tuberculosis infection	16:21 - 16:28
	Leonardo Martinez (United States of America)	
SOA07-106 8-25	Early clearance of Mycobacterium tuberculosis: the INFECT case contact cohort study in Indonesia  Ayesha Verrall (New Zealand)	16:28 - 16:35
SOA07-106 9-25	Finding gaps in TB notifications: spatial analysis of geographical patterns of TB notifications, associations with TB program efforts and social determinants of TB risk  Margo van Gurp (Netherlands)	16:35 - 16:42
SOA07-107 0-25	Pre-treatment lost to follow up tuberculosis patients at four health facilities, Chongwe district, Zambia, 2017: a retrospective cohort study Masitano Chilembo (Zambia)	16:42 - 16:49
SOA07-107 1-25	Combining active case finding approaches results in better yields in finding missing TB patients in Zimbabwe  Christopher Zishiri (Zimbabwe)	16:49 - 16:56
SOA07-107 2-25	Active case-finding for tuberculosis through community-based contact screening in Pakistan: yield and additionality  Mahboob UI Haq (Pakistan)	16:56 - 17:03
SOA07-107 3-25	Time to culture conversion, identifying independent modifiable risk factors in Indian patients	17:03 - 17:10
	Nikhil Gupte (United States of America)	
SOA07-107 4-25	Is distance associated with tuberculosis treatment outcomes? A retrospective study in the Kisugu and Wabigalo neighborhoods of Kampala, Uganda	17:10 - 17:17
	Katherine Robsky (United States of America)	
SOA07-107 5-25	Modelling the role of social distance in TB transmission: implications for interrupting transmission in communities	17:17 - 17:24
	Karyn Sutton (United States of America)	

Oral Abstract session (OA) 16:00 - 17:30

Central America

#### OA08 Has MPOWER empowered nations to tackle tobacco epidemic?

Chairperson: Mira Aghi (India) Chairperson: Sonu Goel (India)

OA08-252- 25	The evaluation of 7 years of local smoke-free legislation implementation in Bali province, Indonesia, and the next steps to improve compliance I Wayan Gede Artawan Eka Putra (Indonesia)	16:00 - 16:11
OA08-253- 25	Examining tobacco control policy interventions in Brazil, Mexico, China, and Indonesia: a landscape assessment from 1990 to 2016  Vinay Gupta (United States of America)	16:11 - 16:22
OA08-255- 25	Written consent by tobacco shopkeepers and regular monitoring by law enforcers sustained city free from tobacco advertisements at POS Mukesh Kumar Sinha (India)	16:33 - 16:44
OA08-257- 25	Effect of tobacco taxation on smoking prevalence and smoking attributable deaths in India Sonu Goel (India)	16:55 - 17:06
OA08-258- 25	Tobacco control in Nepal: collaborative effort of government officials, member of Parliaments, civil society and media  Ananda Chand (Nepal)	17:06 - 17:17
OA08-259- 25	Knowledge of harms of tobacco and awareness of text warnings among tobacco users in Kenya: findings from the ITC Kenya Wave 1 Survey Jane Rahedi Ong'ang'o (Kenya)	17:17 - 17:28

Oral Abstract session (OA) 16:00 - 17:30

South America

# OA09 Diagnosis, screening, prediction of disease in people living with human immunodeficiency virus and for diabetes

Chairperson: Raspati Koesoemadinata (Indonesia)

Chairperson: Yan Lin (China)

OA09-260- 25	A rapid TB diagnosis algorithm including TB-LAM and gastric lavage among severely ill hospitalised HIV patients in Conakry, Guinea Sebastian Albus (Germany)	16:00 - 16:11
OA09-261- 25	Estimating the impact of a combined C-reactive protein and LAM-based diagnostic algorithm for TB disease in HIV clinics in South Africa: a mathematical modeling-based analysis	16:11 - 16:22
	Bradley G. Wagner (United States of America)	
OA09-262- 25	Screening tuberculosis in HIV infected patients: which algorithms work best? A multicountry survey in Benin, Guinea and Senegal (RAFAscreen project)	16:22 - 16:33
	Dissou Affolabi (Benin)	
OA09-263- 25	Host inflammation markers IFN- γ, IL-6 and IL-15 strongly associated with risk of incident TB in advanced HIV Yukari Manabe (United States of America)	16:33 - 16:44
OA09-264- 25	The association of diabetes status and pre-treatment bacillary load among pulmonary TB patients in Indonesia Putu Ariastuti (Indonesia)	16:44 - 16:55

#### **Scientific Programme**

OA09-265- Tuberculosis case detection in diabetic patients in three west African 16:55 - 17:06 countries: which screening algorithms work best? The RAFAscreen

project

Ablo Prudence Wachinou (Benin)

OA09-266- Comparison of point of care HbA1c with laboratory HbA1c for real world 17:06 - 17:17

screening for diabetes among tuberculosis patients

Peijue Huangfu (United Kingdom)

Symposium (SP) 16:00 - 17:30

Mississippi

## SP20 Key operational and clinical issues in scaling up new drugs and a shorter treatment regimen for drug-resistant tuberculosis

The introduction of new drugs and the shorter treatment regimen for DR-TB is facing challenges, ranging from fragmented planning to gaps in clinical guidance, including the management of side effects aDSM. There is growing evidence on practical ways in which stakeholders can address these hurdles. This session seeks to:

- Apprise participants of the implementation of new drugs and the shorter treatment regimen (ND&STR)—challenges and successes in various countries
- · Describe diagnostic setbacks that confound patient triage and management (including additional resistance), and ways to overcome these
- · Highlight critical issues in the clinical management of patients with ND&STR, including AEs.

Chairperson: Valérie Schwoebel (France) Chairperson: Michael Kimerling (Netherlands)

### The Right Diagnosis-Right Treatment Initiative: emerging challenges and successes in implementation

Gunta Dravniece (Netherlands)

### Diagnostic challenges in managing patients on ND&STR—progress and lessons from Africa and Central Asia

Petra De Haas (Netherlands)

### Use of STR for DR-TB patients with resistance to medicines included in the regimen: practical and innovative approaches

Chen-Yuan Chiang (Taiwan)

### Monitoring and management of adverse events of the new drugs and shorter treatment regimen for MDR-TB

Alberto Piubello (Niger)

### Increased access to DR-TB diagnosis and treatment in Indonesia: on the introduction and roll out of ND&STR $\,$

Endang Lukitosari (Indonesia)

Discussion

Symposium (SP) 16:00 - 17:30

Amazon

# SP21 Latent tuberculosis infection screening and management in low tuberculosis incidence countries: what to do, how to do it and how to monitor

Elimination of TB in low-incidence countries requires addressing the question of care among the pool of latently infected individuals. In this symposium we will: 1) assess what needs to be done according to the latest guidelines; 2) Present examples of how LTBI activities can best be implemented; and 3) Discuss how to monitor and evaluate LTBI programmes.

Chairperson: Marieke van der Werf (Sweden) Chairperson: Manish Pareek (United Kingdom)

Programmatic management of latent tuberculosis control in the European Union and candidate countries—a guidance

Senia Rosales-Klintz (Sweden)

Modelling the effect of latent TB infection control on TB transmission and elimination in Europe

Suzanne Verver (Netherlands)

Programmatic screening for latent tuberculosis infection in England—is there any impact?

Dominik Zenner (United Kingdom)

Barriers and enhancers for latent tuberculosis infection screening and treatment among migrants in the Netherlands

Ineke Spruijt (Netherlands)

Monitoring and evaluation of LTBI screening and management of migrants in selected EU countries: The E-Detect experience

Knut Lönnroth (Sweden)

Discussion

Symposium (SP) 16:00 - 17:30

Yangtze 1

# SP22 Tuberculosis in the digital age: leveraging technology as a social intervention to empower the affected

To achieve global TB elimination, innovative approaches to the different aspects of TB prevention and care will be needed. Technology can provide a platform for enhanced outreach and health system engagement. Mobile and electronic health tools can address a spectrum of challenges faced by patients, appeal to key populations and overcome barriers along the treatment cascade to improve the quality of patient-centred care. This symposium seeks to explore the use of technology to address TB care and improve TB control.

Chairperson: Latha Rajan (United States of America)

Digital agenda for action toward the End TB Strategy

Dennis Falzon (Switzerland)

Mobile technology interventions to engage and enable patients in their own care Richard S Garfein (United States of America)

Social media initiatives for tuberculosis advocacy and empowering the affected Deepti Chavan (India)

#### **Scientific Programme**

Connecting the dots: enabling integrated tuberculosis control using innovative technology Kristian van Kalmthout (Netherlands)

The utility of technology-enabled surrogate endpoints: matching expectations to outcomes Madhukar Pai (Canada)

**Discussion** 

Symposium (SP) 16:00 - 17:30

Yangtze 2

## SP23 Ending tuberculosis deaths among people living with HIV—what will it take to change the status quo?

Despite impressive scale-up of ART and collaborative TB-HIV activities, TB remains the leading cause of HIV-associated mortality and morbidity, accounting for an estimated 37% of all HIV deaths in 2016. While there are proven interventions that together can reduce the burden dramatically, significant barriers to implementation and scale-up persist. This session will examine the gaps and opportunities for scaling up access to patient-centred, integrated TB and HIV services and collaborative activities, and share country experiences on practical solutions to ensure effective prevention, early diagnosis and early treatment of HIV-associated TB to end TB deaths among PLHIV.

Chairperson: Haileyesus Getahun (Switzerland)

Chairperson: Riitta Dlodlo (Zimbabwe)

Global perspective on scaling up effective TB prevention, early diagnosis and early treatment of HIV-associated TB: how can we move forward?

Satvinder Singh (Switzerland)

Addressing gaps along the TB-HIV cascade through a national TB quality improvement initiative—experience from South Africa

Lindiwe Mvusi (South Africa)

Ensuring effective TB prevention, early diagnosis and treatment of TB among PLHIV in a Concentrated HIV Epidemic setting - Experience from India

Kuldeep Singh Sachdeva (India)

Overcoming barriers and identifying solutions to end TB deaths among key populations living with HIV—experience from Ukraine

Volodymyr Kurpita (Ukraine)

Reducing tuberculosis deaths among PLHIV: perspectives from the civil society Lynette Mabote (South Africa)

Discussion

Symposium (SP) 16:00 - 17:30

Kilimanjaro 1&2

#### SP24 Health for all-front-line systems to close gaps in paediatric tuberculosis

Primary health care (PHC) affords a crucial opportunity to address major gaps in child TB. Forty years ago, the Alma Ata Declaration was drafted to underline the importance of PHC and promote health for all. As global leaders prepare to renew their commitment to PHC and universal health coverage in 2018, it is important to ensure that childhood TB is firmly inserted in these reshaped agendas. In this symposium, we will examine child TB in the broader PHC context, share country experiences to systematically implement evidence-based interventions, outline the potential impact of global scale-up of contact screening and discuss ways forward to end child TB.

Chairperson: Anne Detjen (United States of America)
Chairperson: Anna Mandalakas (United States of America)

Placing childhood tuberculosis firmly in the global child health agenda

Decentralising child tuberculosis services increases case finding and uptake of preventive therapy

Stella Zawedde-Muyanja (Uganda)

Contact investigation for paediatric tuberculosis in Viet Nam

Greg J. Fox (Australia)

If we did it right—the impact of scaling up household contact management for tuberculosis on children

Peter J. Dodd (United Kingdom)

Panel discussion—moving the needle to reach all children with tuberculosis

**Discussion** 

Symposium (SP) 16:00 - 17:30

Everest 1&2

# SP25 Towards zero hearing loss: access to new TB drugs and the right to enjoy the benefits of scientific progress

This symposium will discuss strategies to end DR-TB treatment-induced hearing loss within the framework of the right to enjoy the benefits of scientific progress and its applications and related human rights. Injectable drugs used in DR-TB treatment cause hearing loss in a significant proportion of patients, and many receive these drugs without audiometry or the option to receive newer drugs (e.g., BDQ, DLM). Speakers will examine the clinical and human rights issues at stake in choosing between injectable agents and newer drugs, which is linked to global advocacy of the right to health and human rights of people with disabilities.

Chairperson: Phumeza Tisile (South Africa) Chairperson: Anja Reuter (South Africa)

Deaf or dead: where is the choice here?

Nandita Venkatesan (India)

The human right to science and new treatments for drug-resistant tuberculosis

Michael Frick (United States of America)

Clinical considerations and consequences of DR-TB treatment, hearing loss and access to new TB drugs  ${\sf TB}$ 

Jonathan Stillo (United States of America)

#### **Scientific Programme**

#### Strategies for changing clinical practice

Jennifer Furin (United States of America)

Linking advocacy to end TB treatment-induced hearing loss to global advocacy for the health and human rights of people with disabilities

Michael Miiro (Uganda)

Discussion

Symposium (SP) 16:00 - 17:30

Atlantic

#### SP26 Post-tuberculosis chronic lung disorders

The 2013 WHO Global Action Plan on Non-communicable Diseases recognises the strong interaction between TB and chronic respiratory diseases, particular in low- and middle-income countries. Pulmonary TB can cause irreversible lung damage, which can lead to loss of lung function, long-term respiratory symptoms and eventually, chronic respiratory diseases. Despite emerging evidence, there is still a lack of international guidelines, programmatic recommendations and interventions to follow up patients beyond cure of TB. In this symposium, speakers will share recent research findings and provide insights into future management options for post-TB chronic lung disorders.

Chairperson: Jeremiah Chakaya (Kenya)

Chairperson: Sanne Christine van Kampen (United Kingdom)

Non-communicable lung disease in LMICs—where does post tuberculosis lung disease care fit in?

Kevin Mortimer (United Kingdom)

Post-TB chronic symptoms and chest x-ray abnormalities in Uganda

Sanne Christine van Kampen (United Kingdom)

Pulmonary rehabilitation for post-tuberculosis lung disorders in Uganda, Greece, Kyrgyzstan and Viet Nam

Bruce Kirenga (Uganda)

Post-tuberculosis lung damage and the link with recurrent risk of tuberculosis

Florian Marx (South Africa)

Tuberculosis morbidity in paediatric populations

Silvia Chiang (United States of America)

Discussion

#### **Scientific Programme**

Community space: panel discussion 16:15 - 19:15

De Ontmoeting 1 (Community space)

#### **UNHLM: What's next?**

After the UNHLM meeting on TB this fall it is time to keep the flow going. How do we keep the momentum and what have we learned from the UNHLM? An interactive session dedicated at keeping TB on the political and communal agenda. With speakers and participants from different perspectives<em> </em>of the subject. Three topics will be discussed in the session:

□•What next? Global TB advocacy after the UN HLM

□•Best practices: Stepping-up Community Engagement to Drive the Response building on the UN HLM on TB

□•National action and accountability following the UN High-Level Meeting on TB: Lessons learnt, reflections and the road ahead.

Coordinator: Ingrid Schoeman (South Africa) Chairperson: Meaghan Derynck (Netherlands)

### Best practices: Stepping-up Community Engagement to Drive the Response building on the UN HLM on TB

16:15 - 17:15

Carole Nawina Nyirenda (Zambia) Blessi Kumar (India) Wim Vandevelde (South Africa) Mercy Annapoorni (India) Peter Owiti (Kenya) Ingrid Schoeman (South Africa) Beatrijs Stikkers (Netherlands)

### National action and accountability following the UN High-Level Meeting on TB: Lessons learnt, reflections and the road ahead

17:15 - 18:15

James Malar (Switzerland)
Safarali Naimov (Tajikistan)
Baroness Alison Suttie (United Kingdom)
Serhiy Kiral (Ukraine)
Yulia Chorna (Ukraine)
Rahab Mwaniki (Kenya)

#### What next? Global TB advocacy after the UN HLM

18:15 - 19:15

Mandy Slutsker (United States of America) Blessi Kumar (India) Allan Maleche (Kenya) Matt Oliver (United Kingdom)

#### **Scientific Programme**

Community space: participatory activity 17:30 - 18:00

De Ontmoeting 2 (Community space)

#### TB Warrior: A Thrilling New Web TV Series of TB Adventure and Advocacy

TBWarrior will be a high reach, social media-charged platform devoted to global TB advocacy. Our venture aims to fight TB in a new, innovative way by catalyzing advocacy and leveraging positive recognition of the front line community of TB care providers and patients. We will innovate by delivering highly consumable, TB-themed, cinematic adventures to engage and retain a far broader global community of people touched by TB than any other digital effort to date. The energetic, entertaining content will be episodic, dramatic, and released over time keeping people connected to the platform. Series story lines over time will touch on various aspects of TB care and control. Scriptwriting is already underway. A variety of additional digital forums (i.e., podcast, blog) and social media channels (i.e., Facebook, Instagram, Twitter, YouTube, Whatsapp, etc.) will be part of the platform, encouraging community sharing, bonding, and normalization of TB.

Member Meetings (Regional, Section, Sub-section, Working Group) 17:45 - 19:00

Antartica

#### **Adult and Child Lung Health Section**

Member Meetings (Regional, Section, Sub-section, Working Group) 17:45 - 19:15

Oceania

#### **Tobacco Control Section meeting**

Tobacco Control Section The Union - Tobacco Control Section. Annual Meeting

Sarwat Shah (United Kingdom)

Member Meetings (Regional, Section, Sub-section, Working Group) 17:45 - 18:45

Central America

#### Global Indigenous STOP TB Initiative Working Group

Member Meetings (Regional, Section, Sub-section, Working Group) 17:45 - 18:45

Kilimanjaro 1&2

#### **Bacteriology & Immunology Sub-section**

**Presentation** 

Satellite session (SS) 18:00 - 19:30

Europe

# SS04 Regional prospective observational research in TB (RePORT) India: biomarkers, diagnostics and comorbidities

Organised by: National Institutes of Health/National Institute of Allergy and Infectious Diseases (NIH/NIAID)

RePORT India is a bilateral, multi-organizational, collaborative research effort established in 2013 under the Indo-US Vaccine Action Program. The consortium consists of seven clinical research site cohorts in India and five partnering US academic sites. The cohorts have well-characterized TB cases and contacts and systematic biobanking for epidemiology, immunology, and biomarker discovery research to address TB in India and beyond. RePORT India is one of six regional consortia worldwide. The objective of this symposium is to share key findings from RePORT India studies that can be applied to improve TB programs and advance biomarker and vaccine research in high-burden settings.

Chairperson: Amita Gupta (United States of America)

Chairperson: Camilla Rodrigues (India)

Addressing diagnostic challenges for TB meningitis—from clinical staging to pet scanning  DJ Christopher (India)	18:00 - 18:15
The effects of diabetes on TB Hardy Kornfeld (United States of America)	18:15 - 18:30
<b>Diagnostic and prognostic host biomarkers</b> Jerrold Ellner (United States of America)	18:30 - 18:45
Treatment outcomes and disease progression among TB cases and household contacts Vidya Mave (India)	18:45 - 19:00
Immunologic markers of household contacts of TB patients at highest risk of developing latent TB infection Ramakrishna Vankayalapati (United States of America)	19:00 - 19:15
Discussion	19:15 - 19:30

Satellite session (SS) 18:00 - 19:30

North America

### SS05 Back to the future: "High performance automated chest radiography as primary triage for Tuberculosis and respiratory symptomatics"

Organised by: Qure.ai

Technological advances in digital x-ray systems along with the emergence of high performance computer aided diagnosis (CAD) software platforms offering real time point-of-care results have led to renewed interest in the possibility of deploying CXR, even in resource scarce settings, as the primary screening/triage test for PTB and indeed the spectrum of lung disease - chronic & infectious.

Newer affordable portable digital x-ray systems designed for field use in low resource settings have resulted in an increased number of active case finding programs and prevalence surveys. Results indicate that when interpreted consistently, CXR is the most sensitive screening tool for pulmonary TB and that a significant proportion of people with TB are asymptomatic, at least early in the course of the disease. CAD based CXR readings can be expected to minimize intra-/inter- reader variability, allowing consistent rule-based interpretation.

The effective use of CXR as the primary screening test (over microscopy) for suspect candidates recommended by the primary caregiver, with candidates with abnormalities referred for Xpert for confirmatory/susceptibility testing has significantly contributed to the landmark success of PATH's Mumbai PPIA & IRD's Karachi screening and active case finding programs.

From an integrated health systems and rights-based universal access to high quality diagnostics perspectives – the above diagnostic algorithm is easily extended to include confirmatory testing for pneumonia and other pathologies as well as for chronic lung diseases.

Furthering the agenda of previous CXR symposiums in Cape Town (2015) & Liverpool (2016) – the symposia will focus on highlighting the present and future of CXR radiology. A panel of expert stakeholders will present their ongoing experience in deploying X-ray hardware and CAD software and discuss the mandate for the future of CXR as a primary screening test for lung symptomatics in the context of UHC and TB 2025 agenda.

Chairperson: Kunal Bose (India)

Presentation Leroy Terquem (France)	18:00 - 18:10
Automated Chest X-ray reads with deep learning Prashant Warier (India)	18:10 - 18:20
Large scale active case finding using automated CXR: The IRD experience Aamir Khan (Pakistan)	18:20 - 18:40
CXRs as primary triage: The Mumbai PPIA model Shibu Vijayan (India)	18:40 - 19:00
The road ahead for automated CXR Jacob Creswell (Switzerland)	19:00 - 19:20
Advances in digital radiology hardware for resource limited settings Kunal Bose (India)	19:20 - 19:30
Discussion	19:30 - 19:40

Satellite session (SS) 18:00 - 19:30

South America

# SS06 Shorter MDR-TB Treatment Regimen why, for whom, and how: evidence to overcome implementation challenges

Organised by: Damien Foundation

In 2016, the World Health Organization (WHO) recommended the Shorter-Treatment-Regimen (STR). Implementation of the cheaper and simplified standardized STR potentially would achieve high-efficacy in many settings. In 2017, 35 countries were implementing the STR, but rationale, indications and the operationalization of STR were not fully understood and the guidelines for its implementation have been made unnecessarily complicated. During the presentations followed by a panel discussion, STR-experts will review current evidence including recently reported seemingly disappointing clinical trial results, and the possible reasons for this.

Chairperson: Anthony Harris (Luxembourg) Chairperson: Rony Zachariah (Luxembourg)

Shorter MDR-TB Treatment Regimen: why does it works?  Armand Van Deun (Belgium)	18:00 - 18:10
Shorter MDR-TB Treatment Regimen: is it only the treatment regimen what matters?  Ernesto Jaramillo (Switzerland)	18:10 - 18:20
Shorter MDR-TB Treatment Regimen: how to implement a successful STR? Alberto Piubello (Niger)	18:20 - 18:30
Shorter MDR-TB Treatment Regimen: how successful was the implementation of STR in nine francophone African countries?  Arnaud Trébucq (France)	18:30 - 18:40
Shorter MDR-TB Treatment Regimen: does it work in Central Asia and Eastern Europe? Gunta Dravniece (Netherlands)	18:40 - 18:50

Satellite session (SS) 18:00 - 19:30

Mississippi

# SS07 Mobiles, dashboards, and the Internet of things: harnessing innovative digital technologies to improve data and treatment adherence in three global regions

Organised by: KNCV Tuberculosis Foundation

Utilising mobile phones, data networks and web systems, digital adherence technologies can play an important role to support patient centered approaches, improve adherence, persistence on treatment and eventually TB treatment success rates by facilitating data-driven, differentiated TB care.

This KNCV hosted satellite symposium will present an overview of digital adherence technologies; updates on recent evidence; experiences from two countries that are preparing implementation and from two countries that are in scale-up phase of technologies. Also a data analytics framework for technology engagement, differentiated care and impact measurement will be introduced.

Chairperson: Kristian van Kalmthout (Netherlands)

Chairperson: Dennis Falzon (Switzerland)

#### Adherence technologies; building the evidence

18:00 - 18:10

Richard Lester (Canada)

What are the technologies, How have they been used (and scaled) to date	18:10 - 18:20
Andrew Cross (India)	
Implementation of electronic medication monitors and video-supported treatment (VOT) in Ukraine	18:20 - 18:30
Alexsey Bogdanov (Ukraine)	
99DOTS as a platform for quality TB treatment by private providers in the Philippines	18:30 - 18:40
V. Mahamba (Tanzania, United Rep.)	
New insights and powerful analytics: The untapped potential of adherence data	18:40 - 18:50

Satellite session (SS) 18:00 - 19:30

Amazon

### SS08 Identifying and addressing ototoxicity due to secondline injectable drugs in the treatment of drug-resistant tuberculosis

Organised by: Johnson & Johnson

Among the second line drugs, injectable anti-TB agents (Kanamycin, Amikacin, Capreomycin) have been recommended in international as core drugs for the treatment of RR/MDR-TB. There are little data supporting the contribution to the effectiveness of these drugs in DR-TB regimens. What is undisputed, however, is the fact that these drugs are associated with significant toxicities including hearing loss, nephrotoxicity and electrolyte disturbances. The lack of viable alternative drugs and the complexity of incorporating audiometry testing under the programmatic DR-TB framework have been cited as the reason for lack of concerted effort to address to SLI drug induced ototoxicity particularly in resource limited settings. The advent of new and repurposed drugs has highlighted the need to reevaluate the widespread use of injectable agents. The South African national TB program has undertaken operational research that has included replacement of injectable with new drugs in the event of incipient ototoxicity. The data informed a policy decision whereby the national Tb program has resolved to transition to an alloral regime and frontline regimens for DR-TB.

This Session will seek to inform healthcare providers, TB program managers and others involved in the planning and the delivery of care to MDR TB patients

- (1) the extent of ototoxicity associated with MDR TB treatment and the toxic effects of SLI drugs;
- (2) how to incorporate robust and cost-effective ways of monitoring for hearing loss during the treatment of MDR TB under programmatic settings: and
- (3) how the use of new or repurposed drugs might help mitigate hearing loss associated with the use of the injectable drugs.

Chairperson: Norbert Ndjeka (South Africa)

Management of SLI associated ototoxicity

18:00 - 19:30

Vivian Cox (South Africa)

Satellite session (SS) 18:00 - 19:30

Yangtze 1

#### SS09 Improving the quality of TB services and data: a path forward

Organised by: John Snow Inc

The tuberculosis community is focused on achieving the End TB Strategy goals of reducing incidence by 80% within the next twelve years. Achievement of the End TB goals will depend on the quality of care provided by individual countries, as most patients have access to health facilities and are covered by national TB programmes. This satellite session will illustrate where quality of care is often poor and the consequences this can have. The session's objective is to indicate where improvements in policies and in implementation can be made at the national level.

The first speaker is a patient advocate who will address quality of TB service needs from a "consumer" perspective, based on personal experience being diagnosed and receiving treatment services. He will make recommendations for how to improve and sustain quality services.

The second speaker will describe the Kenyan experience of identifying patient pathways that must be addressed to align with patient preferences and how this informed updates to improve service provision within the national strategic plan.

The third and fourth speakers will discuss the results and conclusions of two quality of TB services assessments conducted in Nigeria and the Philippines using facility audits and interviews with providers and patients. Results of this comprehensive "360-degree" assessment will be used to identify recommendations for the delivery of quality TB services and provide an approach for future assessments and uses of data.

The fifth speaker will deliberate on the reliability of the data reported in WHO's annual Global Tuberculosis Report — a comprehensive source of TB data and analysis relied upon to design polices and set the direction of TB control for years ahead. Discussion will focus on what can really be said about countries' policies and performance, and how these interpretations can be made more reliable.

Chairperson: Charlotte Colvin (United States of America)

Chairperson: Paul Nunn (United Kingdom)

Patient pathways and preferences in Kenya: informing the development of the National Strategic Plan	18:00 - 18:15
Eunice Omesa (Kenya)  Quality of TB services assessment in Nigeria	18:15 - 18:30
Adebola Lawanson (Nigeria)  Quality of TB services assessment in Philippines	18:30 - 18:45
Ronald Allan Fabella (Philippines)  WHO's Global Tuberculosis Report: challenges in quality of national data	18:45 - 19:00
Philippe Glaziou (Switzerland)  Discussion	19:00 - 19:30

#### **Scientific Programme**

Satellite session (SS) 18:00 - 19:30

Yangtze 2

# SS10 As part of the global healthcare community, how can we impact the TB patient pathway and overcome existing challenges?

Organised by: BD

Drug-resistant Tuberculosis (TB) continues to impact our global communities. Rapid testing for Rifampicin (RIF) and Isoniazid (INH) resistance is critical in detecting Multidrug-resistant (MDR) and Extensively drug-resistant (XDR) TB and placing patients on the right treatment regimens. This session will offer two areas of focus. The first will be the preliminary multi-center clinical trial results of the BD MAX™ MDR-TB molecular test, which detects Mycobacterium tuberculosis complex and resistance to both RIF and INH all in one test. We will then convene a panel of global TB experts. Moderated by Renuka Gadde, Vice President of BD Global Health, panelists will include experts from global organizations such as WHO, USAID, FIND, McGill Global Health & Johns Hopkins Med Ctr programs. This will be an interactive symposium with a question-and-answer session. This discussion will focus on how the healthcare community can best support the elimination of TB, by leveraging current and future technologies, despite existing challenges.

Session 1: Rapid MDR-TB testing for RIF and INH resistance: preliminary results of the BD MAX™ MDR-TB pivotal clinical trial Presenters:

Yukari C. Manabe, MD, Associate Director of Global Health Research and Innovation Johns Hopkins Center for Global Health Education Professor of Medicine, Division of Infectious Diseases Johns Hopkins School of Medicine Charles K. Cooper, MD Vice President of BD Medical Affairs

Session 2: Panel of experts: "A multi-prong approach to end TB" Panel:
Renuka Gadde, Vice President of BD Global Health, Moderator Prof Madhukar Pai, MD, PhD, FCAHS
Canada Research Chair in Epidemiology & Global Health Director, McGill Global Health Programs
Associate Director, McGill International TB Centre Yukari C.Manabe, MD, Professor, Johns Hopkins School of Medicine Claudia Denkinger, MD, Phd, Head of TB, FIND Amy Piatek, Senior TB Technical Advisor, USAID
Wayne Van Gemert, Technical Officer, Stop TB Partnership Saurabh Rane, TB survivor and activist

Chairperson: Renuka Gadde (United States of America)

Satellite session (SS) 18:00 - 19:30

Atlantic

# SS11 Breaking down the barriers to quality TB/HIV care—tools and approaches addressing self-stigma and stigma in healthcare institutions in Kazakhstan

Organised by: KNCV Tuberculosis Foundation

Stigma and discrimination are recognized as some of the most commonly identified barriers to fight the TB epidemic[1]. Jaramillo, et al (2017) stated that "Reducing TB stigma is essential because it hinders care seeking, contact tracing, outbreak investigations, treatment initiation, adherence and quality of care. Moreover it degrades social capital, may contribute to catastrophic costs, and deprives people with TB of their rights and the respect of others."[2]

KNCV Tuberculosis Foundation and The Work for Change have developed two new TB stigma reduction packages and piloted them in collaboration with AFEW in Health Care Facilities providing TB and TB/HIV care in Almaty, Kazakhstan. The first package, 'From the Inside Out - Dealing with TB related self-stigma and shame', focusses on persons affected by TB, while the second, 'The Allies Approach - Tuberculosis stigma reduction for health care institutions', is addressing tuberculosis stigma in health care workers and facilities. This package is called 'the Allies Approach' because it seeks to foster a dynamic mutually-supportive alliance between patients and providers.

In this session we are introducing the concept of TB stigma, and the two toolkits, and share our experiences of implementing both tools in Kazakhstan and provide an opportunity of experiencing the tools and a selection of sessions first-hand.

The tools were developed to be easily accessible, adaptable and flexible to fit a multitude of environments and audiences. The training session are divided into short (30 min) interactive modules.

[1]Coleman CH, Jaramillo E, Reis A, Selgelid M, Organization. WH. Guidance on ethics of tuberculosis prevention, care and control. 2010;38.

[2]Jaramillo E, Savinand S, Van Weezenbeek C.: End Stigma and discrimination. Int J TB Lung Dis

[Internet]. 2017;21(TB Stigma Supplement). Available

at: http://www.ingentaconnect.com/contentone/iuatld/ijtld/2017/00000021/a00111s1/art00002; jsessionid=1fg17aea9yr61.x-ic-live-02#

Chairperson: Kathy Fiekert (Netherlands) Chairperson: Anke Van Dam (Netherlands)

Introduction of TB Stigma and why it is an issue Kathy Fiekert (Netherlands) Sarah van de Berg (Netherlands)	18:00 - 18:10
PhotoVoice as a means to claim space and rights  Netty Kamp (Netherlands)  Alexander Izotov (Russian Federation)  Symbat Sapargaliyeva (Russian Federation)	18:10 - 18:30
From the inside out—dealing with TB related self-stigma and shame Nadine Ferris France (Ireland) Kristina Zhorayeva (Kazakhstan) Raushan Zheteyeva (Russian Federation)	18:30 - 18:50
The Allies Approach—tuberculosis stigma reduction for health care institutions leva Leimane (Netherlands) Fariza Ibrakhim (Russian Federation) Aigul Ibrayeva (Russian Federation)	18:50 - 19:10
Monitoring and evaluation of the combined stigma interventions in Kazakhstan Susan Bergson (Netherlands) Veriko Mirtskhulava (Georgia)	19:10 - 19:20
Q&A	19:20 - 19:30

#### **Scientific Programme**

Member Meetings (Regional, Section, Sub-section, Working Group) 18:00 - 19:00

Rembrandt - Marriott

#### **TB and Migration Working Group**

Side Meeting (MTG) 19:00 - 22:00

Everest 1&2

#### Value of treating LTBI in high burden countries

Is inaction in tuberculosis costly?

Viswanath Pingali

Community space: performance 19:30 - 21:30

De Ontmoeting meeting point

#### Movie night: Breathless in collaboration with Movies that Matter

MEET UP at de Ontmoeting. Movie starts at 19:50 in the Amazon

Breathless / Ademioos

Belgium, Netherlands, The - 2018 - Daniel Lambo - 75 min.

Following the deaths of his father and many others from his village, filmmaker Daniel Lambo sets off on a passionate quest to find the truth about the deadly asbestos industry.

Daniel discovers an active asbestos factory in the Indian village of Kymore where the pollution overshadows the entire village. The same factory was once owned by the Belgian company that had a factory in his hometown, a true retrospective of the grim history he lived through. Daniel meets Nirmala, a former teacher and a mother who decides to fight for the numerous victims of Kymore and for a healthy and safe environment.

