

Global One Health Summer Institute

2023



THE OHIO STATE UNIVERSITY

OFFICE OF INTERNATIONAL AFFAIRS

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Welcome Message

*Dear Global One Health community
and partners,*

It is my distinct pleasure to convene our 12th annual Global One Health Summer Institute. Since 2012, this flagship institute trained a total of 5,977 early and mid-career professionals who hailed from more than 50 countries, 10 U.S. states and six continents. Over the years, the institute has offered modular courses, workshops, practical training and clinical lecture series that have covered a broad range of relevant and timely topics. We take great pride with the ever-increasing participation of faculty members across the United States, Latin America, Africa, Europe, Asia and Oceania who have joined our Ohio State colleagues to share their expertise and serve as instructors.

We live on a highly interconnected planet currently at an inflection point where the confluence of pandemic, climate change, migration, economic crises and other challenges are in full view. As the World Health Organization declared the recent COVID-19 pandemic over, it also serves as a great reminder that we must accelerate strengthening global capacity and establish resilient systems to reduce the chance of another pandemic occurring in the near future. One key approach is to develop a strong global health workforce at home and abroad. This summer institute has a primary goal of narrowing the gap in training a high quality workforce globally. In order to achieve this goal, it is crucial to bring partners from both low and high GDP countries together in a collaborative manner. The Ohio State Global One Health initiative remained committed to this vision by providing open-access instruction, both in-person and/or virtually.

Beyond the instruction and learning experience, such collaboration brings profound impact by connecting our global institutional partners, professors and students. Scientific mobility and collaboration is crucial to recognize emerging issues associated with One Health, fostering professional networking that will often result in synergistic research projects as well as other outcomes such as joint publications. While our institute prefers to convene in a face-to-face manner, technological advancement allowed us to convene synchronous as well as asynchronous delivery of materials to reach a wider audience.

Thank you for your partnership and I wish you all the best.

Sincerely,

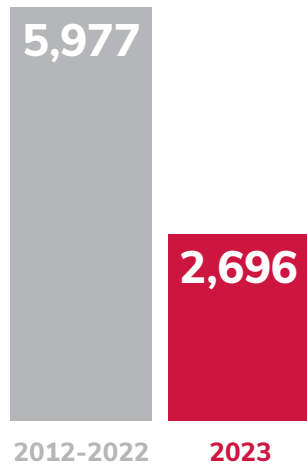


**Wondwossen A.
Gebreyes, DVM, PhD**
Executive Director
and President

Global One
Health initiative

2012 - 2023 Statistical Summary

Trainees 2012-2023



8,673

Number of trainees

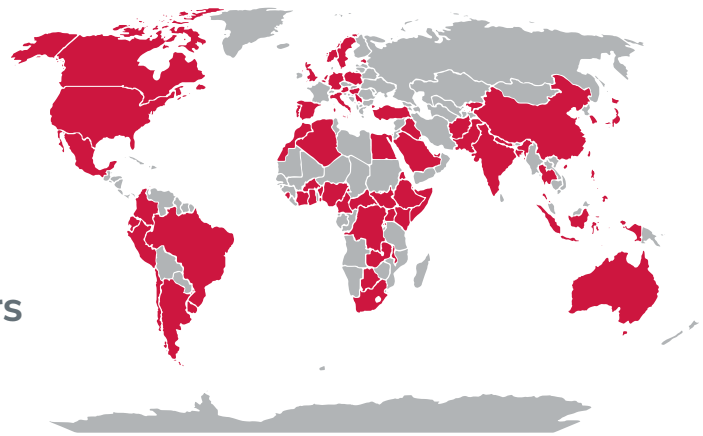
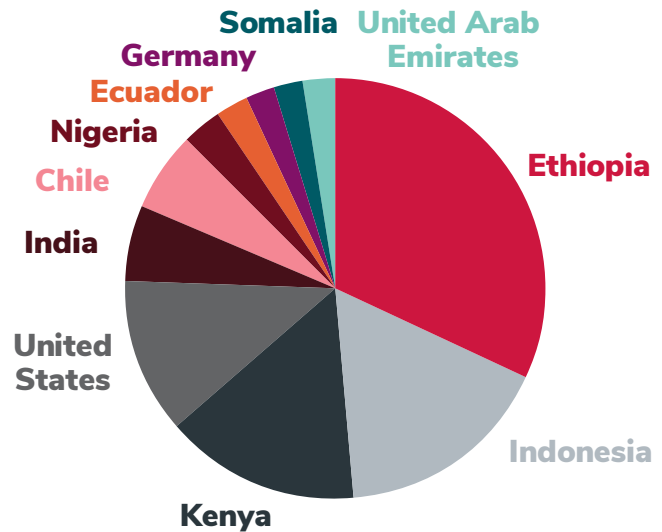
448

Number of faculty, moderators and coordinators

123

Number of courses

Top 10 Countries by Attendees



75

Number of countries represented

Global One Health initiative

Mission

Expand capacity for a One Health approach via applied education, training, research and outreach to more efficiently and effectively address causes and effects of diseases at the interface of humans, animals, plants and the environment.

