



JUNE 19-23, 2017

ADVANCED TB DIAGNOSTICS

“As a new advocate to the TB field, this course was a fantastic way to dive in. I made some valuable networking connections and built a greater understanding of TB diagnostics that has since informed my work.”

– ADVANCED TB DIAGNOSTICS PARTICIPANT

This advanced course will cover advanced topics in TB diagnostics research and implementation, including incremental value of new tests, impact of new tests on clinical decision-making and therapeutic choices, cost-effectiveness in routine programmatic settings, and impact on patient-important outcomes. The course will introduce multivariable approaches to diagnostic research, and cover alternative designs which evaluate patient outcomes, including the diagnostic RCT, and implementation research. The course will also cover meta-analysis, mathematical modeling, and cost-effectiveness studies. Panel discussions will cover topics such as value chain for TB diagnostics development, market analyses, market dynamics, target product profiles, and barriers to scale-up of new diagnostics. Participants will include product manufacturers, donors, product development partnerships, policy makers, academics, clinicians, community advocates, public health implementers and National TB Program managers.

COURSE DIRECTOR

Madhukar Pai, MD, PhD

Professor of Epidemiology, McGill University

Director, McGill Global Health Programs

Associate Director, McGill International TB Centre

COURSE FACULTY

Niaz Banaei, MD - Stanford University

David Boyle, PhD - PATH

Adithya Cattamanchi, MD - UCSF

Jacob Creswell, PhD - Stop TB Partnership

Claudia Denking, MD, PhD - FIND

David Dowdy, MD, PhD - Johns Hopkins University

Paul K. Drain, MD, MPH, FACP - University of Washington

Nora Engel, PhD - Maastricht University

Jennifer Furin, MD, PhD - Harvard Medical School

Jim Gallarda, PhD, MBA - Bill & Melinda Gates Foundation

Janet Ginnard, B.S.E., MPhil - UNITAID

Beate Kampmann, MD, PhD, FRCPC - MRC Unit The Gambia

Cassandra Kelly-Cirino, PhD - DNA Genotek

Sandra Kik, MSc, PhD - KNCV

Amy Piatek, MS - USAID

Max Salfinger, MD, FAAM, FIDSA - National Jewish Health

Marco Schito, PhD - The Critical Path Institute

Samuel Schumacher, MSc, PhD - FIND

Karen Steingart, MD - Cochrane ID Group

Marc Tebruegge, MD, MSc, PhD - University of Southampton

CONTENT

High quality diagnostic studies are critical to evaluate new tools, and to develop evidence-based policies on TB diagnostics. There is evidence that TB diagnostic trials are poorly conducted and poorly reported. Furthermore, there is evidence that a majority of TB diagnostic studies are focused on test accuracy. There are limited data on outcomes such as accuracy of diagnostic algorithms (rather than single tests) and their relative contributions to the health care system, incremental value of new tests, impact of new tests on clinical decision-making and therapeutic choices, cost-effectiveness in routine programmatic settings, and impact on patient-important outcomes. This poses problems because research on test accuracy, while necessary, is not sufficient for policy and guideline development. Translation of policy into impact requires collecting evidence

for scale-up, country-level data on cost-effectiveness and feasibility, implementation research, and local decisions on scale-up, delivery and impact assessment.

OBJECTIVES

By the end of the course, participants will understand:

- value chain for TB diagnostics development, current pipeline of diagnostics, market dynamics, WHO policies on new diagnostics, and challenges for scale-up
- diagnostic research focused on accuracy of tests
- principles and practice of multivariable approaches to diagnostic research, and adjustment for imperfect reference standards
- meta-analyses of diagnostic accuracy studies and GRADE approach to diagnostic policies
- alternative designs to evaluate impact of new tests on clinical decision-making, therapeutic choices, and patient-important outcomes
- principles of implementation research, collecting evidence for scale-up, cost-effectiveness analyses and modeling studies in TB diagnostics

TARGET AUDIENCE

- National TB Program managers and National Reference Lab managers
- Clinicians and nurses
- Researchers, students, trainees, fellows and academics involved in TB diagnostics research
- Product manufacturers
- Funding agencies
- Product development partnerships
- Policy makers and public health implementers
- Community advocates and civil society

ENROLMENT

Maximum of 100 participants. Only participants with prior TB diagnostic research experience or advanced training will be eligible.

2017 COURSES To Register: <http://mcgill-idgh.ca/>



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McGill Summer Institute in
Infectious Diseases and
Global Health