# ARTIFICIAL INTELLIGENCE
## IN INFECTIOUS DISEASE
# WORKSHOP 2024

**VIRTUAL** | 5 - 6 DECEMBER

Program Book

## Organizing Committee

**Lisa Hightow-Weidman, MD, MPH**
College of Nursing, Florida State University,
United States

**Jonathan Schapiro, MD**
National Hemophilia Center, Sheba Medical Center,
Israel

**Joseph Tucker, MD, PhD, AM**
UNC Chapel Hill,
United States

**Lei Zhang, MSc, MPH, PhD**
Monash University,
Australia

## Scientific Committee

**Marien de Jonge, MSc, PhD**
Radboud University Medical Center,
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**Jing Wang, PhD, MPH, RN, FAAN**
Florida State University,
United States

**Liying Wang, PhD**
Florida State University / Center of Population Sciences and Health Equity (C-PSHE),
United States

## Advisory Board

**Dino Rech, MD, MBA**
Audere CEO,
South Africa / United States

## Abstracts
All accepted abstracts can be found in the abstract book online here.

## Accreditation
The **Artificial Intelligence in Infectious Disease Workshop 2024**, 05/12/2024 - 06/12/2024, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with **9.0 European CME credits** (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

## Certificate of Attendance
Certificates of attendance will be sent virtually after completion of the post-workshop survey.

## Code of Conduct
All individuals are required to observe our Code of Conduct. We cannot tolerate any form of discrimination, harassment, disrespect, or the marginalization of those involved in our programs. Please report any incidents to VE | AME via info@amededu.com or to one of our personnel. Any participant who is found to have exhibited any inappropriate conduct or behavior against others may be removed from the program.

**View in full:**
academicmedicaleducation.com/our-commitment-diversity-and-inclusion

## Enduring Materials
The full sessions are available on the virtual platform where the workshpo will be livestreamed for three weeks after the workshop.
After this time, presentations and slides will be made accessible on demand via the workshop website www.AcademicMedicalEducation.com, provided the speakers have given consent.

## Feedback
Your feedback is very valuable to us and enables us to further improve this workshop. After the workshop, a survey will be send to you via email, with questions to help us improve.

## Networking
The Meeting Hub in the virtual portal allows you to connect and communicate with other attendees. Once you have located an attendee you want to connect with, click the Connect button. Once the other attendee accepts your request, you can choose to interact by starting a live chat or live video call. You can also schedule a meeting at a later time, send messages and take notes. Contact information for all attendees you have connected with will be included when you export contacts.

## Posters
Accepted posters are available for view on the virtual portal. Please take your time to review these during the workshop.

## Social Media
We encourage you to post news about the Artificial Intelligence in Infectious Disease Workshop 2024 to your social media accounts as often as you like during the workshop.
You can post your own tweet to your followers using the hashtag #AIinIDWorkshop

## Technical Issues
Should you encounter any technical problems, please contact us by email or via the online helpdesk on the virtual portal.

# Program

## Thursday 5 December 2024

Times in Eastern Standard Time (EST)

| | |
|---|---|
| | **Opening of the Workshop** |
| 10:00 AM | **Opening Words**<br>**Lisa Hightow-Weidman, MD, MPH**<br>College of Nursing, Florida State University, United States |
| | **Session 1 - AI Innovations in Infectious Disease: From Prevention to Treatment**<br>*Chairs: Lisa Hightow-Weidman & Zhe He* |
| 10:10 AM | **AI-Based Radiographic Imaging Analysis for Tuberculosis Treatment Outcomes**<br>**Achilles Katamba, MBChB, DCH, MSc PhD**<br>Makerere University College of Health Sciences, Walimu, Uganda |
| 10:30 AM | **Evaluation of Artificial Intelligence-Powered Screening for Sexually Transmitted Infections-Related Skin Lesions**<br>**Lei Zhang, MSc, MPH, PhD**<br>Monash University, Australia |
| 10:50 AM | **Abstract #1** Finding the missing Tuberculosis cases: Lessons Learnt from using Artificial Intelligence enabled Chest X-ray system for active TB case search in communities in Lagos, Nigeria<br><br>**Abstract #2** Two-years assessment in comparing Tuberculosis symptom screening combined with Chest X-ray screening to symptom screening using Artificial Intelligence among general population in Lagos, Nigeria<br><br>**Abstract #3** Implementing Facility-based Artificial Intelligence enabled Chest X-ray screening as innovative strategy to improving TB case finding in Lagos, Nigeria<br><br>**Taiwo Osatuyi**<br>KNCV Nigeria, Nigeria |
| 11:05 AM | **Abstract #4** The Use of Qure.ai to Intensify Tuberculosis Case Detection Among Coprisoners. The KNCV Nigeria Experience in Anambra State Nigeria<br>**Kenneth Ebarekor Ekpen**<br>KNCV Tuberculosis Foundation, Nigeria |
| 11:15 AM | **Abstract #5** Lesson Learnt from Using Computer-Aided TB Detection in Zanzibar<br>**Rahma Omar**<br>Amref Tanzania, Tanzania |
| 11:25 AM | **Abstract #6** AI-Powered Decision Support for Effective STI PCR Testing: Enhancing Clinical Decision-Making in Infectious Disease Management<br>**Nuntana Chumpa**<br>King Chulalongkorn Memorial Hospital, Thailand |
| 11:35 AM | **Live Discussion** |
| 11:55 AM | Short Break |
| | **Session 2 - AI Innovations in Infectious Disease: From Prevention to Treatment**<br>*Chairs: Marien de Jonge & Liying Wang* |
| 12:15 PM | **Revolutionizing Antibiotic Development with Generative AI**<br>**James Zou, PhD**<br>Stanford AI4Health / Stanford University, United States |
| 12:35 PM | **Using AI to Identify Patients for PrEP**<br>**Julia Marcus, PhD, MPH**<br>Harvard Medical School, Harvard Pilgrim Health Care Institute, United States |
| 12:55 PM | **Live Discussion** |

