

# Global Laboratory Leadership Programme

*A training programme for the development of laboratory leaders*

# Multisectoral Collaboration

Global Laboratory Leadership Programme (GLLP) taking a One Health approach

Partners :

- World Organisation for Animal Health (OIE)
- World Health Organization (WHO)
- Food and Agriculture Organization of the United Nations (FAO)
- European Centre for Disease Prevention and Control (ECDC)
- U.S. Centers for Disease Control and Prevention (CDC)
- Association of Public Health Laboratories (APHL)

# Current Workforce Challenges

## Health workforce challenges

- Lack of specialized training of health professionals in the areas of leadership and management<sup>1</sup>

## Laboratory leadership workforce challenges

- Laboratory science education lacks adequate management training
- Uncertain career path
- Laboratory directors have limited input to national financial planning of health funding

<sup>1</sup>Howard K. Koh, Marsha Jacobson; Fostering public health leadership, *Journal of Public Health*, Volume 31, Issue 2, 1 June 2009, Pages 199–201, <https://doi.org/10.1093/pubmed/fdp032>

# Existing Trainings

## Currently available laboratory leadership offerings

- FELTP: Field Epidemiology and Laboratory Training Program
- I-Tech laboratory leadership and management course
- APHL's Foundations of Laboratory Leadership and Management, Emerging Leaders Program
- GWU/APHL Management of Public Health Laboratory Systems Seminars
- IIAD: Executive Laboratory Management

## Under development

- GLLP: Global Laboratory Leadership Programme
- Africa CDC leadership course

# Needs Assessment

With a limited number of laboratory leadership training opportunities available, there is a need for a Laboratory Leadership Competency Framework to guide comprehensive curriculum and programme development.

# Needs Assessment

## Critical gaps in laboratory leadership to meet global health security goals

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Public health laboratories play a critical role in the detection, prevention and control of diseases. However, reliable laboratory testing continues to be limited in many low- and middle-income countries.<sup>1</sup> The 2013–2016 Ebola virus disease outbreak in West Africa provided many examples of how functioning laboratories were needed for disease control and prevention efforts.<sup>2</sup> This outbreak highlighted the need for laboratory directors to be able to influence national laboratory policy and to implement national laboratory strategic plans.<sup>3,4</sup> Global health initiatives such as The United States President’s Emergency Plan for AIDS Relief (2003),<sup>5</sup> the *International Health Regulations* (IHR; 2005),<sup>6</sup> the Global Health Security Agenda (GHSA; 2014)<sup>5</sup> and the health-related United Nations

such programmes would help the public health laboratory workforce in gaining the skills and expertise to navigate an often-chaotic environment.<sup>9</sup>

The World Health Organization (WHO) has long articulated the need for specialized training for laboratory directors in the areas of leadership and management. Other initiatives have emerged, but they only partially address the identified needs. The Centers for Disease Control and Prevention’s (CDC’s) Laboratory Leadership Service<sup>10</sup> is a new fellowship programme that provides a comprehensive competency-based leadership training in the United States. The European Centre for Disease Prevention and Control also offers the European Union Public Health Microbiology Training Programme,<sup>11</sup> a fellowship which includes a leadership

competency-based and laboratory-specific leadership training as well as a mentorship approach.

In this context, WHO, CDC and the Association of Public Health Laboratories have agreed to define leadership competencies, based on CDC’s and the Association of Public Health Laboratories’ competency guidelines,<sup>14</sup> and to develop a Global Laboratory Leadership Program to address gaps in the education and training of laboratory directors. The Global Laboratory Leadership Program is a fellowship programme that will use a standard curriculum and implementation framework designed to transform mid-level laboratory managers and scientists into effective leaders for a critical component of global health security. ■



