

Newsflash: Global Laboratory Initiative (GLI) events at TB Union Conference 2024, Bali, Indonesia

Against the backdrop of the recent WHO Global TB Report 2024—which shows a persistent diagnostic gap as a major barrier to TB control, with less than 50% of notified TB patients being tested with WHO recommended rapid diagnostics, the Stop TB Partnership Global Laboratory



GLI Core Group 2024

Initiative (GLI) led two pivotal side meetings and co-chaired workshops and symposia at the recent TB Union Conference in Bali. The events explored the role of new tools and innovative strategies to enhance TB and drug resistance detection and enable early linkage to effective treatment. The events included:

A) GLI Partner's Meeting (10 November 2024)

GLI successfully hosted its first in-person GLI Partner Meeting since the COVID-19 pandemic, drawing together a diverse global network of TB diagnostic experts, civil society representatives, funding agencies, WHO Supranational Reference Laboratories, and technical organizations. The aim was to strengthen partnerships, awareness of shared



GLI Partners Meeting Attendees 2024

priorities, and identify innovative solutions to close the diagnostic gap and accelerate progress towards ending TB. Participants shared updates on global and regional TB

Global Laboratory Initiative

diagnostic priorities and engaged in roundtable discussions to address critical gaps and identify opportunities for future collaborations to address challenges in TB laboratory systems. This also provided an opportunity to share successful approaches, debate critical

barriers, and share insights from across the different regions of the world.

In the first roundtable discussion, implementers shared their perspectives on building quality laboratory capacity to deliver services to vulnerable populations like children and migrants. The second roundtable



GLI Partners Meeting Recap Session 2024

discussion focused on leveraging implementation research and lessons learned toward expanding access to advanced diagnostic tools for TB and drug resistance detection, including point-of-care solutions in the development pipeline and WHO-recommended targeted next-generation sequencing technologies, while addressing ongoing health systems challenges like training, budget constraints, and technology access. Both sessions underscored the importance of integrating new diagnostic tools and approaches into national TB programs to improve case detection, treatment, and the quality of TB care.

The meeting facilitated exchange on aligning global efforts to strengthen TB diagnostic networks, enhancing patient access, and integration of innovative approaches across high TB burden countries. The event concluded with a reception where National TB Programme managers from high-burden countries joined, providing a platform for continued dialogue and networking. Further details of the meeting including participant information is provided in the Concept Note (please see below).



B) GLI Core Group Annual Meeting for Strategic Priority Setting (11 November 2024)

Following the successful GLI Partners Meeting, the annual meeting of the GLI Core Group was held to discuss successes and opportunities for improvement across the 2023 – 2024 term, review proposals for GLI activities and products



GLI Core Group Annual Meeting 2024

that were raised by stakeholders during the preceding Partners Meeting, and short-list and rank Strategic Priorities for the 2024 – 2025 term. The final list of global requests for GLI global membership support to enhance uptake of WHO policies for TB and drug resistance testing and the new Strategic Priorities for GLI Core Group oversight will be shared in a forthcoming Annual Meeting Report on the GLI website.

C) Joint Global Drug Initiative (GDI)/GLI Workshop The role of advancing molecular technologies in BPaLM expansion and clinical management of people with TB: Are we ready? (12 November 2024)

The focus of the workshop was to discuss advances in the roll out of the BPaL(M) regimens for treatment of drug-resistant TB and the drug susceptibility testing methods that are critical for monitoring their effectiveness. The workshop was co-chaired by both the outgoing and incoming GLI Vice Chairs, Patricia Hall-Eidson (USA) and Sushil Pandey (Australia), as well as the GDI Vice Chair Xiaolin Wei (Canada).

