

Program

3rd International Virtual Conference on
Mycobacterium tuberculosis
Research and Drug Development

February 02-03, 2026 | Virtual | Eastern Time

Chair: Martin Rottenberg, Karolinska Institutet, Sweden

Zoom Link: To be updated

Meeting ID: To be updated

Passcode: To be updated

08:55-09:00 Welcome & Introductory Remarks by **Martin Rottenberg**, Karolinska Institutet, Sweden

Plenary Talk

Session Chair: **Larry Schlesinger**, Texas Biomedical Research Institute, TX, USA



09:00-09:45

William (Bill) R. Jacobs, Jr.

Albert Einstein College of Medicine, NY, USA

New Ways to Kill and Sterilize Mtb Infections

Session 1: TB Pathogenesis & Host-Pathogen Interactions

09:45-10:10 **Geanncarlo Lugo-Villarino**, University Toulouse III - Paul Sabatier, France
Identification of a Distinct TUBB3⁺ Pericyte-like Cell Population in Tuberculosis Granulomas

10:10-10:35 **Christopher M. Sassetti**, UMass Chan Medical School, MA, USA
Phase Variation in *M. tuberculosis*

10:35-11:00 **Igor Kramnik**, Boston University School of Medicine, MA, USA
Lung-specific Aspects of TB Pathogenesis

11:00-11:25 **Guanchao Ding**, Briken Lab, University of Maryland, MD, USA
Characterization of the Activation of Programmed Cell Death Pathways in Macrophages After *Mycobacterium tuberculosis* Infection

11:25-11:50 Break

Session 2: Immunology, Vaccines & Immune Recognition

Session Chair: **Christopher M. Sassetti**, UMass Chan Medical School, MA, USA

11:50-12:15 **Paulo Bettencourt**, Catholic University of Portugal, Portugal
Identification of Mycobacterial Peptides Presented by Major Histocompatibility Complex Through Immunopeptidomics

12:15-12:40 **Samuel M. Behar**, University of Massachusetts Medical School, MA, USA
Cellular Mechanisms of Vaccine-induced Protection Against Mtb Infection

12:40-13:05 **David Lewinsohn**, Oregon Health & Science University, OR
Lessons Learned from the Analysis of TCR Usage in the Context of BCG Vaccination and Exposure to Mtb

13:05-13:30 **Selvakumar Subbian**, Rutgers University, NJ, USA
Preclinical Evaluation of a Novel rBCG for Tuberculosis

13:30-13:45 Break

Session 3: TB Comorbidities & Clinical Risk Factors

Session Chair: **Alexandre Gouzy**, Weill Cornell Medicine, NY, USA

13:45-14:10 **Blanca Restrepo**, University of Texas Health Houston, TX, USA
TB: Diabetes Interactions with Old Age and COVID-19

14:10-14:35 **Katharina Ronacher**, Mater Research Institute-The University of Queensland, Australia
Alveolar Macrophage Function is Impaired in Tuberculosis Contacts with Diabetes

14:35-15:00 **Martin Rottenberg**, Karolinska Institutet, Sweden
NRF2 Mediates the Impaired Immune Control of *Mycobacterium tuberculosis* caused by Glycolytic byproducts Elevated during Diabetes

Session 4: Systems Biology, Modeling & Omics

15:00-15:25 **Christian Michael**, University of Michigan, MI, USA
Assessing *M. tuberculosis* Infection Outcomes Both During and After Antibiotic Treatment with HostSim

End of the Day 1

Zoom Link: To be updated

Meeting ID: To be updated

Passcode: To be updated

Day 2 Opening Remarks

Session 5: Clinical TB, Diagnostics & Genomics

Session Chair: **Martin Rottenberg**, Karolinska Institutet, Sweden

09:00-09:25 **Kimberlee A. Musser**, David Axelrod Institute, NY, USA

Clinical Next Generation Sequencing in New York: A Ten Year Review

Session 6: Host-Directed Therapies & Adjunctive Approaches

09:25-09:50 **Eusondia Arnett**, Texas Biomedical Research Institute, TX, USA

Inducing Host Cell Death as a Host-Directed Therapy for Tuberculosis

09:50-10:15 **Robert Wallis**, The Aurum Institute, South Africa

Realizing the Promise of TB Host-Directed Therapy

10:15-10:40 **Vishwanath Venketaraman**, Western University of Health Sciences, CA, USA

Adjunctive Therapy for Mycobacterial Diseases

10:40-10:55 **Break**

Session 7: Drug Discovery, Resistance & Novel Therapeutics

Session Chair: **Selvakumar Subbian**, Rutgers University, NJ, USA

10:55-11:20 **Sebastien Gagneux**, Swiss Tropical And Public Health Institute, Switzerland

Epistasis and the Evolution of Multidrug-resistant *M. tuberculosis*

11:20-11:45 **Kristine B. Arnvig**, University College London, United Kingdom

Riboswitches, Metabolic Gauges with Potential

11:45-12:10 **Joel S. Freundlich**, Rutgers University, NJ, USA

Recent Advances in Targeting *Mycobacterium tuberculosis* KasA

12:10-12:35 **Kyle Rohde**, University of Central Florida, FL, USA

Halogenated Phenazines Kill Replicating and Dormant Mycobacteria via a Complex Mechanism that Thwarts Resistance Emergence

12:35-13:00 **Marcela Rodriguez**, Rutgers University, NJ, USA

Identification of a New Player in Iron Regulation in *Mycobacterium tuberculosis*

13:00-13:25 **Hyungjin Eoh**, Keck School of Medicine of USC, CA, USA

Metabolic Perspectives on the Development of Multidrug Resistance in *Mycobacterium tuberculosis*

13:25-13:50 **Christopher Sundling**, Karolinska Institute, Sweden

Affinity Proteomics in TB Infection and Disease

13:50

Summary/Concluding Remarks

We wish to see you at

MycoTube-2027

Organized by



UNITED | Scientific
Group
A non-profit organization

USG United Scientific Group

(A non-profit organization)

8105 Rasor Blvd, Suite 112, PLANO, TX 75024, USA

Tel: +1-469-854-2280/81; **Toll Free:** +1-844-395-4102 **Fax:** +1-469-854-2278

Email: myco.tube@microbioconference.com

Web: <https://tbresearch.unitedscientificgroup.org/>