Vision

Capable professionals and institutional systems that support and advance a healthy, enduring global community.

About Global One Health initiative

The Global One Health initiative (GOHi) is pioneered through efforts of The Ohio State University community and global consortium partners from Brazil, Ethiopia, Kenya, Mexico, Tanzania, Thailand and Uganda. GOHi brings together two concepts: One Health and Global Health.

The One Health approach brings together multiple disciplines working globally (local, national and international) to address the spread of disease, promote health and emphasize the connection among humans, animals and the environment. Over 70 percent of emerging infectious diseases are zoonotic. Zoonotic diseases originate in animals but can mutate and spillover into the human population, such as Ebola and COVID-19.

Global Health draws from the disciplines and frameworks of public health and international health and is the collaborative cross-national research and action for promoting health for all. It focuses on the following characteristics:

- Priority on a population-based and preventive focus
- Concentration on poorer, vulnerable and underserved populations
- Multidisciplinary and interdisciplinary approaches
- Emphasis on health as a public good and the importance of systems and structures
- Participation of several stakeholders



GOHi actively works to build capacity within cross-cutting issues including zoonotic diseases, antimicrobial resistance, cancer, maternal and child health, medicinal plants, food safety and curriculum twinning and sharing information through innovative e-learning technology.

GOHi is the university's largest, interdisciplinary example of institutional teamwork operating on a global scale and is a prime example of Ohio State's commitment as a global institution to engage in meaningful and beneficial partnerships to gain and share knowledge and find innovative solutions to the world's most compelling issues. GOHi activities are anchored on three core and two supportive strategic goals:

- **Core Goal I** – Training and educational capacity
- **Core Goal II** – Research and implementation science capacity
- **Core Goal III** – Outreach and extension capacity
- **Supportive Goal IV** – Resource stewardship
- **Supportive Goal V** – Financial sustainability

Visit globalonehealth.osu.edu

Training Modules

Genomic, Bioinformatics Experiential Resource Learning and Training

June 5-30

INSTRUCTORS: Zelalem Mekuria, Nidia Travao

This course will focus on experiential learning and training in genomics and bioinformatics and will take place on Ohio State's campus in Columbus, Ohio and at the National Institutes of Health-Fogarty International Center in Bethesda, Maryland. Its objective is to enhance the bioinformatic capabilities of Eastern African institutes in a closed session while facilitating collaboration between Ohio State experts and researchers from Eastern Africa. This opportunity is made possible through the financial support of the One Health Eastern Africa Research Training (OHEART) program funded by the NIH-Fogarty International Center.



Vulnerability, Risk Assessment and Mapping and Emergency Preparedness and Response Plan Preparation Workshop

June 13-19

LOCATION: Dire Dawa, Ethiopia

INSTRUCTORS: Berihun Anagaw, Kajela Birhanu, Lehageru Gizachew, Medhaniye Habtetsion, Gebeyaw Molla, Endalkew Sisay, Solomon Tamene

As a capacity building key activity, GOHi conducted a Vulnerability, Risk Assessment and Mapping (VRAM) and preparing Emergency Preparedness Plan (EPRP) training for regional zonal and district experts from the Oromia region and Dire Dawa City.

Objectives

- To assess and quantify the level of vulnerability, risk and existing capacity within the community and the health system for selected priority hazards and ensure effective risk reduction and response to public health emergencies
- To calculate and prioritize the Hazards, Vulnerabilities, Capacities and Risk Index in each district using WHO STAR tool
- Prepare VRAM and EPRP documents for each district

Learning Outcomes

Participants will learn the necessary knowledge and skills to quantify the level of vulnerability, existing capacity and prioritize the hazards, vulnerabilities and risks using the WHO STAR tool. They will also be able to prepare VRAM and EPRP documents for their respective districts to use in effective risk reduction to public health emergencies.



