8th Advanced Course on Diagnostics

Les Pensières Veyrier-du-Lac (French Alps)

October 29 - November 3 2017

Organized by

The Mérieux Foundation and the London School of Hygiene & Tropical Medicine
Considering the advances in technology, why is it not yet possible to have access to rapid, easy-to-use instruments in our countries, especially at the rural clinic level? Leadership initiatives are needed in our regions to promote the benefits of early diagnosis, generating clear gains in public health programs. ACDx is a unique opportunity to foster such initiatives and share experiences with others!

Graciela Russomando
Professor - Universidad Nacional de Asunción (Paraguay)

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Sunday, October 29th

AFTERNOON

Overview of the Role of Diagnostics in Global Health

Session learning objectives:

- To learn about the role of diagnostics in global health and to combat AMR
- To learn about the Africa CDC AMR Surveillance Network

Guiding clinical decision-making

Guiding public health emergency response

Diagnostics as part of the AMR response

Special Session Opening Address: The WHO Global Action Plan in response to Antimicrobial Resistance

UNAIDS response to AMR

Launch of the Africa CDC AMR Surveillance Network (AMRSNET)

- Introducing AMRSNET: Goals and plan of action
- AMRSNET support: Fleming Fund, LSHTM-BD AMR Partnership
- Institut Pasteur Networks contribution to AMRSNET
- Round Table: country plans and Africa AMRSNET

Monday, October 30th

MORNING

Quality Policy in Diagnostics

Session learning objectives:

- To learn the importance of the quality-assured diagnostics for public health programs
- To learn about international quality standards in diagnostics, how to implement quality policy and to share best practice

The diagnostic quality continuum

Industry panel on quality by design and manufacturing

Ensuring quality through regulation and quality assurance

Best practice: post-market surveillance, storage, transport and distribution; the USP Quality Institute

Laboratory quality standards

Quality assurance for Point-of-Care diagnostics

Debate: QA for POC testing, centralized vs decentralized systems
PROGRAM

AFTERNOON

AMR Diagnostic Stewardship and Surveillance

Session learning objectives:
- To learn global, regional and country AMR strategies and policies
- To learn the role that quality-assured diagnostics play in implementing AMR strategies, policies and action plans

AMR Surveillance Technology Forum: ePosters and demonstrations
- Genotypic AMR assays
- Phenotypic AMR assays
- Whole genome sequencing
- Identifying markers of resistance

AMR Surveillance networks: management, analysis and utilization; opportunities for public-private partnerships
- AMRSNET
- Institut Pasteur networks
- Respiratory pathogen networks
- Enteric pathogen networks
- Gonococcal Resistance networks

Scoring system for AMR surveillance competency: ensuring quality and timeliness of surveillance data

Tuesday, October 31st

MORNING

From Basic Research to a Commercialized Diagnostic Test

Session learning objectives:
- To learn the challenges of developing and bringing to market diagnostic tests for infectious diseases
- To explore options for collaborative research and development (R&D) to accelerate the pathway to market for global health, especially for epidemic preparedness and AMR

Challenges of diagnostics R&D for global health:
Overview of the long road from R&D to adoption

Panel discussion: lessons learned from test development and approval for use in past outbreaks

Access to specimens for test development, evaluation and quality assurance

Evaluation of diagnostics
Technological innovation and regulatory science
Debate: Open platform technologies: dream or reality?
AFTERNOON

**State of Art Diagnostics and Diagnostics to Combat AMR**

Session learning objectives:
- To learn the state of the art diagnostics for major infectious diseases
- To learn how Point-of-Care (POC) diagnostics can be used to reduce misuse of antibiotics

**State of the Art Diagnostics Forum:**
HIV, TB, Malaria, Hepatitis, neglected tropical diseases, respiratory infections, enteric infections, sexually transmitted infections, arboviruses, haemorrhagic fevers

Stations with e-posters that summarize state-of-art diagnostics for each of the disease/syndromes listed above. An expert will be available at each station for questions and discussions.

**POC tests to reduce misuse of antibiotics:**
- A simple rapid test to distinguish between bacterial and viral infections
- How can the long pathway from R&D to adoption be accelerated without compromising quality?
  - Fever
  - Pneumonia
  - Enteric infections

Reports back from breakout groups and discussion

**Wednesday, November 1st**

MORNING

**Diagnostic System Strengthening**

Session learning objectives:
- Review laboratory Infrastructure required to support global health priorities
- Review challenges in diagnostic systems (laboratory and Point-of-Care test systems) with respect to quality, capacity building, accreditation, data, governance, biosafety and waste management

**Overview: pillars supporting successful implementation and delivery of diagnostics**

**Laboratory systems:**
- Role of public health and national reference laboratories
- Adaptable laboratory network structures within national health care systems

**Diagnostic system strengthening initiatives:**
- Program and tools for capacity building
- Others from participants

**Tools for assessing competencies (WHO – ASLM scoring system)**
- Human resource management for laboratories
- Data connectivity and governance
- Biosecurity and biosafety for laboratory systems
- Waste management

AFTERNOON
Free for networking, tutorials special sessions.
Thursday, November 2nd

MORNING

Sustainable Diagnostic Systems

Session learning objectives:
- To explore options for public and private partnerships to build sustainable diagnostic systems to meet public health needs
- To learn about initiatives for technological innovation in diagnostics for AMR

Building sustainable national, regional and global diagnostic systems to meet public health needs

Breakout groups:
- Building sustainable laboratory systems
- Financing laboratory systems

Reports from breakout groups

Round table: funding for innovative technologies for AMR
- Longitude Prize
- Japanese group for global health
- Global AMR Innovation Fund
- Others

AFTERNOON

Diagnostics for Antimicrobial Resistance: the Way Forward

Session learning objectives:
- To brainstorm on innovation needed for countries to use diagnostic tests effectively to combat AMR
- How to share tools and experiences

Diagnostics for AMR Round Table:
Social Innovation in Health
Education: crowdsourcing for AMR cases for e-learning
Other initiatives
Sharing tools and experiences for AMR
Debate: topic to be chosen by participants

Friday, November 3rd

Partnerships and Networks

Session learning objectives:
- Learn about ways to communicate through networks, websites and other opportunities
- Brainstorm on key elements in building successful partnerships and networks for emergency preparedness

Partnerships and networking platforms
- ACDx e-Community / Alumni networks
- RESAOLAB/RESAMAD
- Institut Pasteur network
- AMR surveillance networks
- Other networks

CLOSING LUNCH
WHO SHOULD APPLY?

- Scientists and decision-makers involved in the development of diagnostic tools or in the design and implementation of strategies and policies on the use of diagnostics in the control of infectious diseases at national and international levels
- For both private and public sectors

PROGRAM FEES

The fees include tuition, course material, accommodation costs and three meals a day for the full period of the course.

- Participants from academic/governmental institutions & NGOs benefit from reduced fees: 3,000 € VAT included
- Participants from industry fees: 6,000 € VAT included
- If accepted, participants will be required to pay all of the fees in full to confirm their participation

CONTACT

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See additional information on http://www.fondation-merieux.org/advanced-course-on-diagnostics-acdx