



2024 ANNUAL CONGRESS

BRUGES 23-26 JUNE

Programme

Sunday 23 June

14:30-16:30	Registration	Foyer
16:30-17:00	Selected flash talks (5 min) Chair: Conor Meehan Tiago Beites , Porto, Portugal <i>i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto</i> P001 Unrestrained long-chain fatty acid catabolism kills Mycobacterium tuberculosis Clara Aguilar Pérez , Johnson & Johnson P002 Insights into the use of cytochrome Bc inhibitors for future therapeutic strategies for tuberculosis Melanie Grobelaar , Faculty of Medicine and Health Sciences, Stellenbosch University P003 X-ray-based 3D histology of the human tongue and its coating using contrast-enhanced microCT imaging Tania Silva , i3S - Instituto de Investigação e Inovação em Saúde da Universidade do Porto P004 The dependence of bacterial growth phase on Mycobacterium-Macrophage interaction Onya Opota , Lausanne University Hospital P005 Enhancing tuberculosis diagnosis with a mathematical model integrating molecular test histories and patient-specific factors	Ambassadeur
17:00-19:00	Opening session Chairs: Troels Lillebaek , Leen Rigouts Welcome words, ESM and congress Presidents Opening Keynote Wouter Arrazola de Onata , Public health director BELTA - VRGT, Vlaamse Vereniging voor Respiratoire Gezondheidszorg en Tuberculosebestrijding GL01 TB in Belgium and BELTA-TBNet Gertrud Meissner Award presented by S. Niemann Galo Goig , Swiss Tropical and Public Health Institute, Basel GL02 Gardner Middlebrook Award presented by BD Lalita Ramakrishnan , MRC Laboratory of Molecular Biology; Cambridge University Hospital GL03 Lessons for Tuberculosis Treatment from the Zebrafish	Ambassadeur
19:00-21:30	Networking drinks and light dinner snacks	Witte Roos

Monday 24 June

08:00-08:30	Registration	
08:30-10:30	<p>Session 2: Non-tuberculous mycobacteria (NTM) disease and treatment</p> <p>Chairs: Troels Lillebaek, Leen Rigouts Emmanuelle Cambau, University of Paris GL04 State-of-the-art lecture on challenges with phenotypic and genotypic testing in the field of NTMs</p> <p>Winston Chiu, KU Leuven OR01 A novel, high-content imaging based approach towards antibiotic drug discovery for non-tuberculous mycobacteria</p> <p>Tim Peto, University of Oxford OR02 GPAS: evaluation of mycobacterial species identification of 7798 MGIT samples</p> <p>Round table discussion "Phenotypic and genotypic speciation and DST in management of NTM lung disease" Margo Diricks, Borstel Research Institute Natalie Lorent, University of Leuven Pere-Joan Cardona Iglesias, Hospital Universitari Germans Trias i Pujol, Barcelona Sng Li Hwei, Singapore General Hospital, Singapore Fanourios Kontos, University of Athens Arjan van Laarhoven, Radboud University Nijmegen</p>	<i>Ambassadeur</i>
10:30-11:00	Coffee Break	<i>Witte Roos</i>
11:00-12:20	<p>Session 3: TB treatment: past / current / future</p> <p>Chair: Bouke De Jong Alberto Piubello, Damien Foundation, Niamey, Niger GL05 The pathway to the ideal DR-TB treatment: safe, effective, short and able to prevent acquired resistance</p> <p>Hanif Esmail, University College London GL06 Paradigm4tb project</p> <p>Joanna Evans, The Francis Crick Institute, London OR03 Towards restoring antibiotic sensitivity in Mycobacterium tuberculosis using bacteriophages</p> <p>Jihad Snobre, Institute of Tropical Medicine, Antwerp OR04 Safety of high-dose amikacin in the first week of all-oral rifampicin-resistant tuberculosis treatment for the prevention of acquired resistance</p>	<i>Ambassadeur</i>
12:20-12:55	<p>Poster pitches - Session 1</p> <p>Chair: Annelies van Rie <i>1 minute per poster (P06 to P30)</i></p>	<i>Ambassadeur</i>
12:55-13:45	Lunch	<i>Witte Roos</i>
13:45-14:45	Poster Session 1	<i>Beethoven / Vives</i>