Supported by Indian lawyer and activist Tublu Krishnendu Mukherjee they look at the possibilities to start a lawsuit against Eternit for the crimes they committed in India.

But the global asbestos industry is still strong. To defend their interests they even paid for a spy to infiltrate and befriend lawyer Tublu and filmmaker Daniel.

Watch the trailer <a href="https://vimeo.com/270112323" target="\_blank">here</a>.

#### Friday, 26 October 2018

Satellite session (SS) 07:30 - 08:45

Europe

# SS12 Neerja The first thousand Bedaquiline courses - how is India providing access to new drugs and regimens

Organised by: Challenge TB Project- The Union South East Asia India

The Revised National TB Control Programme (RNTCP) in India made Bedaquiline accessible to Drug Resistant TB patients at six initial sites in 2016, under Conditional Access Programme (CAP). In 2017, the access was expanded across the country. In 2018, the country has rolled out the use of Delamanid and Shorter Treatment Regimen under Programmatic Management of Drug Resistant TB (PMDT). The symposium will highlight the country response in terms of the challenges, policy amendments, preparations, during the introduction and scaling of access to new drugs and regimens.

Chairperson: Reuben Swamickan Chairperson: Rohit Sarin (India)

Embarking on the journey for introduction of Bedaquiline in India- a brief introduction  Neerja Arora (India)	07:30 - 07:40
We, the patients want access to best possible services for early diagnosis and effective treatment Saurabh Rane (India)	07:40 - 07:50
Addressing the challenges of DRTB in India, under the National Strategic Plan 2017-2025 Kuldeep Singh Sachdeva (India)	07:50 - 08:00
Experiences from the Bedaquiline Conditional Access Programme in India Sundari Mase (India)	08:00 - 08:10
All hands in for moulding pathways—a multi-stakeholder response Syed Imram Farooq (India)	08:10 - 08:20
Role of Technical Assistance in advancing policies on New Drugs and Regimens for Drug Resistant TB in India  Kiran Rade (India)	08:20 - 08:30
Discussion	08:30 - 08:45

Satellite session (SS) 07:30 - 08:45

North America

### SS13 Breaking beta: heterogeneity in tuberculosis transmission and its impact on model projections

Organised by: Institute for Disease Modeling

In 1985, Karel Styblo estimated that an individual with smear-positive TB can infect ten individuals per year. This rule of thumb averages over factors that affect TB transmission including geospatial and social contexts and individual infectiousness. For example, slums, mines and other hotspots may make outsize contributions to transmission due to crowding and circular migration patterns. Certain individuals with TB may expectorate orders of magnitude more TB bacilli than others, while comorbidities such as HIV co-infection may reduce infectiousness despite leading to advanced disease.

For these situations a "one size fits all" approach may present a suboptimal control strategy. Likewise mathematical models that consider all individuals with TB the same may give misleading results.

This session focuses on the evidence for heterogeneous TB transmission and its impact on projections of TB burden and control. We begin with an overview of recent methods to quantify transmission including shared air monitoring and respiratory aerosol sampling, citing examples from South Africa. Next we present several modeling viewpoints. Models typically represent transmission by a single averaged parameter denoted beta. However, stratifying beta may have distinct advantages. As one example, whether individual infectiousness increases or decreases with duration of disease is poorly understood; assumptions on this trajectory have a strong effect on diagnostic impact. As a second example, household contacts may saturate with infection due to repeated exposure; this would limit the effectiveness of contact tracing. Finally, a different approach is taken by a new individual-based model, EMOD, available at idmod.org. This model captures several factors including heterogeneous mixing, migration between nodes, and stochastic individual outcomes, allowing estimates of the combined effect. We conclude with a discussion of future research into TB heterogeneity. Participants will consider how much heterogeneity in transmission remains unattributed and methods for handling unattributable heterogeneity in projecting TB burden.

Chairperson: Stewart Chang (United States of America) Chairperson: Karyn Sutton (United States of America)

Mapping sites of high TB transmission risk and capturing Mtb bioaerosols	07:30 - 07:45
Benjamin Patterson (South Africa)	
Some benefits and pitfalls of 'average betas': estimating TB burden from primary data in India  Nimalan Arinaminpathy (United Kingdom)	07:45 - 08:00
Implications of heterogeneity in infectiousness and social contact patterns  Nicky McCreesh (United Kingdom)	08:00 - 08:15
The EMOD TB-HIV model and application to heterogeneous TB transmission  Bradley G. Wagner (United States of America)	08:15 - 08:30
Discussion	08:30 - 08:45

Satellite session (SS) 07:30 - 08:45

South America

# SS14 Panel discussion—TB control in refugees, migrants and internally displaced populations: early lessons from the Middle East region

Organised by: IOM - The UN Migration Agency Jordan

Protracted conflicts in the Middle East have caused a region-wide health crisis. Millions are displaced internally and hundreds of thousands are leaving their country to become refugees. Approximately 6.3 million Syrians have taken asylum worldwide, mostly in neighbouring countries. The protracted war in Iraq has displaced three million, while years of war in Yemen have resulted in 22.2 million people in need of humanitarian assistance. Population displacement coupled with destruction of health infrastructure poses challenges to TB control. This symposium will share early lessons from supporting ministries of health and national TB programmes in Yemen, Syria, Iraq, Jordan and Lebanon.

Chairperson: Hoda Yousef Atta (Egypt) Chairperson: Sahu Suvanand (Switzerland)

Managing tuberculosis in the region through civil society partnerships: experience from Annoor Sanatorium for Chest Diseases in Jordan Jeremy Fowler (Jordan) Samer Ameen (Iraq)	07:30 - 07:50
Maintaining continuity of TB services in challenging operating environments: lessons learnt from the Global Fund's differentiated approach in Iraq, Syria and Yemen Bishwa Rai Ahmed Dmierieh (Syrian Arab Republic)	07:50 - 08:10
Extending the reach of NTP through partnerships with agencies and civil- society: increasing access to TB services for refugees and vulnerable populations in Jordan and Lebanon Hiam Yaacoub (Lebanon) Badwan Ibrahim (Jordan)	08:10 - 08:30
Discussion	08:30 - 08:45

Member Meetings (Regional, Section, Sub-section, Working Group) 07:30 - 08:45 Mississippi

#### **TB Section**

Membership	07:30 - 07:40
Wendy Lee Wobeser (Canada)	
Subsection Nursing & Allied Health Professionals	07:40 - 07:50
Working Group on TB and Migration	07:50 - 08:00
Subsection Bacteriology & Immunology	08:00 - 08:10
2018 - What we've done so far	08:10 - 08:20
Global Indigenous Stop TB Initiative	08:20 - 08:30
TB Section	08:30 - 08:40

Satellite session (SS) 07:30 - 08:45

Yangtze 1

#### SS15 Uncovering the Missing Millions: Impact of New TB Diagnostic tools

Organised by: Cepheid

Tuberculosis (TB) remains a global health threat despite the development of new diagnostics and anti-tubercular drugs. The Xpert<sup>®</sup> MTB/RIF test was developed to improve TB and rifampin resistance (RIF-R) detection and has helped to substantially improve TB and MDR TB diagnosis worldwide. In 2017 WHO endorsed a next generation assay for TB and RIF-R detection: Xpert<sup>®</sup> MTB/RIF Ultra (not available in the United States), citing its higher sensitivity for smear-negative samples as its greatest advantage. In this symposium the panel will discuss the impact and limitations of Xpert MTB/RIF and new possibilities with Xpert MTB/RIF Ultra for TB and MDR testing, its applicability for paediatric testing and multiplexing. Xpert MTB/RIF Ultra offers a faster time to result on the GeneXpert<sup>®</sup> platform, thus freeing up capacity on existing devices for additional TB testing and giving room for polyvalent near-care diagnostics testing for HIV, HCV and HPV, a clear opportunity for programs to integrate and work more closely together.

National and global stakeholders' understanding of the benefits of the GeneXpert System and assays, and their support in the successful transition from Xpert MTB/RIF to Xpert MTB/RIF Ultra is crucial to uncovering the missing millions and fighting the TB epidemic.

Chairperson: Philippe Jacon (France)

Achieving Universal DST in Mumbai, India Daksha Shah (India)	07:30 - 07:45
Leveraging the GeneXpert® System to Offer Multi-disease testing: experience from pilots in sub-Saharan Africa Jilian Sacks (United States of America)	07:45 - 08:00
<b>TB diagnostics in children - are we there yet?</b> Marc Tebruegge (United Kingdom)	08:00 - 08:15
Xpert® MTB/RIF Ultra in South Africa: Interpretation of more than a million results Lesley Scott (South Africa)	08:15 - 08:30
Discussion	08:30 - 08:45

#### **Scientific Programme**

Satellite session (SS) 07:30 - 08:45

Yangtze 2

#### SS16 TB and human rights: successes, challenges and opportunities

Organised by: United Nations Development Programme (UNDP)

According to the UN Special Rapporteur on the Right to Health,

The lack of adequate progress in the TB response can largely be attributed to the failure of States to adopt and implement effective, rights-based, and cost-effective strategies, including universal access to good quality prevention, testing and treatment, including rapid diagnostic tests, new drugs and community-based care, legal protections against discrimination and for privacy and confidentiality ...<a href="file:///C:/Users/Agnes/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/1XDQJCE5/Abstract%20on%20the%20Satellite%20session\_UNDP\_Upda ted\_13Sept2018.docx#\_ftn1" name="\_ftnref1" title="">[1]</a>

In July 2018, the Global Commission on HIV and the Law<a href="file:///C:/Users/Agnes/AppData/Local/Microsoft/Wind ows/INetCache/Content.Outlook/1XDQJCE5/Abstract%20on%20the%20Satellite%20session\_UNDP\_Updated\_13Sept20 18.docx#\_ftn1" name="\_ftnref1" title="">[2]</a> released a supplement to its landmark report of 2012- Risks, Rights, & Health. The 2018 supplement addresses barriers to a rights-based response to TB and makes several recommendations to governments aimed at creating an enabling legal and rights environment for an effective response to TB. These recommendations include calls for -

- •Prohibition in law of all forms of discriminations against people with or vulnerable to TB
- □•Increased investments in biomedical R&D for TB, and the need for more access to new TB diagnostics, medicines and vaccines
- ■•More conducive environments for civil society organisations providing services to people with TB
- □•Increased government financing for TB, including in human rights programmes
- □•Prohibition against the misuse of private health information of people with TB
- •Prohibition of travel restrictions, denial of entry, detention and deportation of people with TB; mandatory testing of foreign nationals; and refusal of TB services to migrant populations

The satellite will discuss the recommendations of the 2018 Supplement and examine various strategies and examples of how rights-based, evidence-informed approaches can bolster the global response to TB, including through legal environment assessments, and partnerships with the legislature, judiciary and civil society groups.

Target audience: governments, patients and affected communities, caregivers and treatment providers, interested participants

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- <a href="file:///C:/Users/Agnes/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/1XDQJCE5/Abstract%20 on%20the%20Satellite%20session\_UNDP\_Updated\_13Sept2018.docx#\_ftnref1" name="\_ftn1" title="">[1]</a> Open Letter by the Special Rapporteur on the right of everyone to the highest attainable standard of mental and physical health, Dainius Pūras, in the context of the preparations for the United Nations High-Level Meeting on Tuberculosis, which will take place in New York in September 2018. Available at

https://www.ohchr.org/Documents/Issues/Health/OpenLetterUNSRHealthHLMonTuberculosis.pdf

<a href="file:///C:/Users/Agnes/AppData/Local/Microsoft/Windows/INetCache/Content.Outlook/1XDQJCE5/Abstract%20 on%20the%20Satellite%20session\_UNDP\_Updated\_13Sept2018.docx#\_ftnref1" name="\_ftn1" title="">[2]</a>) For more on the Global Commission on HIV and the Law, see <a

href="http://www.hivlawcommission.org/">www.hivlawcommission.org</a>. The secretariat of the Global Commission is hosted at UNDP.

Chairperson: Kene Esom (United States of America)

Combatting stigma and discrimination as part of the TB respons Dean Lewis (India)	se 07:30 - 07:45
New Research and Development strategies for TB drugs and dia	agnostics 07:45 - 08:00
The role of the judiciary in fostering a rights-based response to Mumbi Ngugi (Kenya)	TB 08:00 - 08:15
Key strategies for advancing a positive legal and rights environ TB response  Allan Maleche (Kenya)	ment for 08:15 - 08:30
Discussion	08:30 - 08:45

Meet the expert session (MTE) 07:45 - 08:45

Antartica

#### MTE03 Adult & Child Lung Health Meet the Expert session

Over 216,000 of TB cases are estimated to occur in pregnancy and the early postpartum period may also be a time of developing TB. While many advances are occurring in TB diagnosis, treatment and prevention, data specific to pregnant women has been lagging. Recent trials and systematic reviews however have just been completed assessing TB diagnosis, latent TB preventive therapy and PK of drugs in pregnancy and postpartum. This session will review the data, the gaps, and provide some insights into managing diagnosis, treatment of TB disease and Mtb infection in pregnancy and the postpartum.

#### Managing tuberculosis in pregnancy

07:45 - 08:45

Amita Gupta (United States of America) Maureen Kamene Kimenye (Kenya)

Meet the expert session (MTE) 07:45 - 08:45

Oceania

#### MTE01 Tobacco Control Meet the Expert session

Global burden of all-cause and mortality due to smokeless tobacco use

07:45 - 08:45

Lekan Ayo-Yusuf (South Africa)

Meet the expert session (MTE) 07:45 - 08:45

Everest 1&2

#### MTE05 Nurses & Allied Professionals Meet the Expert session

In remote areas of the world research does not often get implemented because of a lack of resources and knowledge specific to these regions. Operational research defined as the search for knowledge on interventions, strategies, or tools that can enhance the quality, effectiveness, or coverage of programmes in which the research is being done (Zachariah R, Harries A et al Lancet Inf Dis) offers a way of bridging these operational gaps. In this session, operational research will be described with real world examples of studies done in the Canadian arctic among predominantly Inuit populations, in addition tips on how to identify gaps in care and how to develop your own operational research projects will be discussed.

Chairperson: Gonzalo Alvarez (Canada)

### Improving Health Services Through Operational Research - Calling all Nurses and Allied Professionals!

07:45 - 08:45

Gonzalo Alvarez (Canada)

Community space: panel discussion 07:45 - 08:45

De Ontmoeting 1 (Community space)

### Role of civil society in promotion of people-centred care at national level: best practice examples of TBEC members

Traditionally, individuals with TB in many EECA and some EU countries with a high TB burden have been routinely treated in hospital on an inpatient basis for long periods. This is often unnecessary. In most cases, ambulatory TB treatment delivers similar or better treatment outcomes. However, a successful and sustainable shift from hospital-based to successful, quality, people centred care in ambulatory setting has not been easy, and has often required an active involvement of civil society and community. TBEC members have implemented various innovative activities from nation-wide information campaigns to new funding mechanisms to ensure long-term sustainability and quality of ambulatory TB treatment in the country.

The interactive panel discussion will bring together TBEC members to share and discuss their successes and challenges when it comes to promoting people-centred care at national level. Audience members will be encouraged to participate.

Chairperson: Anete Cook (United Kingdom) Coordinator: Rachael Hore (United Kingdom) Chairperson: Marine Ejuryan (Belgium)

### Role of civil society in promotion of people-centred care at national level: 07:45 - 08:45 best practice examples of TBEC members

Safarali Naimov (Tajikistan) Stefan Radut (Romania) Elchin Mukhtarli (Azerbaijan) Olga Klymenko (Ukraine)

Ksenia Shchenina (Russian Federation)

Svetlana Nicolaescu (Moldova)

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

KWA Plenary Hall

#### Plenary 2 TB: Historic Killer, Changing Threat

Chairperson: Manjula Singh (India)

A history of the microbe: The co-evolution of man, animal and TB 09:00 - 09:20

Sebastien Gagneux (Switzerland)

The role health care and health systems in ending TB 09:20 - 09:40

Adeeba Kamarulzaman (Malaysia)

Closing gaps, changing trajectories - Ending TB 09:40 - 10:00

Dianne Stewart (Switzerland)

#### **Scientific Programme**

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

De Ontmoeting 1 (Community space)

#### Live stream plenary session

Community space: performance 10:00 - 17:00

De Ontmoeting meeting point

#### 3172 Artistic visualizing mental associations with tuberculosis

A conference venue is an ideal place for meeting people from all over the globe. An artist can bring people together in a way beyond any common language.

The artist, Elena Ploetz, will try and visualize people's unique verbal associations with TB by spontaneously drawingtheir answers to one question: "What first comes to mind when you hear the word "tuberculosis"? Elena will draw/paint the answers right there. The questionnaires can be filled in anonymously or one can leave contact details to track their "individual" drawing/painting.

The resulting images may be used as visual aids to address the issues of stigma and people's misconceptions about TR

Sessions will be taking place during the day.

Chairperson: Carrie Tudor (Switzerland) Chairperson: Fernando Dias E Sanches (Brazil)

#### Artistic visualizing mental associations with tuberculosis

10:00 - 13:00

Elena Ploetz (Germany)

Community space: panel discussion 10:15 - 11:15

De Ontmoeting 1 (Community space)

# Debate championship on tuberculosis infection (Itbi) in childhood - what is most important to reduce the epidemic?

Childhood latent tuberculosis infection (Itbi) still is a major issue in Europe. Despite nationwide programs to reduce the burden of Itbi a substantial delay in tracing infected children as well as in diagnostics persists. Even if diagnosed, appropriate therapy is often either not initiated or carried out sufficiently. Lack of communication with patients and families contributes to poor adherence. In addition to that, knowledge of health care professionals about Itbi is often limited.

Vote for either of the four opponents:

- Improved contact tracing/screening? (Folke Brinkmann, Bochum, Germany)
- New diagnostics? (Nicole Ritz, Basel, Switzerland)
- Better drugs and drug trials? (James Seddon, London/ Cape Town)
- More patient involvement and information? (Steve Welsh, Birmingham, patient representative).

This panel discussion aims to raise discussion on how to improve the diagnosis and treatment of ltbi in children with special focus on a constructive exchange between researchers, adult and paediatric clinicians, but also with patients and their families.

The panel discussion is initiated by the paediatric tuberculosis network trials group (ptbnet), an international network of almost 200 clinicians and researchers from more than 30 European countries. As a result, future collaborations between clinicians and researchers will be initiated and information material for children and families will be provided.

Chairperson: Folke Brinkmann (Germany) Chairperson: Steven Welch (United Kingdom)

Debate championship on tuberculosis infection (Itbi) in childhood - what is most important to reduce the epidemic?

Folke Brinkmann (Germany)

Debate championship on tuberculosis infection (Itbi) in childhood - what is most important to reduce the epidemic?	10:25 - 10:35
Steven Welch (United Kingdom)	
Debate championship on tuberculosis infection (Itbi) in childhood - what is most important to reduce the epidemic?	10:35 - 10:45
Nicole Ritz (Switzerland)	
Debate championship on tuberculosis infection (Itbi) in childhood - what is most important to reduce the epidemic?	10:45 - 10:55
James Seddon (United Kingdom)	

Community space: participatory activity 10:15 - 11:15

De Ontmoeting 2 (Community space)

#### **Meet TB Europe Coalition!**

The TB Europe Coalition is a regional advocacy network of civil society organisations and individuals from across the WHO Europe region, comprising Western and Eastern Europe, Caucasus and Central Asia. Established in 2009, TBEC has now more than 180 members from across 35 WHO Europe region countries.

TBEC's overarching vision and mission is to ensure civil society has and continuously increases its capacity to drive the TB response in the region. TBEC strongly believes that civil society organizations and affected communities are key players in responding to disease epidemics. TBEC aims not only to promote overall understanding of the affected communities and civil society's role in TB response, but also has identified health system financing, people-centred TB policies, and TB research and development.

TBEC works twofold: first, to strengthen the advocacy capacity of civil society organisations and activists at national level, and second, to coordinate and carry out evidence-based TB policy advocacy at regional and international level. TBEC aims to address the lack of political will through continuous and strategic advocacy efforts with key decision makers and players from global organisations such as the Global Fund, WHO, UN, OECD, ECDC, G20 and EU amongst others at regional and international level. TBEC members regularly contribute to public consultations on the fight against TB in Europe, actively participate in relevant EU and WHO forums and stand available to provide information and advice to policy-makers on issues that the network has particular expertise.

TBEC also actively informs, trains and engages civil society organisations and individuals working on TB at national level. It does this via regular country visits, online webinars and publications on relevant TB issues, ad hoc financial assistance to members to attend international and regional conferences, meetings and workshops, as well as various individual and organisation-based mentoring activities.

Chairperson: Anete Cook (United Kingdom) Chairperson: Rachael Hore (United Kingdom)

Meet TB Europe Coalition!	10:15 - 10:25
Paul Sommerfeld (United Kingdom)	

Meet TB Europe Coalition! 10:25 - 10:35
Fanny Voitzwinkler (Belgium)

Symposium (SP) 10:30 - 12:00

KWA Plenary Hall

### SP27 Preventive therapy for DS- and DR-TB in household contacts: programmatic implementation

Recent WHO Guidelines for LTBI have increased the indications for preventive therapy for DS- and DR-TB. However, examples of comprehensive preventive therapy remain limited. This symposium aims to discuss the practical challenges and lessons learnt from implementing preventive therapy in household contacts in rural and urban settings. Issues, such as planning, step-by-step service scale-up, consent, adherence, monitoring and ethical implications will be covered with examples from programmes in South America, Asia, Pacific islands and Central Asia.

Chairperson: Steve Graham (Australia) Chairperson: Philipp du Cros (United Kingdom)

The preventive therapy cascade: implementation of preventive therapy in a remote island setting in Papua New Guinea

Suman Majumdar (Australia)

Scaling up DS- and DR-TB preventive therapy in Karachi: adverse events and keeping patients on treatment

Hamidah Hussain (Singapore)

Family-based preventive therapy in an urban setting: lessons from Dushanbe, Tajikistan Jay Achar (United Kingdom)

Preventive therapy monitoring and evaluation using a best practice framework of programme indicators

Courtney Yuen (United States of America)

People-centred preventive therapy

Jonathan Stillo (United States of America)

Discussion

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

Europe

#### OA10 Cooling down tuberculosis hotspots: innovative trials

Chairperson: Helen Ayles (Zambia) Chairperson: Aamir Khan (Pakistan)

OA10-267- 26	Effect of population-wide screening on the prevalence of TB: a cluster randomised controlled trial in Viet Nam Guy B. Marks (Australia)	10:30 - 10:41
OA10-268- 26	Disparities in access to diagnosis and care identified through enhanced citywide tuberculosis surveillance and spatial analysis in Blantyre, Malawi Peter MacPherson (United Kingdom)	10:41 - 10:52
OA10-269- 26	Identification of potential TB hotspots through a mobile X-ray supported community-based mass screening program in Karachi, Pakistan Syed Mohammad Asad Zaidi (Pakistan)	10:52 - 11:03
OA10-270- 26	Private health sector engagement in national tuberculosis control programme: preliminary findings from a cluster randomised trial, India	11:03 - 11:14

OA10-271- 26	Risk factors associated with case clustering of Mycobacterium tuberculosis based on whole-genome sequencing in northern Thailand Reiko Miyahara (Japan)	11:14 - 11:25
OA10-272- 26	Estimation of national tuberculosis incident cases using capture- recapture method based on inventory study data in Indonesia in 2017 Dina Bisara Lolong (Indonesia)	11:25 - 11:36
OA10-273- 26	Enhanced case finding of tuberculosis in The Gambia: a cluster randomized trial	11:36 - 11:47
	Bouke C. de Jong (Belgium)	

Symposium (SP) 10:30 - 12:00

Antartica

### SP28 Leave no one behind—ethical and human rights considerations in TB prevention and care among mobile populations

It is currently estimated that of the global population of 7.55 billion, 1 billion are migrants; in large parts of the world, these include internal migrants and mobile populations; however, the United Nations Department of Economic and Social Affairs estimates that there are 257.7 international migrants worldwide. In 2016, the United Nations High Commissioner for Refugees reported that 65.6 million people worldwide had been forcibly displaced. These staggering numbers are likely to contribute to the "missing 4 million" who pose great challenges to, and ethical and human rights concerns for TB control, requiring a rethink of strategies and safeguarding of TB care. It is essential to address the needs of these vulnerable populations if we want to achieve EndTB and SDG targets. https://esa.un.org/unpd/wpp/Publications/Files/WPP2017\_KeyFindings.pdf

http://tbandmigration.iom.int/sites/default/files/publications/KP\_Mobile\_Spreads.pdf https://migrationdataportal.org/?t=2017&m=1&i=stock\_abs

http://www.unhcr.org/figures-at-a-glance.html

Chairperson: Kathy Fiekert (Netherlands) Chairperson: Justin Timothy Denholm (Australia)

The right to complete anti-tuberculosis treatment—best practiced by the Netherlands Niesje Jansen (Netherlands)

**Tuberculosis control in migrant populations: guiding principles and proposed actions**Nobu Nishikiori (Switzerland)

Tuberculosis among nomadic pastoralists in Nigeria: results of two years of active case finding in Adamawa State

Stephan John (Nigeria)

Where have all the patients gone? Safeguarding patient care and treatment in suddenonset and complex emergencies

Kathy Fiekert (Netherlands)

Ethical challenges arising in the context of providing tuberculosis care to non-refugee migrants in high-income countries

Diego Silva (Canada)

**Discussion** 

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

Oceania

### SOA08 FCTC (Framework Convention on Tobacco Control) at the crossroads: implementation and sustainability of its impact

Chairperson: Xiaolin Wei (Canada) Chairperson: Pranay Lal (India) SOA08-107 Sub-national monitoring of tobacco advertisement, promotion and 10:30 - 10:37 6-26 sponsorship at point of sale in India Renu Sharma (India) SOA08-107 Effective enforcement of the Tobacco Control Act in the Shahjadpur sub-10:37 - 10:44 7-26 district of Sirajganj district, Bangladesh Aminul Islam Sujon (Bangladesh) SOA08-107 Perceived effectiveness of pictorial health warnings in South Jakarta 10:44 - 10:51 8-26 Nuradia Puspawati (Indonesia) SOA08-107 Affordability of smoke tobacco products in India 10:51 - 10:58 9-26 Sonu Goel (India) SOA08-108 Legislative courtesy notices by NGOs—a step towards elimination of 10:58 - 11:05 0-26 TAPS ban violation by tobacco industries Opinder Preet Kaur Gill (India) SOA08-108 'Tobacco shops': trade and product characteristics 11:05 - 11:12 1-26 Elif Dagli (Turkey) SOA08-108 Sustainable funding for tobacco control through implementation of an 11:12 - 11:19 operational plan under the Non-Communicable Disease Control 2-26 Programme of the Government of Bangladesh Aminul Islam (Bangladesh) SOA08-108 Cigarette selling to and by the minors in Bangladesh: policy gaps and 11:19 - 11:26 3-26 implementation challenges Md. Al Amin (Bangladesh) SOA08-108 Tobacco industry's interference challenging public health in India; it is 11:26 - 11:33 time for strict and strategic implementation of FCTC article 5.3 4-26 Ramesh Chand (India) SOA08-108 Unresolved issue: point of sales tobacco advertisements 11:33 - 11:40 5-26 Murat Guner (Turkey)

#### **Scientific Programme**

Symposium (SP) 10:30 - 12:00

North America

#### SP29 Transmission, infection, comparative genomics, surveillance and socioeconomic analyses of tuberculosis and zoonotic tuberculosis using the One Health platform

Most cases of TB worldwide in humans are caused by <em>Mycobacterium tuberculosis</em>. Zoonotic tuberculosis (ZTB), a neglected form of the disease is caused by a closely related species, <em>Mycobacterium bovis</em> (aetiology of bovine TB), which belongs to the <em>M. tuberculosis</em> complex. ZTB and bovine TB threaten communities that rely on livestock for their livelihoods, particularly in developing countries. To end the global TB epidemic by 2030, there is a need for a One Health approach that will explore scientific developments in transmission, virulence, diagnostics, comparative genomics and socio-economic models. This symposium will discuss these methodologies in the control of ZTB

Chairperson: Alejandro Perera (Mexico) Chairperson: Simeon Cadmus (Nigeria)

Zoonotic tuberculosis: comparative analyses of the human and bovine tubercle bacilli

Stephen Gordon (Ireland)

Ferret transmission model for tuberculosis

Fred Quinn (United States of America)

Surveillance of Mycobacterium bovis infection in Taiwan

Ruwen Jou (Taiwan)

TB, zoonotic TB and the value of prevention: methods and lessons from applied economic analysis

Thaddeus Miller (United States of America)

**Discussion** 

Symposium (SP) 10:30 - 12:00

Central America

#### SP30 Novel strategies to accelerate tuberculosis treatment trials in children

The historical neglect and exclusion of children from anti-tuberculosis trials is ending. However, major gaps in the knowledge base for the treatment of both DS- and DR-TB in children, and in the prevention of DR-TB remain. In addition to the evaluation of novel drugs and regimens, a more optimal and efficient design of paediatric TB trials, from dose finding and safety studies to Phase III efficacy trials, is needed. Innovative methods are needed to improve trial efficiencies, and obtain more rapid, patient-relevant findings that impact policy and practice and facilitate rapid access to treatment.

Chairperson: Anneke Hesseling (South Africa)

Chairperson: Sharon Nachman (United States of America)

The current landscape of paediatric trials for the prevention and treatment of DS- and DR-TB: feeding the pipeline

Anthony Garcia-Prats (South Africa)

Accelerating information from tuberculosis pharmacokinetic studies using innovative modelling methods

Elin M Svensson (Netherlands)

Statistical trial design considerations and innovative approaches to paediatric Phase III trials

Soyeon Kim (United States of America)

Use of existing tools for entry points and end points in paediatric TB trials: how can we better use the chest radiograph?

Megan Palmer (South Africa)

High-quality social science to inform the design and interpretation of paediatric tuberculosis treatment trials

Nishi Suryavanshi (India)

simulated scenarios
Ahmad Fuady (Netherlands)

**Discussion** 

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

South America

## SOA09 Catastrophic costs vs. social protection: measuring digesting and addressing patient-level economic drivers of TB

Chairperson: Debora Pedrazzoli (Switzerland) Chairperson: David Dowdy (United States of America) SOA09-108 Social protection for patients with tuberculosis in Uganda, a significant 10:30 - 10:37 6-26 gap in efforts to attain the Sustainable Development Goals Charles Batte (Uganda) SOA09-108 Prevalence and risk factors for catastrophic health expenditure due to 10:37 - 10:44 7-26 tuberculosis in Kaduna State, Northwest Nigeria Bola Biliaminu Lawal (Nigeria) SOA09-108 Catastrophic costs of tuberculosis illness and treatment in rural South 10:44 - 10:51 Africa: a risk factor analysis 8-26 Norberth Stracker (United States of America) SOA09-108 Which subgroups of TB patients in Kenya suffer the 'triple burden' of 10:51 - 10:58 9-26 catastrophic expenditure, dissaving and a disruption of social life during treatment? lacquie Oliwa (Kenya) SOA09-109 Evaluating catastrophic costs for tuberculosis patients in Brazil: a 10:58 - 11:05 mutlicentre study in five state capitals 0-26 Ethel Maciel (Brazil) SOA09-109 Out-of-pocket costs for patients diagnosed with tuberculosis in Bandung, 11:05 - 11:12 1-26 Indonesia Susan McAllister (New Zealand) SOA09-109 Effect of financial support on reducing the incidence of catastrophic 11:12 - 11:19 costs among tuberculosis-affected households in Indonesia: eight 2-26

SOA09-109 4-26	Socioeconomic determinants and economic outcomes for tuberculosis patients in Taiwan: an individual patient pathway analysis using health insurance data	11:19 - 11:26
	Chu-Chang Ku (United Kingdom)	
SOA09-109 5-26	Patient and household costs of tuberculosis services among the rural-to- urban migrant population in Shanghai, China	11:26 - 11:33
	Chongguang Yang (China)	
Oral Abstract 10:30 - 12:00	session (OA)	Mississippi
OA11 The	Union student late-breaker session on lung health	
Chairperson:	Norio Yamada (Japan) Jeremiah Chakaya (Kenya) Keren Middelkoop (South Africa)	
OA11-3314 -26	Predictors for treatment outcome among drug-susceptible tuberculosis patients in The Netherlands  Ivan Surya Pradipta (Netherlands)	10:30 - 10:41
OA11-3348 -26	A disputed rpoB mutation associated with rifampicin mono-resistant TB in Khayelitsha, South Africa	10:41 - 10:52
OA11-3399 -26	Manufactured-cigarette use and rolled-cigarette use in South East Asian countries: which product makes smoker more dependent?	10:52 - 11:03
OA11-3339 -26	Mapping tuberculosis treatment outcomes in Ethiopia Kefyalew Addis Alene (Australia)	11:03 - 11:14
OA11-3307 -26	Recurrent tuberculosis in the Netherlands Betül Tekeli (Netherlands)	11:14 - 11:25
OA11-3213 -26	Prospective evaluation of candidate host immunological biosignatures as tools for the diagnosis of TB disease	11:25 - 11:36
	Hygon Mutavhatsindi (South Africa)	
OA11-3295 -26	Host biomarkers detected in Quantiferon Plus supernatants show promise as diagnostic candidates for active TB disease  Makhadzi Portia Manngo (South Africa)	11:36 - 11:47
OA11-3369 -26	Genotype based clusters and spatio-temporal pattern of multi-drug resistant tuberculosis (MDR-TB) from an outbreak area in Thailand	11:47 - 11:58

Natthakan Thipkrua (Thailand)

Symposium (SP) 10:30 - 12:00

Amazon

# SP31 Towards tackling tuberculosis in vulnerable groups in the European Union. Results from the European Commission funded E-DETECT TB Project

Tuberculosis in the EU and other low-incidence countries increasingly affects risk groups, such as migrants, homeless persons, drug users and prison inmates.

This symposium will present the results of a European TB initiative with projects on migrant screening in Italy and active case finding in vulnerable groups in Romania. It will include a discussion on a platform for pooling latent and active TB screening data from multiple countries to inform future screening policies in low-incidence countries. The use of national TB strategies to control tuberculosis in the EU and low-incidence countries will also be discussed.

