



Digital Technology Symposium

ASLM2021 Symposium 4

Co-conveners

- **Karen Heichman**, Bill & Melinda Gates Foundation
- **Smijlka de Lussigny**, UNITAID

Summary

Diagnostic testing, performed in non-clinical settings such as health posts, pharmacies or traditional laboratory environments, is only effective and impactful if it is used appropriately and if the results are used to guide an individual or public health outcome. In an idealized world, each test would be ordered and conducted under an appropriate use, with the results provided to the individual in a timely manner so that the results could be linked to an appropriate treatment or action, and with results provided to public health and government health authorities could affect decision-making, policy and procurement.

In an idealized world, each test result would be linked to:

- a geographic location;
- the date and time in which the specimen was collected and tested;
- demographic information such as age, sex, and ethnicity;
- information about the individual's symptoms and health history;
- any other information that would inform the treatment of the patient (such as exposure to an individual);
- local prevalence of infectious diseases; and
public health and disease surveillance databases.

In recent years, and especially during the COVID-19 pandemic, digital tools have been developed to realize this idealized vision of how diagnostic testing could best be implemented to maximize impact to individuals, communities, governments, and the world. Some of these tools may be applied at the individual test level, while others are utilized at the systems level to provide not only benefits to the individual but also value to the greater good.

Learning Objectives

In this symposium, we will hear about novel diagnostic tools and solutions that have the potential to maximize access, result utilization and cost effectiveness of testing strategies. We will discuss the various applications and use cases for which digital technology such as mobile phones and web-based applications can bring added value to diagnostic delivery, outbreak response and overall implementation of disease control programmes.

Session Programme

Presenter & Affiliation	Title
Karen Heichman (Bill & Melinda Gates Foundation) Smijlka de Lussigny (UNTAID)	Welcome, introduction and opening remarks
Dino Rech (CEO, Audere)	HealthPulse DxA: Mobile phone-based diagnostic aide for RDT administration and interpretation
Wendy Stevens (University of Witswatersrand and NHLS)	eLABS: Mobile and web-based application for sample collection, transport, and results return
Angela Siteyi (PharmAccess, Kenya)	Connected diagnostics for the management of febrile illnesses in Africa
Jennifer Anderson (ASLM)	Sustainable informatics for EQA providers: introduction to the new ePT
All session participants	Question/Answer panel discussion
Karen Heichman (Bill & Melinda Gates Foundation) Smijlka de Lussigny (UNTAID)	Summary and closing remarks