

ONE HEALTH CURRICULUM REVIEW WORKSHOP PROGRAM

Organised by: University of Nairobi – Department of Medical Microbiology & Immunology

Supported by: COHESA & Partners

Venue: IBIS Hotel, Westlands

Dates: August 5, 6 & 7, 2025

WORKSHOP PROGRAM

DAY 1 – TUESDAY, AUGUST 5, 2025

Focus: *Setting the Context, align on competencies, identify gaps and One Health Foundations*

Time	Activity	Lead
08:00 – 09:00	Arrival & Registration	Secretariat
09:00 – 09:30	Opening and Welcome Remarks Introductions	Dr. Marianne Mureithi Prof. Washington Onyango-Ouma
	Workshop Objectives	Prof. David Odongo
09:30 – 9:45	Remarks from Partners: COHESA, ILRI vision for One Health	Dr. Florence Mutua
09:45 – 10:15	Keynote Address: <i>Why One Health for Postgraduate Medical Training?</i>	Prof. Salome Bukachi
10:15 – 10:30	Group Photo & Health Break	
10:30 – 11:30	Session 1: Overview of Current MSc Curricula and challenges (Microbiology & TID); <i>Strengths, Challenges & Alumni Insights</i>	Prof. Julius Oyugi Prof. Omu Anzala <i>Alumni Panel</i>
11:30 – 12:00	Session 2: Advancing One Health Education – Stakeholder Needs & Public Health Gaps	Prof. Lillian Omutoko
12:00 – 13:00	Plenary Discussion: Competency gaps Competency Gaps in One Health, AMR, Digital Health, Gender, Climate Change	Moderator: Prof. Lillian Omutoko Panel: Prof. Bukachi, Dr. Onono, Dr. Masika, Dr. Vincent Ojwang, Dr. Jane Rutto, Dr. Florence Mutua, Dr. Winnie Mutai
13:00 – 14:00	Lunch Break	
14:00 – 14:45	Session 3: One Health Competency Framework & Global Best Practices	Dr. Joshua Onono & Dr. Tequero Abuom
14:45 – 16:15	Breakout Session 1: Mapping Existing Units Against One Health Competencies	Facilitators (see below)

Time	Activity	Lead
16:15 – 16:30	Day 1 Wrap-Up, Reflection & Action Points	Rapporteur
	Tea break End of Day one	

DAY 2 – WEDNESDAY, AUGUST 6, 2025

Focus: Curriculum Redesign and Infusion of One Health Elements

Objective: Strengthen content alignment with current OH trends, teaching modalities and interdisciplinary links

Time	Session	Facilitator(s)
08:30 – 08:45	Recap of Day 1 Day 2 Agenda briefing	Dr. Marianne Mureithi
08:45 – 09:15	A OH approach in the control of Emerging and Neglected Tropical diseases	Prof. Anzala
09:15 – 09:35	Q&A Session: Audience Clarifications and Key Insights	Moderator
09:30 – 10:45	Breakout Session 2: Redesign of Core & Elective Modules with One Health Integration. Curriculum audit: Course relevance and delivery, Pedagogy	Group Leads
10:45 – 11:00	Tea Break	—
11:00 – 12:30	Integration Exercise: Infusing AMR, Digital Health, Climate Change, Gender Equity, Community	Dr. Moses Masika and Dr. Hellen Mwaura
12:30 – 13:00	Group Presentations: Revised Module Concepts	Rapporteurs
13:00 – 14:00	Lunch Break	—
14:00 – 14:45	Case Studies: <i>Global Innovations</i>	Dr. Allan Yienya (JOOTRH), Dr. Valarie Marah (Morgan State) Dr. Najib Isse Deputy Rector for Research and Consultancy SIMAD University

Time	Session	Facilitator(s)
14:45 – 15:45	<p style="text-align: center;">PANEL DISCUSSION</p> <p>Research & Innovation for the Future: Driving Discovery to Impact</p> <p>Segment 1: Cutting-Edge Science for One Health (15 min)</p> <ul style="list-style-type: none"> ● Dr. Daniel Muema (UoN) ● Prof. Valerie Odero-Marah (UoN/Morgan State) ● Dr. Hellen Mwaura (UoN) <p><i>Strengthen advanced molecular tools for disease research, Digital health/AI innovations for disease surveillance, Big data integration for One Health</i></p> <p>Segment 2: Winning Grants for One Health Research (15 min)</p> <ul style="list-style-type: none"> ● Prof. Patrick Maelo (Moi University) ● Dr. Moses Masika (UoN) ● Dr. Marianne Mureithi (UoN) ● Prof. Julius Oyugi (UoN) ● Dr. Winnie Mutai (UoN) <p>Crafting competitive proposals, Positioning African research globally, Avoiding common funding pitfalls</p> <p>Panel Q&A: Practical Advice for Researchers (15 min)</p>	
15:45 – 16:00	TEA BREAK	
16:00 – 16:30	Consensus Dialogue: <i>Cross-Institutional Harmonisation Strategy</i>	Prof. Odongo
16:30 - 17:00	Day Wrap-Up: <i>Draft Recommendations & Key Action Points</i>	<i>Workshop Committee</i>