Claudio Köser (UK) highlighted the latest updates on resistance-associated mutations impacting drug efficacy from the WHO Mutations Catalogue, second edition, offered a detailed comparison of phenotypic and targeted Next-Generation Sequencing (tNGS) methods for drug resistance detection, and provided insights for interpretation of discordant results. Bouke de Jong (Belgium) presented on the readiness of laboratory networks to support BPaL(M) rollout, emphasizing the importance of decentralized and



reference-level drug susceptibility testing. Ignacio Monedero-Recuero (France) discussed how molecular diagnostics could reshape TB management and questioned whether approaches from HIV diagnostics could be adapted for TB and, Shaheed Vally Omar (South Africa) concluded with a case study of South Africa's approach to implementing advances in drug susceptibility testing technologies, including tNGS, highlighting successes and ongoing challenges. The workshop facilitated active discussions between public health, laboratory, and clinical TB attendees, focusing on practical applications and future needs for the alignment of treatment regimens and drug resistance tests, and identifying opportunities to strengthen clinical and laboratory staff engagement.

C) WHO Global #EndTB Symposium 2024 (12 November 2024)

The WHO Global #EndTB Symposium 2024 highlighted recent policy updates in TB diagnostics and was co-chaired by the GLI Chair, Marguerite Massinga Loembé (Gabon). The workshop reviewed the recent GTB class-based assessment process and the 2024 recommendations on the newly established class of Low-Complexity automated Nucleic Acid Amplification Tests (LC-aNAATs), including the concurrent use of these and other tests to maximize detection of TB among children and people living with HIV. Presentations provided details about the systematic reviews that informed the policy updates, including the cost-effectiveness analyses. In addition, the WHO's Pre-Qualification (PQ) process for molecular and lateral flow TB diagnostic testing products was described, providing participants with a deeper understanding of how GTB and PQ processes now interact to speed introduction and uptake of TB diagnostics through UN/WHO systems. 2024 Union Conference attendees may be able to search for and stream this session as part of the conference's online content through March 2025.



Stop TB Partnership - Global Laboratory Initiative 2024 Global Laboratory Initiative Partners Meeting

10 November 2024

Overview

Since its establishment in 2008, the Stop TB partnership Global Laboratory Initiative (GLI) has served as a coordinating body for global TB laboratory capacity strengthening across a broad network of international partners. GLI membership is held globally by TB laboratory champions across a range of global, international, regional, and national organizations. The working group is governed by a Core Group of selected, term-based, individuals with expertise in multiple disciplines and representing constituencies of stakeholders and/or institutions involved in global and country-level testing system strengthening and is overseen by the World Health Organization (WHO) Secretariat. While the GLI Core Group functionally serves as an independent, technical expert advisory group to the WHO, the Stop TB Partnership, development and funding agencies, and countries; it may also serve as an objective, coordinating body for global TB laboratory organizations and experts.

Prior to the COVID-19 pandemic, GLI convened partner meetings to facilitate information sharing and coordination across the various funding, implementing, regional, and national organizations working to build TB testing capacity worldwide.



Objectives

- Host the first GLI Partners Meeting since the COVID-19 pandemic, bringing together key stakeholders to present and discuss advances in their TB diagnostic strengthening efforts.
- Provide a unique forum and platform for engagement among stakeholders involved in TB laboratory strengthening to identify opportunities for collaboration or enhanced coordination overall and in specified areas of known shared interest.
- Facilitate creative expert discussions around global bottlenecks in TB laboratory systems implementation and enhancement.

Design

One day meeting on Sunday the 10th of November 2024 adjacent to the TB Union Conference in Denpasar, Bali, Indonesia. Meeting participation will be extended to representatives of global funding organizations, international and technical implementing organizations (e.g. Global Fund, USAID, Unitaid, CDC, KNCV, The Union, FIND, Stop TB Partnership, WHO Regional Laboratory Initiatives, and WHO Supranational Reference Laboratories). The meeting agenda will feature short, targeted, presentations from global and regional attendees, Q&A periods, and round-table discussions on select high-priority topics. A reception will follow the formal meeting. Reception attendance will be expanded to invite National TB Programme managers from high TB burden countries taking advantage of their participation in the WHO End TB summit on 11 November.