Chairperson: Ibrahim Abubakar (United Kingdom)

Chairperson: Alberto Matteelli (Italy)

### Vulnerable populations for tuberculosis in the European Union/European Economic Area countries

Marieke van der Werf (Sweden)

### Outreach programme of tuberculosis screening and strengthening care integration in Romania

Gerard de Vries (Netherlands)

### Implementation of active and latent tuberculosis screening strategies in migrant reception facilities in Italy

Daniela Maria Cirillo (Italy)

### European database for latent TB infection and TB screening data from four European Union countries

Knut Lönnroth (Sweden)

### Implementation of national strategic plans in European Union/European Economic Area countries

Dominik Zenner (United Kingdom)

Discussion

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

Yangtze 1

#### SOA10 Tuberculosis, safety, outcomes and innovation

Chairperson: Arnaud Trébucq (France) Chairperson: Valérie Schwoebel (France)

SOA10-109	The burden of clinical, spirometric and HRCT abnormalities at pulmonary	10:30 - 10:37
6-26	TB treatment completion: a cross-sectional study	

Jamilah Meghji (United Kingdom)

### SOA10-109 QT prolongation in multidrug-resistant tuberculosis patients on high 10:37 - 10:44 dose moxifloxacin in Taiwan

Chou-Jui Lin (Taiwan)

#### SOA10-109 Decentralisation of a short-course MDR-TB regimen in a low middle-8-26 income country. What worked? What didn't? Why?

Juergen Noeske (Cameroon)

SOA10-109 9-26	Preliminary treatment outcomes of the shorter MDR-TB regimen using levofloxacin: an operational pilot study in Viet Nam Le Thi Ngoc Anh (Viet Nam)	10:51 - 10:58
SOA10-110 0-26	Factors associated with second line-induced ototoxicity in HIV-co- infected drug-resistant tuberculosis patients in the intensive phase of therapy Ebenezer Ajayi (Nigeria)	10:58 - 11:05
SOA10-110 1-26	High prevalence of ototoxicity in successfully treated rifampicin/multidrug-resistant tuberculosis patients in Uganda: results from the initial 2013/2014 rifampicin/multidrug-resistant tuberculosis cohorts  Robert Kaos Majwala (Uganda)	11:05 - 11:12
SOA10-110 2-26	Interim outcome of DR-TB patients treated with bedaquiline- or delamanid-containing regimens under programmatic conditions in Ethiopia  Ahmed Reshid (Ethiopia)	11:12 - 11:19
SOA10-110 3-26	The role of bedaquiline and linezolid in the management of toxicity from rifampicin-resistant tuberculosis treatment in Johannesburg, South Africa Hanna Matthews (Germany)	11:19 - 11:26
SOA10-110 4-26	Factors associated with loss to follow-up and mortality in public sector MDR-TB treatment in western Maharashtra, India, 2015-2016  Matthew Murrill (United States of America)	11:26 - 11:33
SOA10-110 5-26	Impact of nutritional status on outcome of treatment and mortality among MDR-TB patients  Niyati Trivedi (India)	11:33 - 11:40
SOA10-110 6-26	Is the current practice of using response to empirical broad-spectrum antibiotic treatment as an exclusion diagnostic for tuberculosis supported by evidence? Systematic review and meta-analysis  Titus Divala (United Kingdom)	11:40 - 11:47
SOA10-110 7-26	Using quality Improvement science to improve rifampicin-resistant TB surveillance through GeneXpert weekly reporting, Uganda, May 2016-November 2017  Robert Kaos Maiwala (Uganda)	11:47 - 11:54
SOA10-110 4-26 SOA10-110 5-26 SOA10-110 6-26	Hanna Matthews (Germany)  Factors associated with loss to follow-up and mortality in public sector MDR-TB treatment in western Maharashtra, India, 2015-2016  Matthew Murrill (United States of America)  Impact of nutritional status on outcome of treatment and mortality among MDR-TB patients  Niyati Trivedi (India)  Is the current practice of using response to empirical broad-spectrum antibiotic treatment as an exclusion diagnostic for tuberculosis supported by evidence? Systematic review and meta-analysis  Titus Divala (United Kingdom)  Using quality Improvement science to improve rifampicin-resistant TB surveillance through GeneXpert weekly reporting, Uganda, May	11:33 - 11:4 11:40 - 11:4

Symposium (SP) 10:30 - 12:00

Yangtze 2

# SP32 Strengthening TB care and treatment among the underserved: implementing the ECHO tele-mentoring model around the world

The ECHO tele-mentoring model—based on a combination of videoconferencing, case-based learning, sharing of best practices and monitoring outcomes—is being implemented in a rapidly growing number of global contexts. This education and training model supports the development of communities of practice that link national and international experts with site-level TB practitioners. We will introduce participants to the basic principles of the ECHO model, showcase examples of implementation in a variety of country contexts, and promote discussion of challenges to and opportunities for adapting the model to TB education and workforce development worldwide.

Chairperson: Bruce Struminger (United States of America) Chairperson: Lisa Chen (United States of America)

#### Introduction and overview

Bruce Struminger (United States of America)

Improving access to high quality treatment for drug-resistant tuberculosis in Viet Namusing ECHO

Nguyen Viet Nhung (Viet Nam)

The experience of implementing a binational/bilingual TB ECHO for the US and Mexico border region

The experience of developing and implementing an MDR-TB and a paediatric MDR-TB ECHO programme in Kenya, the first in Africa

Ann Masese (Kenya)

The experience of developing an MDR-TB ECHO program in the Country of Georgia Mari Buziashvili (Georgia)

Expanding TB ECHO to include HIV-TB: National Initiative to Strengthen Collaboration between HIV-TB through e-learning (e-NISCHIT)

Rohit Sarin (India) Neeta Singla (India)

Discussion

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

Kilimanjaro 1&2

11:05 - 11:12

#### SOA11 Solutions to improved case finding and early treatment OR Find and treat

Chairperson: Pamela Orr (Canada) Chairperson: Sylvia LaCourse (United States of America) SOA11-110 Intensifying tuberculosis control interventions in urban slums: a patient-10:30 - 10:37 centred approach from BRAC 8-26 Akramul Islam (Bangladesh) SOA11-110 Impact of the patent medicine vendor engagement drive on the 10:37 - 10:44 9-26 identification, referral and diagnosis of presumptive TB cases in a TB control programme Yusuf Adelakun (Nigeria) SOA11-111 Private sector TB patients: counting the uncounted by engaging private 10:44 - 10:51 0-26 providers in Mumbai Daksha Shah (India) SOA11-111 Social enterprise model to engage the private sector for improved 10:58 - 11:05 2-26 tuberculosis care in metropolitan cities of Bangladesh Shahriar Ahmed (Bangladesh)

Moses Onoh (Nigeria)

lessons learnt

SOA11-111 Achieving systemic and scalable quality assured private sector

engagement in TB-HIV care and prevention in Nigeria: successes and

3-26

SOA11-111 4-26	Creating demand for small-scale private clinics: results and lessons learnt from community active TB case finding using RAPPID-LINK intervention in Lagos, Nigeria	11:12 - 11:19
	Victor Adepoju (Nigeria)	
SOA11-111 6-26	Right diagnosis and right treatment through the patient triage approach: challenges and lessons from pilot to expansion in Viet Nam	11:19 - 11:26
	Thi Mai Phuong Nguyen (Viet Nam)	
SOA11-111 7-26	Quality of care among adult pulmonary TB patients in The Gambia, West Africa: a cross-sectional survey	11:26 - 11:33
	Olumuyiwa Adesina Owolabi (Gambia)	

Symposium (SP) 10:30 - 12:00

Everest 1&2

#### SP33 TB and TB-HIV in vulnerable populations

Certain individuals are particularly vulnerable to TB due to socio-demographic and contextual factors. Increased exposure at the workplace (e.g., healthcare workers and miners) or those who live in congregate settings (e.g., prison inmates), limited access to quality TB services (e.g., internally displaced persons or refugees), and/or those with predisposing biological factors (e.g., persons with HIV infection or young children) have increased risk of TB-related morbidity and mortality. Historically, service delivery models have led to under-diagnosis and under-treatment, allowing TB to thrive and spread. In this symposium, we examine findings from programmatic research aimed to improve TB and HIV case finding and continuity of care in these vulnerable populations.

Chairperson: Susan Cookson (United States of America)

Identifying TB-HIV among Mozambican miners—novel approaches to increasing care Laura Tomm-Bonde (Mozambique)

**TB** case finding and **TB-HIV** integration among prison populations in Southern Africa Salome Charalambous (South Africa)

**Burden of tuberculosis among refugees, need for new guidance** Allen G.K. Maina (Switzerland)

Estimating tuberculosis burden among newly displaced populations

Cuc Tran (United States of America)

Finding missing cases among children

Anne Detjen (United States of America)

**Discussion** 

Symposium (SP) 10:30 - 12:00

Atlantic

### SP34 Critical reflections on the role of technology and innovations in tuberculosis

In recent years, new diagnostics, drugs and monitoring/adherence technologies have been introduced by the TB community. However, many of these technologies are not used, implemented or made accessible to the extent hoped for. Health system barriers are often held responsible for low uptake, while the way technologies are designed and implemented is not necessarily questioned. This symposium will highlight social science research on the processes and politics of technology design so as to ensure that implementation of public health policies and programming are driven by user rights and needs. Lessons may be learned for technology design, R&D, funding and implementation.

Chairperson: Nora Engel (Netherlands) Chairperson: Amrita Daftary (Canada)

Resourcing technology in tuberculosis programmes: anthropological insights

Who's the expert? Physician perspectives on implementing Xpert in India, the last mile Andrew James McDowell (France)

Developing a good POC diagnostic: global norms and local practices of aligning with the  ${\tt POC}$ 

Nora Engel (Netherlands)

Protecting drugs and wasting drugs: provider perceptions on access to novel treatments for persons living with DR-TB

Jennifer Furin (United States of America)

Digital technologies in adherence: challenges and opportunities

Amrita Daftary (Canada)

**Discussion** 

Community space: panel discussion 11:30 - 13:00

De Ontmoeting 1 (Community space)

### Person-centered care for TB and DR-TB: a practical framework for delivering individualized care and cure

Providing person-centered care to people with TB has the power to transform our health systems into service-oriented organizations where people with TB can succeed in getting cured and can contribute actively to our goal of TB elimination. There is much guidance on and discussion of "patient-centered" and "person-centered" care as part of the global effort to eliminate TB, but programs and community-based organizations have little support on HOW to implement. A framework has been developed and tested in four pilot countries to help NTPs, frontline providers, and community organizations implement a participatory approach to providing comprehensive supportive services for people with DR-TB, with promising results. This approach is equally applicable to all people with TB. The framework consists of four thematic areas and 13 elements of supportive care that people with TB have articulated as important to them in reaching cure. It provides tools to assess the current status of services and plan to fill gaps. In addition, there are tools to promote active participation by people with TB in making decisions about the care they receive.

By orienting affected communities and civil society organizations to this framework, we hope to involve them in increasing community demand for high-quality TB services based on a human rights approach and to provide organizations and individuals with the tools they need to deliver those services.

This session will include brief presentations from those involved in the pilot project followed by a showcase of some best practices and tools that can be adapted as well as discussions with participants on how to implementation in their own settings.

Chairperson: DArcy Richardson (United States of America)

Coordinator: Blessi Kumar (India)

Person-centered care for TB and DR-TB: a practical framework for delivering individualized care and cure	11:30 - 11:40
DArcy Richardson (United States of America)	
Person-centered care for TB and DR-TB: a practical framework for delivering individualized care and cure Li Ling (China)	11:40 - 11:50
Person-centered care for TB and DR-TB: a practical framework for delivering individualized care and cure	11:50 - 12:00
•	11:50 - 12:00
delivering individualized care and cure	11:50 - 12:00 12:00 - 12:10

#### **Scientific Programme**

Community space: skills building 11:30 - 12:00

De Ontmoeting 2 (Community space)

#### **Using Maps to fight TB**

During an interactive quiz-like session the audience will be triggered

Until recently national TB control strategies have relied on a "one size-fits-all" approach. Instead, local differences in the number of people affected with TB, the presence of high risk populations, or a combination of other factors require different health interventions to be considered to best fit the local context. KIT Royal Tropical Institute has developed the MATCH approach (Mapping and Analysis for Tailored disease Control and Health system strengthening). During an interactive quiz session we invite the audience to look at various maps and to experience how visualization of TB data helps us to support decision making.<0:p></o:p>

Organized by <a href="https://www.kit.nl/" target="\_blank">KIT Royal Tropical Institute</a>
Until recently national TB control strategies have relied on a "one size-fits-all" approach. Instead, local differences in the number of people affected with TB, the presence of high risk populations, or a combination of other factors require different health interventions to be considered to best fit the local context. KIT Royal Tropical Institute has developed the MATCH approach (Mapping and Analysis for Tailored disease Control and Health system strengthening). During an interactive quiz session we invite the audience to look at various maps and to experience how visualization of TB data helps us to support decision making.<o:p></o>

Coordinator: Mirjam Bakker (Netherlands) Coordinator: Masja Straetemans (Netherlands)

Meet the expert session (MTE) 12:15 - 13:15

Antartica

#### MTE04 Bacteriology & Immunology Meet the Expert session

Next Generation Sequencing is poised to transform drug susceptibility testing (DST) for TB, reducing our dependence on phenotypic testing, and setting the stage for rapid, comprehensive diagnosis of drug resistant TB. In this session we will discuss ongoing global efforts to implement whole genome sequencing (WGS) and culture-free, targeted next generation sequencing (NGS) for TB DST in low-resource settings, and will share examples of successful WGS/NGS implementation for surveys and clinical use. Join the experts to discuss challenges and solutions, share insights from the field and get answers to burning questions about the practicalities of next generation sequencing for TB.<u9:p></u9:p>

<u9:p></u9:p>

New generation sequencing. Linking scientists, people in the field and manufactures

12:15 - 13:15

Daniela Maria Cirillo (Italy) Timothy Rodwell (United States of America)

Meet the expert session (MTE) 12:15 - 13:15

Oceania

#### MTE06 Zoonotic TB Meet the Expert session

The WHO/FAO/OIE/Union's joint 'Roadmap for Zoonotic TB' identifies key priorities that must be addressed if we are to reduce the burden of zoonotic TB. Research priorities in the roadmap include new diagnostics and vaccines, epidemiology and interventions coordinated with veterinary services. This talk will discuss the potential of One Health approaches to address these priorities and deliver new control tools against zoonotic TB.

One Health Lessons for controlling zoonotic TB in humans

12:15 - 13:15

Stephen Gordon (Ireland)

E-poster session (EP) 12:15 - 13:15

North America

#### EP04 Progress in paediatric tuberculosis and lung diseases

Chairperson: Olivier Marcy (France)

EP04-132- Culture-confirmed tuberculosis in infants less than 3 months of age: clinical presentation and management

H. Simon Schaaf (South Africa)

EP04-127- Risk factors for TB infection after household exposure to a TB index case among household contacts aged less than 5 years, Kisumu County, Kenya, 2014-2015

Barbara Burmen (Kenya)

EP04-128- The pharmacokinetics of high dose isoniazid for the prevention or treatment of drug-

resistant tuberculosis in HIV-infected and -uninfected children

Jana Louise Winckler (South Africa)

EP04-129- Adult-to-child transmission of tuberculosis within households in The Gambia

26 Leopold D Tientchel

EP04-130- Implementation of a cascade training approach improved child TB case notification in

6 Uganda

Moorine Penninah Sekadde (Uganda)

EP04-131- Non-communicable lung disease and exposure to household air pollution in rural Malawian

children: a cross-sectional study

Sarah Rylance (Malawi)

EP04-133- Demonstration of a successful model for diagnosing paediatric TB using upfront Genexpert

26 testing

26

26

Debadutta Parija (India)

EP04-134- Increasing paediatric TB case detection using the quality improvement approach: early

results from the USAID Defeat TB project in Uganda

Tamara Nsubuga Nyombi (Uganda)

EP04-135- Could 'non-typical' chest radiographic features in children with culture-confirmed

tuberculosis reflect early, less severe disease?

Megan Palmer (South Africa)

EP04-136- Over a third of child tuberculosis patients diagnosed in a tertiary centre in Botswana are

missing from the national Electronic Tuberculosis Register

Tonya Arscott-Mills (Botswana)

EP04-137- Drug-resistant tuberculosis in children and adolescents: experience from the Indus Hospital,

26 Karachi, Pakistan

Farhana Amanullah (Pakistan)

E-poster session (EP) 12:15 - 13:15

Central America

#### EP05 Raising awareness about tuberculosis through community education

Chairperson: Netty Kamp (Netherlands)

EP05-138- Co-creating an evaluation framework for tuberculosis extension for community health outcomes (TB-ECHO) model in New Delhi, India

Patrick Moonan (United States of America)

EP05-139- Tuberculosis-related knowledge in the general population: results from a cross-sectional survey in 11 regions of Ethiopia

Degu Jerene (Ethiopia)

EP05-140- Integrating tuberculosis into the primary school teaching curriculum in Malawi
Henry Kanyerere (Malawi)

EP05-141- Study on the effect of health promotion on health behavior for newly diagnosed TB patients
Ruixia Cheng (China)

EP05-142- Communication in health to fight tuberculosis in the prison system: the Brazilian experience
Gabriela Tavares Magnabosco (Brazil)

EP05-143- TB knowledge among general population across 30 districts in India: findings from three serial KAP surveys

Karuna Sagili (India)

EP05-144- Opinion leaders of India and their knowledge about tuberculosis across 30 districts in India: findings from three serial KAP surveys

Karuna Sagili (India)

EP05-145- Effectiveness of TB information, education and communication display screen: a case at Naitiri sub-County Hospital, Kenya

Jared Arasa Moenga (Kenya)

EP05-146- eHealth in tuberculosis: are we going in the right direction?

loana Margineanu (Netherlands)

EP05-147- Study on level of tuberculosis knowledge among women in Aksu, China

Hong Zhao (China)

EP05-148- A holistic and self-sustainable approach to control TB in a rural area of Senegal

26 Niccolo Riccardi (Italy)

E-poster session (EP) 12:15 - 13:15

South America

#### EP06 Next-generation sequencing implementation: tools for the future!

Chairperson: Emmanuel André (Belgium)

EP06-149- Impact of whole genome sequencing versus GeneXpert and line probe assays on therapy selection for multi- and extensively drug-resistant tuberculosis

Navisha Dookie (South Africa)

EP06-150- 26	Mycobacterium tuberculosis complex strains in BioNumerics  Marc Rodrigue (France)
EP06-151- 26	Number of effective drugs in the short-course MDR-TB regimen according to standard of care drug susceptibility testing and whole genome sequencing  Elise De Vos (Belgium)
EP06-152- 26	Whole-genome sequencing characterization of Mycobacterium tuberculosis drug resistance at a referral centre in Rome: implications for diagnosis and disease control Angela Cannas (Italy)
EP06-153- 26	Whole genome sequencing Mycobacterium tuberculosis directly from sputum identifies more genetic heterogeneity than sequencing from culture  Camus Nimmo (United Kingdom)
EP06-154- 26	Ethical challenges in the use of whole genome sequencing for tuberculosis surveillance and drug resistance testing: a qualitative study of stakeholder perspectives  Carly Jackson (Canada)
EP06-155- 26	Intrinsic genomic structure of Peruvian Mycobacterium tuberculosis strains Zully Puyen Guerra (Peru)
EP06-156- 26	Detection of pre-XDR and XDR-TB by whole genome sequencing in Tunisia Imen Bouzouita (Tunisia)
EP06-157- 26	From MDR to pre-XDR to XDR-TB: whole genome sequencing reveals several different evolutionary strategies  Serej D. Ley (South Africa)
EP06-158- 26	Pangenome analysis of Mycobacterium tuberculosis isolates disclosed accessory genome sequences specific to Beijing lineage Sarman Singh (India)
EP06-159- 26	Compensatory mutations in rpoA and rpoC gene regions in 121 Mycobacterium tuberculosis isolates disclose association with Ser531Leu mutation of rpoB gene Sarman Singh (India)

#### **Scientific Programme**

Special session (SPS) 12:15 - 13:15

Mississippi

#### **UN Panel**

Moderator: Roy Tomeij

Speakers:

12:45- 13:00 Dr Tereza Kasaeva, Director of the Global Tuberculosis (TB) Programme in the Communicable Diseases Cluster, WHO

Responsible management of lung health in mobil

12.15 – 12.30 Mr. Tim Martineau, Acting Deputy Executive Director, Programme Branch and Director, Fast-Track Implementation

How the HIV response affects TB, UNAIDS

12:30 - 12:45 Dr. Anne Detjen, Health Specialist, iCCM/IMCI, Childhood TB United Nations Children's Fund (UNICEF) A TB free generation

Dr. Dominik Zenner

How the IOM replies to HLM commitments

13:00 - 13:15 Discussion

Chairperson: Roy Tomeij

Responsible management of lung health in mobil Teresa Kasaeva	12:15 - 12:30
How the HIV response affects TB, UNAIDS Tim Martineau	12:30 - 12:45
A TB free generation Anne Detjen (United States of America)	12:45 - 13:00
How the IOM replies to HLM commitments  Dominik Zenner (United Kingdom)	13:00 - 13:15
Discussion	

Member Meetings (Regional, Section, Sub-section, Working Group)

Yangtze 1

#### **North America Region meeting**

12:15 - 13:15

49th Union World Conference on Lung Health , 24 - 27 October, 2018, The Hague, The Netherlands

### **Scientific Programme**

Meet the expert session (MTE) 12:15 - 13:15

Yangtze 2

### MTE07 TB Meet the Expert session

Effective MDR-TB treatment is critical not only for individual survival for persons living with MDR TB but also to the well being of communities to which they belong. Generating new evidence for optimal MDR-TB treatment is costly and subject to limitations related to regional variability in the bacterial, human and programmatic repertoire. This session will bring experts together to discuss issues to be considered in the management of MDR-TB and also look ahead to plotting the best paths to the generation of new, practice changing evidence.

Chairperson: Chen-Yuan Chiang (Taiwan)

### Best MDR-TB management - how to get the most out of available and future science

12:15 - 13:15

Vivian Cox (South Africa) Lorenzo Guglielmetti (France) Alberto Piubello (Niger)

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

Kilimanjaro 1&2

### **South-East Asia Region meeting**

Meet the expert session (MTE) 12:15 - 13:15

Everest 1&2

### MTE08 Adult & Child Lung Health Meet the Expert session 2

The second-line injectable antituberculosis medications amikacin, kanamycin and capreomycin have traditionally been mainstays of treatment regimens for multidrug-resistant tuberculosis (MDR-TB). Due to the high risk of adverse effects, including permanent sensorineural hearing loss, poor tolerability related to the need for administration via intramuscular injection, and recent evidence demonstrating worse outcomes in adults with MDR-TB treated with some of these agents, the injectables have been de-prioritized as components of MDR-TB treatment regimens. This session will briefly summarize the evidence related to the efficacy and safety of the second-line injectables in MDR-TB treatment regimens, and discuss the approach to constructing MDR-TB treatment regimens in children without the use of the injectables using an interactive case-based discussion format.

### Injectable-free regimens, and the role of injectable agents, in the treatment of children with DR-TB

12:15 - 13:15

H. Simon Schaaf (South Africa) Anthony Garcia-Prats (South Africa)

Community space: participatory activity 12:15 - 12:45

De Ontmoeting 2 (Community space)

### TB Warrior: A Thrilling New Web TV Series of TB Adventure and Advocacy

TBWarrior will be a high reach, social media-charged platform devoted to global TB advocacy. Our venture aims to fight TB in a new, innovative way by catalyzing advocacy and leveraging positive recognition of the front line community of TB care providers and patients. We will innovate by delivering highly consumable, TB-themed, cinematic adventures to engage and retain a far broader global community of people touched by TB than any other digital effort to date. The energetic, entertaining content will be episodic, dramatic, and released over time keeping people connected to the platform. Series story lines over time will touch on various aspects of TB care and control. Scriptwriting is already underway. A variety of additional digital forums (i.e., podcast, blog) and social media channels (i.e., Facebook, Instagram, Twitter, YouTube, Whatsapp, etc.) will be part of the platform, encouraging community sharing, bonding, and normalization of TB.

Chairperson: Joe Kabel (United States of America)

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

Poster Area

### PS22 Treating TB-HIV patients under programmatic conditions

Atlantic 2

26

Chairperson: Nunurai Ruswa (Namibia)

PS22-629- Missed opportunity for HIV testing among TB clinic attendees in Malawi: results from the Malawi population-based HIV impact assessment, 2015

Laurence Gunde (Malawi)

PS22-631- Barriers to tuberculosis drug adherence during community treatment among HIV-TB patients in Southwest China

Li Zhong (China)

PS22-632- Integration of services at a TB DOT Point improve access and treatment outcomes: the Kuvukiland story

Mavis Alice Chipo Mukamba (Namibia)

PS22-633- High prevalence, incidence and mortality of tuberculosis among people with advanced HIV disease, Viet Nam, 2015-2017

Van-Anh Ho (Viet Nam)

PS22-634- Interim results in HIV patients treated for multidrug-resistant tuberculosis with bedaquiline

and delamanid in Belarus

Alena Skrahina (Belarus)

PS22-636- Early presumptive TB treatment in South African HIV-positive hospital in-patients

Carolin Bresges (United Kingdom)

PS22-638- Fungal profile of lower respiratory tract infections and drug susceptibility patterns among

26 people living with HIV in Addis Ababa, Ethiopia

Ephrem Tolossa (Ethiopia)

PS22-639- Clinical, microbiological and molecular profiles of HIV-associated tuberculous meningitis

26 patients in Myanmar

Chulhun L Chang (Korea, Republic of)

PS22-64026 Frequency and significance of hyponatremia in tuberculous meningitis: a prospective cohort and causal survival model
Sofiati Dian (Indonesia)

PS22-641- HIV disclosure by partnership status among PLHIV initiating IPT in Dire Dawa and Harar,

PS22-641- HIV disclosure by partnership status among PLHIV initiating IPT in Dire Dawa and Harar 26 Ethiopia

Tsigereda Gadisa Belachew (United States of America)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

### PS21 Optimising regimens for multidrug-resistant tuberculosis treatment

Atlantic 2

Chairperson: Francesca Conradie (South Africa)

PS21-617Risk factors for poor treatment outcomes in patients with multidrug-resistant TB in Cambodia: a 10-year experience
Sam Sophan (Cambodia)

PS21-618- Roll-out of the shorter treatment regimen for drug-resistant tuberculosis in Zambia: finding opportunities to strengthen programmatic gaps

Patrick Saili Lungu (Zambia)

PS21-619- Trends in treatment outcomes among MDR-TB patients in Tigray Region, Ethiopia 26 Degu Jerene (Ethiopia)

PS21-620- Death and loss to follow-up among patients receiving out-patient care for drug-resistant tuberculosis in Johannesburg, South Africa

Craig van Rensburg (South Africa)

PS21-621- Mortality and associated risk factors of patients with extensively drug-resistant tuberculosis: an emerging public health crisis in China

Chengli Bei (China)

PS21-623- Evaluation of isoniazid-resistant tuberculosis cases in Istanbul, Turkey

26 Aylin Babalık (Turkey)

PS21-625- Factors affecting outcomes of drug-resistant tuberculosis in the Philippines

**26** Evanisa Lopez (Philippines)

PS21-626- Failing multidrug-resistant tuberculosis treatment with the short-course regimen: what next?

Charles Ssonko (United Kingdom)

PS21-627- Initiation of patient enrolment in treatment with new drugs: developing a patient selection and monitoring model

Natalia Lytvinenko (Ukraine)

PS21-628- Effect of decentralization on MDR-TB treatment in Ayeyarwaddy Region, Myanmar

26 Si Thu Aung (Myanmar)

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

Poster Area

### PS20 Anti-tuberculosis drugs, monitoring and optimising

Atlantic 2

Chairperson: Paul Nunn (United Kingdom)

PS20-608- Clinical efficacy of combined chemotherapy with clofazimine in the treatment of multidrug-26 resistant tuberculosis

Xueling Li (China)

PS20-609- Double dose rifampicin is well tolerated in first-line treatment for tuberculosis

Armand Van Deun (Belgium)

PS20-610- High-dose rifampicin results in higher total and protein-unbound plasma concentrations but

26 not in increased free fraction

Carlijn Litjens (Netherlands)

PS20-611- Therapeutic failure associated with low pyrazinamide exposure to MIC ratio using dried

26 blood spot analysis

Natasha van't Boveneind-Vrubleuskaya (Netherlands)

PS20-612- Assessment of rifampicin exposure using dried blood spot analysis: a pilot study

Natasha van't Boveneind-Vrubleuskaya (Netherlands)

PS20-613- Delayed drug susceptibility results are associated with amplified drug resistance in M.

26 tuberculosis isolates

Yi Hu (China)

PS20-614- Therapeutic drug monitoring for rifampin, isoniazid and pyrazinamide among newly

diagnosed tuberculosis in Shenzhen, China

Peize Zhang (China)

PS20-615- Adverse reactions in the treatment of MDR-TB

Irina Chernokhaeva (Russian Federation)

PS20-616- Treatment of patients with extensively drug-resistant tuberculosis by administration of new

26 anti-tuberculosis drugs

Anna Starshinova (Russian Federation)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

### PS25 Tulips and tuberculosis: emerging themes for children

Atlantic 2

26

Chairperson: Lisa V. Adams (United States of America)

PS25-665- Increasing childhood TB diagnosis through symptom screening in pediatric outpatient

26 departments of key hospitals in Karachi Meherunissa Hamid (Pakistan)

PS25-666- Assessment of the IPT cascade for under five childhood contacts of smear-positive TB

26 Dickens Onyango (Kenya)

PS25-667- 26	Alarming child TB under-reporting in Pakistan: need to strengthen child TB surveillance Aashifa Yaqoob (Pakistan)
PS25-668- 26	Xpert MTB/RIF assay to diagnose suspected paediatric tuberculosis: a retrospective cohort study in Shanghai, China Lu Xia (China)
PS25-669- 26	Improving pediatric TB diagnosis in North Kivu, DR Congo, by targeted GeneXpert on gastric aspirates  Daan Van Brusselen (Belgium)
PS25-670- 26	Implementation of systematic investigation and preventive therapy in children under 5 years living with smear-positive pulmonary tuberculosis in four French-speaking African countries: preliminary results  Kobto Koura (France)
PS25-671- 26	Enhancing laboratory diagnosis of Mycobacterium tuberculosis in samples from children in The Gambia Abigail Ayorinde (Gambia)
PS25-672- 26	Scaling up childhood TB diagnosis in Malawi through capacity building and active contact investigation  Christian Stillson (Malaysia)
PS25-673- 26	Baseline characteristics and clinical presentation of African and Indian children with smear- negative non-severe (minimal) TB in the SHINE trial Anna Turkova (United Kingdom)
PS25-674- 26	Use of chest radiographs in a Phase 3 randomised controlled efficacy trial for treatment shortening of non-severe drug-susceptible TB in children: the SHINE Trial Megan Palmer (South Africa)
PS25-675- 26	Active case finding at tertiary care hospitals to increase paediatric tuberculosis case notification in Bangladesh  Md. Toufiq Rahman (Bangladesh)
PS25-676- 26	Immune reconstitution syndrome in hospitalized HIV-infected children starting ART Lisa M. Cranmer (United States of America)

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

Poster Area

### PS26 Improving case finding and reducing diagnostic delays

Chairperson: Hege S Bjelkaroy (Norway)

Pre-treatment loss to follow-up from regional referral hospitals in Uganda: implications for optimizing the patient centered care model 26

Kenneth Mutesasira (Uganda)

PS26-679- A novel community-based tuberculosis case finding mentorship intervention to find missing cases in Southern Nations Nationalities and Peoples Region, Ethiopia

Mubarek A Yasin (Ethiopia)

PS26-680- 26	Targeted intervention to improve contact tracing and case finding in a complex case in a low-incidence country  Margriet Brouwer (Netherlands)
PS26-681- 26	Accessibility of healthcare facilities contributes to reducing pre-treatment delay among tuberculosis patients in Central India  Moumita Biswas (India)
PS26-682- 26	Experiences of household tuberculosis contacts with SMS results and instructions and influences on intention to seek care Joseph Ggita (Uganda)
PS26-683- 26	Late presentation hampers successful TB treatment in the era of TB-HIV integrated care in Uganda Joseph Musaazi (Uganda)
PS26-684- 26	Assessment of health facility based active case finding intervention effect in increasing TB case notification among the elderly Willy Mbawala (Tanzania, United Rep.)
PS26-685- 26	Increasing TB case finding through implementation of Leadership Development Programme action plans in selected Nigerian states  Babatunde Tifase (Nigeria)
PS26-686- 26	How does the community contribute to increased TB case finding? Esty Febriani Mkes (Indonesia)
PS26-687- 26	Effectiveness of an upfront sputum sample collection and transportation strategy to reach missed TB cases: a study of 62 districts in India  Ganesh Chandra Mallick (India)
PS26-688- 26	Monitoring DOTS in patients with multidrug-resistant tuberculosis in Bangladesh using mHealth platform

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

Poster Area

### PS32 Tobacco control programmes: are they key to sustainable tobacco control?

Atlantic 1

Chairperson: Akramul Islam (Bangladesh)

PS32-750- Innovative financing of tobacco control yielding desired outcomes in low income settings: experience from the state of Himachal Pradesh, India

Gopal Chauhan (India)

PS32-751- Emergent issues in Philippine tobacco control and priority reform recommendations from the Department of Health's Omnibus Policy Project

Allan Chester Nadate (Philippines)

PS32-752- Coordination and collaboration of national tobacco control activities: lessons from Bangladesh

Md. Khaiurul Alam Shiekh (Bangladesh)

PS32-753- 26	Institutionalization of the tobacco control programme is key to sustained results: a case study from the challenge-ridden state of Bihar in India  Deepak Mishra (India)
PS32-755- 26	Countering tobacco industry tactics to recruit youth tobacco users: where are we in India after a decade of tobacco control programme and legislation enforcement?  Renu Sharma (India)
PS32-756- 26	Journey towards local enforcement of tobacco control in metropolitan Manila, Philippines Maria Loida Alzona (Philippines)
PS32-757- 26	Strengthening of Article 11 and 14 of FCTC: efficacy of pictorial warnings on tobacco products in promoting cessation Sonu Goel (India)
PS32-759- 26	Methods used to control tobacco consumption in post-war Sri Lanka Periyannan Dineshkumar (Sri Lanka)
PS32-760- 26	SmokeFree caravan: popularizing the national executive order on smoke free implementation and tobacco control in selected key cities in the Philippines Carlos Garcia (United States of America)

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

Poster Area

### PS33 Activism or evidence: what drives tobacco control?

Atlantic 1

Chairperson: Anne Jones (Australia)

PS33-761- 26	Role of mass media in tobacco control: a study of the Indian context  Amrita Gupta (India)
PS33-762-	Exposure to second-hand smoke and risk of TB in children: what do Challenge T

PS33-762- Exposure to second-hand smoke and risk of TB in children: what do Challenge TB Project's active case finding data tell us?

