

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Innovations for Tackling Tuberculosis in the Time of COVID-19
Virtual Workshop

AGENDA
SEPTEMBER 14-16, 2021

This two-part public workshop will examine future innovations required to meet the [United Nations High-Level Meeting \(UNHLM\) on Tuberculosis](#) targets in 2022 and the WHO [END TB Strategy](#) targets by 2030.

Despite being preventable and curable, tuberculosis (TB) has long been the world's deadliest infectious disease and continues to kill 1.4 million and sicken 10 million new people each and every year, mostly the poorest and most vulnerable people in the world. Unfortunately, COVID-19 and its mitigation efforts have taken a devastating toll on countries with the highest burden of TB disease and the global TB response, threatening to reverse up to eight years of progress. Recent [modeling exercises](#) project that between 2020 and 2025, the initial impact in 2020 of the COVID-19 pandemic will result in an additional 1.4 million TB deaths. The webinar series will consider the science behind the innovations required to bring TB diagnosis, treatment, prevention, and political commitment to the 21st century and achieve the ambitious targets set by the UNHLM and WHO.

The public webinar series will feature invited presentations and discussions to consider:

- How can we accelerate the development of affordable point-of-care tests for TB? What barriers or challenges have prevented the development of accessible point-of-care tests for TB for low and middle-income countries?
- Improvements in the usual care for TB: Can we achieve a two-week, non-toxic treatment for drug-sensitive and drug-resistant TB?
- How can we rapidly use the TB platform, such as contact investigation, in low- to middle-income countries to address COVID-19 and other airborne infections to prevent future pandemics?
- How can we ensure increased and sustained commitments to reach the UNHLM TB targets in high burden countries, despite the challenges from COVID-19?

A proceedings of the presentations and discussions at the webinar will be prepared by a designated rapporteur in accordance with institutional guidelines. For more information on this virtual workshop, please visit the [main project page](#).

WORKSHOP – PART TWO

Tuesday, September 14, 2021

11:00 AM – 2:30 PM ET

Workshop Opening

11:00 AM Welcome and Workshop Goals

PETER DASZAK, *Chair, Forum on Microbial Threats, National Academy of Medicine*

President, EcoHealth Alliance

LUCICA DITIU, *moderator, Stop TB Partnership*

11:05 AM Sponsor Remarks

Jennifer Adams, *Senior Deputy Assistant Administrator, Bureau for Global Health, United States Agency for International Development*

11:20 AM Building a Tuberculosis-Free World: Progress Update

Eric Goosby (University of California, San Francisco)

15 min Q&A

Realities of Multidrug Resistant TB and Challenges for TB Control

Matteo Zignol (World Health Organization)

15 min Q&A

Session One: Detect

12:15 PM Rapid Acceleration of Diagnostics: The COVID Experience

Matthew McMahon (Director, Small Business Education and Entrepreneurial Development, NIH)

15 min Q&A

12:45 PM Panel Discussion on Diagnostic Advances

Point of Care Molecular Platform for Diagnosis of TB and Other Infectious Respiratory Diseases

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- Morten Ruhwald (FIND, the global alliance for diagnostics)

Platform Technologies for Detection of Multiple Agents

- Zvi Marom (BATM) and Eran Zahavy (BATM)

Improving X-ray Accessibility

- Luan Vo (Friends for International Tuberculosis Relief)

Implementation Challenges with New TB Diagnostics

- Kaiser Shen (USAID)

1:15 PM **Enhancing Adherence, Infection Control Capacities, and Cost Effectiveness**

Expansion and Improvements to Contact Tracing and Engagement: Mobile or Digital Platforms from the COVID-19 Pandemic

- Aamir Khan (IRD)

Telehealth and Digital Adherence Technologies

- Bruce Thomas (The Arcady Group)

Innovative Strategies to Cost-Share Investments in Health Care Systems by Partnering with Other Disease Burdens in LMICs

- Monique K. Mansoura (MITRE)

Infection Prevention

- Edward Nardell (Harvard Medical School, Brigham and Women's Hospital)