Expected Outcomes

- Improved stakeholder awareness of ongoing and planned TB laboratory strengthening activities around the world
- Established and strengthened collaborations and coordination between the various cadres of meeting attendees, technical organizations, and regional and country programs.
- Report of key meeting happenings and discussion outputs; including topic-specific lists of gaps, solutions, and needs for enhanced TB testing program implementation that could advance WHO recommendation uptake, TB case management, TB surveillance, and TB disease control.



#	Activity Detail	Organization or Speaker	Chair	Rapporteur	Start	End
	SESSION 1: WELCOME, OPENING REMARKS, AND GLI OVERVIEW					
1	Introduction remarks by the StopTB Partnership	Jacob Creswell			08:30	08:40
2	Global Laboratory Initiative (GLI) Presentation: Past work and perceived priorities for 2025	Marguerite Massinga Loembé			08:40	09:00
	SESSION 2: PERSPECTIVES ON GLOBAL TB DIAGNOSTIC PRIORITIES, PROGRESS, AND GAPS					
3	Presentations: Perspectives from civil society	1 Civil Society Taskforce, CSTF (Timothy Wafula) 2 Blossom Trust (Mercy Annapoorani)	Marguerite Massinga Loembé	Henry Byabajungu	09:00	09:15
4	Presentations: Perspectives from donors (5 min each)	1 USAID (Kaiser Shen) 2 GF (Mohammed Yasin) 3 CDC (Heather Alexander) 4 Unitaid (Smiljka de Lusigny) 5 BMGF (Puneet Dewan)	Marguerite Massinga Loembé	Henry Byabajungu	09:15	09:40
5	Discussion	All	Marguerite Massinga Loembé	Henry Byabajungu	09:40	09:55
	Break				09:55	10:10
6	Framing Remarks: Perspectives from Implementers		Marguerite Massinga Loembé		10:10	10:15



7	Roundtable Discussion 1: Perspectives from Implementers					
	Topic 1 - Different approaches to TB lab capacity building, support networks and quality assurance	1 ASLM (Collins Otieno) 2 SRL Cotonou (Faridath Massou) 3 SRL Brisbane (Sushil Pandey)	Leen Rigouts	Subhadra Nandakumar	10:15	10:35
	Discussion	All			10:35	10:55
	Topic 2 - Last mile service delivery for vulnerable populations under changing and challenging circumstances	1 KNCV (Mustapha Gidado) 2 IOM (Pamela Hepple) 3 MSF (Stijn Deborggraeve) 4 STP (Jacob Creswell)	Sushil Pandey	Valerie Donkeng	10:55	11:20
	Discussion	All			11:20	11:45
	Topic 3 - Implementation research impact on programs and translation into practice	1 TDR (Corinne Merle) 2 The Union (Koura Kobto) 3 SRL Johannesburg (Shaheed Omar) 4 FIT (Han Nguyen)	Andrea Cabibbe	Subhadra Nandakumar	11:45	12:10
	Discussion	All			12:10	12:35
	Break: Lunch (provided)				12:35	14:00
8	Roundtable Discussion 2: Innovative approaches to increase patient access to TB testing	1 FIND - NDWG (Morten Ruhwald) 2 ELI (Askar Yedilbayev) 3 SRL Milan (Andrea Cabibbe) 4 SRL Chennai (Siva Kumar) 5 FHI360 (Gopal Pantal) 6 MSH (Alaine Nyaruhirira)	Pamela Hepple	Karchung Tshering	14:00	14:30
	Discussion	All	Pamela Hepple	Karchung Tshering	14:30	15:00
9	GLI Reflective Remarks: Are there gaps between civil society, donors, and implementers on global TB diagnostic priorities or emerging areas of need?	Marguerite Massinga Loembé/ Sushil Pandey		Mercy Annapoorani	15:00	15:10
	Discussion				15:10	15:30
	Break				15:30	16:00