Advanced Monitoring and Evaluation Training

June 14-16

LOCATION: Addis Ababa, Ethiopia

INSTRUCTORS: Addis Bogale, Zelalem Bongor, Biniyam Eskinder, Abel Getu, Kyle Moon, Samuel Muluye, Saira Nawaz

Monitoring and evaluation (M&E) is a crucial component of Public Health Emergency Management (PHEM) that is carried out at each level from preparedness to recovery. This M&E training is planned to improve the monitoring and evaluation of the PHEM system at different levels, thereby increasing the capacity of the program to handle outbreaks and any other emergencies in an effective manner. The training will be provided for PHEM M&E experts/PHEM officers/surveillance officers who are currently working in the PHEM M&E area with the national and regional Public Health Institutes/regional health bureaus. The training will help the PHEM experts gain foundational and advanced technical skills for boosting confidence in practicing M&E.

Target Audience

PHEM officers, PHEM M&E officers, surveillance officers from the national and regional public health institutions and regional health bureaus in Ethiopia.

Objectives

To provide PHEM officers with:

- Foundational training of M&E approaches/frameworks
- Fit-for-purpose tools to implement M&E approaches for PHEM (e.g., logic models, performance indicators, data collection tools, data system designs, protocols, etc.)
- Models to allow data-driven decision-making (e.g., AAR, statistical analyses, data use approaches, etc.)

Learning Outcomes

Participants will increase their capacity to implement monitoring and evaluation activities relevant to each of the PHEM components – preparedness, surveillance, response and recovery – including how to develop the “right” evaluation questions, logic models and performance measures/indicators. In addition, participants will improve their technical skills in descriptive and inferential data analysis to develop models for data-driven decision-making.

TARTARE Ethiopia Risk Prioritization Workshop

June 20-22

LOCATION: Addis Ababa, Ethiopia

INSTRUCTORS: Janet Buffer, Desalegne Degefaw, Arie Havelaar, Barbra Kowalczyk, Ewen Le Borgne, Binyam Moges, Katie Stolte-Carroll

Target Audience

Food safety experts from key food safety stakeholders in Ethiopia.

Objectives

This workshop aims to provide a roadmap toward a stronger food safety system in Ethiopia. The group will work towards offering workable and concrete suggestions to contain the risks associated with the top foodborne hazards. This risk prioritization workshop also provides recommendations to improve the coordination and collaboration between various agencies controlling the potential towards a stronger food safety system in Ethiopia.



Internal Medicine and Pediatrics Residency Training Program

The Ohio State University Wexner Medical Center
and Nationwide Children's Hospital

In collaboration with the Global One Health initiative (GOHi),
Tikur Anbessa Hospital, Addis Ababa University, Jimma University,
SPHMMC and University of Gondar, Ethiopia

July 10-20

MODERATORS: Robert Baiocchi, Traci Bouchard, Sharon Clark, Shu-Hua Wang

CO-MODERATORS: Getaw Birhan Worku, Gashagun Mekonnen, Yemisrach Mekonnen, Ephrem Tafesse,
Liya Wassie

General Hospital Medicine Lecture Series

July 10-11, 2023

Moderator

Sharon Clark, MD

Co-Moderator

Gashagun Mekonnen, MD

INSTRUCTORS: Michael Dienstbach, Poorvi Hardman, Hannah L. Hays, Britni Lookabaugh, Devicka Ojha,
Rama Raja, Alicia Zha

Infectious Disease Lecture Series

July 12, 2023

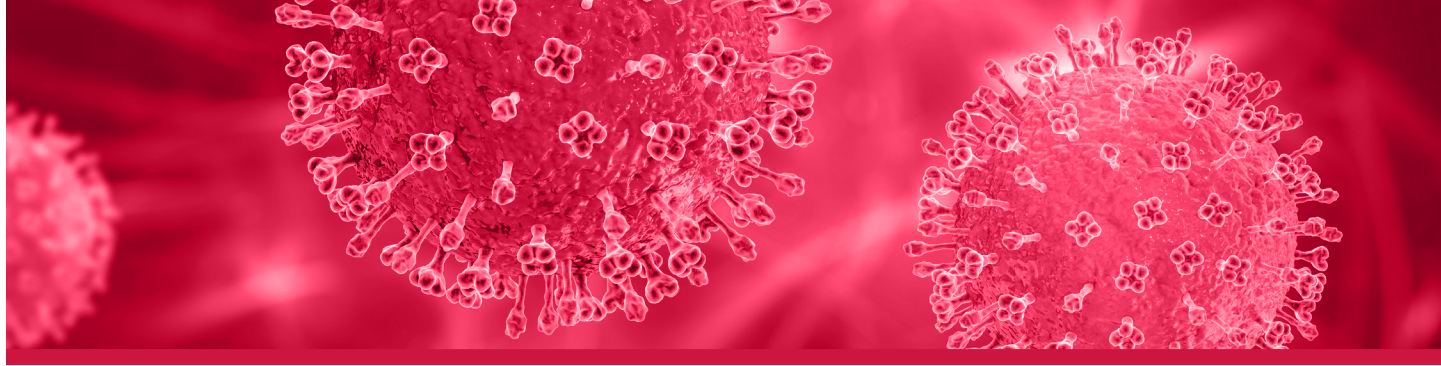
Moderator

Shu-Hua Wang, MD, PharmD, MPH&TM, FIDSA

Co-Moderator

Getaw Birhan Worku, MD

INSTRUCTORS: Julie Mangino, Nicholas Marschalk, Courtney Nichols, Jessica Smith, Madhee Sobhanie