Management of Latent TB Infection: Gaps and Opportunities

- Gavin Churchyard (The Aurum Institute)

2:15 PM **Reflections on Session One** LUCICA DITU

2:30 PM **Adjourn**

WORKSHOP PART 2
Wednesday, September 15, 2021
11:00 AM – 2:30 PM ET

SESSION TWO: Vaccines and Therapeutics

11:00 AM **Welcome & Session Goals**
KENT KESTER, *moderator, Sanofi Pasteur*

11:05 AM **Leveraging Existing Tools and New Technologies**

BCG Re-Vaccination

- Alex Schmidt (Bill & Melinda Gates Medical Research Institute)

Promising New Adjuvants and Late-Stage Clinical Development Vaccine Candidates

- Steve Reed (University of Washington; HDT Bio)

How Host-Directed Therapies Can Change the Development Landscape

- Daniel Kalman (Emory University)

Immune Mechanisms of Protection Against TB

- Rhea Coler (Seattle Children's Hospital)

12:00 PM **Transforming Treatment Options**
CHARLES WELLS, *moderator, Bill & Melinda Gates Medical Research Institute*

The Key to Success for Developing a New Regimen to Advance TB Treatment: Lessons from TBTC Study 31 (S31/A5349)

- Payam Nahid (University of California, San Francisco)

What It Takes to Roll Out a New Treatment Regimen: Lessons from Drug Resistant TB

- Adrian Thomas (Johnson & Johnson)
- Norbert Ndjeka (National Department of Health, Republic of South Africa)

Bringing Innovation to the Development of New Transformative TB Regimens

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- David Hermann (Bill & Melinda Gates Foundation)

Importance of Context-Specific Economic Analyses to Inform Future Program Design and Investment

- Anna Vassall (London School of Hygiene & Tropical Medicine)

1:00 PM **Expert Reflections and Discussion on Critical Elements for Implementation**

- Ezra Shimeles Tessera (TB Data, Impact Assessment and Communications Hub, USAID; John Snow, Inc.)
- Richard Chaisson (Johns Hopkins University School of Medicine and Bloomberg School of Public Health)

2:15 PM **Reflections on Session Two**

KENT KESTER

CHARLES WELLS

2:30 PM **Adjourn**

WORKSHOP PART 2
Thursday, September 16, 2021
11:00 AM – 2:30 PM ET

SESSION THREE
Future: Financing, Ambition and Preparedness

- 11:00 AM **Welcome: Session Goals & Bold Moves**
PETER SANDS, *moderator, The Global Fund*
- 11:10 AM **Opening Remarks**
VICTOR DZAU, *President, National Academy of Medicine*
- 11:15 AM **A Place for TB in the Pandemic Preparedness Agenda**
Tharman Shanmugaratnam, *Senior Minister, Singapore and co-chair, G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response*
- 11:50 AM **Achieving Synergy in Global Health Security Preparedness against Respiratory Pathogens: Recognition of TB as a Leading Killer**
PETER SANDS, *moderator*
- John Bell (University of Oxford)
 - Bruce Gellin (The Rockefeller Foundation)
 - Rebecca Katz (Georgetown University, Center for Global Health Science and Security)
 - Michael Callahan (Massachusetts General Hospital; United Therapeutics)
- 1:05 PM **Making the Case for Financing TB Elimination**
MARGARET HAMBURG, *moderator, Nuclear Threats Initiative*
- The Cost of Failing to Achieve the End TB Targets: A Full Economic Analysis**
- Michael Reid (University of California, San Francisco)
- Why TB is One of the Best Investments on the SDG Agenda**
- Bjorn Lomborg (Copenhagen Consensus Center)

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Smart Investments in Ending TB

- Mark Dybul (Georgetown University; Enochian BioSciences)

Implications for TB from the High-Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response

- Amanda Glassman (Center for Global Development)

2:00PM

Closing Remarks

MARGARET HAMBURG

GAIL CASSELL, *workshop co-chair*

KENNETH CASTRO, *workshop co-chair*

2:30 PM

Adjourn