	SESSION 3: OPPORTUNITIES TO STRENGTHEN ALIGNMENT, COLLABORATION, AND GLI SUPPORT					
10	Recap on Global TB diagnostic priorities and areas for enhanced collaboration	All	Kristin Kremer	Pamela Hepple	16:00	16:20
11	Group Discussion: GLI Moving Forward - What can GLI do to support the global TB testing community?	All	Sushil Pandey	Marguerite Massinga Loembé	16:20	16:40
12	Final Remarks and Closing: GLI and Stop TB Partnership	Marguerite Massinga Loembé Jacob Creswell			16:40	16:45

ASLM, African Society for Laboratory Medicine; BMGF, Bill & Melinda Gates Foundation; CDC, Centers for Disease Control and Prevention; CSTF, Civil Society Taskforce; ELI, European Laboratory Initiative; FHI360, Family Health International 360; FIND, Foundation for Innovative New Diagnostics; FIT, Friends for International TB Relief; GF, The Global Fund to Fight AIDS, Tuberculosis and Malaria; IOM, International Organization for Migration; KNCV, KNCV Tuberculosis Foundation; MSF, Médecins Sans Frontières; MSH, Management Sciences for Health; SRL, WHO TB Supranational Reference Laboratory; STP, Stop TB Partnership; TDR, Special Programme for Research and Training in Tropical Diseases; USAID, United States Agency for International Development.



Round table discussions 1: Perspectives from Implementers

Topic 1 Different approaches to tuberculosis laboratory (TB Lab) capacity building, support networks and quality assurance

10:15 - 10:55

Chair Leen Rigouts, rapporteur Subhadra Nandakumar

TB diagnostic laboratories play an important role within the TB diagnostic network. A combination of clinical, microbiological and molecular techniques is used in identifying TB, determining drug resistance and in guiding appropriate treatment. To meet the goals of WHO End TB strategy it is essential to ensure that the countries' National TB Programs have functional and well supported TB diagnostic laboratories that are fully integrated within the TB diagnostic network.

Topic 2 Last mile service delivery for vulnerable populations under changing and challenging circumstances

10:55 - 11:45

Chair Sushil Pandey, rapporteur Valerie Donkeng

TB case detection remains the weakest link in the cascade of care with 3.1 million cases undiagnosed in 2022 globally. This gap is exacerbated in children due to low bacillary load, challenges for collection of respiratory samples and limited access to sensitive diagnostic tools. Moreover, WHO reports that 1 in 8 persons globally is either a migrant or forcibly displaced due to conflicts or natural disasters. Many of these individuals live in poverty and overcrowded conditions, severely limiting their access to essential health services, including TB diagnosis. This topic will focus on how we best can address specific needs of these vulnerable populations and to provide access to differentiated testing services to effectively overcome the diagnostic gap for all.



Topic 3 Implementation research impact on programs and translation into practice

11:45 - 12:35

Chair Andrea Cabibbe, rapporteur Subhadra Nandakumar

TB research and innovation is one of the 3 pillars of the End TB strategy. With an expanding TB diagnostics pipeline, implementation research allows production of knowledge on optimal interventions, policies, and practices to accelerate adoption and scale up of new tools in routine setting. Providing such practical evidence is key to ensure program success and sustainability, reduce barriers to efficient service delivery and enable outreach and benefit for the intended populations.

Roundtable Discussions 2: Innovative approaches to increase patient access to TB testing

14:00 - 15:00

Chair Pamela Hepple, rapporteur Karchung Tschering

Sputum smear microscopy remains the most widely used method to diagnose TB despite more sensitive and rapid tools allowing the detection of drug resistance being recommended by WHO for more than 14 years. This session will focus on innovative approaches to increase access to new diagnostic tools. The discussants will explore the potential impact of near point-of-care and point-of-care tests that are expected to emerge form the TB new diagnostics pipeline in the coming years.



List of participants

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