Updates on Tuberculosis Management and Programs in Ethiopia **July 13, 2023**

Moderator

Shu-Hua Wang, MD, PharmD, MPH&TM, FIDSA

Co-Moderator

Liya Wassie, PhD

INSTRUCTORS: Stephanie Bjerrum, Connie Haley, Russel Kempler, Blanca Restrepo, Liliana Salvador, Liya Wassie

Hematology/Oncology Lecture Series **July 17-18, 2023**

Moderator

Robert Baiocchi, MD, PhD

Co-Moderator

Ephrem Tafesse

INSTRUCTORS: Kate Collier, Srinivas Devarakonda, AK Einfeld, Naren Epperla, Karilyn Larkin, Ashish Manne, Elvira Umyarova, Richard Wu

Pediatrics Lecture Series **July 19-20, 2023**

Moderator

Traci Bouchard, MD

Co-Moderator

Yemisrach Mekonnen, MD

INSTRUCTORS: Brandon S. Arnold, Amee Bigelow, Audrey Miller, Grace Paul, Pablo J. Sanchez, Jennifer Young

Environmental Health Science

July 25, 7-10 a.m. EDT

INSTRUCTOR: Michael Bisesi, PhD

Environmental health is the science and practice of preventing human injury and illness and promoting well-being by (1) identifying and evaluating sources and hazardous agents; and (2) limiting exposures to hazardous physical, chemical and biological agents in air, water, soil, food and other environmental media or settings that may adversely affect human health as well as animal health.

- **Module 1:** Exposure and Toxicological Characteristics of Chemical Agents (90 minutes)
- **Module 2:** Direct and Indirect Toxic Chemical Exposure Pathways (90 minutes)

Public Health Emergency Management and Incident Command Systems

July 26, 7-10 a.m. EDT

INSTRUCTOR: Michael Bisesi, PhD

Emergency management focuses on the phases of preparedness/planning, recognition and response, recovery and prevention and mitigation relative to both natural and anthropogenic incidents that may be declared as public health emergencies. A description of these phases with reference to applicable guidelines as well as the components and approaches for an effective and efficient incident command system are presented.

Learners completing the module will be able to:

- Distinguish between natural and anthropogenic emergencies and disasters
- Summarize the principles associated with the foundational phases of emergency management
- Explain the structures and functions of single and unified incident command systems



Antimicrobial Resistance (AMR) Training Workshop (Closed Session)

July 31-August 5

PROGRAM LEAD FACILITATOR: Eden Degnachew Zeleke

GOHi, in collaboration with Ethiopian institutions, is implementing a CDC-funded AMR project as part of the Global Action in Health Care Network (GAIHN). This program aims to enhance AMR detection and response and healthcare-associated infections, as well as increase clinical laboratories' capacity for infection prevention and control (IPC). This project will also provide training for healthcare workers in IPC contact precaution and isolation and laboratory detection of carbapenemase producing-carbapenem resistant Enterobacterales (CP-CRE).

Module 1: Colonization Screening and Identification of Antimicrobial Resistance Markers

INSTRUCTORS: Joan-Miquel Balada-Llasat, Tadesse Eguale, Zelalem Mekuria, Natasha Reese, Emily Schmit-Matzen

Objectives

To enable trainees to collect specimens, identify bacterial pathogens and perform drug susceptibility testing. Trainees will also learn about molecular detection of mechanisms of resistance.

Target Audience

Microbiologists from EPHI and selected hospitals.

Module 2: Infection Prevention and Control (IPC): Contact Precaution and Isolation Screening for Carbapenemase Producing-Carbapenem Resistance Enterobacterales (CP-CREs)

INSTRUCTORS: Joan-Miquel Balada-Llasat, Tadesse Eguale, Zelalem Mekuria, Natasha Reese, Emily Schmit-Matzen

Objectives

To enable trainees to have basic knowledge of IPC and provide enhanced training on CP-CRE organisms, clinical significance and implementation of infection prevention and control.

Target Audience

Health-care workers from selected hospitals.