DAY 3 – THURSDAY, AUGUST 7, 2025

Focus: *Validation, Implementation Roadmap & Commitments – finalize revisions, develop action plan and assign responsibilities*

Time	Session	Facilitator(s)
08:30 – 08:45	Recap & Objectives for Day 3	Dr. Marianne Mureithi
08:45 – 10:30	Showcase of Revised Curriculum Modules Purpose: Share outputs from breakout groups and gather final input Review recommendations of Draft Revised Curriculum & Competency Matrix	<i>Group Rapporteurs & curriculum committee</i>
10:30 – 10:45	Tea Break	—
10:45 - 11:30	Collaborative Insights: Perspectives from Kenyan Universities on One Health	
11:30 – 12:00	Implementation/ Action Plan/ Timelines: Commitments & Roadmap Accreditation Readiness, Mentorship & Monitoring	Dr. Marianne Mureithi
12:00 -12:30	Monitoring & Mentorship Framework: How to sustain momentum	Prof. Salome Bukachi Prof. Lilian Omutoko
12:30 – 13:00	Closing Ceremony: Reflections, Certificates & Next Steps	Prof. Salome Bukachi, Dr. Marianne Mureithi
13:00 – 14:00	Lunch Break	

Group 1: Bacteriology & Mycology – AMR & Environmental Links

Facilitators: Dr. Winnie Mutai, Meshack Juma, Victor Musyoki

Expected Outputs:

- Revised bacteriology modules
- AMR-focused elective outline

Group 2: Virology & Immunology – Pandemic Preparedness & Digital Surveillance

Facilitators: Prof Julius Oyugi, Dr. Moses Masika, Dr Daniel Muema, Dr. Samuel Nyamweya

Expected Outputs:

- Updated virology curriculum
- Integration of bioinformatics content

Group 3: Parasitology & Vector Control – Climate Health & Vector-Borne Diseases

Facilitators: Prof. David Odongo, Dr. Mukoko Dunstan, Dr. Kariuki Njaanake

Expected Outputs:

- Revised parasitology modules with climate-health links
- Framework for vector-borne disease preparedness

Group 4: One Health Core, Research & Leadership – Policy, Ethics & Gender

Facilitators: Prof. Lillian Omutoko, Prof. Salome Bukachi, Dr. George Agot, Dr. Emily Nyariki

Expected Outputs:

- One Health core module framework
 - Strategy for research mentorship and gender integration
- Participants: All partner universities, AMREF, KRCS, ILRI

Group 5: Molecular Diagnostics & Genomics – Digital Health

Facilitators: Dr. Daniel Muema, Dr. Noel Onyango, Dr. Florence Mutua, Prof Valerie Odero-Marah

Expected Outputs:

- New module on Molecular Diagnostics & Genomics
- Integration of bioinformatics, sequencing, and digital health tools

Rapporteurs

Roles of Rapporteurs in the Curriculum Review Workshop

1. Record keeping – Capture all discussions, key issues raised, and proposed solutions.
2. Summarising outputs – Consolidate inputs from breakout sessions into clear summaries.
3. Daily reports – Prepare a brief summary of daily outcomes for review by the organizers.
4. Final report – Compile the full workshop report, including recommendations, revised modules, and action plans.

Main Plenary Rapporteur: Antonina Odak/Sarafina Jeptoo

Breakout Groups:

- Group 1: Daniel Wainaina
- Group 2: Nigel Madara
- Group 3: Simba Yahaya
- Group 4: Janet Kombo

Curriculum Review Philosophy and Rationale

The programs aim to produce highly skilled professionals capable of addressing infectious disease challenges using an integrated One Health approach. This ensures graduates can function effectively in academia, research, clinical practice, and policy development within human, animal, environmental and planetary health systems.

Objectives of the Workshop

1. Align MSc Medical Microbiology and MSc Tropical & Infectious Diseases (TID) curricula with One Health principles.
2. Build consensus among partner universities for cross-institutional harmonisation.
3. Develop updated modules, manuals, and thematic inputs that embed One Health competencies.
4. Produce an implementation roadmap and monitoring framework for One Health integration.

Expected Deliverables

- Revised curriculum integrating One Health competencies.
- One Health curriculum manual & training module draft.
- Consensus document on implementation strategy.
- Stakeholder engagement and collaboration framework.