14:45-15:45	<p>Session 4: Innovative new diagnostics Ambassadeur</p> <p>Chairs: Praha Rupasinghe, Richard Anthony</p> <p>Morten Ruhwald, FIND; Geneva GL07 New diagnostics: What's hot in the pipeline?</p> <p>Veronique Suttels, Lausanne University Hospital OR05 Point-of-care lung ultrasound for the detection of pulmonary tuberculosis in Benin: the TrUST study</p> <p>Rouxjeanne Venter, Stellenbosch University OR06 Use of a modified face mask and liquid-based cough aerosol sampling system to measure the infectiousness of drug-resistant tuberculosis patients</p> <p>C M Crovara Pesce, Universitaria di Bologna OR07 Pluslife MTBC Card: a new rapid diagnostic tool for management of pulmonary TB patients</p>
15:45-16:20	<p>Poster pitches - Session 2 Ambassadeur</p> <p>Chair: Annelies van Rie</p> <p><i>1 minute per poster (P31-P55)</i></p>
16:20-16:50	<p>Coffee Break Witte Roos</p>
16:50-18:30	<p>Session 5: WGS to guide public health interventions Ambassadeur</p> <p>Chairs: Conor Meehan, Claude Semuto Ngabonziza</p> <p>Ethel Windels, ETH Zürich, Basel GL08 Unlocking the potential of phylodynamic birth-death models: Opportunities and challenges in TB epidemiology</p> <p>Stefan Niemann, Borstel Research Institute GL09 Whole genome sequencing to inform tuberculosis control in high endemic countries</p> <p>Dario Garcia De Viedma, Instituto de Investigación Gregorio Marañón, Madrid GL10 Whole genome sequencing to guide TB control in a European context: experience from Spain</p> <p>Richard Anthony, National Institute for Public Health and the Environment, Bilthoven OR08 Routine whole genome sequencing of Mycobacterium tuberculosis when the consensus is not enough</p> <p>Ana Maria García-Marín, Instituto de Biomedicina de Valencia (IBV-CSIC), València OR09 Genomic epidemiology of tuberculosis using long-read sequencing to increase resolution of transmission clusters</p>
19:00	<p>Guided tour and traditional dinner</p>

Tuesday 25 June

08:00-08:30	Registration	Foyer
08:30-10:20	<p>Session 6: Host-pathogen interaction and vaccines</p> <p>Chairs: Tim Walker, Inaki Comas</p> <p>Carlos Martin, Zaragoza University, Spain GL11 MTBVAC: A molecular Pasteurian approach to tuberculosis vaccines in clinical trials among the new technology vaccine platforms</p> <p>Stefan Schille, BionTech, Germany GL12 BNT164: Preclinical development of two mRNA-based tuberculosis vaccine candidates.</p> <p>Klaas Dewaele, Institute of Tropical Medicine, Antwerp OR10 Conservation of M72/AS01E vaccine epitopes in 31,428 Mycobacterium tuberculosis isolates</p> <p>Marta Arch, Germans Trias i Pujol Research Institute and Hospital, Badalona OR11 Deciphering Tuberculosis host-pathogen coevolution using Drosophila melanogaster as a model system</p> <p>Daniela Brites, Swiss Tropical and Public Health Institute OR12 Host and Pathogen Determinants of TB Disease and Transmission in Tanzania Host and Pathogen Determinants of TB Disease and Transmission in Tanzania</p> <p>Pablo Soldevilla, Germans Trias i Pujol Research Institute and Hospital, Badalona OR13 Sex and progression towards active TB in an experimental mouse model. Impact of stress-induced glucocorticoids and intermittent fasting</p> <p>Marta Caballer-Gual, Universidad de València OR14 Unraveling host-specific in vitro virulence profiles of Mycobacterium tuberculosis ecotypes.</p>	Ambassadeur
10:20-10:50	Coffee Break	Witte Roos
10:50-12:10	<p>Session 7: TB treatment: forgiveness</p> <p>Chair: Bouke De Jong</p> <p>Tom Decroo, Institute of Tropical Medicine, Antwerp GL13 Effect of regimen composition on acquired resistance</p> <p>Annelies Van Rie, Antwerp University GL14 WGS-guided RR-TB care and prevention to save lives and preserve regimens</p> <p>Jennefer Wetzel, J&J Innovative Medicine - Global Public Health OR15 Inhibition of menaquinone biosynthesis results in re-sensitization of Bedaquiline resistant Mycobacterium tuberculosis</p>	Ambassadeur
12:10-12:45	<p>Poster pitches - Session 3</p> <p>Chair: Annelies van Rie</p> <p>1 minute per poster (P56 - P80)</p>	Ambassadeur
12:45-13:45	Lunch	Witte Roos
13:45-14:45	Poster Session 2	Beethoven / Vives

14:45-16:05	<p>Session 8: One Health <i>Ambassadeur</i></p> <p>Chairs: Anzaan Dippenaar, Daniela Brites</p> <p>Michele Miller, <i>NRF South African Research Chair (SARChI) in Animal TB</i> GL15 Tackling the Tip of the Iceberg – Using a One Health Approach to Tuberculosis</p> <p>Verena Schuenemann, <i>University of Basel</i> GL16 One health approaches to trace <i>M. leprae</i>'s zoonotic potential through time</p> <p>Mireia Coscolla, <i>Institute for integrative systems biology</i> OR16 In vitro host gene expression profiles in cross-infections of <i>Mycobacterium tuberculosis</i> ecotypes</p> <p>Andrei Gabrielian OR17 Democratizing education and research for new generation of medical professionals: TB Portals data and resources</p>
16:05-16:35	<p>Coffee Break <i>Witte Roos</i></p>
16:35-17:45	<p>Session 9: Rapid genotypic and phenotypic drug-susceptibility testing for clinical decision making <i>Ambassadeur</i></p> <p>Chairs: Elisa Ardizonni, Andrea Cabbibe</p> <p>Shelley E. Haydel, <i>Biodesign Institute, Arizona State University, USA</i> GL17 Large volume scattering imaging technology for rapid mycobacterial phenotypic drug susceptibility testing</p> <p>Dylan Adlard, <i>University of Oxford</i> OR18 Reproducible algorithmic generation of resistance catalogues improves resistance prediction for bedaquiline in <i>M. tuberculosis</i></p> <p>Morwan Osman, <i>University of York, UK</i> OR19 Remission cytochrome spectroscopy reveals the mode of action of bedaquiline in living mycobacteria</p> <p>Isabel Cuella-Martin, <i>Institute of Tropical Medicine, Antwerp</i> OR20 Nationwide evaluation of Xpert MTB/RIF Ultra reveals challenges in accurate diagnosis of rifampicin-resistant tuberculosis</p> <p>Philip Supply, <i>GenoScreen, Lille</i> OR21 Closing the diagnostic gap for the BPaLM treatment regimen with tNGS: Deeplex Myc-TB XL.</p>
17:45	<p>General Assembly</p>
19:00	<p>Social activity: Dinner and party</p>