Shagufta Sultana (Bangladesh)

PS33-763- What is the prevalence of e-cigarette use among current smokers and users of tobacco in India? A multicultural cross-sectional study

Govind Kumar Tripathi (India)

PS33-764- Diffusion of metals in the liquids of electronic cigarettes
Paraskevi Katsaounou (Greece)

PS33-765- Can stigma work in the fight against the tobacco industry?
P. A. S. C. Lakmal (Sri Lanka)

PS33-767- High yield of earned media in a month-long Tobacco Free Punjab campaign in Punjab, India Sonu Goel (India)

PS33-769- Tobacco use among rickshaw pullers of Dhaka City: behavior, awareness and prevention M Manjurul Islam (Bangladesh)

PS33-770- Implementing a tobacco control law in Bangladesh: challenges and way forward
Mohammed Misbah Uddin (Bangladesh)

PS33-771- Tobacco control measures: focus group discussions in Georgia

26 Nino Maglakelidze (Georgia)

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

Poster Area

### PS19 Tuberculosis advocacy for political commitment and accountability and critical areas for tuberculosis care

Atlantic 2

Chairperson: Chaudhary Nawaz (Pakistan)

Zero TB Cities Initiative in Bangladesh: the power of advocacy in turning political PS19-597-

commitment into action

Zakia Sultana (Bangladesh)

PS19-598- Community advocate to increase local funding allocation for TB control

26 Erman Varella (Indonesia)

PS19-599- Involving TB survivors as TB champions and advocates: a report from India

Anupama Srinivasan (India)

PS19-600- Maximising the impact of cash transfers for TB control: when, how much and for how long?

Daniel J Carter (United Kingdom)

PS19-601- Awareness and knowledge of tuberculosis and predictive factors among urban slum

dwellers in Lagos, Nigeria

Funsho Egbedeyi (Nigeria)

PS19-602- Tuberculosis-related knowledge of family members of tuberculosis patients in Ethiopia

Degu Jerene (Ethiopia)

PS19-603-Additional nutritional support to TB and DR-TB patients provided under Chief Minister's

Flagship Food Support Programme improved treatment compliance and outcome of NTP in

Chhattisgarh

Gayadhar Mallick (India)

PS19-604- Assessing community knowledge and stigma perception about tuberculosis through stigma

measurement scale in Pakistan

Farah Naureen (Pakistan)

PS19-605- Importance of community engagement in the STREAM Stage II trial in two study sites in

India: a learning experience

Subrat Mohanty (India)

PS19-606-Monthly cough days to increase TB screening at the community level: experience from

Sofala Province, Mozambique

Lucio Colaco (Mozambique)

Effect of decentralisation of clinical and programmatic management of drug-resistant PS19-607-26

tuberculosis services on enrolment of drug-resistant tuberculosis patients: Nigerian

experience, 2013-2017

Victor Babawale (Nigeria)

26

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

Poster Area

### PS23 The human right to health

Atlantic 2

Chairperson: Olive Mumba (Tanzania, United Rep.)

PS23-642- A qualitative exploration of disclosure of MDR-TB status in South Africa
Andrea Stennett (United States of America)

PS23-643- Factors associated with stigmatizing attitude towards tuberculosis patients in the general population of Ethiopia

Degu Jerene (Ethiopia)

PS23-644- Assessing and overcoming human rights-related barriers to TB in 11 countries

Hyeyoung Lim (Switzerland)

PS23-645- Discriminatory experiences of TB patients across 30 districts in India

26 Karuna Sagili (India)

PS23-646- The right to complete TB treatment in the Netherlands

Niesje Jansen (Netherlands)

PS23-647- Humanizing TB: let's talk about people, not numbers

Marion Biremon (Kyrgyz Republic)

PS23-648- Challenging stigmatizing language in TB research and practice: achievements and lesson

learnt from the community research advisors group experience

PS23-649- Understanding gender differences and barriers that exist for men and women in accessing

26 TB services for improved TB case notification in Pakistan

Dorothy Namutamba (United States of America)

Aamna Rashid (Pakistan)

PS23-650- A new political framework for stimulating TB drug R&D incorporating concepts from

26 bioethics and human rights

26 bloethics and human rights

Mascha Elskamp (United States of America)

PS23-651- Perceptions of family members of tuberculosis patients about TB-associated stigma in

26 Ethiopia

26

Daniel G. Datiko (Ethiopia)

PS23-652- Lawyers' knowledge about tuberculosis patient's rights in India

Sukhwinder Singh (India)

PS23-653- Factors affecting uptake of TB services in the communities: findings from a TB knowledge,

attitude and practice survey in Nigeria

Abiodun Hassan (Nigeria)

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

Poster Area

### PS31 Scaling up diagnosis: the way forward

Atlantic 1

Chairperson: Leen Rigouts (Belgium)

PS31-737Sputum smear slide referral by non-laboratory professionals as an interim solution in remote areas, Amhara Region, Ethiopia
Beza Belayneh (Ethiopia)

PS31-738Are we adequately utilising available diagnostic resources for DR-TB in India? Assessment of annual status report
Sripriya Pandurangan (India)

PS31-739TB one stop services, a diagnostic hub offering one stop services: an innovative approach to increase bacteriologically positive TB case detection in the private sector

PS31-740- Use of motorcyclists for specimen referral: phased implementation in Tanzania specimen referral network

Edgar Luhanga (Tanzania, United Rep.)

PS31-741- Ineffective implementation of interventions: the largest road block to the end TB strategy
Wilber Sabiiti (United Kingdom)

PS31-742- Reaching vulnerable communities in hard-to-reach areas of Myanmar: increasing access to TB diagnosis through sputum collection centers

Zar Ni Thaung (Myanmar)

PS31-743- Pre-evaluation of pyrazinamide resistance among MDR-TB isolates: a study from an apex tertiary care center in India

Binit Kumar Singh (India)

PS31-744- Detecting drug-resistant tuberculosis in patients with history of prolonged stay in highburden countries, Taiwan

Pei-Chun Chan (Taiwan)

PS31-745- A qualitative approach to determine dynamics behind low GeneXpert utilization in Jinja Health region, Uganda

Godfrey Ekuka (Uganda)

PS31-746- Improved GeneXpert utilization through capacity building activities in Southern Nations Nationalities and Peoples Region, Ethiopia

Pawlos Reji (Ethiopia)

PS31-747- Barriers to uptake of GeneXpert testing where recommended: insights from a district hospital in Sierra Leone

Brian Kermu Ngwatu (Sierra Leone)

PS31-748- Increased mortality during rifampicin-resistant TB treatment associated with inadequate laboratory testing

Rosanna Boyd (United States of America)

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

Poster Area

### PS27 Xpert for all: optimistic or realistic?

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Chairperson: Sabira Tahseen (Pakistan)

Chairperson: Julian Villalba (United States of America)

PS27-689- Decentralisation of Xpert MTB-Rif in to hospitals: the impact on MDR case finding.

Jogjakarta, Indonesia

Pratiwi Putri Masrul (Indonesia)

PS27-690- Xpert MTB/RIF assay for detection of rifampicin-resistant M. tuberculosis from presumptive drug resistance tuberculosis patients in Ethiopia

Mulualem Tadesse (Ethiopia)

PS27-691- GeneXpert positivity rate among smear negative TB patients in Mombasa County, Kenya in

26 2017

Thani Suleiman (Kenya)

PS27-692- Role of Xpert MTB/RIF in diagnosis of tuberculous meningitis: genotypic, phenotypic and

26 clinical evaluation

PS27-693- Clinical utility of Xpert MTB/RIF assay for the diagnosis of extrapulmonary tuberculosis in

26 Ethiopia

26

26

Mulualem Tadesse (Ethiopia)

PS27-694- Valeur ajoutée du GeneXpert pour le dépistage de la tuberculose chez les usagers de

drogue à Abidjan : comparaison d'algorithmes de diagnostic en vie réelle

Adeline Bernier (France)

Jigyasa Chaubey (India)

PS27-695- Challenges with implementation of Xpert MTB/RIF testing for tuberculosis using a hub-and-

spoke model in Uganda. A health system perspective

Talemwa Nalugwa (Uganda)

PS27-696- Results of a repeat GeneXpert MTB/RIF test among rifampicin resistant patients in a low

26 MDR-TB prevalence setting, Uganda

Willy Ssengooba (Uganda)

PS27-697- Improved diagnostic accuracy with a single GeneXpert MTB/RIF® performed on two

combined sputa versus smear microscopy of three separate sputum samples

Clarence Yeong (Australia)

PS27-698- Improving MDR-TB diagnosis through Xpert MTB/Rif testing for high risk TB patients in

26 Kampala

Raymond Byaruhanga (Uganda)

PS27-699- 7 years of implementing GeneXpert MTB/RIF diagnostic assay—lessons learnt from Nigeria

26 Amos Fadare Omoniyi (Nigeria)

PS27-700- What causes the most unsuccessful results in GeneXpert: experience from Indonesia

Retno Kusuma Dewi (Indonesia)

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

Poster Area

### PS18 The role of digital technologies along the patient pathway

Atlantic 2

Chairperson: Kristian van Kalmthout (Netherlands)

PS18-585- Findings from the DrOTS Perceptions Study: patient and wider community engagement with a drone-observed therapy strategy for TB control in rural Madagascar

Astrid Knoblauch (United States of America)

PS18-586- Use of video-DOT in treatment of active tuberculosis in Norway

Tone Ovesen (Norway)

PS18-587- A randomised trial of in-person vs. electronic directly observed therapy for tuberculosis

26 treatment

Michelle Macaraig (United States of America)

PS18-588- Evaluating the accuracy of 99DOTS, a cellphone-based strategy for monitoring TB treatment

26 adherence

Beena Thomas (India)

PS18-589- Advanced real-time electronic data system to improve turnaround time and data

26 management in mobile screening: TaS4TB 2017 operational year

Tonderai Sengai (Zimbabwe)

PS18-590- mHealth for home-based TB contact investigation in Kampala, Uganda: a household-

26 randomised controlled trial
Patricia Turimumahoro (Uganda)

PS18-591- Scaled deployment of ICT-enabled adherence monitoring for all public-sector TB patients in

26 Mumbai

Daksha Shah (India)

PS18-593- Automated electronic sensing of TB health care facilities in Johannesburg, South Africa:

26 Time and Motion Study

Darlington Mapiye (South Africa)

PS18-594- Improved patient management through implementing an electronic surveillance system: a

Kenyan TIBU experience

Martin Githiomi (Kenya)

PS18-595- Adhaar: an important link between government programs and TB patients in India to create

an enabling environment

Ramesh Chellan (India)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

### PS24 Tuberculosis infection: diagnostics and immunology

Atlantic 2

26

Chairperson: Abbas Zezai (Netherlands)

PS24-654- 26	Adenosine deaminase and CCL1 discriminate between active and latent tuberculosis Laura van Hoorn (Netherlands)
PS24-655- 26	Immunomodulation in latent tuberculosis infection with isoniazid prophylactic therapy in view of invariant natural killer T (iNKT) cells Wei-Juin Su (Taiwan)
PS24-656- 26	Quantiferon-TB gold plus is a more sensitive screening tool than quantiferon-TB gold intube for latent tuberculosis infection among older adults in long-term care facility
PS24-657- 26	Early tuberculosis infections assessed by serial QuantiFERON-TB Gold Plus testing in a prospective cohort of household contacts  María Elvira Balcells (Chile)
PS24-659- 26	The TEKO trial: implementation of the QuantiFERON®-TB Gold In-Tube test at CD4 blood draw for diagnosing latent tuberculosis among newly diagnosed HIV-infected adults in South Africa  Jonathan Golub (United States of America)
PS24-660- 26	Utility of QGIT as an adjunct to TST for screening of latent tuberculosis infection among Indian healthcare workers Sunita Girish (India)
PS24-661- 26	Differential protein expression in peripheral blood CD4+ T cells between latent and active tuberculosis patients $\frac{1}{2}$
PS24-662- 26	Target-responsive liposome facilitated by catalyzed hairpin assembly enables highly sensitive detection of tuberculosis-related cytokine Haiyan Cui (China)
PS24-663- 26	Utility of the T-SPOT.TB test to differentiate active TB from LTBI in patients from Cape Town, South Africa  Andrea Tattersall (United Kingdom)
PS24-664- 26	Immune responses among adult household contacts resistant to Mycobacterium tuberculosis Pholo Maenetje (South Africa)

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

Poster Area

### PS28 How to make active tuberculosis case finding more active?

Atlantic 1

Chairperson: Yan Lin (China)

PS28-701- Prediction model of active TB in HIV-negative/unknown individuals: development, validation and cost-effectiveness analysis

Yun-Ju Shih (Taiwan)

PS28-702- Prevalence of pulmonary tuberculosis among pregnant women in southern Mozambique (PREG-TB)

Dinis Nguenha (Mozambique)

PS28-703- 26	Active massive tuberculosis case finding in East Jakarta, 2016-2017: the role of Ketuk Pintu Layani Dengan Hati and Juru Pemantau Batuk cadre programmes Ngabila Salama (Indonesia)
PS28-704- 26	Yield of active tuberculosis case finding in a high-burden district of South Africa Gladys Kigozi (South Africa)
PS28-705- 26	Risk of tuberculosis transmission in Cali, Colombia, 2009-2013 Paola Buriticá (Colombia)
PS28-707- 26	Geospatial hotspots in the spatial spread of tuberculosis in Ethiopia Debebe Shaweno Adewo (Australia)
PS28-708- 26	Prevalence of pulmonary tuberculosis in an urban city with increasing internal migration in China Chongguang Yang (China)
PS28-709- 26	Prevalence of and risk factors for active tuberculosis among school children in Mongolia Maral Oyunsuren (Mongolia)
PS28-710- 26	Tuberculosis disease outbreak in a secondary school in Mukono District, Central Uganda, October 2017 Akello Susan Adakun (Uganda)
PS28-711- 26	Are classrooms and dormitories equally dangerous for tuberculosis transmission among adolescent students in Guangxi, China?  Htet Myat Win Maung (Myanmar)
PS28-712- 26	High yield of tuberculosis case finding by mobile chest X-ray screening in Ho Chi Minh City, Viet Nam
	Andrew James Codlin (Viet Nam)

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

Poster Area

### **PS29 Active case finding**

Atlantic 1

Chairperson: Merry Samsuri (Indonesia)

PS29-713- Yield of retrospective vs. prospective tuberculosis contact investigations: survey findings in four Ethiopian towns

Zewdu Gashu (Ethiopia)

PS29-714- Ending the TB epidemic: role of active TB case finding using mobile units for early diagnosis of tuberculosis in Nigeria

Rupert Eneogu (Nigeria)

PS29-715- Active TB case finding among seniors in rural China: findings from a pilot project Jun Cheng (China)

PS29-716- Does mobile screening for tuberculosis identify cases earlier among vulnerable populations? Community-based active case finding in Palawan, the Philippines

Kyung Hyun Oh (Korea, Republic of)

PS29-717- 26	Motivating private physicians to notify TB cases: a case study from rural India Tushar Garg (Indonesia)
PS29-718- 26	Diagnostic delays and barriers to tuberculosis service delivery in hard-to-reach riverine areas of the Niger Delta, Nigeria  Chinwe Eze (Nigeria)
PS29-719- 26	Effects of active household contact screening on TB case detection in Afghanistan Mohammad Khakerah Rashidi (Afghanistan)
PS29-720- 26	Narrowing the gap of missing cases in Myanmar: active TB case finding in hard-to-reach and poor urban areas  Thet Htet Aung (Myanmar)
PS29-721- 26	Integrating TB screening in HIV testing outreaches targeting key HIV populations improves TB case detection in Bugiri district, Uganda  Dathan M Byonanebye (Uganda)
PS29-722- 26	Role of intensified tuberculosis case finding among drug users in Afghanistan Ghulam Qader (Afghanistan)

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

Poster Area

### PS34 Drug safety and efficacy in Europe

Chairperson: Jan-Willem Alffenaar (Netherlands)

Chairperson:	Chairperson: Jan-Willem Alffenaar (Netherlands)	
PS34-772- 26	Case study: applying a comprehensive care model to improve MDR-TB treatment success and reduce mortality in Mykolayivska Oblast, Ukraine Kateryna Gamazina (Ukraine)	
PS34-773- 26	From compassionate use to programmatic use of delamanid and bedaquiline: safety data from Armenia Hakob Atshemyan (Armenia)	
PS34-774- 26	Eligibility for shorter treatment of multidrug-resistant tuberculosis in Kyrgyzstan Mathieu Bastard (Switzerland)	
PS34-775- 26	Interim treatment outcomes of multidrug-resistant tuberculosis patients in individualized treatment regimens with new drugs in Tajikistan  Mavlyuda Makhmudova (Tajikistan)	
PS34-776- 26	Program implementation of bedaquiline in Ukraine: challenges and achievements  Kateryna Gamazina (Ukraine)	

PS34-777- Use of bedaquiline to treat TB-HIV co-infected individuals in Ukraine Olga Pavlova (Ukraine)

PS34-778- Use of delamanid and bedaquiline in Georgia: description and results from the end TB cohort programmatic data

Tinatin Kotrikadze (Georgia)

Kateryna Gamazina (Ukraine)

PS34-779-	Genomic context of drug resistance among Mycobacterium tuberculosis in Moldova
26	Kurt Wollenberg (United States of America)
PS34-780- 26	What needs to be done to sustain progress achieved in TB control in EECA region before critical decisions are made  Lela Sulaberidze (Georgia)
PS34-781-	Introduction of active drug safety monitoring and management in Tajikistan
26	Mavlyuda Makhmudova (Tajikistan)
PS34-782- 26	Is the shorter multidrug-resistant tuberculosis regimen suitable for Eastern Europe? The example of Armenia  Naira Khachatryan (Armenia)

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

Poster Area

### PS30 How do programmes find tuberculosis cases: lessons from the field

Atlantic 1

Chairperson: Tope Adepoyibi (Australia)

PS30-725- 26	Does mobile screening for tuberculosis alleviate the financial burden of patients among vulnerable populations? Community-based active case finding in Palawan, the Philippines
	Kyung Hyun Oh (Korea, Republic of)

PS30-726- Public-private partnership to enhance access of key populations to public sector health facilities for diagnosis and treatment of tuberculosis

Sharaf Shah (Pakistan)

PS30-727- Leveraging rapid molecular tests for TB detection in a key population, India
Yogesh Patel (India)

PS30-728- A successful model of TB contact investigation in Ukraine

Tamara Ivanenko (Ukraine)

PS30-729- Expansion of tuberculosis services across the world's largest humanitarian crisis
Saifur Reja (Bangladesh)

PS30-730- Geospatial mapping of current and former mineworkers in a high incidence TB setting: 26 Zambia

Laura Jean Podewils (United States of America)

PS30-731- Tuberculosis health services for mineworkers in Zambia: policies vs. practices

Mathias Tembo (Zambia)

PS30-732- Active tuberculosis case finding in healthcare settings: feasibility and promise of case detection and treatment initiation

Kimcheng Choun (Cambodia)

PS30-733- To study the complications and sequelae in patients with pulmonary and pleural tuberculosis at a tertiary care hospital in Pakistan

Syed Muhammad Zubair (Pakistan)

49th Union World Conference on Lung Health , 24 - 27 October, 2018, The Hague, The Netherlands

### **Scientific Programme**

PS30-734- 26	The yield of tuberculosis mass screening among refugees in Western Ethiopia  Degu Jerene (Ethiopia)
PS30-735-	Active case finding using mobile units in urban slums, Ulaanbaatar, Mongolia
26	Hongjo Choi (Korea, Republic of)

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49th Union World Conference on Lung Health ,
24 - 27 October, 2018,
The Hague, The Netherlands
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Community space: networking activity 13:15 - 18:00

De Ontmoeting 1 (Community space)

#### TB, the Dutch story

DUTCH INSPIRATIONAL AFTERNOON IN THE COMMUNITY SPACE

On Friday, 26 October, from 1.15pm till 6pm, participants will meet in 'De Ontmoeting', the conference's Community Space, which is open to everyone with no entrance fee. On this afternoon PAST, PRESENT and FUTURE of TB in the Netherlands will be explored, as well as the deployment of Dutch expertise and experience worldwide.

Over the course of this afternoon, we will present you with an interactive program, covering various themes of Dutch TB care and prevention, and

**BEST PRACTICE - INNOVATION - SYNERGY** 

overall cross cutting themes

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 Timeframe
 Theme
 Organization
 Form
 13.15 - 13.30
 WELCOME REMARKS
 13.30 - 13.45
 THEN
 Private initiative
 Zonnestraal
 Film & presentation
 13.45 - 14.15
 Delft Imaging
 Stories
 Philips
 KNCV
 14.15 - 15.00
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 Challenge TB
 Delft Imaging
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 15.00 - 15.15 
 Contact investigation
 KLM
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49th Union World Conference on Lung Health , 24 - 27 October, 2018, The Hague, The Netherlands

### **Scientific Programme**

Community space: panel discussion 13:15 - 15:15

De Ontmoeting 2 (Community space)

### Global fund community dialogue space

Civil society (CS), community groups (CG) and key populations (KP) play a crucial role in the design, delivery, monitoring, and governance of programs responding to AIDS, Tuberculosis and Malaria. The Global Fund is committed to engaging communities, strengthening community-based responses and promoting gender equality and human rights. As part of the Global Fund´s Community, Rights and Gender Strategic Initiative (CRG SI), the Regional Platform for Communication and Coordination for Anglophone Africa hosted by EANNASO propose a networking zone with the following activities:

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\_\_•Thought provoking round-table panel discussions, open debate and hard talk between CS/CG/KP and high-level decision makers to identify opportunities and recommendations for effective engagement.

□•Topical discussions around strengthening community systems, promoting human rights and gender equality in Global Fund programs.

□•to share EANNASO´s experience in implementing the STOP TB Partnership Community Rights and Gender Tools in Tanzania.

□•Sharing of experiences on country coordinating mechanisms, accessing technical assistance, engaging in funding request development and monitoring grant implementation.

□•Promotion of technical assistance opportunities through the Global Fund and its partners Materials to be distributed: Capacity development tools and materials developed by the Platforms, including guides, surveys, reports and research in English, French, Portuguese and Swahili.

Tech Innovation Zone 13:15 - 13:45

Tech Innovation Zone - Exhibition Area

#### **Presentations @Tech Innovation Zone**

SmartSpot Quality 13:15 - 13:30

Dean Sher Anest Myburgh

"SureAdhere VOT: Revolutionizing directly observed therapy with mobile 13:30 - 13:45 technology"

Richard Garfein

Symposium (SP) 14:00 - 15:30

KWA Plenary Hall

## SP35 Measuring the magnitude and impact of multidrug-resistant tuberculosis stigma on patients and healthcare workers

The objective of the session is to introduce new measures agains TB stigma and to show how stigma impacts care seeking, health care provision, retention and professional identity. We explain the use of rigorous scales to detect DR-TB stigma in policies, patients and providers, and report on the psychometric properties of the new scales, their congruence and comparability with older stigma measures, and their ability to measure the relationship between TB stigma and patient-relevant outcomes. Finally, we share an example of public communication to improve health seeking.

Chairperson: Ellen Mitchell (Netherlands)

Chairperson: Pedro Suarez (United States of America)

### Development and validation of a stigma scale for patients with drug-resistant tuberculosis in Viet Nam

Lisa Redwood (Australia)

#### Stigma among MDR-TB patients in Cape Town, South Africa

Anne Lia Cremers (Netherlands)

### Tuberculosis-related stigma among adults presenting for human immunodeficiency virus testing in South Africa

Kristina Bajema (United States of America)

### The role of awareness raising activities on stigma and discrimination: a case study from Afghanistan

Khaled Seddiq (Afghanistan)

## High levels of perceived tuberculosis stigma among DOTS service providers in Lagos, Nigeria

Ellen Mitchell (Netherlands)

Discussion

Symposium (SP) 14:00 - 15:30

Europe

### SP36 Individualised versus standardised second-line treatment for multidrugresistant tuberculosis

In this symposium, speakers with diverse experiences and opinions will discuss the merits and disadvantages of individualised treatment versus a standard regimen for the treatment of MDR-TB.Participants will have an update of current opinion on individualised versus standardised treatment, relating to their setting and an overview of the current state of national and international practice and recommendations.

Chairperson: Dick van Soolingen (Netherlands) Chairperson: Richard Anthony (Netherlands)

## Strengthening the health system to address the individualised vs. standardised treatment dichotomy in MDR-TB management ${\bf m}$

Ernesto Jaramillo (Switzerland)

### Standardised short treatment regimen for multidrug-resistant tuberculosis: the details (how standard is it?)

Armand Van Deun (Belgium)

Individualised MDR-TB treatment is highly effective and prevents additional drug resistance Christoph Lange (Germany)

Will new drugs lead to a single regimen for everyone?

Martin Boeree (Netherlands)

Discussion

Symposium (SP) 14:00 - 15:30

Antartica

## SP37 Children included: a human rights-based approach to the inclusion of children in advances in drug-resistant TB

The past decade in DR-TB has been one of innovation, but children are often systematically excluded when it comes to providing access to diagnostic and therapeutic advances. Ironically, the desire to "protect" children instead results in a violation of their human rights, particularly the right to health and the right to benefit from scientific progress. This session will highlight the myriad ways children are being left behind in DR-TB care and explore pragmatic solutions for overcoming each of the barriers identified and providing a path forward for ensuring children are prioritised for innovations in DR-TB treatment.

Chairperson: Gunta Dravniece (Netherlands)

Chairperson: Anne Detjen (United States of America)

Patient perspectives—success stories of children affected by tuberculosis

Marion Biremon (Kyrgyz Republic)

The need for and success in using new drugs and short DR-TB regimen in children—experiences from Kyrgyzstan and Nigeria

Gunta Dravniece (Netherlands)

Second-line drug formulations for children

Jennifer Furin (United States of America)

Trauma of treatment and frequency of adverse effects—why we need injectable-free regimens

Marcela Tommasi (Netherlands)

Research update on the clinical management of drug-resistant tuberculosis in children lames Seddon (United Kingdom)

**Discussion** 

Symposium (SP) 14:00 - 15:30

Oceania

## SP38 Importance of zoonotic TB surveillance using whole genome sequencing to trace TB outbreaks at the human-animal interface

The increased precision offered by WGS genotyping is remarkable. Shared ancestors of isolates can provide insight into how strains are moving through populations and where they are located. The sequence database used for isolate comparisons is critical, and international governmental collaborations can greatly benefit from the expertise of University researchers, industry professionals and NGOs. By recognising, supporting and engaging partners in education, research and industry; the benefits of federal dollars invested can be magnified. This session will cover different epidemiology studies, from traditional bacteriological methods to the most advance molecular analysis

Chairperson: Alejandro Perera (Mexico) Chairperson: Simeon Cadmus (Nigeria)

Whole genome sequencing of Mycobacterium orygis for in-depth molecular analysis of isolates

Zeaur Rahim M. Phil (Bangladesh)

M. bovis tuberculosis in Tunisia: epidemiological and bacteriological overview Leila Slim-Saidi (Tunisia)

The prevalence of gross lesions of bovine TB in slaughtered cattle and assessment of the pastoralists' knowledge of the disease in Hoima District, Uganda

Lawrence Mugisha (Uganda)

Molecular and phylogenetic profiling of Mycobacterium bovis circulating among slaughtered cattle in Nigeria

Simeon Cadmus (Nigeria)

Discussion

Symposium (SP) 14:00 - 15:30

North America

## SP39 Capitalising on the complementarity of analytical tools and frameworks in support of the TB prioritisation agenda

Given the daunting amount of available information on TB planning, a new framework is emerging to help NTPs prioritise their problems, understand root causes and intervene accordingly. A large number of tools and analytical frameworks are available to unearth the root causes. This symposium proposes rational combinations of tools to analyse the gap between TB case notification and estimated burden, and measure sub-national coverage and access to care. These results should be used to prioritise interventions intended for those with TB who are missed by the health system.

Chairperson: Christy Hanson (United States of America)

Chairperson: Jacob Creswell (Switzerland)

Combining the patient pathway analysis and MATCH to better understand the supply and demand of TB services

Enos Masini (Kenya)

Using MATCH and Llamasoft geospatial analysis to optimise placement of tuberculosis health facilities

Ente Rood (Netherlands)

Strengthening the analysis of commercial TB drug sales data to find the missed cases of TB Lokesh Sharma (India)

Sharpening the case detection rate using sub-national incidence estimates and inventory studies

Rein Houben (United Kingdom)

Discussion

Oral Abstract session (OA) 14:00 - 15:30 Central America **OA12** Allocating funds for impact Chairperson: David Dowdy (United States of America) Chairperson: Kevin Schwartzman (Canada) OA12-275- Insights from four allocative efficiency studies: evaluating the current 14:00 - 14:11 and potential impact of national TB budgets and responses 26 Gerard Joseph Abou Jaoude (United Kingdom) OA12-276- Sub-national priority setting for TB control in South Africa: results from a 14:11 - 14:22 26 cost-effectiveness model Don Mudzengi (South Africa) OA12-277- Cost-outcomes analysis of decentralised care for drug-resistant 14:22 - 14:33 tuberculosis in Johannesburg, South Africa Craig van Rensburg (South Africa) OA12-278- Tuberculosis care reform in Belarus: an allocative efficiency analysis 14:33 - 14:44 supporting the policy dialogue 26 Alena Skrahina (Belarus) OA12-279- Active case finding of pulmonary tuberculosis in the Russian Federation: 14:44 - 14:55 how to save costs 26 Elena Bogdanova (Russian Federation) OA12-280- Cost-effectiveness of interventions to improve TB contacts' cascade of 14:55 - 15:06 care in Rio de Janeiro, Brazil Mayara Lisboa Bastos (Brazil) OA12-281- But at what cost? The cost of implementing mobile-health facilitated 15:06 - 15:17 tuberculosis contact investigation Patricia Turimumahoro (Uganda) Early-phase implementation success of isoniazid preventive therapy for OA12-282-15:17 - 15:28 people living with HIV, Malawi, 2017 26 Laurence Gunde (Malawi)

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

South America

### **SOA12** Digital technology to improve treatment adherence and outcomes

JOA12 Digital technology to improve treatment aunerence and outcomes			
•	Carrie Tudor (Switzerland) Kristian van Kalmthout (Netherlands)		
SOA12-111 8-26	Comparing electronic directly observed therapy with in-person DOT: patients' perspectives	14:00 - 14:07	
	Joan M. Mangan (United States of America)		
SOA12-111 9-26	Acceptability to patients and providers of 99DOTS, a cellphone-based TB adherence monitoring strategy  Beena Thomas (India)	14:07 - 14:14	
SOA12-112 0-26	Medication electronic reminding monitor used to guide differential patient management at community level in China Hui Zhang (China)	14:14 - 14:21	
SOA12-112 1-26	Effect of mobile app-based nursing health education on patients with pulmonary multidrug-resistant tuberculosis Xiaoman Zhou (China)	14:21 - 14:28	
SOA12-112 2-26	Patient acceptability of an electronic pillbox for monitoring adherence to MDR-TB therapy in India Beena Thomas (India)	14:28 - 14:35	
SOA12-112 3-26	TB medication adherence using patient-centred, self-managed wirelessly observed therapy is superior to directly observed therapy  Sara Hope Browne (United States of America)	14:35 - 14:42	
SOA12-112 4-26	99 DOTS: a mobile phone based technology to monitor treatment adherence in TB-HIV co-infected patients in Himachal Pradesh State, India Ravinder Kumar (India)	14:42 - 14:49	
SOA12-112 5-26	Follow-up observation on the nursing effect of hemodialysis patients with pulmonary tuberculosis complicated with renal failure after WeChat video follow-up  Gui Chun Du (China)	14:49 - 14:56	
SOA12-112 6-26	Integrated mHealth tool for nationwide scale-up of community-based TB services Rachel Forse (Viet Nam)	14:56 - 15:03	
SOA12-112 7-26	Implementing digital health solutions for monitoring mutations of Mycobacterium tuberculosis associated with drug resistance in high MDR-TB burden Arkhangelsk Region of Russian Federation  Andrei Mariandyshev (Russian Federation)	15:03 - 15:10	

Oral Abstract 14:00 - 15:30		Mississipp
OA13 The	HIV-TB and diabetes late-breaker session	
Chairperson:	Satvinder Singh (Switzerland) Anand Date (United States of America) Katharina Kranzer (United Kingdom)	
OA13-3449 -26	Novel point-of-care LAM assay for the detection of tuberculosis in people living with HIV with superior sensitivity  Claudia Denkinger (Switzerland)	14:00 - 14:15
OA13-3347 -26	Association of diabetes mellitus with treatment outcome of drug resistant tuberculosis patients in Pakistan from 2010-14 Abdullah Latif (Pakistan)	14:15 - 14:30
OA13-3277 -26	Feasibility and acceptability of integrating paediatric TB and HIV case finding with integrated community case management of malaria, pneumonia and diarrhoea in Uganda  Fred Kagwire (Uganda)	14:30 - 14:45
OA13-3282 -26	Effect of extensive tuberculosis screening before and after ART initiation in HIV-infected adults with CD4 < 100/mm3: data from the ANRS 12290 STATIS trial  Maryline Bonnet (France)	14:45 - 15:00
OA13-3312 -26	Mortality risk doubled in tuberculosis patients with diabetes not receiving metformin Vidya Mave (India)	15:00 - 15:15
OA13-3267 -26	Co-existant burden of malnutrition and diabetes in Filipino people with Tuberculosis Sharon Elizabeth Cox (Japan)	15:15 - 15:30
Short Oral Ab 14:00 - 15:30	stract session (SOA)	Amazon
SOA13 Tu	berculosis, laboratory and epidemiology in Europe	
	Raquel Duarte (Portugal) Daniela Maria Cirillo (Italy)	
SOA13-112 8-26	Tuberculosis control and prevention in the EU/EEA: a survey of national TB programmes  Dominik Zenner (United Kingdom)	14:00 - 14:07
SOA13-112 9-26	The effect of tuberculosis patient and health care delays on the infectiousness of cases in London  Emilia Vynnycky (United Kingdom)	14:07 - 14:14
SOA13-113 0-26	Experiences from the introduction of screening and treatment of tuberculosis among pregnant women in Stockholm 2016 Gabrielle Fröberg (Sweden)	14:14 - 14:21
SOA13-113 1-26	Setting up the first TB-PRACTECAL trial site: experience from Uzbekistan Mansa Mbenga (Uzbekistan)	14:21 - 14:28

SOA13-113 2-26	Social determinants of tuberculosis in Portugal Raquel Duarte (Portugal)	14:28 - 14:35
SOA13-113 3-26	Risk of tuberculosis infection among health care professionals in non- tuberculosis hospitals in Estonia Lea Pehme (Estonia)	14:35 - 14:42
SOA13-113 4-26	Prospects for preventing and closing undesirable adverse reactions in patients with lung tuberculosis and hepatitis C Ludmila Shovkun (Russian Federation)	14:42 - 14:49
SOA13-113 5-26	Tuberculosis not prevented in contacts of infectious tuberculosis patients: a retrospective study of missed cases based on genotyping Rianne van Hunen (Netherlands)	14:49 - 14:56
SOA13-113 6-26	Utility of whole genome sequencing (WGS) to study tuberculosis transmission  Karin Rebel (Netherlands)	14:56 - 15:03

Symposium (SP) 14:00 - 15:30

Yangtze 1

# SP40 Paediatric lung function measurements in low-middle-income countries with high burden of TB-HIV, malnutrition and environmental exposures

Lung function in early life has been shown to be an important predictor for lung function later in life. Reduced lung function is associated with increased morbidity and mortality. Infectious diseases, malnutrition and external exposures (e.g., air pollution, exposure to environmental tobacco smoke) can result in impaired lung function later in life. Given the burden of TB, HIV and respiratory infections in African children, there is a significant unmet need to study the combined effects of these infections and external exposures on lung function in children.