# History of GLLP

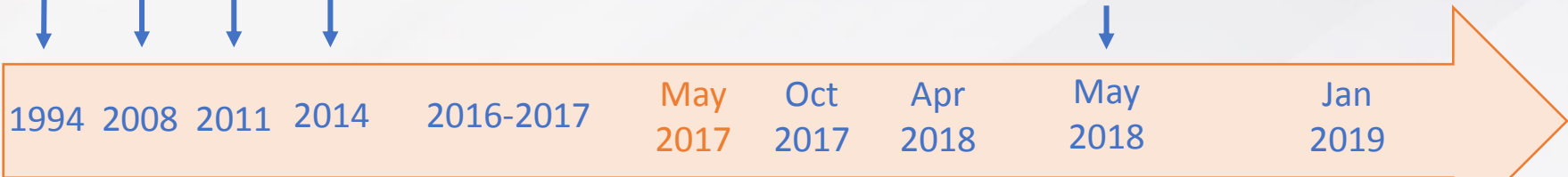
CDC started FELTP in Kenya

ECDC launched the EUPHEM programme

WHO meeting on laboratory leadership competencies

GHSA was launched to support capacity building efforts

OIE published Competency Guidelines for Veterinary Paraprofessionals



Needs assessment conducted

APHL, CDC, ECDC, FAO, OIE and WHO came together to partner on laboratory leadership

1<sup>st</sup> GLLP partners meeting

2<sup>nd</sup> GLLP partners meeting

3<sup>rd</sup> GLLP partners meeting planned

# GLLP Goal

Foster and mentor current and emerging laboratory leaders to build, strengthen and sustain national laboratory systems





# GLLP Partners Current Activities

- Laboratory leadership competency framework to guide competency-based curriculum development – developed, under clearance
- Communication tools promoting GLLP, laboratory leadership competency framework and international collaboration – competency framework article
- Comprehensive learning package – under development

# GLLP Competency Framework

## Competencies:

1. Laboratory systems
2. Leadership
3. Management
4. Communication
5. Quality management system
6. Biosafety and biosecurity
7. Disease surveillance and outbreak investigation
8. Emergency preparedness, response and recovery
9. Research

# Competency Framework

## Competency 1: Laboratory systems

### Domain 1.1: Policy and legal framework

1.1.1 Organizational structure	
<i>Performance activities</i>	
Developing	Outline the organization of the national/regional/multinational/international network of laboratories
Skilled	Explain the organization of the national/regional/multinational/international network of laboratories
Expert	Evaluate the organization of the national/regional/multinational/international network of laboratories
1.1.2 Human-animal-environmental interface	
<i>Performance activities</i>	
Developing	Identify the sectors and disciplines working within the human-animal-environmental interface
Skilled	Explain the various roles of the sectors and disciplines working within the human-animal-environmental interface
Expert	Evaluate collaboration among the various sectors and disciplines working within the human-animal-environmental interface

# Consistent with Standards/Texts

- **Primary international standards used in laboratories**
  - ISO 17025 General requirements for the competence of testing and calibration laboratories
  - ISO 15189 Medical laboratories — Requirements for quality and competence
  - OIE International Standards: Manual for Diagnostic Tests and Vaccines for Terrestrial Animals
- **International Health Regulations**

# The GLLP Competency Framework can be used:

- **By organizations**
  - Standardized reference for laboratory workforce development
  - Foundation for laboratory leadership learning programmes
  - Guidance to write job descriptions
  - Staff development planning
- **By individuals**
  - Assess current level of knowledge, skills and abilities
  - Identify areas in need of improvement
  - Plan for achieving higher levels of proficiency

# Way Forward

GLLP Learning package is currently under development and may include:

- Programme purpose, objectives and outcomes;
- Course outlines;
- Core set of materials (presentations, textbooks, case studies, exercises, quizzes, readings, available resources, etc.);
- Steps for programme planning, implementation and evaluation;
- Manuals (mentor/facilitator/trainees)





# For more information

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# Thank You

# Health laboratory(ies):

Laboratories inclusive of clinical, diagnostic, medical, public health, animal, environmental or any other laboratories performing testing for the purpose of disease diagnosis, screening, prevention, medical treatment decisions, surveillance or public health.

From: WHO. Laboratory quality management system handbook. Geneva: 2011.