

Advancing *Mycobacterium tuberculosis* Drug Susceptibility Testing with Targeted Next Generation Sequencing

Tuesday, March 24, 2026 | 2:00 — 3:00 pm ET

COURSE # 588-607-26

DESCRIPTION

Phenotypic drug susceptibility testing (DST) for *Mycobacterium tuberculosis* (MTB) is slow and laboratories are increasingly using molecular methods to provide faster results. Three public health laboratories that have implemented targeted Next-Generation Sequencing (tNGS) for molecular DST in MTB will discuss their validations and regulatory compliance, establishing efficient workflows and the ability to detect heteroresistance with this approach. Additionally, the speakers will compare tNGS to phenotypic DST and whole genome sequencing and how these approaches can be used to streamline and accelerate DST for MTB.

AUDIENCE

This program is intended for anyone who works in or supervises a public health or clinical laboratory, including clinical and public health laboratory staff, microbiology students, epidemiologists and research scientists. Those working in Mycobacteriology laboratories would benefit the most.

OBJECTIVES

After completing this webinar the participant will be able to:

- Explain the advantages and disadvantages of tNGS for identification and prediction of drug susceptibility in MTB
- Discuss considerations for integrating tNGS into a drug susceptibility testing workflow for MTB
- Define the commercially available and laboratory designed tNGS assays and testing platforms

ACCESSIBILITY

In compliance with the Americans with Disabilities Act, individuals seeking special accommodations must email a request to Ashton Blair (Ashton.blair@aphl.org) prior to the live webinar. Closed captions will be available with the webinar recording.

LEARN MORE

For more information about this webinar, please email infectious.diseases@aphl.org.

ENROLL FOR FREE

Enrollment via the link above is required to access the live webinar. If you need assistance with enrollment, send us an [email](#). To participate in this live webinar, log in to the [APHL Learning Center](#) (ALC) and follow [these instructions](#). If accessing the [APHL Learning Center](#) (ALC) for the first time, [create a free APHL account](#).

Continuing Education

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Level of Instruction:

INTERMEDIATE: Refresher course; some basic knowledge is required; for the experienced staff technologist with some years of experience.

SPEAKERS

Presenters

- **Ela Macanas, CPhT**, medical laboratory scientist III, mycobacteriology department, Florida Department of Health, Bureau of Public Health Laboratories
- **Joe Shea, MS**, research scientist, New York State Department of Health, Wadsworth Center
- **Matthew Sylvester, PhD, PHM**, research scientist supervisor, California Department of Public Health, Microbial Diseases Laboratory Branch

Moderator

Sarah Buss PhD, D(ABMM), program manager, infectious diseases, Association of Public Health Laboratories

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This webinar is supported by Cooperative Agreement number NU47CD000001 (CFDA No. 93.322), funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services, or APHL and member laboratories. This project was 100% funded with federal funds from a federal program of \$1,332,034.