Chairperson: Marieke van der Zalm (South Africa)

Chairperson: Diane Gray (South Africa)

#### Update on lung function techniques in pre-school children

Rolien Bekkema (Netherlands)

#### Early-life determinants of lung function in African infants

Diane Gray (South Africa)

### Lung function in children presenting with symptoms suggestive of pulmonary TB

Marieke van der Zalm (South Africa)

### The long-term effects of severe acute malnutrition on lung function

Natasha Lelijveld (Malawi)

### The long-term effects of severe acute malnutrition on lung function

Natasha Lelijveld (Malawi)

**Discussion** 

Oral Abstract session (OA) 14:00 - 15:30

Yangtze 2

## OA14 Pharmacokinetics and pharmacodynamic sciences to accelerate development of new drugs and vaccines

	Imran Syed (India) Yamuna Mundade (Switzerland)	
OA14-283- 26	Maximising impact of the TB vaccine pipeline: mathematical modelling to inform TB vaccine development  Rebecca Harris (United Kingdom)	14:00 - 14:11
OA14-284- 26	Proteomic analysis of Mycobacterium tuberculosis lineages 3, 4, 5 and 7 reveals differentially abundant proteins involved in DNA repair, lipid metabolism, oxidative phosphorylation and virulence Solomon Yimer (Norway)	14:11 - 14:22
OA14-285- 26	Matrix metalloproteinases are associated with lung inflammation in HIV- TB co-infected patients initiating ART in South Africa Pholo Maenetje (South Africa)	14:33 - 14:44
OA14-286- 26	Acute phase proteins and IP-10 as a first step screening test for TB: could they increase the pre-test probability of a follow-on test?  Konstantina Kontogianni (United Kingdom)	14:44 - 14:55
OA14-287- 26	Use of resuscitation promoting factors to screen for tuberculosis infection in exposed children in The Gambia Welmoed van Loon (Netherlands)	14:55 - 15:06
OA14-288- 26	Contribution of pretomanid to the BPaMZ regimen in different murine models of tuberculosis Jian Xu (United States of America)	15:06 - 15:17
OA14-289- 26	Discontinuing universal bacille Calmette-Guérin vaccination in Taiwan: a dynamic modelling study	15:17 - 15:28

Symposium (SP) 14:00 - 15:30

Kilimanjaro 1&2

## SP41 Boats, drones and motorcycles—optimising specimen referral networks to meet the needs of TB diagnostic networks

Efficient specimen transport systems and referral networks are essential to meet the needs of an effective TB diagnostics network, and play a critical role in increased TB case detection and universal DST. There has been a focus on these important systems and more recently, an emphasis on efficiency and costs. In this year's symposium, we will build on guidance issued at the 2017 Union Conference and share a wider variety of success stories–innovations, including the use of unmanned aerial aircrafts, countries building efficiencies by integration with networks of other specimens and diseases, and new tools that are currently available.

Chairperson: Kameko Nichols (United States of America) Chairperson: Lice González-Angulo (Switzerland)

Han Fu (United Kingdom)

Landscape of specimen referrals: what's new and what's next

Kameko Nichols (United States of America)

Towards an integrated specimen referral network in Burkina Faso using the national post Abdoulaye Nikiema (Burkina Faso)

Malawi's specimen transport network model and the potential for introducing drones |ames Kandulu (Malawi)

Current use of motorcycles for specimen transport in Tanzania and piloting toolkit to improve and move towards an integrated specimen referral network

Willy Mbawala (Tanzania, United Rep.)

Implementation of a sample referral system for DR-TB diagnosis and treatment follow-up: the Bangladesh experience

Sarder Tanzir Hossain (Bangladesh)

Discussion

Symposium (SP) 14:00 - 15:30

Everest 1&2

### SP42 Ensuring tuberculosis free prisons: achievements and challenges

Successful Control of TB and its drug-resistant forms in penal institutions requires a combination of public health, political and social solutions.

The objective of this session is to share examples of best practices in achieving collaborative efforts to implement the evidence-based and internationally recognised TB control policies in prisons, as well as to speak up the current challenges.

Chairperson: Rafail Mehdiyev (Azerbaijan) Chairperson: Masoud Dara (Denmark)

Azerbaijan's experience in the introduction of new TB drugs for treatment XDR-TB in prisons Elmira Gurbanova (Azerbaijan)

Improving tuberculosis case finding in Malawian prisons: implementation of systematic screening

Reinaldo Ortuno (Malawi)

Key achievements of the tuberculosis control activities in the penitentiary system of Kazakhstan

Kulakhmet Yerimbetov (Kazakhstan)

Ensured early case detection, how can we ensure treatment completion? Example from India  ${f C}$ 

Banuru Muralidhara Prasad (India)

Tuberculosis care among prison inmates in the Netherlands, best practices and barriers Niesje Jansen (Netherlands)

**Discussion** 

Symposium (SP) 14:00 - 15:30

Gauguin - Marriott

### TB educational material discussion session

Member Meetings (Regional, Section, Sub-section, Working Group) 14:00 - 15:30

Dali - Marriott

### **Inter-Regional meeting**

Community space: skills building 15:30 - 16:45

De Ontmoeting 2 (Community space)

## Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB

Targets for elimination of tuberculosis (TB) and challenges as MDR-TB demand more output from TB researchers and clinicians. New diagnostic methods, treatment and follow up strategies are to be designed and implemented. Collaboration with TB patient communities is crucial on this track as clinical trials and advocacy for new treatments require participation of patients.

Vulnerable groups, pregnant women or adolescents are sometimes difficult to recruit in the studies. At the same time, the knowledge on how the new approaches work in such groups are particularly important.

The activity is proposed by TBnet, pTBnet – networks on clinical TB/pediatric TB research and also TBpeople – a community of former patients. To facilitate networking, short talks will be combined with a skittles game and "speed-dating".

During the session, suggestions will be collected for the content of a "TB and pregnancy" brochure and for a "TB knowledge for patients, their relatives and friends" course - two proposed projects to join clinical researchers and patient communities.

Session plan: each talk - 10 minutes; chairs, O. Rzhepishevska and G. Bothamley

1. L. Guglielmetti:

How to include the adolescent and the pregnant in clinical studies?

2. K. Shchenina:

Vulnerable groups in clinical TB studies

Lack of knowledge in medical staff for TB treatment in pregnancy

3. A. Dudnyk:

Approaches TB treatment in pregnancy

Addressing palliative TB treatment in Ukraine - pediatric case

Game: Skittles where pins represent TB bacteria; 15 minutes

4. F. Brinkmann:

Pediatric TB in refugees- diagnosis and treatment on the run  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right)$ 

5. C. Prat

TB challenges differ from settings to setting?

How recent advances in diagnostic are introduced in different parts of the world

Speed-dating between representatives of patient communities and researchers; 20 minutes; moderator, TBpeople.

Concluding remarks to identify directions for further work based on the "speed-dating" results: 20 min.

Chairperson: Olena Rzhepishevska (Sweden)

Chairperson: Ksenia Shchenina (Russian Federation)

Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB Lorenzo Guglielmetti (France)	15:30 - 15:40
Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB Ksenia Shchenina (Russian Federation)	15:40 - 15:50
Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB Andrii Dudnyk (Ukraine)	15:50 - 16:00
Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB	16:00 - 16:10

Folke Brinkmann (Germany)

Page 173 / 235

Collaboration of TB researchers, clinicians and patient communities can help to reach for vulnerable groups and beat TB

16:10 - 16:20

Cristina Prat Aymerich (Spain)

Tech Innovation Zone 15:30 - 16:00

Tech Innovation Zone - Exhibition Area

### **Presentations @Tech Innovation Zone**

**SHOEBOX Audiometry** 

15:30 - 15:45

The Everwell Hub: an integrated technology platform for adherence and patient support

15:45 - 16:00

Nakull Gupta Andrew Cross (India)

Symposium (SP) 16:00 - 17:30

KWA Plenary Hall

## SP43 Techniques and approaches to address the right to knowledge of the subnational TB burden data among local TB programmers

Sub-national TB burden estimates are sought after by TB programmes. From a planning perspective, these provide support in the design of case-finding strategies targeting specific sub-national contexts. From an accountability perspective, they also allow individual districts and provinces to set specific targets based on the number of missing people with TB and be held accountable for these. Most current prevalence surveys are powered to provide estimates only at the national level, or at best, at the regional level. In this session, experiences with recently developed innovative approaches to estimate sub-national burdens, including the different strengths and limitations, will be presented and contrasted.

Chairperson: Ente Rood (Netherlands)

Chairperson: Charlotte Colvin (United States of America)

### Sub-national estimation of tuberculosis burden

Philippe Glaziou (Switzerland)

Generation, interpretation and dissemination of sub-national tuberculosis burden estimates in a high burden setting—a model for Indonesia

Rein Houben (United Kingdom)

### Estimating local level tuberculosis burden—warts and all

Jens Levy (Netherlands)

Development and validation of a statistical model to estimate tuberculosis undernotification

Ente Rood (Netherlands)

Sub-national tuberculosis burden estimate in India using TB notification data and TB drug sales data

Kiran Rade (India)

49th Union World Conference on Lung Health , 24 - 27 October, 2018, The Hague, The Netherlands

### **Scientific Programme**

Symposium (SP) 16:00 - 17:30

Europe

### SP44 Meeting patients where they are: a patient-centred approach to tuberculosis

The End TB Strategy seeks a unified response to ending TB deaths, disease and suffering. It is built upon three pillars that are underpinned by four key principles. Pillar 1 (Patient-centred TB care and prevention) describes interventions to ensure that all people with TB have equitable access to high-quality diagnosis, treatment, care and prevention. Objectives:

1) To share lessons learnt on implementing patient-centred TB prevention and care

2) To discuss the potential contribution of a patient-centred approach toward finding missing TB cases

Chairperson: Robert Makombe (South Africa) Chairperson: Lisa Stevens (Thailand)

Differentiated models of care for multidrug-resistant tuberculosis: experience and lessons learnt from South Africa

Norbert Ndjeka (South Africa)

Front-line tuberculosis diagnostics: how close are we to point-of-care diagnostic tests in the most rural of places?

Chanda Mulenga (Zambia)

Meeting patients where they are: experience and lessons learnt from Kyrgyzstan Dilorom Kosimova (Kyrgyz Republic)

Patient-centred care for multidrug-resistant tuberculosis: experience and lessons learnt from China

Ling Li (China)

Strengthening the public-private mix for tuberculosis: experience and lessons learned from Kenya

Jeremiah Chakaya (Kenya)

Discussion

Symposium (SP) 16:00 - 17:30

Antartica

## SP45 Confronting the commercial drivers of disease—how and what needs to be done to protect health gains at global and local levels

Policy makers use some strategies to reduce the adverse health impact of industry practices in promoting unhealthy commodities-in particular, tobacco products that kill 7m people annually. Also described as the "commercial determinants of health", unhealthy commodities are bigger than just tobacco and their combined impact demands more systematic monitoring, analysis and countering to integrate effective protection policies across health, finance and consumer/human rights. The objectives of this symposium are: to share developments in preventing industry interference from undermining goals for achieving SDGs; and to show ways to achieve policy support beyond health to include finance, human rights and health from government leaders.

Chairperson: Gan Quan (United States of America)

What are the commercial determinants of health, the economic costs and risks, and why we need to act now

Tackling the commercial drivers of preventable diseases—how leading countries are reducing the costly impact of unhealthy commodities on health and economic goals Stephen Hamill

The rise of the tobacco indust	y and what it	t means for to	bacco contro
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Pranay Lal (India)

### Putting ethics to work: how UNDP has evolved exclusion criteria to achieve the Sustainable Development Goals

**Dudley Tarlton (Switzerland)** 

### Civil society as an architect of health policy governance

Blanca Llorente (Colombia)

Kesetebirhan Delele (Ethiopia)

**Discussion** 

Oral Abstract session (OA) 16:00 - 17:30

Oceania

### OA15 Finding and treating latent tuberculosis infection

Chairperson: Gavin Churchyard (South Africa) Chairperson: Mustapha Gidado (Nigeria) OA15-290- Improving the quality of care of TB contacts: a pilot study in Brazil 16:00 - 16:11 26 Anete Trajman (Brazil) OA15-291- Effective approach: TB screening among close contacts 16:11 - 16:22 Ngak Song (Cambodia) OA15-292- Enhancing the public health impact of latent tuberculosis infection 16:22 - 16:33 management (ACT4): results from Ghana Jospeh Obeng (Ghana) OA15-293- Integrated care and patient choice enable treatment completion of 16:33 - 16:44 isoniazid preventive therapy in Swaziland 26 Lisa V. Adams (United States of America) OA15-294-Active case finding of tuberculosis among household contacts in 16:44 - 16:55 Bangladesh: lessons learned from Challenge TB contact investigation 26 Zakia Sultana (Bangladesh) OA15-295- Family matrix-guided HIV and tuberculosis case finding using index 16:55 - 17:06 patients as an entry point at four urban sites in Ethiopia 26 Dereje Bekele (Ethiopia) OA15-296- 'Contact tracing' beyond household in MDR TB patients: how effective? 17:06 - 17:17 Razia Fatima (Pakistan) Contribution of sustained contact investigation for case notification in OA15-297-17:17 - 17:28 26 North Western Sidama Zone in Southern Ethiopia

Short Oral Abstract session (SOA) 16:00 - 17:30		North America
SOA14 Dr	ug-resistant: disease burden outcomes	
	Chen-Yuan Chiang (Taiwan) Dennis Falzon (Switzerland)	
SOA14-113 7-26	Short-course MDR-TB treatment in the high HIV prevalence setting of Swaziland: treatment and post-treatment follow-up outcomes and safety Charles Ssonko (United Kingdom)	16:00 - 16:07
SOA14-113 8-26	Determinants of mortality among patients with drug-resistant tuberculosis in Northern Nigeria Mamman Bajehson (Nigeria)	16:07 - 16:14
SOA14-113 9-26	Innovative real time reporting system improves healthcare responses to drug-resistant tuberculosis in Nigeria Kehinde Jimoh Agbaiyero (Nigeria)	16:14 - 16:21
SOA14-114 0-26	What are the factors contribute to multi-drug resistant tuberculosis patients' survival in Yangon region, Myanmar?  Htet Myat Win Maung (Myanmar)	16:21 - 16:28
SOA14-114 1-26	What is the impact of Swaziland's TB programme interventions on the treatment outcomes of DR-TB patients for the cohort 2009-2014?  Debrah Vambe (Swaziland)	16:28 - 16:35
SOA14-114 2-26	Baseline radiographic appearances in the STREAM MDR-TB trial and their association with treatment outcomes  Conor Tweed (United Kingdom)	16:35 - 16:42
SOA14-114 4-26	Improving DR-TB treatment interim outcomes—lessons learnt from Nigeria Sani Useni (Nigeria)	16:49 - 16:56
SOA14-114 5-26	Burden, characteristics and treatment outcomes of patients treated for isoniazid mono-resistant TB in Cape Town, South Africa Kay Joseph (South Africa)	16:56 - 17:03
SOA14-114 6-26	Pyrazinamide treatment is associated with shorter time to sputum culture conversion in multidrug-resistant tuberculosis Lina Davies Forsman (Sweden)	17:03 - 17:10
SOA14-114 7-26	Challenges across four types of directly observed therapy Chee Kin Lam (United States of America)	17:10 - 17:17
Oral Abstract 16:00 - 17:30	session (OA)	Central America
OA16 Air	pollution and ecology of illness	
Chairperson:	Frederik van Gemert (Netherlands)	
OA16-298- 26	Association between household air pollution and lung function among rural women: a population-based study in Odisha, India Bijaya Padhi (India)	16:00 - 16:11

OA16-299- 26	Household air pollution and tuberculosis in India: analysis of District Level Household Survey-IV, a nationally representative survey in India Jaya Prasad Tripathy (India)	16:11 - 16:22
OA16-300- 26	Heat effects of ambient apparent temperature on respiratory disease mortality in six major cities in South Africa: 2006-2010 Janine Wichmann (South Africa)	16:22 - 16:33
OA16-301- 26	Associations between solid fuel use and low birth weight in Indonesia Russell Dowling (United States of America)	16:33 - 16:44
OA16-302- 26	Citizen science on air pollution Wim van Doorn (Netherlands)	16:44 - 16:55
OA16-303- 26	Is indoor air pollution derailing the efforts of the TB control programme? Impact study of indoor air pollution on pulmonary tuberculosis patients in rural India Sajna Sarasita Nayak (India)	16:55 - 17:06
OA16-304- 26	Relationship between daily air pollutants and emergency room visits of children with acute respiratory symptoms in Delhi, India Rashmi Yadav (India)	17:06 - 17:17

Symposium (SP) 16:00 - 17:30

South America

### SP46 Reaching the unreached to find the missing millions

"Key populations" are people who are vulnerable, underserved or at-risk of TB infection and illness. It is likely that a large portion of the more than 4 million people with TB missed by routine services are TB key populations since they are least likely to be reached by passive TB case-finding efforts. These groups benefit most from targeted interventions that in conjunction with active case finding also address human rights barriers. We present a selection of tailored interventions that ensure people most vulnerable to TB are found.

Chairperson: Marina Smelyanskaya (Switzerland)

Chairperson: Stephan John (Nigeria)

Reaching key tuberculosis populations through case detection activities: an overview of TB REACH work

Jacob Creswell (Switzerland)

Active TB case finding among transgender and male sex workers in Pakistan

Sharaf Shah (Pakistan)

Reaching the unreached to find the missing millions: community-based approaches in India's tribal pockets

Ashvini Vyas (India)

Integrated provider initiated TB and HIV services among internally displaced persons in North-Eastern Nigeria  $\,$ 

Suraj Abdulkarim (Nigeria)

Community rising to address tuberculosis: working in peri-mining communities

Venance Muzuka Kabwebwe (Tanzania, United Rep.)

Discussion

Oral Abstract session (OA) 16:00 - 17:30

Mississippi

### **OA17** The Union/CDC (Centers for Disease Control and Prevention) late-breaker session on TB

Chairperson: Wendy Lee Wobeser (Canada)

Chairperson: Christine Ho (India)

	Detecting TB	
OA17-3194 -26	Non-invasive detection of tuberculosis by oral swab PCR analysis Angelique Kany Kany Luabeya (South Africa)	16:00 - 16:07
	Simple stool processing method for the diagnosis of pulmonary TB using GeneXpert MTB/Rif: promise for improved access to a bacteriological diagnosis for children  Petra De Haas (Netherlands)	16:07 - 16:14
OA17-3415 -26	The Conundrum of Xpert MTB/RIF Ultra 'trace' in a high burden setting: to treat or not to treat?  Farzana Ismail (South Africa)	16:14 - 16:21
	Finding cases	
OA17-3113 -26	Prevalence of latent tuberculosis among household contacts of patients with multidrug-resistant tuberculosis in Vietnam	16:21 - 16:28
	Binh Nguyen (Viet Nam)	
OA17-3308 -26	TB & leprosy free Majuro: early findings of a mass TB and leprosy screening and treatment program in the Marshall Islands	16:28 - 16:35
	Grace Dugan (Marshall Islands) Jeremy Hill (Australia)	
	Treatment	
OA17-3294 -26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa	16:35 - 16:42
-26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)	
-26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa	16:35 - 16:42 16:42 - 16:49
-26 OA17-3440	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis	
-26 OA17-3440 -26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis  Anthony Garcia-Prats (South Africa)	
-26 OA17-3440 -26 OA17-3416	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis  Anthony Garcia-Prats (South Africa)  Broader impact  Addressing policy needs for controlling TB and multidrug-resistant TB (MDR-TB): a biosocial inquiry among patients in Pune city in Western	16:42 - 16:49
-26 OA17-3440 -26 OA17-3416 -26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis  Anthony Garcia-Prats (South Africa)  Broader impact  Addressing policy needs for controlling TB and multidrug-resistant TB (MDR-TB): a biosocial inquiry among patients in Pune city in Western Maharashtra, India	16:42 - 16:49
-26 OA17-3440 -26 OA17-3416 -26 OA17-3302	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis  Anthony Garcia-Prats (South Africa)  Broader impact  Addressing policy needs for controlling TB and multidrug-resistant TB (MDR-TB): a biosocial inquiry among patients in Pune city in Western Maharashtra, India  Sachin Atre (India)  Isolation and molecular typing of Mycobacterium tuberculosis isolated	16:42 - 16:49 16:49 - 16:56
-26 OA17-3440 -26 OA17-3416 -26 OA17-3302 -26	Resistance to moxifloxacin and pyrazinamide in patients with recurrent tuberculosis in KwaZulu-Natal South Africa  Anushka Naidoo (South Africa)  Pharmacokinetics, safety and optimal dosing of linezolid in children with multidrug-resistant tuberculosis  Anthony Garcia-Prats (South Africa)  Broader impact  Addressing policy needs for controlling TB and multidrug-resistant TB (MDR-TB): a biosocial inquiry among patients in Pune city in Western Maharashtra, India  Sachin Atre (India)  Isolation and molecular typing of Mycobacterium tuberculosis isolated from farm workers and cattle from south India	16:42 - 16:49 16:49 - 16:56

Questions

Oral Abstract 16:00 - 17:30	session (OA)	Amazon
OA18 Inn	ovative treatment for multidrug-resistant tuberculosis	
•	Ivan Solovic (Slovakia) Inge Koppelaar (Netherlands)	
OA18-306- 26	Characteristics of patients with drug-resistant TB in Eastern Europe/Central Asia and determinants of their treatment outcome Christian Auer (Switzerland)	16:00 - 16:10
OA18-307- 26	Efficacy, safety and tolerability profile of linezolid containing regimens in the treatment of drug-resistant pulmonary tuberculosis in Georgia  Lali Mikiashvili (Georgia)	16:10 - 16:20
OA18-308- 26	Bedaquiline containing regimens in the treatment of multi- and extensively drug-resistant tuberculosis at the programmatic level: prospective cohort study  Alena Skrahina (Belarus)	16:20 - 16:30
OA18-309- 26	Shorter treatment regimen for multidrug-resistant tuberculosis: first outcomes in the Kyrgyz Republic	16:30 - 16:40
OA18-310- 26	Aimgul Duishekeeva (Kyrgyz Republic)  First results of shorter treatment regimen use in treatment of multidrugresistant patients in Tajikistan	16:40 - 16:50
OA18-311- 26	Mavlyuda Makhmudova (Tajikistan)  A comparison of medical versus medical and adjunctive surgical treatment of patients with cavitary multidrug-resistant tuberculosis  Sergo Vashakidze (Georgia)	16:50 - 17:00
OA18-312- 26	Sensititre MYCOTB MIC plate for testing Mycobacterium tuberculosis susceptibility to first-line, second-line and new drugs in Georgia  Nino Bablishvili (Georgia)	17:00 - 17:10
OA18-313- 26	Active tuberculosis drug safety monitoring and management results in the country of Georgia Nino Lomtadze (Georgia)	17:10 - 17:20
Short Oral Ab 16:00 - 17:30	ostract session (SOA) )	Yangtze 1
	uman immunodeficiency virus, diabetes and other lities—association with treatment outcomes and risk of behavi	our
	Gunar Günther (Germany) Valeria Rolla (Brazil)	
SOA15-114 8-26	Hyperglycemia and increased rate of all-cause mortality among people with HIV/TB co-infection in Myanmar (2011-2017) Nang Thu Thu Kyaw (Myanmar)	16:00 - 16:07
SOA15-114 9-26	Lung glycolytic activity on 18F-FDG PET-CT and pulmonary function among South African adults with TB and HIV Sara Auld (United States of America)	16:07 - 16:14

SOA15-115 0-26	Mortality amongst HIV-positive female tuberculosis patients in South Africa	16:14 - 16:21
	Muhammad Osman (South Africa)	
SOA15-115 1-26	Outcomes among a MDR-TB cohort with high HIV co-infection treated with delamanid or bedaquiline in Lesotho  David Holtzman (Lesotho)	16:21 - 16:28
SOA15-115 2-26	Adherence to bedaquiline and antiretroviral therapy predicts mortality in the treatment of multi- and extensively drug-resistant tuberculosis and HIV co-infected patients in KwaZulu-Natal, South Africa  Max O'Donnell (United States of America)	16:28 - 16:35
SOA15-115 3-26	Whole genome sequencing of Mycobacterium tuberculosis from tuberculosis patients with and without diabetes mellitus Carolien Ruesen (Netherlands)	16:35 - 16:42
SOA15-115 4-26	The effect of chronic non-communicable diseases and dyslipidemias on tuberculosis treatment outcomes Petros Karakousis (United States of America)	16:42 - 16:49
SOA15-115 5-26	International research and guidelines on post-tuberculosis chronic lung disorders: a systematic scoping review Sanne Christine van Kampen (United Kingdom)	16:49 - 16:56
SOA15-115 6-26	End-stage renal disease and risk of tuberculosis: a nationwide population-based cohort study Jinsoo Min (Korea, Republic of)	16:56 - 17:03
SOA15-115 7-26	Risk of tuberculosis in cancer patients in British Columbia, Canada: retrospective cohort study  Diviot Kumar (Canada)	17:03 - 17:10

Symposium (SP) 16:00 - 17:30

Yangtze 2

# SP47 Overcoming gender inequity in TB by understanding factors that drive excess male burden of disease

The male disadvantage in TB is clear: 70% of undiagnosed cases, 60% of notified cases, 65% of deaths. Yet men are not prioritised as a key affected population, nor benefit from gender-equity concerns or gender-transformative responses. An evidence-based response to male-gendered TB vulnerability requires greater understanding of underlying factors, including health systems and social norms, and is urgently needed to meet the 2020 mortality reduction target of the EndTB Strategy. This session presents the burden of TB by sex, discusses specific factors driving disparities and offers recommendations to guarantee the human rights of both women and men by overcoming gender inequity.

Chairperson: Elizabeth Corbett (Malawi) Chairperson: Bertie Squire (United Kingdom)

### Gender gap in tuberculosis burden

Charalampos Sismanidis (Switzerland)

#### Differential impact of HIV on gender- and age-specific tuberculosis rates

Sabine Hermans (Netherlands)

### Gender differences in smoking behaviour among TB patients: is there a need for programme collaboration?

Tara Singh Bam (Singapore)

Masculinity and men's decisions about tuberculosis care

Jeremiah Chikovore (South Africa)

Modelling gender disparities in tuberculosis in Viet Nam

Katherine C. Horton (United Kingdom)

Discussion

Symposium (SP) 16:00 - 17:30

Kilimanjaro 1&2

# SP48 Scaling up childhood tuberculosis care: lessons learnt, challenges faced, solutions proposed

Children remain one of the key vulnerable population affected by TB, facing major gaps in diagnosis and access to either prevention or treatment. Scaling up paediatric TB care still poses major challenges to countries and NTPs. Strengthening the clinical and programmatic management of paediatric TB requires a comprehensive approach that encompasses the establishment of an effective framework for coordination and collaboration across health programmes, policies, comprehensive training programmes and the availability of optimised technical platforms. This symposium will provide an opportunity to share and discuss recent advances on strategies, approaches, challenges and lessons learnt in strengthening childhood TB care.

Chairperson: Martina Casenghi (Switzerland) Chairperson: Anne Detjen (United States of America)

Roadmap for childhood tuberculosis: towards zero deaths—the 2018 update

Farhana Amanullah (Pakistan)

Catalysing the use of innovative tools and programmatic models to improve paediatric TB care: an overview of the Catalysing Paediatric TB Project in Kenya

Lucy Matu (Kenya)

Scaling up childhood tuberculosis programmes: experiences from Uganda

Moorine Penninah Sekadde (Uganda)

Child's play: the failure of the global community to scale up treatment and prevention for children with DR-TB

Jennifer Furin (United States of America)

Turning points for children with tuberculosis

Lindsay Mckenna (United States of America)

**Discussion** 

Short Oral Abstract session (SOA) 16:00 - 17:30

Everest 1&2

#### SOA16 Chest radiography—a key piece of the puzzle

Chairperson: Etienne Leroy-Terquem (France) Chairperson: Nesri Padayatchi (South Africa)

SOA16-115 8-26	Prevalence of Xpert-positivity is strongly associated with CAD4TB score in individuals screened for TB using mobile X-rays in hospital settings in Karachi Palwasha Yousafzai Khan (Pakistan)	16:00 - 16:07
SOA16-115 9-26	The association between bacterial homoplasy and radiological pathology in tuberculosis  Louis Grandjean (United Kingdom)	16:07 - 16:14
SOA16-116 0-26	Baseline chest X-ray score identifies TB patients at greater risk of slower bacillary clearance and poor treatment response  Andrew Duncan McCallum (United Kingdom)	16:14 - 16:21
SOA16-116 1-26	Prevalence of 'scarring' on chest radiographs among foreign-born non- resident patients with microbiologically proven pulmonary tuberculosis: a retrospective study Shera Tan (Singapore)	16:21 - 16:28
SOA16-116 2-26	Consistent high performance interpretation of pulmonary tuberculosis in chest X-rays using multi-label classification under the Deep Learning framework  Mausumi Acharyya (India)	16:28 - 16:35
SOA16-116 3-26	Online resource for data explorations in large annotated DR-TB database.  Comparative analysis of annotated CT scans of patients with drug- resistant forms of tuberculosis  Andrei Gabrielian (United States of America)	16:35 - 16:42
SOA16-116 4-26	Diagnostic evaluation of an automated chest radiography reading software for TB among individuals with diabetes in Karachi, Pakistan Shifa Salman Habib (Pakistan)	16:42 - 16:49
SOA16-116 5-26	Role of computer-aided diagnosis in chest radiography for TB: concordance with human readers Nunurai Ruswa (Namibia)	16:49 - 16:56
SOA16-116 6-26	The role of the chest x-ray in screening for tuberculosis in Uganda Joanitah Nalunjogi (Uganda)	16:56 - 17:03
SOA16-116 7-26	Further evidence for a standardised chest radiograph scoring System for TB  Andrew Duncan McCallum (United Kingdom)	17:03 - 17:10

#### **Scientific Programme**

Symposium (SP) 16:00 - 17:30

Atlantic

### SP49 Laboratory human resources: abating attrition, closing the gap and finding solutions

For two decades many countries have depended on NGO support for training laboratorians in highly specialised techniques required to diagnose TB/DR-TB. As external funding resources dwindle, governments need to invest more in the development of academic or national training programmes to ensure skilled laboratorians are available to support diagnostic services. As newer, more advanced technologies move to the forefront, a higher skillset will be required. Skills in laboratory management will be needed to monitor performance, provide oversight and ensure the highest quality of testing. At the end of the session, the chair will lead a discussion with participants and speakers.

Chairperson: Kathleen England (Switzerland) Chairperson: Fuad Mirzayev (Switzerland)

Building capacity for sustainable training and credential maintenance systems for laboratory professionals to address HR concerns in TB laboratory programmes

Teferi Mekonen (Ethiopia)

Assessment of the status of laboratory professionals in East Africa and government actions to strengthen the profession as a key pillar of quality health care

Martin Matu (Tanzania, United Rep.)

Human resources development plan as the ultimate tool to address challenges with TB laboratory staff management

Uladzimir Antonenka (Germany)

Addressing HR challenges to improve laboratory systems performance: approaches, experiences and lessons learnt from SRL Milan

Riccardo Alagna (Italy)

**Investing in sustainable solutions for strengthening the diagnostic workforce** Kathleen England (Switzerland)

Discussion

Community space: panel discussion 17:00 - 19:00

De Ontmoeting 2 (Community space)

#### Communities and clinicians-partners in clean air advocacy

Air pollution is by far the most important global environmental health risk, with about 6 million deaths per year attributable to poor household and outdoor air quality. This disease burden falls disproportionately on vulnerable populations, especially people living in low- and middle-income countries as well as women and children living without access to clean household energy. Aggressive clean air action is needed to reduce pollution-related illness and death and to limit emissions that contribute to climate change. Clinicians can play a critical role in partnership with lay advocates as champions for clean air as a health priority.

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

Coordinator: Thomas Matte (United States of America) Coordinator: Neil Schluger (United States of America)

#### **Scientific Programme**

Speakers 17:00 - 17:10

Elvis Nidikum Achiri (Cameroon) Neil Schluger (United States of America) Jonathan Grigg (United Kingdom)

Community space: participatory activity 17:45 - 18:00

De Ontmoeting meeting point

#### Join the run!

45 minute guided run through the nearby Scheveningse Bosjes. Repower yourself in the nearby nature.

max. 60 participants.