Module 3: Specimen Collection

INSTRUCTORS: Zerihun Kassa, Yamirot Merga, Mequanint Mitiku, Feyisa Regassa

Objectives

To enable trainees to acquire basic knowledge and skills on current specimen collection practices to improve clinical management and care.

Target Audience

IPC officers, nurses, physicians, phlebotomist, laboratory personnel from selected hospitals.

Leishmaniasis Vector Biology

August 1-10

INSTRUCTORS: Eva Iniguez, Shaden Kamhawi, Abhay Satoscar, Damaris Matoke

This course focuses on sand fly vectors of leishmaniasis and includes lectures and intensive practical sessions. The practical sessions have two major components: field processing of collected specimens and laboratory assays to incriminate vectors and reservoirs of leishmaniasis. Participants will learn about real-time speciation, midgut dissections (optimized for unfed, blood-fed and gravid states) and prepare for laboratory-based analyses. At the end of this course, participants will have the theoretical and practical skill set needed to undertake entomological studies of sand fly vectors. Most of the approaches used in this course are translatable to studying other disease vectors.

Objectives

- To provide training in protocols critical to elucidate leishmaniasis transmission in active disease foci.



Simple Methods for Managing and Analyzing Correlated Health Outcomes: A Practical Illustration Using R

August 9-11, 9 a.m.-4 p.m. EAT

INSTRUCTORS: Zelalem Bonger, Binyam Moges

Correlated data is widely used across disciplines. It may arise when pairs or clusters of observations are related and more similar to each other than they are to other observations in the dataset. When data with correlation exists among observations due to clustering/nested or repeated measurements, the correlation should be considered in any of the statistical methods. Ignoring the correlation may lead to misleading conclusions because standard errors are underestimated.

This course builds data management skills specifically aimed at helping public health professionals choose the correct statistical methods to assess the factors associated with public health outcomes. Both theoretical concepts and practical illustrations using R will be discussed using correlated public health outcome data.

Target Audience

Public health/health science professionals and data specialists with interest in managing and analyzing correlated health outcomes.

Requirements

Students taking this course are expected to have basic knowledge of statistical concepts and some exposure to data analysis.

Objectives

This course aims to fill the data management analysis skill gaps encountered by the public health professionals with respect to correlated health outcomes. After taking this course, participants are expected to manage and analyze correlated public health outcome data.



Community-Based Participatory Research

August 7-10, 8-10 a.m. EDT

INSTRUCTOR: María Julia Brunette, PhD

This course offers an introduction to the Community Based Participatory Research (CBPR) approach, a powerful tool to achieve health equity. CBPR is a participatory and equitable approach where academics and key community stakeholders respectfully work together to generate solutions that are impactful and address key problems in the community. In this four-session course, the instructor will cover eight topics and themes and utilize case studies to show how to implement a CBPR process and follow its principles. Each virtual session will last two hours and will be participatory in nature.

Themes Content

- **Theme 1:** CBPR – An Introduction and Revision of Conceptual Models
- **Theme 2:** CBPR Principles
- **Theme 3:** Case Study #1 – Strengthening TB Diagnosis Process in Lima, Peru
- **Theme 4:** Establishing Research Partnerships to Promote Health Equity
- **Theme 5:** Case Study #2 – Promoting Latino Worker Health and Safety
- **Theme 6:** CBPR Research Projects – Operationalization and Critical Tools
- **Theme 7:** Case Study #3 – Role of Community Health Workers (CHWs) in CBPR Programs and Initiatives
- **Theme 8:** Looking at 2030 – CBPR, Social Justice and Community Capacity Building



Metabolomics Series – Principles of Lipidomics

August 21-25, 8-9 a.m. EDT

PROGRAM LEAD FACILITATOR: Feven Tigistu-Sahle, PhD

INSTRUCTORS: Minna Holopainen, Reijo Käkelä, Hanna Ruhanen, Kristin Stanford, Feven Tigistu-Sahle

This course will introduce lipidomics through online lectures, recorded videos and reading materials using publicly available data, software and tools. Participants will familiarize themselves with the current state of lipidomics workflow and the importance of lipid biology in health and disease states.

Target Audience

Laboratory professionals, research scientists and graduate students.

