The Union

TB SCIENCE 2018

23–24 OCTOBER 2018
THE HAGUE, THE NETHERLANDS

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#TBSCIENCE

THANK YOU
TO OUR SUPPORTERS

TBScience 2018 is organised by The Union with support from our sponsors, the National Institutes of Health, the KNCV Tuberculosis Foundation, TB Surveillance and Research Unit (TSRU), the European and Developing Countries Clinical Trials Partnership (EDCTP) and the American Thoracic Society (ATS). The Union acknowledges the in-kind support from the Amsterdam Institute for Global Health and Development (AIGHD).

NIH National Institute of Allergy and Infectious Diseases

KNCV TUBERCULOSIS FOUNDATION

TB Surveillance & Research Unit

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WELCOME TO TB SCIENCE 2018

The Union is pleased to host the first-ever TBScience pre-conference, taking place on the eve of the 49th Union World Conference on Lung Health. This is an official event entirely devoted to basic and translational TB research.

TBScience brings together scientists from microbiology, immunology, molecular biology, pharmacology, epidemiology and mathematical modelling to present and discuss recent findings on TB transmission, infection and disease. Additional focus is also given to the development of better vaccines, new drugs and efficient but effective diagnostics for TB, and methodological challenges to determining the burden of TB disease at the subnational level.

CONTENTS

GENERAL INFORMATION

FREE WIFI

NETWORK TheUnion
PASSWORD TheHague

ABSTRACT BOOK

All TBScience abstracts will be published in a supplement of the *International Journal of Tuberculosis and Lung Disease* (IJTLD) and shared on our website at the end of the Union World Conference. The abstract book is open access and available to all interested parties.

POSTERS

Poster abstracts will be on display in the Marriott Level -1 during the entirety of the TBScience pre-conference. We encourage delegates to view the posters during breaks.

PHOTOGRAPHY CONSENT

By entering the event premises, delegates give their permission to be photographed or recorded by official photographers, videographers and attending media of TBScience. Delegates consent to their images and video being reproduced for subsequent use in the media, webcasts, internal and external promotional purposes, advertising and inclusion on websites and social media. Images are shared publicly with open access for use.

CONFERENCE EMBARGO POLICY

In the case of TBScience 2018, as with most scientific or medical conferences, all conference abstracts are released to media under a strict embargo policy.

All oral abstracts are embargoed until the time and date of the start session in which they are delivered, or during a press conference — whichever comes first.

All poster abstracts are embargoed until 08.30 CEST Tuesday 23 October 2018.

All delegates, presenters and media are asked to respect this policy.

CERTIFICATE OF ATTENDANCE

Delegates who wish to receive a certificate of attendance for TBScience should send their request to **scientific@theunion.org** after the conference ends.

FOOD AND BEVERAGES

Coffee and tea will be made available during session breaks and lunch will be provided on Tuesday, 23 October, in the Marriott's restaurant, The Gallery.

TUESDAY 23 OCTOBER
OVERVIEW OF EVENTS

TIME	TITLE	SPEAKER	ROOM
08.00-08.30	Registration		Marriott Level -1
08.30-08.35	Welcome	Christian Lienhardt	Room A1 Marriott Level -1
08.35-08.45	Opening	Sarah Read	Room A1 Marriott Level -1
08.45-13.45	Plenary Session 1 — TB treatment shortening	Frank Cobelens and Rada Savic	Room A1 Marriott Level -1
14.00-17.00	Parallel Session 1 — Reducing transmission: what is the scientific basis behind the reduction of transmission and the initiation of appropriate therapy?	Ole Olesen and Paula Fujiwara	Van Gogh-Monet Marriott Level +1
14.00-17.50	Parallel Session 2 — Highlighting the latest developments in the TB vaccine area	Richard White and Tom Ottenhoff	Room A1 Marriott Level -1
14.00-17.30	Parallel Session 3 — Innovations in the production and use of surveillance data	Martien Borgdorff and Edine Tiemersma	Rembrandt Marriott Level +1

TUESDAY 23 OCTOBER
PLENARY SESSION 1

TIME	08.45-13.45
SESSION	Plenary Session 1 — TB treatment shortening
CHAIRPERSONS	Frank Cobelens and Rada Savic
ROOM	Room A1 Marriott Level -1

TIME	TITLE	SPEAKER
08.45-09.05	Introductory WHO speaker: key questions, latest TB (MDR) epi data, latest new drug trial / treatment results from new regimens	Matteo Zignol
09.05-09.25	New strategies and models to find novel TB drug targets: in which direction does basic science point?	Wilbert Bitter
09.25-09.45	Animal models focusing on treatment shortening strategies: potential and future directions	Deepak Kaushal
09.45-10.05	Mathematical modelling focusing on treatment shortening strategies: potential and future directions	Emily Kendall
10.05-10.30	**COFFEE AND TEA BREAK**	
10.30-10.50	Within-host evolution of *M. tuberculosis*: implications for drug resistance, treatment outcome, and TB transmission*	Bouke de Jong
10.50-11.10	New approaches to developing tests to monitor the response to treatment and stratification of hosts: what studies are needed?*	Gerhard Walzl
11.10-11.30	Can we stratify slow versus fast convertors: experience from Tanzanian studies	Martin Boeree
11.30-11.50	Short panel discussion	Michael Rich, Cathy Bansbach, Payam Nahid, Mel Spigelman
11.50-12.00	Q/A	
12.00-13.00	**LUNCH BREAK**	
13.00-13.20	TB ReFLECT meta-analysis of all key FQ treatment shortening trials	Rada Savic
13.20-13.40	The CURE-TB Strategy Trial concept on stratified medicine trials in active TB	Payam Nahid and Patrick Phillips
13.40-13.45	Q/A & Closing	

* Presentation of relevance to TB-HIV co-infection.