Registration required.

Register at the Point of Vitality in Lobby 3 on Wednesday or de Ontmoeting on Thursday and Friday.

Satellite session (SS) 18:00 - 19:30

Europe

# SS17 Prevention of phenotypic resistance testing of Mycobacterium tuberculosis isolates by whole genome sequencing

Organised by: National Institute for Public Health and the Environment (RIVM)

In this symposia speakers will highlight the possibilities to determine the susceptibility of Mycobacterium tuberculosis isolates to antituberculosis drugs no longer by phenotypic, time consuming tests, but by investigating the presence/absence of mutations associated with resistance. The negative predictive value of Whole Genome Sequencing for resistance is extremely high and this should lead to stopping with most of the drug susceptibility testing for cases in which absence of resistance mutations is confirmed. In addition, there will be presentations on the association of resistance mutations and treatment outcome to emphasize possibilities to steer the therapy on basis of molecular diagnosis.

Chairperson: Dick van Soolingen (Netherlands) Chairperson: Richard Anthony (Netherlands)

It is time to stop with most of the phenotypic resistance testing for Mycobacterium tuberculosis isolates  Daniela Maria Cirillo (Italy)	18:00 - 18:15
Influence of resistance mutation patterns in causative Mycobacterium tuberculosis on treatment outcome in Bangladesh Leen Rigouts (Belgium)	18:15 - 18:30
What is resistance in the era of Whole Genome Sequencing?  Matthias Merker (Germany)	18:30 - 18:45
Value of routine Whole Genome Sequencing in TB control' Ben J. Marais (Australia)	18:45 - 19:00

Explanation of the discrepancies between presence of resistance mutations and phenotypic resistance testing of Mycobacterium tuberculosis isolates	19:00 - 19:15
Rana Jajou (Netherlands)	
Discussion	19:15 - 19:30

Satellite session (SS) 18:00 - 19:30

Amazon

# SS18 Lessons learnt from the West African regional network for tuberculosis control (WARN-TB) for improving TB control in West Africa

Organised by: International Union Against Tuberculosis and Lung Disease (The Union), Damien Foundation and WHO/TDR

The African-region is the second region most affected by tuberculosis worldwide with 2.6 million people affected in 2016 out of 10.4 million worldwide. The African-response to this burden included rapid uptake of WHO guidelines and public-health based approaches to control TB. In June 2015, 16 countries of the region created the West African regional network for Tuberculosis Control (WARN-TB) aiming exchanges and harmonization of best-practices, implementation-research and advocating for resource-mobilisation. The initiative is supported by regional partners including The Union, Damien Foundation, WAHO, GFATM, WHO, and TDR. We share in this presentation progress achieved after three years of WARN-TB creation.

Chairperson: Frank Bonsu (Ghana)

Chairperson: Corinne Simone Collette Merle (Switzerland)

Discussion	19:00 - 19:15
Multidrug-resistant TB: current situation in West Africa and lessons learnt from a comprehensive model of care implemented in Niger and Cameroon Mahamadou Bassirou Souleymane (Niger)	18:45 - 19:00
Corinne Simone Collette Merle (Switzerland)	
West African TB burden: how to enhance operational/implementation research for improving TB control in the region? Experience of the WARN-TB	18:30 - 18:45
childhood TB projects conducted in the region Valérie Schwoebel (France)	
Childhood TB: current situation in West Africa and lessons learnt from	18:15 - 18:30
Dissou Affolabi (Benin)	
Implementing a win-win regional network for TB-control: a success- history of WARN-TB	18:00 - 18:15

Satellite session (SS) 18:00 - 19:30

Yangtze 1

# SS19 Harnessing the full potential of private providers across the TB cascade of care

Organised by: FHI 360

More than 60% of the 4 million "missing people" with TB in 2016 were in six countries in which private providers accounted for more than two thirds of initial care for the population. However, in these countries, the contribution of private for-profit providers was equivalent to only 9% of estimated TB incidence. Many of the "missing people" are unreached by health services because of weak health systems, lack of universal health coverage and the presence of financial and socio-cultural barriers, particularly for vulnerable and marginalized populations. Many remain undiagnosed after reaching health services because of weak referral pathways between private sector and other health care providers, and the lack/poor enforcement of mandatory case notification. Countries are moving towards Universal Health Coverage (UHC) and reaching the TB-related targets in the Sustainable Development Goals and End TB Strategy. Ensuring early access to TB diagnosis and treatment and reducing unnecessary death and suffering requires countries to harness the full potential of private providers. This satellite session will discuss the evidence base and rationale for the effectiveness of private sector engagement towards TB elimination, with a focus on lessons learnt from high burden countries.

Chairperson: Robert Makombe (South Africa)

Chairperson: Lisa Stevens (Thailand)

Public-private mix (PPM) for TB: evidence of what works and what doesn't work	18:00 - 18:20
Kenneth Castro (United States of America)	
Lessons learnt from approaches on not-for-profit private provider engagement in TB-HIV and HIV	18:20 - 18:40
Otto Chabikuli (United States of America)	
Overcoming political barriers to making public-private mix on TB a reality Yogan Pillay (South Africa)	18:40 - 19:00
Strategic investments for public-private mix towards ending TB Monica Dias	19:00 - 19:20
Discussion	19:20 - 19:30

Satellite session (SS) 18:00 - 19:30

Kilimanjaro 1&2

# SS20 Ensuring the rights to rapid and quality diagnosis, treatment and care for TB in countries of Eastern Europe and Central Asia: challenges, achievements and perspectives

Organised by: WHO EURO Joint Tuberculosis, HIV/AIDS & Hepatitis (JTH) programme Dr Masoud Dara, Programme Manager

Despite a steady decline in the number of new TB cases and TB deaths globally and in European region, the countries of Eastern Europe and Central Asia (EECA) have become the global center of MDR-TB crisis with the highest levels of MDR/XDR-TB ever recorded. Simultaneously, the incidence of TB/HIV co-infection and TB/HIV mortality have been increasing and added additional challenges to healthcare systems of EECA countries. In order to address these problems, EECA countries have introduced many successful initiatives and started moving towards more peoplecentred models of TB care. In line with the 2018 Union conference theme, this year's EECA session will focus on possible effective solutions to the emerging challenges in order to ensure the rights to prevention, rapid and quality diagnosis, treatment and care for TB.

Chairperson: Masoud Dara (Denmark) Chairperson: Alena Skrahina (Belarus)

Reforming the structure and financing mechanisms of TB healthcare in Armenia Hratchia Lylozian (Armenia)	18:00 - 18:15
The experience of Belarus in the use of new drugs (bedaquiline and deamanid) for M/XDR-TB treatment in HIV co-infected patients  Alena Skrahina (Belarus)	18:15 - 18:30
Opportunities and challenges to implementation of new TB control law in Georgia Nestani Tukvadze (Georgia)	18:30 - 18:45
MDR-TB in Kyrgyzstan: implementation of new rapid laboratory diagnostic methods and their role for using shorter treatment regiments Gulmira Kalmambetova (Kyrgyz Republic)	18:45 - 19:00
Russian TB control experience as the input to reducing the global TB burden Irina Vasilyeva (Russian Federation)	19:00 - 19:15
Discussion	19:15 - 19:30

Satellite session (SS) 18:00 - 19:30

Everest 1&2

# SS21 Role of artificial intelligence and chest radiography for the detection of tuberculosis and other lung diseases

Organised by: Delft Imaging Systems

Digital chest radiography is increasingly used to screen for tuberculosis. Used as a triage test to select individuals for bacteriological testing, it allows for screening large groups of TB suspects at low costs. Chest radiography is also essential for the diagnosis and monitoring of many other lung diseases. Artificial intelligence is a rapidly developing field and increasingly applied to medical image analysis. The first products for chest radiography analysis have appeared on the market. In this symposium we show and discuss progress and application of chest radiography and artificial intelligence to the detection of TB and other lung diseases.

Chairperson: Bram van Ginneken (Netherlands) Chairperson: Klaus Reither (Switzerland)

Scale-up of computer-aided detection for TB in Pakistan: implementation experience and development of individual risk scoring algorithms  Shifa Salman Habib (Pakistan)	18:00 - 18:20
Artificial intelligence and deep learning in chest radiography: automating the reading process	18:20 - 18:40
Bram van Ginneken (Netherlands)	
Computer aided diagnosis for WHO standardized chest X-ray interpretation in children	18:40 - 19:00
Nasreen Mahomed (South Africa)	
Choosing algorithms for TB screening: triage tests with chest radiography, symptoms, and the Xpert MTB/RIF assay  Anja van't Hoog (Netherlands)	19:00 - 19:20
,	
Discussion	19:20 - 19:30

Satellite session (SS) 18:00 - 19:30

Atlantic

## SS22 Preserving our future—protecting children from TB infection, disease and death

Organised by: KNCV Tuberculosis Foundation

At least 1 million children (< 15y) develop TB disease every yearwith 253,000 dying - nearly 700 per day - including 52,000 TB deaths among HIV positive children[1]. In 2016, 87% of new cases were in the 30 TB high-burden countries. Three main facts define childhood TB: (i) the majority of children with TB are NOT diagnosed; (ii) Children die from TB; and, (iii) children exposed to TB do not access preventive therapy.

This Symposium provides an overview of the global childhood TB epidemic, presents the new 2nd edition of the Childhood TB Roadmap, and the KNCV Childhood TB Benchmarking tool to help countries to assess the status of their own childhood TB interventions against the Childhood TB Roadmap and develop their own country specific policies, strategy and roadmap in response.

The symposium further explores new and improved child-friendly ways towards prevention, early detection, improved diagnosis, and management of latent childhood TB.

[1]World Health Organization. Global Tuberculosis Report 2017

Chairperson: Connie Erkens (Netherlands) Chairperson: Malgorzata Grzemska (Switzerland)

Overview of Childhood TB and Childhood TB Roadmap 2nd edition Farhana Amanullah (Pakistan)	18:00 - 18:15
KNCV childhood TB benchmarking tool—the Nepal experience Kathy Fiekert (Netherlands)	18:15 - 18:30
Contact investigation in Ethiopia—organisation approaches and procedure Challa Negeri (Ethiopia)	18:30 - 18:45
LTBI treatment in children—SOPs and experiences in Viet Nam Huong Nguyen (Viet Nam)	18:45 - 19:00
LTBI treatment in children—results from the Netherlands and recommendations for the way ahead  Connie Erkens (Netherlands)	19:00 - 19:15
No pain 4 kids - the KNCV one-step method for diagnosing TB in children Petra De Haas (Netherlands)	19:15 - 19:30

Community space: participatory activity 18:00 - 18:15

De Ontmoeting meeting point

#### Join the run!

45 minute guided run through the nearby Scheveningse Bosjes. Repower yourself in the nearby nature.

max. 40 participants.

Registration required.

Register at the Point of Vitality in Lobby 3 on Wednesday or de Ontmoeting on Thursday and Friday.

Member Meetings (Regional, Section, Sub-section, Working Group) 18:30 - 19:30

Mississippi

#### **GENERAL ASSEMBLY**

Time TBC

Community space: art display 19:00 - 19:30

De Ontmoeting 1 (Community space)

# Documentary: Two Countries, Two Choices: India, South Africa and the Struggle against Multi-Drug-Resistant Tuberculosis

A documentary film by AIDS-Free World: The drugs Bedaquiline and Delamanid can mean the difference between life and death for people suffering from the worst and most noxious strain of tuberculosis in the world, MDR-TB. The government of India has restricted access to the drugs for its 140,000 MDR-TB sufferers. South Africa has made a different choice for 20,000 MDR-TB patients. The consequences are profound.

Watch the <a href="https://vimeo.com/280790846" target=" blank">trailer</a> here

#### Saturday, 27 October 2018

Satellite session (SS) 07:30 - 08:45

Yangtze 2

### SS23 Cracking the aDSM conundrum in resource limited settings—safeguarding patients whilst introducing new drugs and regimens for DRTB in India

Organised by: Challenge TB-The Union South-East Asia

Pharmacovigilance and proper management of adverse drug reactions and prevention of drug-drug interactions, is one of the most important and challenging five conditions that must be met for the inclusion of bedaquiline in the adult treatment regimen of MDR-TB, in accordance with the WHO Interim Guide for Bedaquiline Use (2013). The speakers in this symposium will talk about how the Pharmacovigilance and active Drug Safety Monitoring and Management (aDSM) system was established at the initial six Bedaquiline Conditional Access Programme (CAP) sites in India; lessons from Cohort Event Monitoring; and how to address the challenges in managing Adverse Drug Reactions under programmatic settings.

Chairperson: Kuldeep Singh Sachdeva (India)

Chairperson: Jamhoih Tonsing (India)

Are patients really at the centre of TB care?  Nandita Venkatesan (India)	07:30 - 07:40
The approach for aDSM for new TB drugs within the pharmacovigilance framework in India Neerja Arora (India)	07:40 - 07:50
Lessons from cohort event monitoring of the Bedaquiline Conditional Access Programme Virender Singh Salhotra (India) Sundari Mase (India)	07:50 - 08:00
Addressing programmatic challenges in managing adverse drug reactions Syed Imram Farooq (India)	08:00 - 08:10
Managing adverse drug reactions and simultaneously Implementing aDSM for patients receiving new drugs and regimens  Sundari Mase (India)	08:10 - 08:20
Discussion	08:20 - 08:35

Meet the expert session (MTE) 07:35 - 08:35

Everest 1&2

#### MTE09 TB Meet the Expert session 2

Originally a means to speed up the implementation of DOTS, national programme reviews are regarded as an essential step on the way to receiving funding for TB control. There is often a conspiracy, however, to write the most favourable report possible, regardless of the real problems facing the Programme, or to ignore the report if it is critical. WHO's 2014 Framework for Conducting Reviews of Tuberculosis Programmes provides technical guidance but doesn't adequately address the major problems that commonly confront TB management and control in countries, namely adequate political support, better leadership, management and organisation, as well as addressing the urgent need of improving service provision to patients with TB. The Meet the Expert session will discuss how reviews can achieve positive change.

#### **Scientific Programme**

#### **Quality Improvement in National Programme Reviews**

07:35 - 08:35

Paul Nunn (United Kingdom)

Community space: skills building

07:45 - 08:45

De Ontmoeting 1 (Community space)

#### Asking healthcare workers: 'Are you TB Proof?'

How do you convince healthcare workers to protect themselves and their patients against the spread of TB in healthcare facilities? How can we amplify the voices of TB survivors to share this important message on a larger scale? Join TB Proof for an interactive discussion about the process behind creating an online package that aims to engage and interest healthcare workers in TB Infection Control and equip them with the skills to be TB champions! This session will cover:

- · Tips for telling your story on camera
- · Using health behaviour change models in TB prevention
- · Experiences of using the 'Are you TB Proof? Online training tool.

Chairperson: Ingrid Schoeman (South Africa)

Coordinator: Helene-Mari van der Westhuizen (South Africa)

Asking healthcare workers: 'Are you TB Proof?' Helene-Mari van der Westhuizen (South Africa)	07:45 - 07:55
Asking healthcare workers: 'Are you TB Proof?' Phumeza Tisile (South Africa)	07:55 - 08:05
Asking healthcare workers: 'Are you TB Proof?' Wieda Human (South Africa)	08:05 - 08:15

Plenary session (PL)

09:00 - 10:00 KWA Plenary Hall

### Plenary 3 From new science to new policies

Chairperson: Guy B. Marks (Australia)

What is the New Science?	09:00 - 09:20
Frank Cobelens (Netherlands)	
How to take New Science and develop New Policies	09:20 - 09:40
Soumya Swaminathan (Switzerland)	
Discussion	09:40 - 10:00

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

De Ontmoeting 1 (Community space)

### Live stream plenary session

Community space: skills building 10:15 - 11:15

De Ontmoeting 1 (Community space)

# Reaching out to Youth: raising awareness on tuberculosis through short films and video blog

This session will show two films that won the Tuberculosis Short Film Festival and one video vlog. The first film, titled "Jangan Anggap Sepele TBC"-"Don't underestimate TBC" was produced by high-school students from Teruna Bakti school in Jayapura, Papua. Story of a student named Stenly, who is concerned about his best friend, Domin's health and advised him to do a health check up. As a farmer's child, Domin was unsure about checking up his health as cost being his main concern. This film shows a series of Papua's atmosphere scene and the unique characteristics of Papuans. Mixed with a comedic vibe, JAS TBC was produced in only three weeks has successfully defeated 21 other films, and the film also raised common issue on universal health coverage in Papua. ~14 minutes. The 2ndfilm, "Bukan Batuk Biasa"-"Not An Ordinary Cough'- won the title inspiring film. This film was made by highschool students from SMKN 48 (48 Vocational High School) in DKI Jakarta. The film shows the urban setting by taking scene from public transportation that is associated with an increased risk of TB.The main role is Dandy, an ignorant student who cares less on his surrounding, until a time when his friends start to distance themselves from him because of his condition. At that point, he started to find out what he was going through. This film also shows a common pathway that people normally take once they experience TB symptoms. ~8 minutes. The third film is a 5-minute video blog (vlog) produced by Thorofi Ramdan, an ex-MDR TB patient. The vlog was the 1strunner-up winner of the Vlogger competition organized for World TB Day Event 2018. The films screening will be followed by a discussion. All films will be in Bahasa Indonesia, with English subtitle.

Coordinator: Roviliana Trishanty Rondonuwu (Indonesia)

Chairperson: Erik Post (Indonesia)

Reaching out to Youth: raising awareness on tuberculosis through short films and video blog	10:15 - 10:25
Bey Sonata (Indonesia)	
Reaching out to Youth: raising awareness on tuberculosis through short films and video blog Niken Wastu Palupi (Indonesia)	10:25 - 10:35
Reaching out to Youth: raising awareness on tuberculosis through short films and video blog	10:35 - 10:45
Riskiyana Sukandhi Putra (Indonesia)	
Reaching out to Youth: raising awareness on tuberculosis through short films and video blog	10:45 - 10:55

Nikita de fretes (Indonesia)

#### **Scientific Programme**

Community space: skills building 10:15 - 10:45

De Ontmoeting 2 (Community space)

#### Using Maps to fight TB

During an interactive quiz-like session the audience will be triggered

Until recently national TB control strategies have relied on a "one size-fits-all" approach. Instead, local differences in the number of people affected with TB, the presence of high risk populations, or a combination of other factors require different health interventions to be considered to best fit the local context. KIT Royal Tropical Institute has developed the MATCH approach (Mapping and Analysis for Tailored disease Control and Health system strengthening). During an interactive quiz session we invite the audience to look at various maps and to experience how visualization of TB data helps us to support decision making.

Organized by <a href="https://www.kit.nl/" target=" blank">KIT Royal Tropical Institute</a>

Coordinator: Mirjam Bakker (Netherlands) Chairperson: Masja Straetemans (Netherlands)

Symposium (SP) 10:30 - 12:00

KWA Plenary Hall

### SP50 Implementation of the revised WHO tuberculosis infection control guidelines: what's new?

The WHO has recently updated the 2009 TB infection control guidelines. This session will highlight the latest recommendations for infection prevention and control (IPC), the gaps in existing knowledge, implementation of these recommendations at a country level, measuring the impact of IPC, and the procurement of IPC equipment and supplies.

Chairperson: Matsie Mphahlele (South Africa) Chairperson: Carrie Tudor (Switzerland)

An introduction to the new WHO guidelines on tuberculosis infection control: what is new? Paul Jensen (United States of America)

Research gaps in infection prevention and control (IPC): what we know and what we don't Grigory Volchenkov (Russian Federation)

How to implement the WHO infection control guidelines: experience from China  $\mbox{\it Jun}$  Cheng (China)

Measuring impact of infection control measures

Nii Hanson-Nortey (Ghana)

Implementing the new WHO guidelines: procurement of equipment and supplies by the Global Drug Facility

Wayne van Gemert (Switzerland)

Discussion

Short Oral Ab 10:30 - 12:00	stract session (SOA)	Europe
SOA17 Fr	om low to high drug-resistant tuberculosis	
•	Edmund Rutta (United States of America) Stella Zawedde-Muyanja (Uganda)	
SOA17-116 8-27	Geospatial characterization of extensively drug-resistant tuberculosis transmission areas using varying location types in Durban, South Africa Meaghan Peterson (United States of America)	10:30 - 10:37
SOA17-116 9-27	Transmission drives the increase of multidrug-resistant tuberculosis in Rwanda Jean-Claude Ngabonziza Semuto (Belgium)	10:37 - 10:44
SOA17-117 0-27	Genetic diversity of multidrug-resistant Mycobacterium tuberculosis isolates in Bangladesh  Syed Mohammad Mazidur Rahman (Bangladesh)	10:44 - 10:51
SOA17-117 1-27	Increasing drug resistance in National Survey of Susceptibility to Anti- Tuberculosis Drugs in Peru  Gustavo Velasquez (United States of America)	10:51 - 10:58
SOA17-117 2-27		10:58 - 11:05
SOA17-117 3-27	A case control study to identify community venues associated with genetically clustered multidrug-resistant tuberculosis disease in Lima, Peru	11:05 - 11:12
	Louis Grandjean (United Kingdom)	
SOA17-117 4-27	Emergence of tuberculosis drug resistance by different patient-matching strategies using laboratory data  Yuri van der Heijden (United States of America)	11:12 - 11:19
SOA17-117 6-27	The national prevalence of drug resistance tuberculosis in Morocco, 2014 Kenza Bennani (Morocco)	11:26 - 11:33
Short Oral Ab 10:30 - 12:00	estract session (SOA)	Antartica
SOA18 Ho	ow expert is Xpert?	
	Jerod N. Scholten (Netherlands) Martina Casenghi (Switzerland)	
SOA18-117 7-27	Is Xpert MTB/RIF as an initial test adequate for patient management in high HIV-TB settings?  Welile Sikhondze (Swaziland)	10:30 - 10:37
SOA18-117 8-27	Real-life impact of the implementation of Xpert MTB/RIF on patient management, time to treatment initiation and mortality among people diagnosed with rifampicin resistant TB  Elise De Vos (Belgium)	10:37 - 10:44

SOA18-117 9-27	Xpert Ultra can unambiguously discriminate among rifampicin resistance- conferring mutations Kamela Charmaine Ng (Belgium)	10:44 - 10:51
SOA18-118 0-27	The experience of innovative specimen transportation and GeneXpert expansion in Ethiopia  Endale Mengesha (Ethiopia)	10:51 - 10:58
SOA18-118 1-27	Factors associated with negative MTB culture results among GeneXpert- positive MTB patients Zwakele Tfwala (Swaziland)	10:58 - 11:05
SOA18-118 2-27	Feasibility of ultra-deep high fidelity amplicon sequencing (SMOR) on genomic DNA from used Xpert MTB/RIF (G4 and Ultra) cartridges for full genotypic drug susceptibility testing	11:05 - 11:12
	Rouxjeane Venter (South Africa)	
SOA18-118 3-27	How does Xpert Ultra compare to Xpert MTB/RIF in patients with TB symptoms in a mixed ancestry and African population in Cape Town, South Africa?  G Theron (South Africa)	11:12 - 11:19
SOA18-118 4-27	Comparison of Xpert MTB/RIF and Xpert MTB/RIF Ultra for detection of tuberculosis	11:19 - 11:26
	Kishor Kumar Paul (Bangladesh)	
SOA18-118 5-27	Evaluation of the GeneXpert MTB/RIF Assay on cultured samples from the sanatoria in North Korea  Dae Yeon Kim (Korea, Republic of)	11:26 - 11:33
SOA18-118 6-27	Performance of the Zimbabwe mycobacterial culture and drug susceptibility testing system among retreatment tuberculosis patients during the scale-up of Xpert MTB/RIF Collins Timire (Zimbabwe)	11:33 - 11:40
SOA18-118 7-27	The utilisation of an Android-based application to increase access to quality GeneXpert test Jhon Sugiharto (Indonesia)	11:40 - 11:47
Chamb O I Al	anting the consists (COA)	

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

Oceania

### SOA19 Tobacco use in various populations: implications for policy and practice

Chairperson: Gan Quan (United States of America) Chairperson: Sarwat Shah (United Kingdom)

 Connaissances et attitudes des étudiants de la faculté des sciences de la santé de Niamey sur le tabagisme	10:30 - 10:37
Mourtala Mohamed Assao Neino (Niger)	

### SOA19-118 Does smoking have an impact on TB treatment outcomes?—A prospective 10:37 - 10:44 cohort study from India

Kannan Thiruvengadam (India)

SOA19-119 0-27	5 percentage points (21.2 to 16.1%) reduction in tobacco use in the state of Himachal Pradesh—a self-enforcing and sustainable model in India Gopal Chauhan (India)	10:44 - 10:51
SOA19-119 1-27	Prevalence and associations of tobacco use among a men who have sex with men (MSM) in Lagos, Nigeria Victor Adepoju (Nigeria)	10:51 - 10:58
SOA19-119 3-27	Opportunities and threats for smoking cessation counseling of tuberculosis patients in Armenia  Arusyak Harutyunyan (Armenia)	11:05 - 11:12
SOA19-119 4-27	How new economic policies (demonetization of higher currency notes and GST) impacted on sale of tobacco products in India. A comparative analysis  Nirmalya Mukherjee (India)	11:12 - 11:19
SOA19-119 5-27	Tobacco retailers' association: the beginning of 'Front Groups' in Sri Lanka P. A. S. C. Lakmal (Sri Lanka)	11:19 - 11:26
SOA19-119 6-27	A youth internship programme to promote the image of the tobacco industry: a case study from Sri Lanka  Manuja Perera (Sri Lanka)	11:26 - 11:33
SOA19-119 7-27	Civil society organization's involvement in advocating and supporting local governments of Indonesia in smoke-free laws  Siti Rahma (Indonesia)	11:33 - 11:40
Short Oral Ab 10:30 - 12:00	ostract session (SOA)	North America
10:30 - 12:00		North America
10:30 - 12:00 <b>SOA20 Th</b> Chairperson:		North America
10:30 - 12:00 <b>SOA20 Th</b> Chairperson: Chairperson:	ne changing landscape of childhood tuberculosis  Yaël Hirsch-Moverman (United States of America)	North America 10:30 - 10:37
SOA20 The Chairperson: Chairperson: SOA20-119 8-27	ne changing landscape of childhood tuberculosis  Yaël Hirsch-Moverman (United States of America) Farhana Amanullah (Pakistan)  Pharmacokinetics of rifampicin in children from the OptiRIF study: dosing cohort 1	
10:30 - 12:00  SOA20 Th  Chairperson: Chairperson: SOA20-119 8-27  SOA20-119 9-27	ne changing landscape of childhood tuberculosis  Yaël Hirsch-Moverman (United States of America) Farhana Amanullah (Pakistan)  Pharmacokinetics of rifampicin in children from the OptiRIF study: dosing cohort 1  Elin M Svensson (Netherlands)  Implementation of the childhood TB road map addressed the missed childhood TB cases in Addis Ababa	10:30 - 10:37
10:30 - 12:00 SOA20 Th Chairperson: Chairperson: SOA20-119 8-27 SOA20-119 9-27 SOA20-120 0-27	ne changing landscape of childhood tuberculosis  Yaël Hirsch-Moverman (United States of America) Farhana Amanullah (Pakistan)  Pharmacokinetics of rifampicin in children from the OptiRIF study: dosing cohort 1  Elin M Svensson (Netherlands)  Implementation of the childhood TB road map addressed the missed childhood TB cases in Addis Ababa  Tilay Gudina (Ethiopia)  Ten years of routine paediatric TB surveillance data in South Africa: high disease burden and poor treatment outcomes	10:30 - 10:37 10:37 - 10:44

SOA20-120 3-27	Understanding TB treatment initiation delays among children in Lima, Peru: a qualitative study	11:05 - 11:12
	Julia Coit (United States of America)	
SOA20-120 4-27	A review of Mycobacterium tuberculosis culture yield from three daily gastric aspirate specimens versus multiple samples obtained in one day (2013-2017)	11:12 - 11:19
	Raquel Consunji-Araneta (Canada)	
SOA20-120 5-27	Mycobacterium tuberculosis detection from stool in young children using a novel centrifugation-free method with Xpert MTB/RIF Elisabetta Walters (South Africa)	11:19 - 11:26
SOA20-120 6-27	Advanced molecular detection of paediatric pulmonary tuberculosis on gastric aspiration and stool samples  Xuhui Liu (China)	11:26 - 11:33
SOA20-120 7-27	Comparison of two DNA extraction procedures for the detection of Mycobacterium tuberculosis in paediatric stool samples  Martin Soto (Peru)	11:33 - 11:40
Oral Abstract 10:30 - 12:00		Central America
OA19 Bui	lding workforce capacity through education and training	
•	Amanda Christensen (Australia) Kerri Viney (Australia)	
OA19-314- 27	Scaling up TB workforce development around the globe: the ECHO experience	10:30 - 10:40
	Bruce Struminger (United States of America)	
OA19-315- 27	Is knowledge retained by healthcare provider after training? A pragmatic evaluation of drug-resistant tuberculosis management in China  Shishi Wu (Singapore)	10:40 - 10:50
OA19-316- 27	Competence-based training of frontline health workers in paediatric TB management to increase paediatric TB case identification in Rwenzori region, Uganda	10:50 - 11:00
	Pauline Mary Amuge (Uganda)	
OA19-317- 27	Impact of Fogarty HIV-TB training program on 'institutional research capacity building' at the Byramjee Jeejeebhoy Government Medical College, Pune, India  Gauri Dhumal (India)	11:00 - 11:10
OA19-318- 27	Using innovative digital tools to measure physicians´ diagnostic behaviour  Manisha Sabharwal (India)	11:10 - 11:20
OA19-319- 27		11:20 - 11:30

OA19-320- 27	South African National Department of Health and CDC partnered with John Hopkins School of Nursing MDR-TB Short Course Training of Clinicians, 2017-2018  Jason Farley (United States of America)	11:30 - 11:40
OA19-321- 27	TB/MDR-TB education and training for nurses improving the quality of TB services in Malawi Harriet Chiomba (Malaysia)	11:40 - 11:50
Oral Abstract 10:30 - 12:00	· ·	South America
OA20 A po	otpourri of tuberculosis: subclinical disease to dirty money	
	Paula Fujiwara (United States of America) Anthony D Harries (United Kingdom)	
OA20-322- 27	Prevalent pulmonary tuberculosis diagnosed in participants, stratified by transcriptomic correlate of risk, in a clinical trial of targeted preventive therapy  Michele Tameris (South Africa)	10:30 - 10:40
OA20-323- 27	Final tuberculosis treatment outcomes of patients receiving a socio- economic support intervention: long-term follow-up from a randomized controlled trial in Peru Tom Wingfield (United Kingdom)	10:40 - 10:50
OA20-324- 27	Contribution of multi-sectoral approach of Public-Private-Mix in new cities of Afghanistan: urban DOTS experiences  Mohammad Khakerah Rashidi (Afghanistan)	10:50 - 11:00
OA20-325- 27	Strengthening leadership pays: a look at TB programme indicators after a leadership development program in Cote d'Ivoire Firmin Zokora (Côte D'Ivoire)	11:00 - 11:10
OA20-326- 27	Risk-benefit analyses using novel methods in the A5279 latent TB clinical trial  Sachiko Miyahara (United States of America)	11:10 - 11:20
OA20-327- 27	Neural network analysis as a tool to develop screening algorithm for tuberculosis Lucelly López (Colombia)	11:20 - 11:30
OA20-328- 27	A quantitative assessment of general wellbeing in TB-affected people Sumona Datta (United Kingdom)	11:30 - 11:40
OA20-329- 27	Screening currency notes for M. tuberculosis using loop-mediated isothermal amplification  Manoj Nimesh (India)	11:40 - 11:50

Symposium (SP) 10:30 - 12:00

Mississippi

# SP51 Clinical trial capacity building to address multidrug-resistant tuberculosis: challenges and the way forward

As new therapeutic agents for TB become available, there is an urgency to generate evidence for optimal treatment options, particularly for DR-TB. It is thus critical to develop research infrastructure and build capacity for clinical trials in the field to generate reliable data that can inform policy and guideline decisions for the management of DR-TB. This symposium will bring together people from the field to discuss challenges faced in key areas of research infrastructure required for the successful conduct of clinical trials, share experiences from past and ongoing studies, and propose solutions and a way forward.

Chairperson: YaDiul Mukadi (United States of America)

Chairperson: Meera Gurumurthy (Singapore)

Multidrug-resistant tuberculosis clinical trial landscape overview

Robert Horsburgh Jr. (United States of America)

Ethics and regulatory capacity building

Abraham Aseffa (Ethiopia)

Challenges, efforts in strengthening site pharmacies and pharmacists in the STREAM Trial lan Komrska (United States of America)

Mycobacteriology laboratory capacity building for tuberculosis clinical trials Gomathi N.S. (India)

Community engagement in multidrug-resistant tuberculosis clinical trials

Ezio Tavora (Brazil)

Discussion

Symposium (SP) 10:30 - 12:00

Amazon

# SP52 How prices could affect universal access to anti-tuberculosis treatment of the future? Options for solutions

Access to medicines is a major challenge for all-(public) health and innovation are at stake when access is not guaranteed. In this session, speakers will discuss the different perspectives on the acceptable price of a novel TB regimen, how a new regimen could affect existing NTP budgets and the public health value of a novel regimen from a cost-effectiveness perspective, taking into account the potential to avert current and future morbidity and mortality. Also discussed will be how to recoup costs associated with developing and manufacturing drugs and incentivise continued investment in TB R&D and ensure the commercial sustainability of new regimens.

Chairperson: Christian Lienhardt (France) Chairperson: Grania Brigden (Switzerland)

What would the tuberculosis regimens of the future look like?

Gavin Churchyard (South Africa)

Trends in multidrug-resistant tuberculosis treatment prices and scale-up

Christophe Perrin (France)

Trends in the tuberculosis drug market

Shelly Malhotra (United States of America)

#### Modelling costs of new tuberculosis regimens

Emily Kendall (United States of America)

What are fair prices for tuberculosis medicines and how can they be achieved?

Discussion

Symposium (SP) 10:30 - 12:00

Yangtze 1

### SP53 Chronic lung disease in older children with human immunodeficiency virus infection

HIV infection is the leading cause of mortality among older children in Africa Respiratory disease is the most common manifestation of HIV/AIDS, accounting for more than 50% of HIV-associated mortality in this age group. The use of ART has contributed to a reduction in the rate of acute respiratory tract infections and mortality. Nevertheless, recent studies in Southern Africa have demonstrated that about 30% of African HIV-infected older children have chronic respiratory symptoms. This symposium will discuss clinical presentation, underlying causes and possible interventions of chronic lung disease in HIV-infected older children.