Course Topics

1. Introduction to Lipidomics: Overview and Concepts of Lipids
2. Lipid Biochemistry: Fatty Acids, Membrane Lipids, Neutral (Storage) and Lipid Mediators
3. Lipid Metabolism: Synthesis and Degradation Pathways of Lipids
4. Lipid Analysis: Mass Spectrometry and Chromatographic Analysis of Various Lipids
5. Lipidomics Application in Health and Disease Studies

Objectives

After the course students should be able to:

- Understand the basics of lipid biology
- Discuss the role of lipids in health and disease states
- Comprehend the principles of creating a standardized workflow to perform basic lipidomic analysis
- Describe the application of lipidomics in infectious and non-communicable disease research



An Introduction to Implementation Science Study Designs and Methods in Health Service Settings

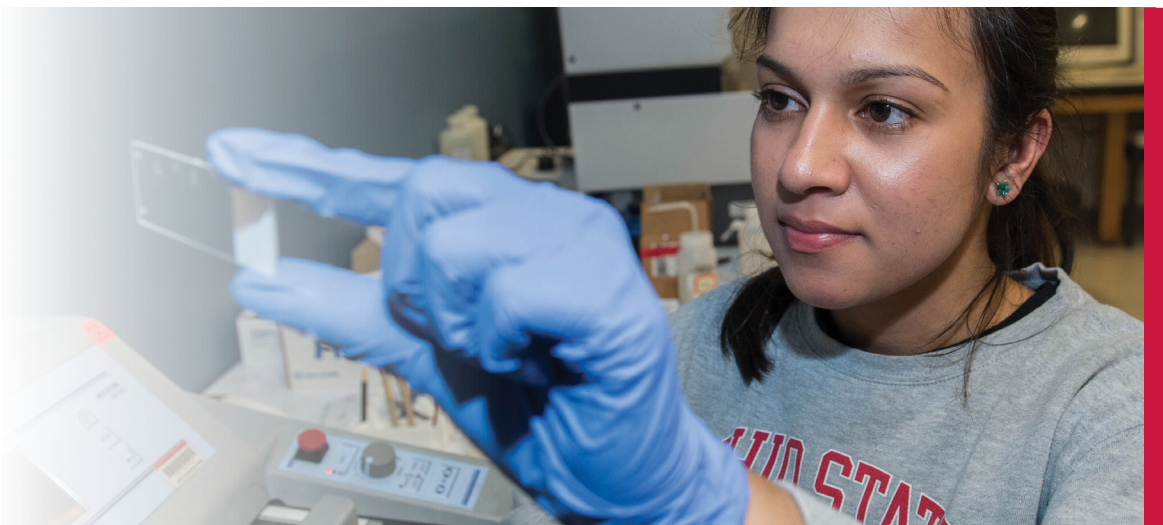
August 8, 7-10 a.m. EDT / 2-5 p.m. EAT

SPEAKERS: Alicia C. Bunger, Molly McNett

In this session, attendees will learn about the science of implementation, including study designs, strategies and implementation outcomes. Examples of implementation science research in social services settings will be presented, along with implications of findings to improve uptake of evidence-based practices for populations.

Objectives

- Discuss the field of implementation science, how it evolved and how it can improve uptake of an evidence-based practice
- Explain different types of implementation science designs and interventions for research investigations
- Discuss implications of implementation science research for improving population health



So You Want to Implement a Program: Implementation Science in Low Resource/ High Pace Settings

August 9, 7-10 a.m. EDT

SPEAKERS: Alicia C. Bunger, Molly McNett, Lauren Southerland, Sharon Tucker

In this session, attendees will learn about the science of implementation, including study designs, strategies and implementation outcomes. Attendees will gain insights about barriers and facilitators that can influence a practice change and why measuring these can impact the success of a practice change. Examples of implementation science applications will be presented to illustrate how this approach can be used to navigate implementation of practice changes in challenging settings. The content will highlight how service teams can apply implementation science to increase uptake of evidence-based practices across service settings and with variable resources.

Objectives

- Discuss the field of implementation science, how it evolved and how it can improve uptake of an evidence-based practice
- Develop knowledge in how to select an implementation model and priority implementation strategies to guide an EBP project
- Differentiate implementation outcomes and metrics from intervention clinical and organizational outcomes



Vaccines and Impacts on Animal and Human Health

August 14-15, 7-10 a.m. EDT / 2-4 p.m. EAT

INSTRUCTOR: Prosper Boyaka

This workshop will help graduate students, postdoctoral trainees and non-immunologist professionals learn the basic terminology and immunological perspective on the impact of vaccines on animal and human health. The training will include lectures and group case studies to facilitate applying the knowledge gained in their respective activities. It will explore the basic principles of vaccines (live vs. subunit vaccines, routes of delivery, adjuvants and delivery systems), factors affecting the efficacy of vaccines (pathogen, environmental and host factors) and impacts of animal vaccines on human health (zoonoses, safety and efficiency data).