TUESDAY 23 OCTOBER
PARALLEL SESSION 1

TIME	14.00-17.00
SESSION	Parallel Session 1 — Reducing transmission: what is the scientific basis behind the reduction of transmission and the initiation of appropriate therapy?
CHAIRPERSONS	Ole Olesen and Paula Fujiwara
ROOM	Van Gogh-Monet Marriott Level +1

TIME	TITLE	SPEAKER
14.00-14.20	How can next generation sequencing of TB be used to reduce transmission by improved diagnostics or by improved epidemiological understanding of TB	Sebastien Gagneux
14.20-14.40	How can we translate NGS data to TB treatment shortening?	Jeffrey Tornheim
14.40-15.00	How does transmission take place? How do we identify the most transmitting patients?*	Robin Wood
15.00-15.20	Addressing institutional amplifiers of tuberculosis transmission*	Jason Andrews
15.20-15.30	Q/A	
15.30-15.50	**COFFEE AND TEA BREAK**	
15.50-16.10	Do a/oligosymptomatic incipient TB patients contribute to transmission?*	Hanif Esmail
16.10-16.20	The effect of Beijing lineage on TB transmissibility and disease progression	Alexander Chu
16.20-16.30	Deriving Mycobacterium tuberculosis transmission between risk-groups in low-incidence setting using MIRU-VNTR fingerprints and WGS combined*	Hester Korthals Altes
16.30-16.40	Can we find the missing men in clinics? Clinic attendance by sex and HIV status in rural KwaZulu-Natal, South Africa*	Wende Clarence Safafi
16.40-16.50	Automated algorithm for early identification of rifampicin-resistant tuberculosis transmission hotspots in Rwanda	Kamela Charmaine S Ng
16.50-17.00	Q/A and closing	

* Presentation of relevance to TB-HIV co-infection.

TUESDAY 23 OCTOBER
PARALLEL SESSION 2

TIME	14.00-17.50
SESSION	Parallel Session 2 — Highlighting the latest developments in the TB vaccine area
CHAIRPERSONS	Richard White and Tom Ottenhoff
ROOM	Room A1 Marriott Level -1

TIME	TITLE	SPEAKER
14.00-14.20	Field overview and what is in the clinical and preclinical tuberculosis vaccine global pipeline?	Georges Thiry
14.20-14.40	The potential epidemiological impact of new TB vaccines	Rebecca Harris
14.40-15.00	Newest data on RhCMV based TB vaccines in NHP, and steps towards clinical testing	Louis Picker
15.00-15.20	Newest data on iv administered BCG in NHP models	Bob Seder
15.20-15.40	**COFFEE AND TEA BREAK**	
15.40-16.00	Pulmonary BCG vaccination shows improved efficacy including prevention of infection and a unique local immune profile in NHP	Frank Verreck
16.00-16.10	Imprinted DNA methylation perturbations persist after successful anti-tuberculosis therapy	Andrew DiNardo
16.10-16.20	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
16.20-16.40	M72 prevention of disease trial: results of the primary analysis	Marie-Ange Demoitie
16.40-17.00	Impact of recent vaccine trial results — the way forward	Mark Hatherill
17.00-17.40	Panel discussion: What does the TB vaccine field need to do now?	Ann Ginsbert, Georges Thiry, Mark Hatherill, Johan Vekemans, Helen McShane, Willem Hanekom, Ole Olesen
17.40-17.50	Q/A and closing	

TUESDAY 23 OCTOBER
PARALLEL SESSION 3

TIME	14.00-17.30
SESSION	Parallel Session 3 — Innovations in the production and use of surveillance data / TSRU
CHAIRPERSONS	Martien Borgdorff and Edine Tiemersma
ROOM	Rembrandt Marriott Level +1

TIME	TITLE	SPEAKER
WHAT'S THE USE OF INFECTION TESTING?		
14.00-14.20	Update on current and new tools for infection testing*	Madhu Pai
14.20-14.40	History of infection testing, and rationale for WHO decision to drop recommendation to stop using tuberculin survey data*	Philippe Glaziou
14.40-15.00	What could we use infection testing for?*	Pete Dodd
15.00-15.20	Discussion	
15.20-15.40	**COFFEE AND TEA BREAK**	
INNOVATION IN SUBNATIONAL BURDEN ESTIMATION		
15.40-16.00	Subnational burden estimation in Indonesia, using prevalence distribution method*	Muhammad Noor Farid
16.00-16.20	Subnational burden estimation in Brazil*	Nick Menzies
16.20-16.40	Subnational burden estimation using the MATCH analytical framework?*	Mirjam Bakker
16.40-16.50	An evaluation of a systematic screening intervention among elderly populations in rural Cambodia*	Monyrath Chry
16.50-17.00	Mixture analysis of tuberculin data to estimate incidence of Mycobacterium tuberculosis infection*	Palwasha Yousafzai Khan
17.00-17.10	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
17.10-17.30	Discussion, Q/A and closing	

* Presentation of relevance to TB-HIV co-infection.