Chairperson: Rashida Ferrand (United Kingdom) Chairperson: Katharina Kranzer (United Kingdom)

### Chronic lung disease in young adults living with human immunodeficiency virus—not just bronchiectasis

Engi F. Attia (United States of America)

Lung function in human immunodeficiency virus infected children and adolescents Leah Githinji (South Africa)

The radiological morphology of chronic lung disease in human immunodeficiency virusinfected adolescents

Sujal Desai (United Kingdom)

Cytomegalovirus virus in perinatally acquired HIV-infected children and its association with chronic lung disease

Louis-Marie Yindom (United Kingdom)

Distinct lung microbiota associated with chronic lung disease in children with HIV on antiretroviral therapy

John Metcalfe (United States of America)

Discussion

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

Yangtze 2

#### OA21 Multidrug-resistant tuberculosis: more pearls and wisdom

Chairperson: Kitty van Weezenbeek (Netherlands)

Chairperson: Arnaud Trébucq (France)

OA21-330- Interim cohort analysis of drug-resistant TB patients on bedaquiline- 10:30 - 10:40 containing regimens in Viet Nam

Thi Thanh Thuy Hoang (Viet Nam)

OA21-331- 27	Provision of guideline-based care for drug-resistant tuberculosis in South Africa: individual and health system characteristics affecting guideline adherence	10:40 - 10:50
	Brittney van de Water (United States of America)	
OA21-332- 27	An observational study documenting treatment and pregnancy outcomes in women exposed to MDR/RR-TB treatment during pregnancy  Marian Loveday (South Africa)	10:50 - 11:00
OA21-333- 27	Mathematical modelling of the epidemiological impact, cost-effectiveness and budget impact of novel tuberculosis vaccines on multidrug-resistant tuberculosis	11:00 - 11:10
	Chathika Krishan Weerasuriya (United Kingdom)	
OA21-334- 27	Six-month culture conversion among a MDR-TB cohort with high HIV co- infection treated with delamanid or bedaquiline in Lesotho	11:10 - 11:20
	David Holtzman (Lesotho)	
OA21-335- 27	Safety of regimens containing bedaquiline and delamanid among cohort of drug-resistant tuberculosis patients in Ethiopia	11:20 - 11:30
	Andargachew Kumsa (Ethiopia)	
OA21-336- 27	tuberculosis treatment in drug-resistant tuberculosis patients: a nationwide database study from The Netherlands	11:30 - 11:40
	Ivan Surya Pradipta (Netherlands)	
OA21-337- 27	High-dose isoniazid continues to contribute to treatment success in the majority of MDR-TB patients	11:40 - 11:50
	Pauline Lempens (Belgium)	
Chart Oral Ab	aturat accessor (COA)	
10:30 - 12:00	ostract session (SOA)	Kilimanjaro 1&2
SOA21 Sp	pecial populations, special needs, special care	
	Delia Goletti (Italy) Mustapha Gidado (Nigeria)	
·	Systematic monitoring and evaluation of TB contact evaluation practice	10:30 - 10:37
8-27	Connie Erkens (Netherlands)	10.30 - 10.37
SOA21-120 9-27	Tuberculosis among older adults in Kenya: implications for an aging population	10:37 - 10:44
	Abraham Katana (Kenya)	
SOA21-121 0-27	Identifying yield of pulmonary TB among mental disordered patients in Afghanistan: a cross-sectional study	10:44 - 10:51
	Ghulam Qader (Afghanistan)	
SOA21-121 1-27	Predictors of failure to continue tuberculosis treatment after release from prison in Malaysia: a cohort study Haider Abdulrazzaq Abed Al-Darraji (New Zealand)	10:51 - 10:58

SOA21-121 2-27	Results of tuberculosis screening programme among drug or alcohol depended individuals and cost-benefit analysis in Tel Aviv, Israel (2013-2016)  Zohar Mor (Israel)	10:58 - 11:05
SOA21-121 3-27	Experience of involvement NGOs in TB control among migrants in Kazakhstan	11:05 - 11:12
	Bakhtiyar Babamuradov (Kazakhstan)	
SOA21-121 4-27	Primary isoniazid prophylaxis for prevention of tuberculosis infection: a randomised, placebo-controlled trial among high-risk prison inmates  Roberto Oliveira (Brazil)	11:12 - 11:19
SOA21-121 5-27	Fear of job loss as a barrier to TB care among mine workers in Zambia: impact of TB-related policies	11:19 - 11:26
	Laura Jean Podewils (United States of America)	
SOA21-121 6-27	Finding and treating missed cases among key affected population—primitive tribal groups of central India Ashvini Vyas (India)	11:26 - 11:33

Symposium (SP) 10:30 - 12:00

Everest 1&2

# SP54 Building models for the future—innovative partnerships addressing legal issues, and systems and human rights-related barriers to TB-HIV care

The symposium showcases different experiences and approaches to innovative partnership models for improved TB-HIV prevention and care. The focus is on the role of the non-public sector in addressing legal issues, and systems and human rights-related barriers to TB-HIV care, sharing results, lessons learnt and best practices from three countries (Kazakhstan, Nigeria and The Philippines). The initiatives presented are all part of the "Improved TB-HIV prevention and care-building models for the future" Project funded by the Dutch Ministry of Foreign Affairs, the Directorate-General for International Cooperation (DGIS), as part of their Global Fund support.

Chairperson: Kathy Fiekert (Netherlands) Chairperson: Ini Huijts (Netherlands)

"Improved TB-HIV prevention and care-building models for the future" project—innovative partnerships

Kathy Fiekert (Netherlands)

Establishing and strengthening NGO networks providing a full range (legal, psycho-social, anti-discrimination, etc.) of supportive patient-centred activities for vulnerable and key affected populations

Kristina Zhorayeva (Kazakhstan)

Supporting the mechanisms and legal framework of collaboration between public and non-public/private sector-changing perspectives

Svetlana Pak (Kazakhstan)

Improving the quality of TB-HIV services in the non-public sector through the internationally accredited SafeCare standards and International Standards for Tuberculosis Care

Egbedeyi Samuel Olufunsho (Nigeria)

Non-public sector one-stop shop TB-HIV service provision prototypes tailored to vulnerable and at-risk populations—seen from a human rights perspective

Mary Ann Evangelista (Philippines)

#### **Scientific Programme**

Discussion

Symposium (SP) 10:30 - 12:00

Atlantic

#### SP55 Multi-disease: testing the next paradigm

Data reported by 72 countries show that retention on ART after 12 months ranged from 72% in western and central Africa to 89% in the Middle East and North Africa. When the gaps across the HIV testing and treatment cascade are combined, this translates into 44% of all people living with HIV being virally suppressed in 2016, substantially lower than the 73% required for full achievement of the 90–90–90 targets. This symposium will illustrate some country initiatives in addressing the increasing TB-HIV dual burden by integrating TB-HIV testing programmes and platforms through the promotion of new opportunities for collaboration and integration.

Chairperson: Alaine Umubyeyi Nyaruhirira (South Africa)

Chairperson: Emmanuel Fajardo (Spain)

Integrated TB-HIV diagnostic platforms—potential for synergy and efficiency

Christopher Gilpin (Switzerland)

A systems approach to maximise multi-disease testing

Lesley Scott (South Africa)

Multi-instrument/multi-disease connected diagnostics, is this the next frontier?

Jeff Takle (United States of America)

What's missing to improve efficiency across the laboratory value chain? The Zambian e-LABS experience

Lynsey Stewart-Isherwood (South Africa)

Leveraging Xpert's expanded assay menu for the integrated management of HIV/HCV/TB coinfections: a MSF field experience

Erwan Piriou (Netherlands)

Discussion

#### **Scientific Programme**

Community space: panel discussion 11:30 - 12:30

De Ontmoeting 1 (Community space)

#### **Xpert for all: optimistic or realistic?**

The global roll-out of Xpert MTB/RIF has changed the diagnostic landscape of TBI A more sensitive Xpert test to detect TB (Ultra) has recently been released. More than 23 million Xpert MTB/RIF tests have been performed since 2011 and almost 30 000 Xpert® instruments were procured between 2010 and 2016. Detection of multidrug-resistant TB has increased three- to eight-fold compared to conventional testing. The roll-out has excited stakeholders, from donors to civil society, and paved the way for universal drug susceptibility testing. However, the roll-out has also highlighted gaps that have constrained scale-up and limited impact on patient outcomes. Studies have found average delays of 28 to 30 days from when patients first contact a health care provider to diagnosis, even when patients present with overt TB symptoms. The end result is that 40% of people with TB do not receive a rapid diagnosis, and DR-TB is detected in only 23% of people thought to have it. This symposium shall highlight the need to change perspectives on what is actually needed to optimize testing, improve utilization, and use Xpert MTB/RIF as the initial test for all persons with presumptive TB of the lungs, or forms of extra-pulmonary TB. The new Ultra cartridge also has more sensitivity but less specificity in TB detection. The question is, "is this a feasible and realistic task?' We present 5 perspectives regarding opportunities & challenges on GeneXpert roll-out from the perspective of country stakeholders (including Indonesia with MTB/RIF and South Africa with Ultra) as well as international stakeholders including Médecins Sans Frontières (MSF) and the KNCV Tuberculosis Foundation. The presentations are followed by a panel discussion with discussion and opportunities for comments and questions from the audience.

Chairperson: Jerod N. Scholten (Netherlands)

Chairperson: Alaine Umubyeyi Nyaruhirira (South Africa)

GeneXpert MTB/RIF Ultra Implementation: Lessons learnt in South Africa. Puleng Marokane (South Africa)	11:30 - 11:40
Rapid GeneXpert Expansion in Indonesia 2016-2017: progress and lessons learned Retno Kusuma Dewi (Indonesia)	11:40 - 11:50
Measuring Diagnostic Gaps to End TB: A Reality Check Kathleen England (Switzerland)	11:50 - 12:00
Lessons learned and surveillance on GeneXpert repair service provision and maintenance on the country level.  Jerod N. Scholten (Netherlands)	12:00 - 12:10

#### **Scientific Programme**

Community space: panel discussion 12:00 - 13:30

De Ontmoeting 2 (Community space)

### Improving dissemination of clinical trial results - experiences in TB and HIV clinical trials

Dissemination of research results is an ethical obligation and can be a catalyst for policy change. However, its focus is often on peer reviewed publications, rather than communication to ministries of health, trial participants, and civil society organizations. The clinical trials represented in this panel discussion have disseminated TB and HIV trial results to a range of stakeholders. In this session, panelists will compare their dissemination experiences/strategies, with the aim of promoting more inclusive and impactful dissemination practices.

Stage 1 of the STREAM Clinical Trial sought to determine whether a 9-month multidrug-resistant tuberculosis (MDR-TB) regimen successfully piloted in Bangladesh could achieve similar results in other settings. Preliminary results were shared with trial sites, ministries of health, community advisory boards (CABs), trial participants and community stakeholders.

NC-005 was an eight-week, phase 2b trial testing the BPaZ and BPaMZ regimens in patients with drug-sensitive and MDR-TB. Preliminary results were disseminated to trial sites, participants, community engagement (CE) staff and CABs. Dissemination strategies were developed with CE partners at the TB Alliance's annual CE Forum.

FACTS 001 evaluated pericoital tenofovir gel for the prevention of HIV transmission in HIV non-infected women in South Africa. 2000+ women were enrolled but primary analysis indicated that the intervention was non-effective. Results were disseminated via long-standing CAB structures.

The HPTN052 trial evaluated the effectiveness of antiretroviral therapy plus HIV primary care vs. HIV primary care alone to prevent sexual transmission of HIV-1 in serodiscordant couples. An interim breakthrough finding was disseminated and prompted changes in treatment assignment. Final results of this trial were disseminated at the end of the study.

This panel will explore important issues related to research results dissemination, including:

- · Communications channels/materials
- · Making complex topics accessible to all audiences
- · Dissemination of unfavorable or unexpected results
- · Using results to advocate for change.

Speakers 12:00 - 13:20

Ezio Tavora dos Santos Filho (Brazil) Francesca Conradie (South Africa) Oxana Rucsineanu (Moldova) Nombuyiselo Tshandu (South Africa) Helen Platt (United Kingdom) Sarah Mulera (United States of America) Stephanie Seidel (United States of America) Kay Marshall (United States of America)

Community space: participatory activity 12:00 - 12:15

De Ontmoeting meeting point

#### Join the powerwalk!

25 minute powerwalk to keep the energy high on the last conference day.

Max 20 participants

Meetup at the banner Point of Vitality in De Ontmoeting - Community Connect.

E-poster session (EP) 12:15 - 13:15

North America

#### EP07 Innovations in capacity building and translating evidence to policy

Chairperson: Elif Dagli (Turkey)

Chairperson: Rumana Huque (Bangladesh)

EP07-162-Possibilities to eliminate tobacco cultivation: a case study from Karnataka, India 27 Ashish Kumar Pandey (India)

EP07-163-Emotional, behavioral problems and cigarette smoking behavior: a survey among Bangladeshi adolescents 27

Rajib Ahmed Faisal (Bangladesh)

EP07-164-The need to improve smoking cessation services provided to pregnant smokers in Greece Paraskevi Katsaounou (Greece)

EP07-166-Trend of illicit cigarette use in Tehran: an experience from third pack survey in Tehran, 27 2018

Gholamreza Heydari (Iran, Islamic Rep. Of)

EP07-167-Knowledge of Nigerian smokers on health effects of tobacco smoking and their quit attempts: evidence from Global Adult Tobacco Survey (GATS) 2012 27

Obioma Uchendu (Nigeria)

EP07-168-Quit attempts and cessation services utilization among tobacco smokers in Nigeria: analysis of Global Adult Tobacco Survey (GATS) 2012

Olayide Olubunmi Olabumuyi (Nigeria)

EP07-169-Deglamorizing smoking among young people through social media 27

Andibuduge Ishara Buddhika (Sri Lanka)

EP07-170-Evaluation of different strategies (pharmacologic intervention vs. enhanced motivation vs. standard motivation) for smoking cessation in TB patients under treatment in the RNTCP, 27 India

Ramesh Kumar (India)

E-poster session (EP) 12:15 - 13:15

Central America

#### EP08 Innovations in tuberculosis—across the care cascade

Chairperson: Kevin Schwartzman (Canada)

EP08-171-Quantitative culture results predict treatment response and guide infection control during the first 14 days of therapy

Sumona Datta (United Kingdom)

Sampling strategies for therapeutic drug monitoring of moxifloxacin with and without EP08-172rifampicin in tuberculosis patients 27

Simone H J van den Elsen (Netherlands)

EP08-173-Safety of recombinant fusion protein CFP10-ESAT6 (RP22) as a skin test reagent for tuberculosis diagnosis: a randomised, double-blind, single-centre Phase I clinical trial 27

Lu Xia (China)

EP08-174- 27	Genetic diversity of MDR Mycobacterium tuberculosis isolates circulating in Cuba, 1995-2014 Raul Diaz (Cuba)
EP08-175- 27	Chronic respiratory symptoms and lung abnormalities among people with a history of TB in Uganda: a national cross-sectional analysis  Sanne Christine van Kampen (United Kingdom)
EP08-176- 27	The results are in: survey on MDR-TB treatment preference Safiqa Khimani (United States of America)
EP08-177- 27	Body mass index and hyperglycemia interact among south Indian tuberculosis cases and household contacts Rachel Wenger Kubiak (United States of America)
EP08-178- 27	HIV testing for all TB patients in Jember District, Indonesia: mission possible Dyah Kusworini (Indonesia)
EP08-179- 27	The role of systematic TB contact investigation in an urban setting; experiences from Kampala Uganda Samuel Kasozi (Uganda)
EP08-180- 27	Evaluation of FAST strategy in the National Center for Tuberculosis and Lung Diseases (NCTLD) of Georgia  Mikheil Madzgarashvili (Georgia)

E-poster session (EP) 12:15 - 13:15

South America

### EP09 The importance of health workers and civil society organisations in finding tuberculosis in communities

Chairperson: Ruvandhi R. Nathavitharana (United States of America)

EP09-181- Improving TB case notification through engagement of community volunteers: experience from Challenge TB supported districts in Tanzania

V. Mahamba (Tanzania, United Rep.)

EP09-182- Leaders wanted for a TB free world: exploring prospects of community influencers for TB case finding in low reporting districts in Akwa Ibom State, Nigeria

Chukwuemeka Austin Ihesie (Nigeria)

EP09-183- Pharmacists and rural health care providers and peer motivation strategy: experiences of piloting peer motivation strategy from PRATAM project, India

Vikas Panibatla (India)

EP09-184Sputum collection and transportation initiatives by local community volunteers under NGOPP scheme in hard-to-reach-areas among vulnerable-populations increased sputum
examination and TB notification in Bastar District, Chhattigarh

Gayadhar Mallick (India)

EP09-185- The crucial role of community health workers, Shasthya Shebikas, for programmatic management of TB in Bangladesh: experience from BRAC

Sardar Munim Ibna Mohsin (Bangladesh)

#### **Scientific Programme**

EP09-186- Bringing communities and civil society to the front line for tackling TB in England

27 Luis C. Berrocal-Almanza (United Kingdom)

EP09-187- Effect of community engagement on TB case finding and treatment in Nangarhar Province,

27 Afghanistan

Ghulam Qader Qader (Afghanistan)

EP09-188- The case for active case finding in poor urban areas in Zambia

27 Chanda Mulenga (Zambia)

EP09-190- Community volunteers help increase TB case detection among key affected populations:

27 analysis from 16 designated microscopy centres across India

David Livingstone (India)

Special session (SPS) 12:15 - 13:15

Mississippi

# Universal Health Coverage (UHC): Sustainable programming and financing for TB and Lung health

This session aims to enhance the understanding of the fundamental health system transformation that UHC requires and equip TB and Lung Health program managers to effectively position TB and Lung health at national levels by gaining an appreciation of the rapidly evolving health financing policies, explained against the context globally of UHC and SDG agenda's, and against the in-country context of national budgets trade-off decision processes.

The session will address three key themes:

- Historical policy perspective: explain how we got from Alma Ata Declaration (primary health care as the approach to reach "Health for All") to UHC.
- Health financing aspects: address how TB care can be sustainably anchored in an evolving UHC approach at country level
- Investment cases: how to position TB and Lung health effectively for trade-off decisions in national health resources and budget allocations.

12:15 - 12:25: Soumya Swaminathan

An Historical perspective: From Alma Ata Declaration to the SDG and UHC Era?

12:25 – 12:40: Eduard Sigalinggin

Universal access to sustainably funded programmes in devolved health system: An Indonesian case study

12:40-12:55: Yogan Pillay

From grassroots to district: The role of community in advocating for equitable and quality integrated care

12:55-13:10 Dr. Anna Vassall

Allocative efficiency and embedding TB and Lung Care in country UHC plans

Plenary session (PL) 12:30 - 12:45

De Ontmoeting meeting point

#### Join the powerwalk!

25 minute powerwalk to keep the energy high on the last conference day.

Max 40 participants

Meetup at the banner Point of Vitality in De Ontmoeting - Community Connect.

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

Poster Area

#### PS39 New agents, old ways: old agents, new ways

Atlantic 2

Chairperson: Robert Horsburgh Jr. (United States of America)

PS39-825- Treatment outcomes of delamanid for intractable TB patients in a National TB Hospital
Dae Yeon Kim (Korea, Republic of)

PS39-826- A description of patients receiving bedaquiline and delamanid in Mozambique
Mathieu Bastard (Switzerland)

PS39-827Treatment of drug-resistant tuberculosis with regimens containing bedaquiline and delamanid: description of patient eligibility criteria among Ethiopian cohorts

Amsalu Bekele (Ethiopia)

PS39-828- High cure rates with bedaquiline-based treatment of pre- and extensively drug-resistant tuberculosis in Niger

Mahamadou Bassirou Souleymane (Niger)

PS39-829- QTcF prolongation with bedaquiline: early experience from India

Yogesh Patel (India)

PS39-830- Poor quality of life in patients who experience adverse events while on treatment for drug-27 resistant TB

Tembeka Sineke (South Africa)

PS39-831- Risk factors associated with acquiring drug-resistant tuberculosis as found at the Can Tho Tuberculosis and Lung Hospital, Viet Nam

Nguyen Le Thi Thao (Viet Nam)

PS39-832- Short-course treatment regimens for multidrug-resistant tuberculosis

Poorana Ganga Devi Navaneetha Pandian (India)

PS39-833- Efficacy and safety of the MDR-TB regimen containing clarithromycin

Liu Yuhong

PS39-834- Isoniazid Mycobacterium tuberculosis resistance: genetic support and impact on patient

27 treatment

Leila Slim-Saidi (Tunisia)

PS39-835- Adoptive transfer of in vitro expanded autologous T cells enhances the efficacy of

27 chemotherapy against MDR-TB

Peijun Tang (China)

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

Poster Area

#### PS42 Bicycles, cheese and canals: the changing face of paediatric tuberculosis

Atlantic 2

Chairperson: Lisa V. Adams (United States of America)

PS42-858- 27	Tuberculosis among indigenous children and adolescents in Brazil: factors associated with death and loss to follow-up from treatment Paulo Victor S. Viana (Brazil)
PS42-859- 27	Risk factors for unsuccessful treatment outcomes in older adolescents with drug- susceptible tuberculosis in Lima, Peru Meredith Blair Brooks (United States of America)
PS42-860- 27	Nutritional status in intra-thoracic tuberculosis disease and TB infection in children: an observational study from South India  Syed Hissar (India)
PS42-861- 27	Pattern of response to current short-course chemotherapy in children suffering from intrathoracic tuberculosis  Anshula Tayal (India)
PS42-863- 27	Recent trends in pediatric tuberculosis in Germany Nita Perumal (Germany)
PS42-864- 27	Innovation in pediatric MDR-TB treatment: a novel dose delivery system for MDR-TB medications  Amanda Zieselman (United States of America)
PS42-865- 27	Tuberculosis in children treated in primary health units and university centers in the metropolitan area of Rio de Janeiro, Brazil  Anna Cristina C. Carvalho (Brazil)
PS42-866- 27	Estimating intervention impacts on pediatric tuberculosis mortality in India and Nigeria: a modeling study using MAP-IT, a user-friendly decision-support model for pediatric tuberculosis  Jennifer Griffin (United States of America)
PS42-867- 27	Delamanid with and without bedaquiline for adolescents and children with rifampicin- resistant tuberculosis  Anja Reuter (South Africa)
PS42-868- 27	Lessons learnt from integrating childhood TB case finding in a PEPFAR funded orphans and vulnerable children (OVC) program in Benue State, Nigeria Chukwuemeka Anoje (Nigeria)

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

Poster Area

### PS45 Challenging diagnostics: hard to reach mycobacteria

Atlantic 1

Chairperson: Petra De Haas (Netherlands)

PS45-889- Use of lateral flow urine lipoarabinomannan test to diagnose tuberculosis in critically ill people living with the human immunodeficiency virus in Uganda

Raymond Asiimwe (Uganda)

PS45-890- Comparison of Mueller Hinton and 7H9 broths for testing drug susceptibility of Mycobacterium avium complex using SLOMYCO Sensititre panel

Nicolas Veziris (France)

PS45-891- 27	Retrospective analysis of NTM in patients with suspected TB in the Moyen Ogooue Region of Gabon  Micheska Epola Dibamba Ndanga (Gabon)
PS45-892- 27	Accuracy of determine TB-LAM Ag to detect TB in HIV-infected patients in association with diagnostic methods used in Brazilian public health units  Valeria Rolla (Brazil)
PS45-893- 27	Clinical review of laboratory diagnostic techniques of tuberculous peritonitis Yu Chen (China)
PS45-894- 27	Current approaches to the diagnosis of tuberculous pleuritis Vadim Testov (Russian Federation)
PS45-895- 27	Parallel tests using culture, Xpert MTB/RIF and SAT-TB in sputum plus bronchial alveolar lavage fluid significantly increase diagnostic performance of smear-negative pulmonary tuberculosis Lin Fan (China)
PS45-896- 27	Differential diagnosis of prostate tuberculosis Elena Brizhatyuk (Russian Federation)
PS45-897- 27	Rapid detection of circulating Mycobacterium tuberculosis DNA for the diagnosis of abdominal tuberculosis  Sagarika Haldar (India)
PS45-898- 27	Evaluation of the yield of histology to diagnose lymph node tuberculosis in Morocco, 2016-2017 Kenza Bennani (Morocco)
PS45-899-	Bacteriological examination for the diagnosis of tuberculous lymphadenitis: is it sufficient?

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

Poster Area

# PS50 Towards quality management of tuberculosis laboratory networks: approaches and experiences

Atlantic 1

27

Chairperson: Stella Van Beers (Netherlands)

Sabira Tahseen (Pakistan)

PS50-946- Quality control of sputum samples to increase the proportion of bacteriologically confirmed tuberculosis: a multicenter randomised controlled trial

Qi Jiang (China)

PS50-947- Introduction of a quality management system in a national reference laboratory

Susanne Homolka (Germany)

PS50-948- Quality components affecting the quality of TB laboratory diagnostics services in public health centers in central Uganda

Kenneth Mutesasira (Uganda)

PS50-949- External quality assurance for ensuring quality and diagnostic services in TB

27 Saifur Reja (Bangladesh)

PS50-950- 27	Continuous quality improvement approach rapidly increases GeneXpert utilization, reporting and tuberculosis case notification: lessons from Kampala, Uganda  Syrus Ntudhu (Uganda)
PS50-951- 27	Preparing TB C&DST laboratories under the RNTCP for NABL accreditation in India Tarak Shah (India)
PS50-952- 27	Rapid scale-up of liquid culture and DST facilities under the RNTCP to increase access to universal DST  Tarak Shah (India)
PS50-953- 27	External quality assessment of chest X-ray interpretation for TB triage and diagnosis in Myanmar Si Thu Aung (Myanmar)
PS50-954- 27	Quality improvement support improves TB diagnosis through intensified TB case finding at care entry points in Kampala Raymond Byaruhanga (Uganda)

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

Poster Area

### PS46 See, hear, speak: the use of the media for tuberculosis

Atlantic 1

Chairperson: Kerri Viney (Australia)

PS46-901- Overcoming TB stigma through cultural health beliefs with the edutainment of TB disease in West Sumatera, Indonesia

Rizanda Machmud (Indonesia)

PS46-902- Encouraging an evidence-based narrative
Divya Vaidyanathan (India)

PS46-903Social media, mass media and health advocacy: cross-promotion of tuberculosis information to increase TB diagnosis and adherence to treatment in South Africa

Petronella Mugoni (South Africa)

PS46-904- Using community radio to improve active case finding for TB in an indigenous community: a case study from West Bengal, India

Nirmalya Mukherjee (India)

PS46-905- Let's talk about TB on radio, a demand creation strategy for TB services: evidence from the evaluation of TB radio jingle in Nigeria

Richard Olukolade (Nigeria)

PS46-906- Involving local celebrities as ambassadors for increased attention to TB: experiences from India

Anupama Srinivasan (India)

PS46-907- Edutainment positively impacts the transfer of TB messages to high school students in Rehoboth, Namibia

Karin Husselmann (Namibia)

PS46-908- 27	Establishing a structured media engagement programme to improve reporting on TB in India
	Anupama Srinivasan (India)
PS46-909- 27	Knowledge about tuberculosis and its impact on MCH care services among mothers in south Asia: results of a nation-wide cross-sectional household survey  Brajesh Brajesh (India)
PS46-910- 27	Applying integrated communication strategies to increase tuberculosis prevention knowledge and case identification capacities in West Coast District, Western Cape Province, South Africa  Princess Mabota-Rapholo (South Africa)
PS46-911- 27	Do the social media sites of India's top political leaders vouch for commitment to end TB by 2025?  Sashi Kanta Nayak (India)
PS46-912- 27	Social media application facilitates fast treatment initiation among drug-resistant TB patients: Cambodia experience

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

Poster Area

#### PS37 Air pollution: measurement, risk and impact

Atlantic 2

Chairperson: Daniel Kass (United States of America)

Sam Sophan (Cambodia)

PS37-804- 27	Empowering village administrative body for preventing air pollution vis-a-vis lung diseases through environmental amelioration
	Aiay Kumar Singh (India)

PS37-805- 27	Wood fuel usage is associated with a higher leukocyte count in pulmonary tuberculosis patients
	Robert Horsburgh Jr. (United States of America)

PS37-80627 Do fuel type and place of cooking matter for acute respiratory infections among Afghan children? Evidence from a cross-sectional survey

Rayhan Sk (India)

PS37-807Air pollution risk factors, wheeze and dry cough in young children living in an industrial area of Gauteng Province, South Africa
Janine Wichmann (South Africa)

PS37-80827 The Cooking and Pneumonia Study: exploring social determinants of lung health in a lowincome setting using the participatory methodology Photovoice

Jane Ardrey (United Kingdom)

PS37-809- Cooking on open fires in the kitchen and TB in India
Lopamudra Paul (India)

PS37-810- Association between air pollution and respiratory disease mortality in Cape Town, Durban and Johannesburg, South Africa: effect modification by apparent temperature

Janine Wichmann (South Africa)

PS37-811- Comparison of atmospheric quality indexes: application in Athens
Paraskevi Katsaounou (Greece)

PS37-812- Deriving optimal mean indoor concentration threshold levels of PM2.5 and VOC for detecting respiratory symptoms among pregnant women in Zambia

David Mulenga (Zambia)

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

.2:45 - 13:45 Poster Area

#### PS35 Programmatic and clinical management of drug-resistant tuberculosis

Atlantic 2

Chairperson: Chen-Yuan Chiang (Taiwan)

PS35-783- Performance and epidemiological impact of programmatic management of drug-resistant tuberculosis in Taiwan

Pin-Hui Lee (Taiwan)

PS35-784- Time to treatment initiation of DR-TB patients in three South Western states of Nigeria: a retrospective study

Michael Seshi (Nigeria)

PS35-785- Efficacy and safety of delamanid to replace the injectable agent in a rifampicin resistant

tuberculosis cohort from Khayelitsha, South Africa

Anja Reuter (South Africa)

PS35-786- MDR-TB treatment: quantifying the need for new drugs

27 Lorenzo Guglielmetti (France)

PS35-787- Decentralised multidrug-resistant tuberculosis care in South Eastern Ghana: assessment of

27 implementation in 2015-2017 Lillian Addai (Ghana)

PS35-788- Predicting aminoglycoside-induced ototoxicity among DR-TB-infected individuals in South

27 Africa

Jason Farley (United States of America)

PS35-789- Decentralisation of audiology screening services for MDR-TB in Western Cape Province,

27 South Africa

Yulene Kock (South Africa)

PS35-790- Site improvement monitoring system for programmatic management of drug-resistant TB

27 (SIMS for PMDT): experiences from Uganda

Kenneth Mutesasira (Uganda)

PS35-791- A quality improvement intervention for improving interim 6-month outcomes of patients

initiated on DR-TB treatment in Swaziland

Debrah Vambe (Swaziland)

PS35-792- Bedaquiline use for drug-resistant TB treatment: interim result of its implementation in

27 Indonesia

Yusie Luciana Permata (Indonesia)

PS35-793What can we learn about drug-resistant TB patients' experiences of decentralised care from their routinely collected laboratory data? Visualising patients' journeys in South Africa Jeremy Hill (Australia)

PS35-794Effectiveness of monthly interim cohort analysis (MICA) to improve enrolment and treatment adherence among drug-resistant TB patients in Indonesia

Yusie Luciana Permata (Indonesia)

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

Poster Area

#### PS47 Found and reported: but what tuberculosis treatment outcome

Atlantic 1

Chairperson: Brenda Mungai (Kenya)

PS47-913- M. africanum (MTBc Lineage 6) has worse treatment outcome than M. tuberculosis sensu stricto (Lineage 4)

Bassirou Diarra (Mali)

PS47-914- Disparities in tuberculosis treatment outcomes between rural and urban populations in Zambia

Simon Mutembo (United States of America)

PS47-915- Treatment outcomes of tuberculosis patients seeking care in the private sector in India

Karuna Sagili (India)

PS47-916- Predictors of relapse among people with smear-positive pulmonary tuberculosis disease in Iraq

Layth Al-Salihi (Iraq)

PS47-917- TB treatment outcomes among recurrent TB patients in Zambia

Simon Mutembo (United States of America)

PS47-918- Predictive risk model of failure in pulmonary tuberculosis treatment in HIV co-infected patients in Portugal

Carla Nunes (Portugal)

PS47-919- Facteurs associés à l'abandon du traitement antituberculeux à Douala, Cameroun

27 Adeline Wandji (Cameroon)

PS47-920- Performance measurement dashboard for data-driven management of a TB control project

27 in Indonesia

Paulus Daniel Sahanggamu (Indonesia)

PS47-921- Innovation in information systems processes: generating impact in decision making in

27 Antioquia, 2017

Juan Jose Victoria Escarria (Colombia)

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

Poster Area

#### PS48 Understanding drug-resistant tuberculosis

Atlantic 1

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Chairperson: Ignacio Monedero (Spain)

PS48-922- Genotyping of drug-resistant tuberculosis strains for isoniazid resistance using first-line line probe assay in Karachi, Pakistan

Sara Siddiqui (Pakistan)

PS48-923- Trend of multidrug and fluoroquinolone resistance in Mycobacterium tuberculosis isolates from 2010 to 2014 in South Korea

Doosoo Jeon (Korea, Republic of)

PS48-925- MDR/XDR-TB strain mobility in South Africa

Serej D. Ley (South Africa)

PS48-926- Updated TB drug resistance in Japan, 2012-2013

27 Akiko Takaki (Japan)

PS48-927- Prevalence of MDR-TB in Indonesia: results from the first national anti-tuberculosis drug resistance survey

Lamria Pangaribuan (Indonesia)

PS48-928- Genetic diversity of multidrug-resistant Mycobacterium tuberculosis Central Asian Strain

isolates from Nepal and comparison with neighboring countries

Yogendra Shah (Japan)

PS48-929- Predominance of Mycobacterium tuberculosis Beijing clade and its association with drug

resistance in north-eastern parts of India

Sarman Singh (India)

PS48-930- Demographic characteristics and geographic distribution of drug-resistant TB patients

enrolled in six treatment initiation centres of SNNPR, Ethiopia

Melaku Godebo (Ethiopia)

PS48-931- Do patients incur out-of-pocket expenditures prior to multidrug-resistant tuberculosis

treatment? A cost analysis study from South India

Priya Rathi (India)

PS48-932- Increasing trend of drug-resistant TB among new TB patients and its implications in two

large regions of Ethiopia

Nebiyu Hiruy (Ethiopia)

PS48-933- Whole genome sequencing of multidrug-resistant tuberculosis isolates in Singapore,

27 2005-2017

Cynthia BE Chee (Singapore)

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

Poster Area

#### PS40 Public, private tuberculosis: separate and together

Atlantic 2

Chairperson: Adebola Lawanson (Nigeria)

PS40-847Optimizing community screening for TB: spatial analysis of localized case finding from doorto-door screening for tuberculosis in a district of Ho Chi Minh City, Viet Nam

Luan Nguyen Quang Vo (Viet Nam)

PS40-836- Contribution of the private health sector to TB case finding in Kabul, Afghanistan: document review

Habibuddin Faqiryar (Afghanistan)

PS40-837- Improve access to quality TB care through engagement of private clinics in Almaty city, Kazakhstan

Svetlana Pak (Kazakhstan)

PS40-838- Nation-wide public-private mix for tuberculosis case holding in South Korea: a comparison of initial and expanded phases in 2009 and 2014

Hongjo Choi (Korea, Republic of)

PS40-839- Did prioritisation and strengthening of the law for public-private partnership in the RNTCP yield effective results in Central India?