Equine Medicine Training Program

August 14-17

PROGRAM LEAD FACILITATOR: Jorge Lohse

INSTRUCTORS: Mónica Aleman, Gabriela Arroyo, Luis Arroyo, Felipe Corrêa, Berihu Gebrekidan, Beatriz Montero, Alberto Rullan, Angela Varnum

This course builds on the core equine ambulatory skills delivered in the 2020-2021 Equine Medicine Training Program. Students in this course will learn more about general health issues encountered in the field. Instructors will discuss conventional first opinion techniques and introduce a One Health approach to field work, providing a better understanding of the etiology, transmission and control of infectious diseases important to veterinary medicine and public health. Students will also learn about the theoretical and practical aspects of equine field medicine and surgery in the context of working equines used in the developing sector.

Objectives

This course aims to address common clinical scenarios encountered by the equine ambulatory practitioner working in the field.

After taking this class, participants are expected to be fluent in performing system-focused clinical exams and addressing common medical and surgical concerns affecting working equines.

Requirements

Trainees taking this course are expected to have a veterinary background and some exposure to equine caseload.

Target Audience

Veterinary students, professionals and paraprofessionals (community health workers) with an interest in equine medicine and surgery.

Proposal Writing, Review Process and Grant Management Workshop

Sponsors: GOHi, Emory University, Texas Tech University, KEMRI, CDT-Africa

August 17-18, 21-22, 7-10 a.m. EDT / 2-5 p.m. EAT

PROGRAM LEAD FACILITATOR: *Wondwossen Gebreyes*

INSTRUCTORS: Henry Blumberg, Prosper Boyaka, Desalegne Degefaw, Abebaw Fekadu, Samuel Kariuki, Feven Tigistu-Sahle, Shu-Hua Wang, Jeff Workman

PROGRAM LOGISTICS MANAGEMENT: Desalegne Degefaw, Eeshetu Deressu, Abinet Kebede

Target Audience

Early to mid-career academic staff, research institute staff, senior PhD candidates, faculty and post-doctoral research scholars.

Objectives

The overarching goal of this workshop is to strengthen the capacity of higher education and research institute faculty and staff in identifying financial resources to support their research and training activities. This will enable them to write competitive grants, navigate the peer-review process and highlight post-award grant management.

Participants will learn how to:

- Identify sources of funding for research, training and outreach projects and programs
- Understand key components of successful proposal writing using various formats
- Navigate the peer-review process, scoring systems and funding decisions
- Participate in a review panel and provide peer-review critical comments/feedback
- Highlight basic principles of ethical compliance, budget and grant management



Data Processing and Data Visualization

August 21-24, 6-7:30 a.m. EDT / 1-2:30 p.m. EAT

INSTRUCTOR: Dawit Mulugeta, PhD

Diverse and big data is being generated at a faster rate across industries. The huge influx of data coupled with progress in analytics techniques, analytics talent, analytics tools and computing power herald great opportunities to harness information.

Being adept and savvy in a multitude of data processing tasks is universally critical to the success of data scientists. Data visualization is also an essential component of analytics and a powerful tool to elucidate insights and tell stories about data.

During this four-day training, students will learn the basic principles of the art and the science of data processing and data visualization. Classes will be hands on and utilize real-world data to demonstrate course content.

Chemical Risk Assessment

August 28-29, 7-10 a.m. EDT

INSTRUCTOR: Olorunfemi Adetona, PhD

Risk assessment is a framework for evaluating scientific information to assess the nature and probability of adverse effects of exposures to toxic biological, chemical and physical agents in human and ecological receptors. Risk assessment is used to inform policy decisions and is a scientific basis for environmental regulations.

The following two modules will be presented to discuss the principles and application of risk assessment with a focus on human exposure to waterborne toxic chemicals:

- **Module 1:** Purpose of and Exposure Assessment for Chemical Risk Assessment (90 minutes)
- **Module 2:** Toxicity Assessment and Risk Characterization for Chemical Exposures (90 minutes)

Leadership, Management and Governance in Ethiopian Higher Education

August 15-16, 8:30 a.m.-5:30 p.m. EAT

INSTRUCTORS: Solomon Abrha, Desalegne Degefaw, Wondwossen Gebreyes, Samuel Kifle, Randy Kluver, Sukant Misra, Tibor Nagy

PROGRAM LOGISTICS MANAGEMENT: Eeshetu Deressu, Abinet Kebede

A joint program by Texas Tech University, Oklahoma State University and The Ohio State University in collaboration with the Ethiopian Ministry of Education and U.S. Embassy in Addis Ababa.

Target Audience

Select Ethiopian public university presidents and vice presidents and Ministry of Education senior leaders.