WEDNESDAY 24 OCTOBER
OVERVIEW OF EVENTS

TIME	TITLE	SPEAKER	ROOM
08.00-08.30	Registration		Marriott Level -1
08.30-08.35	Welcome	Paula Fujiwara	Room A1 Marriott Level -1
08.35-12.30	Plenary Session 2 — *M. tuberculosis* infection: acquisition, control and clearance	Michael Kimerling and William Worodria	Room A1 Marriott Level -1

WEDNESDAY 24 OCTOBER
PLENARY SESSION 2

TIME	08.35-12.30
SESSION	Plenary Session 2 — *M. tuberculosis* infection: acquisition, control and clearance
CHAIRPERSONS	Michael Kimerling and William Worodria
ROOM	Room A1 Marriott Level -1

TIME	TITLE	SPEAKER
08.35-08.55	Novel PET/CT imaging approaches reveal dynamics and spectrum of latent TB*	Gerhard Walzl
08.55-09.15	New developments in refining and testing prospective correlates of risk of TB*	Tom Scriba
09.15-09.35	Targeted TB screening for treatment and prevention by host biomarker stratification*	Mark Hatherill
09.35-09.55	Factors controlling susceptibility to TB disease progression: HIV*	Robert Wilkinson
09.55-10.15	Factors controlling susceptibility to TB disease progression: other viral coinfections including CMV	Helen Fletcher
10.15-10.35	The effect of diabetes on TB susceptibility and outcome	Reinout van Crevel
10.35-11.00	**COFFEE AND TEA BREAK**	
11.00-11.20	Harnessing inflammation and trained immunity for TB vaccination: what distinguishes protective from harmful inflammation?*	Mihai Netea
11.20-11.40	Mycobacterial Growth Inhibition is associated with trained innate immunity	Simone Joosten
11.40-12.00	BCG revaccination trial data suggest ability to clear Mtb infection in humans: implications. TB vaccine prevention of infection trial results	Elisa Nemes
12.00-12.20	New hypotheses for the natural history of TB using models combining data from modelling, epidemiological, clinical and basic research*	Rein Houben
12.20-12.30	Closing remarks	

* Presentation of relevance to TB-HIV co-infection.

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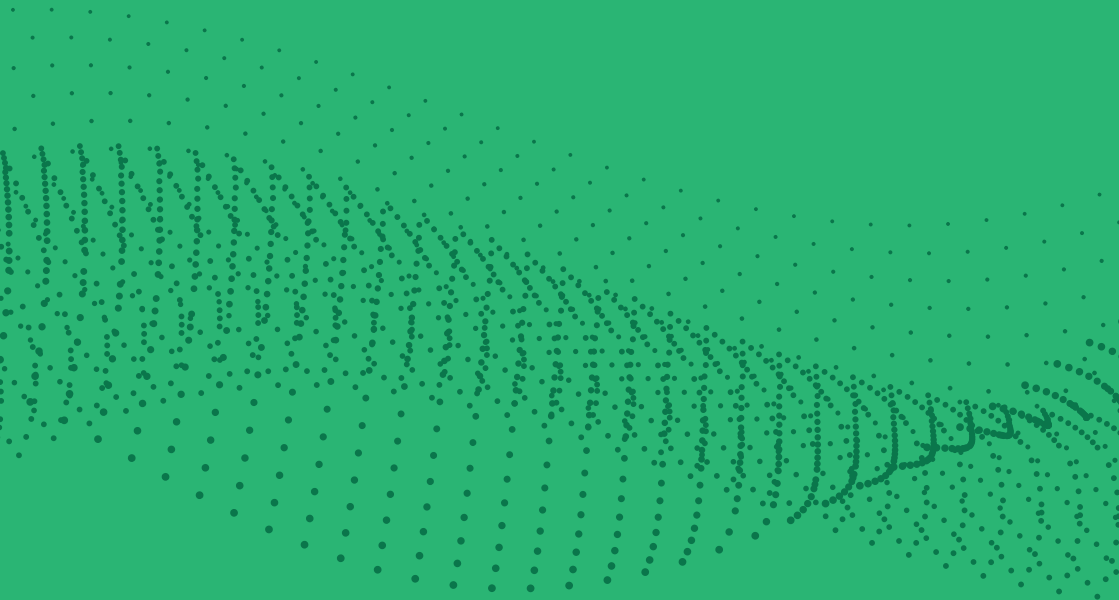

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