Moumita Biswas (India)

PS40-840- Accelerating tuberculosis case identification through public-private mix approaches: BRAC experience

Saifur Reja (Bangladesh)

PS40-841- The role of health system governance in strengthening the TB control programme in Nigeria

Daniel Ogbuabor (Nigeria)

PS40-842- Self-notification through chemist: progenitor approach towards ending TB in Delhi

Nandani Sharma (India)

PS40-843- Enforcement of Schedule H1 Provisions of Drugs and Cosmetics Act increased private TB

notification by 95% in 11 districts of Jharkhand, India

Sashi Kanta Nayak (India)

PS40-844- Programmatic preparations for TB patient triage approach

27 Bakyt Myrzaliev (Kyrgyz Republic)

PS40-845- Effectiveness of public and private health sector engagement in TB services in Jalalabad city

27 of Nangarhar

27

Mohammad Khakerah Rashidi (Afghanistan)

PS40-846- TB reporting through DHIS2 in Bangladesh: road to digitalization

27 Mohammad Shahrear Farid (Bangladesh)

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

Poster Area

#### PS44 Laboratory informatic system: where are we?

Atlantic 1

PS44-880- Connecting actions to connectivity: a case study Victoria Harris (Switzerland)

PS44-881- Monitoring the quality of the National GeneXpert Programme in Botswana against international benchmarks using a connectivity solution (GxAlert)

Diriba Mosissa (Botswana)

PS44-882- Predicting Xpert capacity targets based on annual notifications: using the WHO framework targets and indicators for laboratory strengthening capacity calculation tool

Kathleen England (Switzerland)

PS44-883- Challenges and lesson learnt during implementation of GeneXpert GxAlert platform in connecting rapid tuberculosis diagnosis for better health outcomes in Tanzania

Nicodem Bernado Mgina (Tanzania, United Rep.)

PS44-884- The utilisation of an Android-based application to increase access to quality GeneXpert

27 testing

Jhon Sugiharto (Indonesia)

PS44-885- GxAlert field implementation: experience of Ethiopia

Endale Mengesha (Ethiopia)

PS44-886- Innovation using 'line listing' with information communication technology for improving

initiation of treatment in RR/MDR-TB patients: experience from Nigeria

Sani Useni (Nigeria)

PS44-888- Benefits of using technology-supported GxAlert in managing Genexpert high error rates in

27 Nigeria

Kehinde Jimoh Agbaiyero (Nigeria)

Poster discussion session (PD)

12:45 - 13:45 Poster Area

#### **PS36 Result of intensified case detection**

Atlantic 2

Chairperson: Christiaan Mulder (Netherlands)

PS36-795- APOPO's TB detection: results in 24h and patient tracking improve linkage to care,

27 Tanzania, 2014-2017

Joseph Soka (Tanzania, United Rep.)

PS36-796- Role of a contact center in TB control in Mumbai

Vaishnavi Jondhale (India)

PS36-797- Facility-based active tuberculosis case finding in Nyeri County, Kenya: a feasible and

?7 effective strategy

Cosmas Mwashumbe (Kenya)

PS36-798- 27	Cost analyses of active case finding programs in Cambodia and Tajikistan Youngji Jo (United States of America)
PS36-799- 27	The impact of reactive (contact tracing) case finding versus proactive (door-to-door) case finding in the Shiselweni Region, Swaziland  Tikhona Mkhabela (Swaziland)
PS36-800- 27	Increasing TB screening points in an urban district improved TB case identification: early results from Mukono district, Uganda  Abel Nkolo (Uganda)
PS36-801- 27	Successes in increasing TB case detection through quality improvement interventions in health facilities in Tanzania  Deus Vedastus Kamara (Tanzania, United Rep.)
PS36-802- 27	An attempt to identify actively practising private practitioners and their potential contribution to TB care in Bandung Municipality, Indonesia  Bachti Alisjahbana (Indonesia)
PS36-803- 27	Implementation of active case finding as a strategy to find tuberculosis cases in Kericho referral hospital, Kericho county, Kenya  Elizabeth Chirchir (Kenya)

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

Poster Area

#### PS38 Windmills, clogs and healthy lungs

Atlantic 2

Chairperson: Kevin Mortimer (United Kingdom)

PS38-813- 27	Pulmonary hypertension in a cohort of patients previously treated for Pulmonary Tuberculosis at Mulago Hospital in Kampala, Uganda	
	Winceslaus Katagira (Uganda)	
PS38-816-	Pulmonary outcomes in patients with tuberculosis: systematic review and meta-analysis	

27 Olena Ivanova (Germany)

PS38-817The predictors of Mycobacterium kansasii pulmonary infection within 1 year for patients initially having a single MK isolate
Hung-Ling Huang (Taiwan)

PS38-818Experience in developing a software visualization tool to increase the informative value of transbronchial biopsy in diffuse parenchymal lung disease

Igor Cherniaev (Russian Federation)

PS38-820- Global trends in lung cancer risk reduction among former smokers: an analysis from the Global Burden of Disease Study 2017

Thomas Hsiao (United States of America)

PS38-821- Connaissances et pratiques des médecins généralistes sur la BPCO à Niamey, Niger
Mourtala Mohamed Assao Neino (Niger)

PS38-822- Community-based screening for chronic obstructive pulmonary disease among the elderly in an urban area of South India

Ramesh Chand Chauhan (India)

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

Poster Area

#### **PS43 Tuberculosis and diabetes**

Atlantic 2

Chairperson: Julia Critchley

PS43-869- Diabetes mellitus among pulmonary tuberculosis patients from four tuberculosis-endemic countries: the TANDEM cohort

Cesar Ugarte-Gil (Peru)

PS43-870- Tuberculosis and associated transient hyperglycaemia in peri-urban South Africa: implications for diabetes screening in high tuberculosis/HIV-1 burden settings

Mmamapudi Kubjane (South Africa)

PS43-871- The distribution of diabetes mellitus among TB patients in the State of Florida, USA

27
PS43-872- Gestational diabetes suppresses the inflammatory response to M. tuberculosis in pregnant women in Pune, India

Jyoti Mathad (United States of America)

PS43-873- Association between diabetes mellitus and multi-drug resistant tuberculosis: a systematic review and meta-analysis

Melkamu Merid Mengesha (Ethiopia)

PS43-874- Diabetes mellitus and latent tuberculosis infection in the Eastern China: a population-

27 based, retrospective cohort study

Peng Lu (China)

PS43-875- Addressing diabetes and tuberculosis comorbidity: lessons from Bangladesh

Mohammad Shahrear Farid (Bangladesh)

PS43-876- Scaling up diabetes mellitus screening in patients with pulmonary tuberculosis in Dhaka,

Bangladesh, with a public-private model

Kishor Kumar Paul (Bangladesh)

PS43-877- Bi-directional screening of TB and diabetes at private diagnostic and treatment centers,

27 Karachi, Pakistan

Syed Mohammad Asad Zaidi (Pakistan)

PS43-878- Improving integrated care of tuberculosis and diabetes comorbidities in South Africa

Refiloe Matji (South Africa)

PS43-879- Active case finding and screening for HIV and diabetes as a potentially viable strategy for

reduced transmission of tuberculosis in penitentiary institutions in India

David Livingstone (India)

27

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

Poster Area

# PS41 Temporal trends, spatial distribution and modelling for human immunodeficiency virus and diabetes

Atlantic 2

Chairperson: Palwasha Yousafzai Khan (Pakistan)

PS41-84827 Rapid, sustained scale-up of ART for HIV-positive TB patients in Mozambique, 2010-2017:
successes and next steps
Benedita Jose (Mozambique)

PS41-849- A decline in the number of notified TB cases in the last 7 years could be ascribed to the decline in HIV infection rates in Ethiopia

Zewdu Gashu (Ethiopia)

PS41-850- Temporal trends in tuberculosis notification rates following nine years of antiretroviral therapy scale-up in Uganda

Stella Zawedde-Muyanja (Uganda)

PS41-851- Trends in the South African tuberculosis epidemic with scale-up of TB-HIV integration services

Muhammad Osman (South Africa)

PS41-852- TB-HIV coinfection: profile of cases and spatial distribution in the city of São Paulo, Brazil
Roberta Figueiredo Cavalin (Brazil)

PS41-853- Spatial analysis of the common risk of HIV and tuberculosis incidence in Kenya Thomas Achia (Kenya)

PS41-854- Creating localised case finding strategies by spatio-temporal analysis of LGA-level TB case notification data in South East and South West Nigeria

Stewart Chang (United States of America)

PS41-855- Modelling the effect of HIV and diabetes co-epidemics on tuberculosis

Gerard Joseph Abou Jaoude (United Kingdom)

PS41-856- Forecasting the impact of diabetes mellitus on tuberculosis disease incidence and mortality in India

Susanne F. Awad (Qatar)

PS41-857- Characterizing the impact of diabetes mellitus on tuberculosis epidemiology: analytical insights

Laith J. Abu-Raddad (Qatar)

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

Poster Area

#### PS49 Tuberculosis among prison inmates

Atlantic 1

Chairperson: Ivan Solovic (Slovakia)

PS49-934- 27	Nationwide chest X-ray screening for active TB in Thai prisons Sirinapha Jittimanee (Thailand)	
PS49-935- 27	The contribution of mass screening to overall case finding in 10 prisons in Tigray Region, Northern Ethiopia  Degu Jerene (Ethiopia)	
PS49-936- 27	Active TB case finding in prisons: experience of the Challenge TB project in Democratic Republic of Congo  Tatiana Sanda Aksenenkova (Congo (Democratic Rep.))	
PS49-937- 27	Can regular mass TB screening in a central prison increase TB case notifications? Henry Kanyerere (Malawi)	
PS49-938- 27	Tuberculosis in inmates: access to laboratory diagnosis in Brazil Gabriela Tavares Magnabosco (Brazil)	
PS49-939- 27	Underserved prison settings in Uganda contribute to missed TB cases: the case of Mukono District  Andrew Ocero (Uganda)	
PS49-940- 27	Promoting the rights of prisoners to tuberculosis care and prevention in Kenya Tabitha Abongo (Kenya)	
PS49-941- 27	Best practices towards ending TB in correctional facilities: experience from India Sripriya Pandurangan (India)	
PS49-942- 27	Contribution of mass screening to case finding in USAID/CTB supported prisons in SNNPR, Ethiopia Melaku Godebo (Ethiopia)	
PS49-944- 27	Effect of urban DOTS expansion in Kabul prisons on tuberculosis treatment outcome: a document review  Mohammad Khakerah Rashidi (Afghanistan)	
PS49-945- 27	Identifying efficient mass screening strategies for tuberculosis in Brazilian prisons using a mobile diagnostic unit  Andrea Carbone (Brazil)	

Community space: skills building 12:45 - 13:45

De Ontmoeting 1 (Community space)

# Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units

WHO estimates that 40% of TB patients are "missing" including many without typical symptoms and many with symptoms who do not seek care. Delays in diagnosis and treatment lead to high mortality and continued transmission. Reliance on only passive screening hinders TB control. Africa suffers greatly from this epidemic, particularly with parallel HIV epidemics that fuel the TB epidemic. New methods are needed to reach people with TB in communities. Systematic chest x-ray screening of targeted populations and diagnosis with GeneXpert assay using mobile units is a step towards finding and treating missing TB patients. However, the choice of screening as well as operational issues on how best to deploy the mobile TB units remain daunting. We present key principles and practices for active TB case finding followed by country experiences with mobile TB diagnostic units in communities representing Zimbabwe, Nigeria, Rwanda and Ghana. A panel discussion follows with questions posed by the audience.

Chairperson: Jerod N. Scholten (Netherlands)

Coordinator: Bassey Nsa (Nigeria)

Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units  Eveline Klinkenberg (Netherlands)	12:45 - 12:55
Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units Ronald Thulani Ncube (Zimbabwe)	12:55 - 13:05
Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units  Rupert Eneogu (Nigeria)	13:05 - 13:15
Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units  Patrick Migambi (Rwanda)	13:15 - 13:25
Finding and treating all of the missing patients: active screening for tuberculosis in African settings using mobile units  Frank Bonsu (Ghana)	13:25 - 13:35

Community space: participatory activity 13:00 - 13:15

De Ontmoeting meeting point

#### Join the powerwalk!

25 minute powerwalk to keep the energy high on the last conference day.

Max 30 participants

Meetup at the banner Point of Vitality in De Ontmoeting - Community Connect.

Tech Innovation Zone 13:15 - 13:45

Tech Innovation Zone - Exhibition Area

#### **Presentations @Tech Innovation Zone**

Presentation of Alics - a social network to improve global public health 13:15 - 13:30

Olajumoke Arinola Xavier Morelle

**Artificially Intelligent Point-of-Care TB Screener** 

13:30 - 13:45

Yunju Ra

Symposium (SP) 14:00 - 15:30

KWA Plenary Hall

#### SP56 Final STREAM Stage 1 results with implications for implementation

In this symposium, the final results of the safety and efficacy of the Standarised Treatment Regimen of Anti-TB Drugs for Patients with MDR-TB (STREAM) Stage 1 randomised trial of the shorter MDR-TB treatment regimen will be presented. In addition, talks will cover the possible cardiac toxicity of the short regimen, results in the subgroup of patients co-infected with HIV, patient and health systems costs, and experience and challenges in disseminating the trial results.

Chairperson: I D Rusen (United States of America) Chairperson: YaDiul Mukadi (United States of America)

Final results of the Standarised Treatment Regimen of Anti-TB Drugs for Patients with MDR-TB (STREAM) Stage 1 trial

Andrew Nunn (United Kingdom)

Understanding the potential toxicity of the short regimen

Sarah Meredith (United Kingdom)

What do we learn about giving this regimen to patients co-infected with human immunodeficiency virus?

Francesca Conradie (South Africa)

What are the real benefits for the patient and the health system?

Bertie Squire (United Kingdom)

Disseminating Stage 1 results to the community: successes and challenges

Bazra Tsogt (Mongolia)

**Discussion** 

Symposium (SP) 14:00 - 15:30

Europe

#### SP57 Harm reduction, e-cigarettes and new tobacco products

E-cigarettes and other heated tobacco products are being widely promoted in countries across the globe and new technologies continue to be developed and marketed. One of the marketing "promises" is their potential role in harm reduction, in assisting smokers to quit or as an alternative to smoking. Policies vary by country, and evidence on their health risks and potential utility in smoking cessation continues to emerge. Speakers will present a variety of experiences and perspectives on the public health policy implications of these products and the role of the tobacco industry, and review recognised harm reduction strategies in tobacco control.

Chairperson: Myra Wisotzky (United States of America) Chairperson: Gan Quan (United States of America)

### From banning to regulating: attempts at e-cigarette and new tobacco product regulation in Mexico and Brazil

Gustavo Sóñora (Mexico)

#### E-cigarette regulation in the Philippines

Jekee Miraflor (Philippines)

### E-cigarettes, heated tobacco products, and harm reduction: a win/win situation for the tobacco industry

Silvy Peeters (United Kingdom)

The Union perspectives on harm reduction, e-cigarettes and heated tobacco products Myra Wisotzky (United States of America)

Discussion

Symposium (SP) 14:00 - 15:30

Antartica

# SP58 Learning from patients to design an improved tuberculosis care delivery system

While there is growing interest in the quality of TB care, there is little information on patient experience and client satisfaction. NTPs do not routinely collect data on patient confidence, dignity, autonomy, privacy, confidentiality or user experience. Currently, TB patients are rarely engaged in designing TB care delivery. This panel will provide a platform for their voices. In this session, TB survivors will use their user experience and client satisfaction, to provide concrete suggestions on how to improve TB care delivery. Patient experiences will inform 'design thinking' and 'user-centred design' to improve TB services and enhance quality of care.

Chairperson: Ruvandhi R. Nathavitharana (United States of America)

#### Person-centric care: bridging the gap between talk and task

Nandita Venkatesan (India)

#### Role of art in fighting stigma

Paulina Siniatkina (Russian Federation)

#### Tuberculosis patients are the solution, not the problem!

Endalkachew Fekadu (Ethiopia)

#### Strengthening the tuberculosis system using survivors

Saurabh Rane (India)

#### Resilience and extensively drug-resistant tuberculosis: the unlikely ally

Ingrid Schoeman (South Africa)

Discussion

Short Oral Abstract session (SOA) 14:00 - 15:30 Oceania SOA22 The need for quality tuberculosis sciences Chairperson: Austin Obiefuna (Ghana) Chairperson: Carla Nunes (Portugal) SOA22-121 An assessment of socioeconomic factors, including gender, contributing 14:00 - 14:07 to diagnostic delay and treatment non-adherence among tuberculosis 8-27 patients in the Kyrgyz Republic Chynara Kamarli (Kyrgyz Republic) SOA22-122 Finding the missing cases among the elderly—a hard-to-reach and 14:07 - 14:14 vulnerable group 4-27 Ngak Song (Cambodia) SOA22-121 Articulating the state duty in human rights protection towards public 14:14 - 14:21 9-27 health-oriented carceral reforms in the Philippines Allan Chester Nadate (Philippines) SOA22-122 Providing guidance on a programmatic approach to reducing human 14:21 - 14:28 rights- and gender-related barriers to TB services 0 - 27Hvevoung Lim (Switzerland) SOA22-122 A right-based approach for institutionalizing patient charter for 14:28 - 14:35 1-27 tuberculosis care in Nigeria: implementation framework, results and lessons learnt Victor Adepoju (Nigeria) SOA22-122 Establishing community structures through the engagement of lay 14:35 - 14:42 2-27 providers can improve TB contact screening: initial lessons from the **USAID Defeat TB Project in Uganda** Stavia Turyahabwe (Uganda) SOA22-122 Effective civil society and government partnership for improved TB case 14:42 - 14:49 3-27 detection and treatment outcomes in Mulanje District, Malawi Sameer Sah (United Kingdom) SOA22-122 The strategic collaboration between NTP Mozambique and civil society 14:49 - 14:56 partners through USAID-supported project to enhance TB case finding in 5-27 Nampula and Zambézia Provinces, Mozambique Sugata Mukhopadhyay (Mozambique) SOA22-122 Engagement of lady health workers to enhance tuberculosis case 14:56 - 15:03 6-27 notification in rural Sindh, Pakistan Aamna Rashid (Pakistan) SOA22-122 Psychological and educational intervention to improve tuberculosis 15:03 - 15:10 treatment adherence in Ethiopia based on health belief model: a cluster-7-27 randomised control trial Habteyes Tola (Ethiopia)

Oral Abstract session (OA) 14:00 - 15:30 North America **OA22 Global approaches to child tuberculosis** Chairperson: Eric Wobudeya (Uganda) Chairperson: Lisa M. Cranmer (United States of America) OA22-338-Improving TB case detection in children aged < 15 years: experiences 14:00 - 14:10 from Kampala, Uganda 27 Raymond Byaruhanga (Uganda) 14:10 - 14:20 OA22-339- Virologic outcomes among Kenyan children receiving cART and TB therapy Lisa M. Cranmer (United States of America) OA22-340- Rifampicin and pyrazinamide exposures in children with DS-TB on WHO-14:20 - 14:30 recommended FDCs in the SHINE trial Helen McIlleron (South Africa) Reaching zero TB deaths among children: strengthening health systems OA22-341-14:30 - 14:40 to accelerate detection and prevention of pediatric TB in Viet Nam 27 Bao Vu Ngoc (Viet Nam) OA22-342- Tuberculosis contact investigation in Mozambique improves case 14:40 - 14:50 detection and preventive therapy initiation Cecily Miller (United States of America) OA22-343- Good treatment outcomes in children with extensively drug-resistant 14:50 - 15:00 tuberculosis: a systematic review and individual patient meta-analysis Muhammad Osman (South Africa) OA22-344- Tuberculosis contact investigation and its yield in children aged under 5 15:00 - 15:10 over a five-year period in Amhara Region, Ethiopia, 2013-2017 27 Degu Jerene (Ethiopia) Performance of MPT64 antigen detection test compared to Xpert MTB/RIF 15:10 - 15:20 OA22-345-27 assay and culture for diagnosis of extra-pulmonary tuberculosis in children in Tanzania Erlend Gronningen (Norway) Short Oral Abstract session (SOA) 14:00 - 15:30 Central America SOA23 Tuberculosis diagnosis + DST: getting from here to there Chairperson: Leen Rigouts (Belgium) Chairperson: Alberto Garcia-Basteiro (Spain) SOA23-122 Diagnostic accuracy of smear microscopy, TB-LAMP, GeneXpert assay 14:00 - 14:07 and solid media culture for the detection of pulmonary TB in Madagascar 8-27 Niaina Rakotosamimanana (Madagascar) 14:07 - 14:14 SOA23-122 Correlation between routine phenotypic drug susceptibility testing, MIC 9-27 using Middlebrook 7H9 media and genotypic resistance in consecutive MDR-TB isolates from Sweden Mikael Mansjö (Sweden)

SOA23-123 0-27	Correlation of gyrA mutations with minimum inhibitory concentrations of ofloxacin- and moxifloxacin-resistant isolates from India Sarman Singh (India)	14:14 - 14:21		
SOA23-123 1-27	Reduction of MDR-TB prevalence by 50% in Swaziland: results of the 2nd National Anti-Tuberculosis Drug Resistance Survey, 2017 Welile Sikhondze (Swaziland)	14:21 - 14:28		
SOA23-123 2-27	Resistance of M. tuberculosis to second line TB drugs in Tajikistan Marija Joncevska (Tajikistan)	14:28 - 14:35		
SOA23-123 3-27	Evaluation of the Omnigene reagent for long-term preservation of sputum for MGIT culture in Uganda Patrick Orikiriza (Uganda)	14:35 - 14:42		
SOA23-123 4-27	Performance of microscopic observation drug susceptibility assay in the diagnosis of multidrug-resistant tuberculosis in regional laboratories of Peru, 2016	14:42 - 14:49		
SOA23-123 5-27	Teresa Huamán Meza (Peru)  Implementation of Universal DST in a Tertiary care TB hospital in Sindh province  Sabira Tahseen (Pakistan)	14:49 - 14:56		
SOA23-123 6-27	Mumbai: a step ahead in implementing universal drug susceptibility testing Vinod Choudhary (India)	14:56 - 15:03		
SOA23-123 8-27	Slide fixing and referral improved access to diagnosis: experiences of Oromia Region in Ethiopia  Jemal Seid (Ethiopia)	15:10 - 15:17		
SOA23-123 9-27	Comparison of one-month storage of sputum in CPC, ethanol and OMNIgene•SPUTUM for molecular analyses Chakirath N'Dira Sanoussi (Benin)	15:17 - 15:24		
Oral Abstract session (OA) 14:00 - 15:30 South America				
OA23 Reaching the hard-to-reach populations in high tuberculosis burden countries				
	Zohar Mor (Israel) Viet Nhung Nguyen (Viet Nam)			
OA23-346- 27	Impact of active case finding of tuberculosis among prisoners using the WOW truck in North Central Nigeria  Victor Anyebe (Nigeria)	14:00 - 14:10		
OA23-347- 27	Genomic evidence of tuberculosis spillover from prisons to the community in Mato Grosso do Sul, Brazil Katharine Walter (United States of America)	14:10 - 14:20		
OA23-348- 27	Active case finding among vulnerable populations reduces catastrophic costs due to tuberculosis diagnosis Srinath Satyanarayana (India)	14:20 - 14:30		

OA23-350- 27	Household contact tracing for families of Mozambican mineworkers Linda Manjate (Mozambique)	14:40 - 14:50
OA23-351- 27	Community-based active TB case finding to improve coverage of NTP services in Viet Nam  Luan Nguyen Quang Vo (Viet Nam)	14:50 - 15:00
OA23-352- 27	Systematic TB symptom screening increases the yield of TB case finding in hospital settings: lessons from Cambodia  Ngak Song (Cambodia)	15:00 - 15:10
OA23-353- 27	Finding the 'missing TB cases' in South Africa Gregory Jagwer (South Africa)	15:10 - 15:20

Symposium (SP) 14:00 - 15:30

Mississippi

#### SP59 Innovations in private provider engagement

A significant proportion of the missing TB patients seek and receive services of unclear quality from private providers. This session outlines recent innovations in engaging these providers to provide quality TB care. Contrasting country experiences will be presented from Ethiopia, Indonesia and India, which indicate the prominent role played by respectively regulation, linkages to the public sector and interface agencies. This is complemented by two presentations on the potential for electronic apps in easing private provider notifications, and describes a way forward.

Chairperson: Lal Sadasivan (United States of America)

**Doubling the number of notifications in Mumbai using a private provider interface agency** Shibu Vijayan (India)

**Driving private sector notifications in Indonesia using the district public-private mix (DPPM)**Agnes Gebhard (Netherlands)

Regulation as an essential tool for successful tuberculosis public-private mix in Ethiopia Asfawesen Gebreyohannes (Ethiopia)

**Digital technologies for the notification of tuberculosis by private providers**Dennis Falzon (Switzerland)

Open source and design considerations for private notification apps for tuberculosis Ali Habib (Pakistan)

Discussion

#### **Scientific Programme**

Symposium (SP) 14:00 - 15:30

Amazon

#### SP60 Country approaches to finding missing persons with tuberculosis

In 2016, the WHO estimated that close to 40% of TB patients were missed by routine health systems. These represented more than 4 million people with TB for whom it is not known if they have ever received diagnosis or appropriate treatment. To end the TB epidemic, it is necessary to find, diagnose and treat the people routinely missed by NTPs. This symposium shows new country practices to find and treat more people with TB and how these practices have impacted TB notification and TB treatment results. The strategy, scalability and sustainability of these interventions will be discussed.

Chairperson: Diana Weil (Switzerland)

Chairperson: Kitty van Weezenbeek (Netherlands)

### WHO perspective: finding missing cases in the context of universal coverage/strategic initiative to find missing people with TB

Nobu Nishikiori (Switzerland)

#### Strategic approaches to addressing the gap

Michael Kimerling (Netherlands)

#### Intensive contact investigation approach in Swaziland

Joyce Sibanda (South Africa)

#### District health planning: experiences from Indonesia

Bey Sonata (Indonesia) Wiendra Waworuntu (Indonesia)

# Finding males with tuberculosis: experiences from the Wings Over Wetlands Project in Nigeria

Rupert Eneogu (Nigeria)

Discussion

Symposium (SP) 14:00 - 15:30

Yangtze 1

# SP61 Implementation of TB infection control: approaches to monitoring and measuring programmatic success and impact

This session is intended to:

- $\cdot$  Discuss approaches used to measure changes in, and the impact of, TB infection control programmes/activities in high-burden settings;
- · Identify challenges and potential limitations of measurement approaches.

Chairperson: Michele L. Pearson (United States of America) Chairperson: Susan Maloney (United States of America)

### Establishing a dedicated unit to implement, scale-up and monitor airborne infection control, India

Satish Kaipilyawar (India)

## Using a scoring system to monitor changes in the performance of tuberculosis infection control, Zimbabwe

Valerie Robertson (Zimbabwe)

#### **Scientific Programme**

Assessing the sustainability of tuberculosis infection control interventions/programmes, Nigeria

Bethrand Odume (Nigeria)

Monitoring healthcare workers for tuberculosis using routine screening, Ethiopia Beniam Feleke (Ethiopia)

Discussion

Symposium (SP) 14:00 - 15:30

Yangtze 2

# SP62 Second annual symposium: Preventing a public good from becoming a market failure—introduction and scale-up of innovations in the era of decentralised financing and procurement

NTPs continue to take on a more central role in the implementation of self-financing programmes, including procurement of commodities. However, innovations to improve prevention, diagnosis and treatment also require increased investments in the TB response. This session will build upon last year's symposium to explore in depth the impact of self-financing approaches on access to key TB innovations from a human rights perspective, using country-specific examples. Risks to the rights to health and science, as well as potential solutions to mitigate such risks, will be discussed.

Chairperson: Sharonann Lynch (United States of America)

Chairperson: Allan Maleche (Kenya)

Effects of sustainability financing on procurement: a view from programmes

Gunta Dravniece (Netherlands)

Risks of sustainability financing to fragile TB markets: evidence from recent innovations, and projections of future impact

Brenda Waning (Switzerland)

Angola's challenges with access to recommended tuberculosis interventions when self-financing

Human rights implications of Venezuela's transition from donor funding

Mary Ann Torres (Canada)

Discussion

#### **Scientific Programme**

Symposium (SP) 14:00 - 15:30

Kilimanjaro 1&2

#### SP63 Tuberculosis contact investigation in high tuberculosis burden settings

Investigating contacts of index TB patients is a proven approach for identifying missing people with TB and preventing TB among high-risk groups. High TB burden countries have limited experience with contact investigations and the overall impact of this approach with high levels of community transmission is not clear. In this symposium, we will:

- □•Share global updates on and country examples of TB contact investigation
- □•Assess the comparative yield of various contact investigation methods
- □ Discuss challenges in contact investigations, including the role of community transmission of TB and stigma
- ■•Share global updates on and country examples of TB contact investigation
- Assess the comparative yield of various contact investigation methods

Chairperson: Pedro Suarez (United States of America) Chairperson: Laura White (United States of America)

#### Global updates on tuberculosis contact investigation

Philip Hopewell (United States of America)

#### Ethiopia's experience in scaling up tuberculosis contact investigation

Blen Ayele (Ethiopia)

TB stigma and its impact on enrolling household contacts in clinical trials and cohort studies: an Indian perspective

Nishi Suryavanshi (India)

#### Tuberculosis among household contacts in Afghanistan

Mohammad Khakerah Rashidi (Afghanistan)

#### Determining transmission of tuberculosis outside of the household setting

Chris Whalen (United States of America)

Discussion

Symposium (SP) 14:00 - 15:30

Everest 1&2

#### SP64 Asthma, an international development issue: how to go further?

This symposium will provide updates on the global burden of asthma, which is now recognised as one of the most important non-communicable diseases in all the regions of the world, including low-income countries. The experience gained by The Union on asthma management in different countries will be reported. The lessons learnt from the TB Union model will be presented and their relevance for chronic respiratory diseases will be discussed. Finally, barriers to the access to medicines will be identified and actions will be proposed to overcome these obstacles.

Chairperson: Jean-William Fitting (Switzerland) Chairperson: Karen Bissell (New Zealand)

#### **Scientific Programme**

#### The Global Asthma Report 2018

Chen-Yuan Chiang (Taiwan)

The Union multi-countries experience on asthma management

Asma El Sony (Sudan)

Capacity building for chronic respiratory disease: lessons from the TB Union model Nadia Aït-Khaled (Algeria)

Actions needed to improve access to medicines for asthma and other respiratory diseases Guy B. Marks (Australia)

Discussion

Community space: panel discussion 14:00 - 15:30

De Ontmoeting 1 (Community space)

#### Asthma right care: join the movement!

The clinically-led NGO, International Primary Care Respiratory Group (IPCRG) is leading an international programme to explore how to

use the evidence for social movements to create a desire for change in the management of asthma. Social movements need followers,

and therefore this event is designed to build followers in more countries and in more parts of the health system in each country. We also

know that the best networks for social change are those that bridge networks, and therefore this is a bridging activity between the Union

and IPCRG.

In quality improvement, we start with hunches. Our hunch is that there is a relatively high degree of comfort with the status quo in

asthma right across the healthcare system, which means there is not much "noise" about the need for change. And yet those in the

IPCRG network and the Union know that there is a real need for improvement and we need to disrupt that thinking. Our priority, in the first phase, is in getting conversations started across geographies and parts of the health system about the overreliance

(chosen deliberately rather than over-use to imply a dependency) on short-acting beta2 agonists (SABAs). We have been

testing how to trigger these between patients, pharmacists, GPs, nurses and others involved in front line care. We have aimed to create

a sense of discomfort and dissatisfaction.

We will share data from four pilot countries, Canada, Portugal, Spain and the UK where multi-disciplinary stakeholders have met at

"design charrettes" to take Asthma Right Care prototypes for triggering conversations and share the prototypes to see how you might

adapt or build on them. These include playing cards and asthma SABA slide rules. If you are curious about social movement

approaches, right care, and/or passionate about asthma, please come and meet our team.

Asthma right care: join the movement!

14:00 - 15:30

Darush Attar-Zadeh (United Kingdom) Siân Williams (United Kingdom) Juliette Kamphuis (Netherlands)

#### **Scientific Programme**

Tech Innovation Zone 15:30 - 16:00

Tech Innovation Zone - Exhibition Area

**Presentations @Tech Innovation Zone** 

emocha Mobile Health Inc. 15:30 - 15:45

Qure.ai 15:45 - 16:00

Plenary session (PL) 16:00 - 17:00

KWA Plenary Hall

Rapporteur session

**Rapporteur Presentation** 

Plenary session (PL) 16:00 - 17:00

De Ontmoeting 1 (Community space)

Live stream Rapporteur session

Plenary session (PL) 17:00 - 17:45

KWA Plenary Hall

**Closing session** 

Plenary session (PL) 17:00 - 17:45

De Ontmoeting 1 (Community space)

**Live stream Closing session**