Objectives

- Understand global trends in higher education leadership
- Articulate professional development priorities of the leaders of Ethiopian higher education institutions
- Define and prioritize professional development needs and challenges of participants
- Outline applicable comparative perspectives of U.S. and Ethiopian higher education systems
- Understand global trends in higher education leadership
- Prepare for in-country training and U.S. visiting fellowship training



Antimicrobials Unveiled: Unravelling the Science, Challenges and Solutions of Antibiotic Resistance

August 28-30, 8-10 a.m. EDT / 3-5 p.m. EAT

INSTRUCTORS: Menuka Bhandari, Dhanashree, Gireesh Rajeshekara

Topics

This course will cover the background of antibiotics, antibiotic classes and antibiotics resistance as a silent pandemic, along with public health implications. Participants will learn about the One Health approach – the interconnectedness of human health, animal health and the environment. This class will also discuss mechanisms of antibiotic resistance in bacteria – techniques to determine the antibiotics resistance in-vitro and in-vivo – as well as future directions – global initiatives and policies, antibiotics stewardship and alternatives to antibiotics.

Objectives

To provide background on AMR, discuss the mechanisms by which bacteria develop resistance, discuss the current situation with AMR and identify practical and novel approaches to mitigate AMR.

Laboratory Animal Medicine

September 4-5, 7-10 a.m. EDT / 2-5 p.m. EAT

INSTRUCTOR: Yohannes G. Asfaw

Laboratory animal medicine is a growing profession that plays an important role in biomedical/basic science research and discoveries, with a major emphasis on animal welfare and refinement of laboratory animal care. Based on anecdotal information, a significant gap needs to be filled in developing countries in laboratory animal medicine practice and training.

Course Topics:

- Laboratory Animal Medicine: A Historical Perspective
- Laws, Regulations and Policies Affecting the Use of Laboratory Animals
- Design and Management of Animal Facilities
- Animal Models in Biomedical Research
- Transgenic and Knockout Mice
- Factors that May Influence Animal Research
- Research in Laboratory Animal and Comparative Medicine

2023 Global One Health Symposium

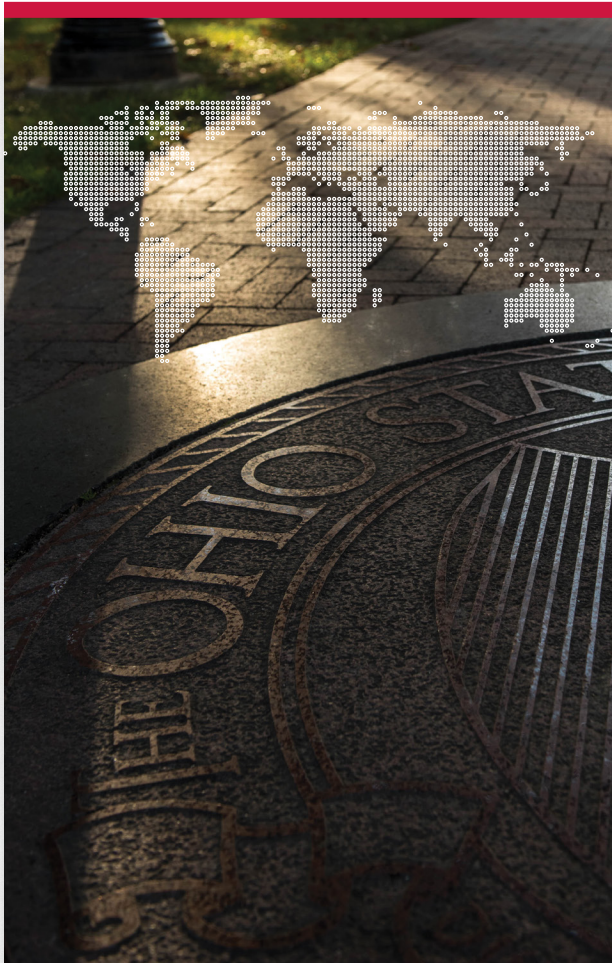
November 2-3, 8:30 a.m.-5:30 p.m. EAT

LOCATION: Nairobi, Kenya

The symposium's theme is "Addressing Complex One Health Challenges." It will cover topics like emerging zoonotic, food, water and vector-borne challenges; data science and machine learning for predicting and modeling disease outbreaks; climate change, changing ecosystems and health; and more. The event will include several partners from Kenya, such as KEMRI, International Livestock Research Institute, International Centre of Insect Physiology and Ecology and the University of Nairobi, and from Ethiopia, such as the GOHi Eastern Africa Office, Addis Ababa University and the University of Gondar.

Sponsors





Global One Health initiative

A100R Sisson Hall, 1920 Coffey Road

Columbus, Ohio 43210

614-247-7789

globalonehealth@osu.edu

globalonehealth.osu.edu