Wednesday 26 June

08:30-09:00	Registration	Foyer
09:00-10:30	<p>Session 10: History of mycobacterial pathogens</p> <p>Chairs: Mireia Coscolla, Mattias Merker</p> <p>Rein Houben, <i>London School of Hygiene and Tropical Medicine</i> GL18 The (re)discovery of the spectrum of TB</p> <p>Kirsten Bos, <i>Max Planck Institute for Evolutionary Anthropology</i> GL19 Genomic studies of tuberculosis in archaeological bone</p> <p>Thierry Wirth, <i>Ecole Pratiques des Hautes Etudes, Paris</i> OR22 Unveiling the Drivers of Mycobacterium tuberculosis Lineage 2 success: An Integrative Approach</p> <p>Álvaro Chiner-Oms, <i>FISABIO-Public Health</i> OR23 Delving deeper into the evolution of drug resistance</p> <p>Emma Roycroft, <i>Irish Mycobacteria laboratory, Trinity College, Dublin</i> OR24 First evidence of pyrazinamide-susceptible Mycobacterium bovis, sub-lineage La1.1, in Ireland</p>	Ambassadeur
10:30-11:00	Coffee Break	Witte Roos
11:00-12:20	<p>Session 11: Mycobacterium tuberculosis machinery</p> <p>Chairs: Mattias Merker, Christophe Sola</p> <p>Edith Houben, <i>Vrije Universiteit Amsterdam</i> GL20 Type VII secretion systems: structure, functioning and roles in pathogenic mycobacteria</p> <p>Jorge Alberto Cardenas-Pestana, <i>Universidad de Zaragoza</i> OR25 Mycobacterium tuberculosis (Mtb) transcriptional adaptations to growth arrest: unveiling the role of iron and carbon sources</p> <p>Annemarie Hintz-Rüter, <i>Research Center Borstel Leibniz Lung Centre</i> OR26 Rifampicin tolerance in Mycobacterium tuberculosis complex strains</p> <p>Federico Di Marco, <i>San Raffaele Scientific Institute, Milan</i> OR27 Spatial dual host-bacterial gene expression to study pathogenesis and the regulation of virulence factors in tissue during NTM respiratory infections</p> <p>Ori Solomon, <i>McGill University</i> OR28 Drivers of levofloxacin resistance in a high MDR-TB incidence country.</p> <p>Lindsay Sonnenkalb, <i>Research Center Borstel Leibniz Lung Centre</i> OR29 Using long term evolution models to define drug resistance mechanisms to DDU209, a novel tuberculosis drug candidate</p>	Ambassadeur
12:20-13:30	Lunch	Witte Roos
13:30-15:00	<p>Session 12: Advancements in modelling and data integration</p> <p>Chair: Annelies Van Rie, Viola Dreyer</p> <p>Oren Tzfadia, <i>Institute of Tropical Medicine, Antwerp</i> GL21 Integration of SNPs and 3D protein structures to highlight conserved regions in the virulence mechanism of Mtb, which could serve as potential new vaccine target</p> <p>Joaquín Sanz Remón, <i>Zaragoza University</i> GL22 Data drive assessment of MTB transmission in evolving demographic structures</p>	Ambassadeur

	<p>Guislaine Regrégier, <i>Université Paris - Saclay</i> OR30 Improving the benchmark of Mycobacterium tuberculosis variant calling protocols with in silico evolved genomes</p> <p>Rima Zein Eddine, <i>Laboratory for Optics and Biosciences, École Polytechnique</i> OR31 Mutator genotypes drive resistance to antibiotics in natural isolates of Mycobacterium tuberculosis</p>
15:00-15:30	<p>Poster Awards and Closing Ceremony <i>Ambassadeur</i> Chairs: Troels Lillebaek, Leen Rigouts</p>
17:00	<p>Social activity: Reception in the City Hall of Bruges offered by the City of Bruges</p>

With thanks to our sponsors and partners

Gold



Silver



Bronze



Supporters