## Thursday 5 December 2024

Times in Eastern Standard Time (EST)

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| 1:15 PM | **Abstract #9** Development and Evaluation of a Pre-Exposure Prophylaxis (PrEP) Eligibility Prediction Tool: Improving Public Health Outcomes through Accurate Risk Identification<br>**Collins Odhiambo**<br>Usaid Fahari Ya Jamii, Kenya |
| 1:25 PM | **Abstract #10** Predicting HIV Diagnosis Among Emerging Adults Using Electronic Health Records and Health Survey Data in All of Us Research Program<br>**Balu Bhasuran**<br>Florida State University, United States |
| 1:35 PM | **Abstract #11** Development of an AI Chatbot Based Triage Solution to Support ART Adherence for PLWHIV<br>**Yuanchao Ma**<br>RI-MUHC, Canada |
| 1:45 PM | **Abstract #12** HIV Case Identification through Machine Learning in Coastal Counties of Kenya<br>**Evelyn Ogola**<br>Usaid Stawisha Pwani, Kenya |
| 1:55 PM | **Live Discussion** |
| 2:15 PM | End of Day 1 |

# Program

## Friday 6 December 2024

Times in Eastern Standard Time (EST)

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|---|---|
|  | **Session 3 - Moving Forward: AI in ID** <br> *Chairs: Lisa Hightow-Weidman & Joyce Nabende* |
| 10:00 AM | **Considerations of AI Within Infectious Disease Medicine** <br> **Westyn Branch-Elliman, MD, MMSc** <br> VA National Artificial Intelligence Institute / Veterans Affairs Boston Healthcare System / Harvard Medical School, United States |
| 10:20 AM | **Showcase Presentation:** <br> **Applying AI to Advance Global Infectious Disease Surveillance and Emerging Threat Detection** <br> **Andrea Thomas, DVM, MSc, PhD** <br> BlueDot Global, Canada |
| 10:35 AM | **Abstract #13** Implementing AI-Driven Solutions at National Scale for HIV and TB in Nigeria: Lessons from Multi-Sectoral Collaboration <br> **Annika Lindorsson Krugel** <br> Vantage Health Technologies, South Africa |
| 10:45 AM | **Abstract #14** Data Science Research to Predict Chronic Hepatitis B Disease Progression and Outcomes: A Pilot Study in the Gambia <br> **Dorcas Asare** <br> African Institute for Mathematical Sciences, South Africa |
| 10:55 AM | **Abstract #15** Leveraging AI for Preventive Strategies Against Stigma and Suicidal Ideation in HIV Self-Management <br> **Diego Sebastian Villanueva Guzman** <br> Research Institute Of Mcgill's University Healthcare Center, Canada |
| 11:05 AM | **Abstract #16** Use of Machine Learning to Increase HIV Testing Yield Among Adolescents and Young People in Kenya <br> **Daniel Wandina** <br> Gold Star Kenya, Kenya |
| 11:15 AM | **Live Discussion** |
| 11:35 AM | Short Break |
|  | **Session 4 - Where Are We Going? Future Perspectives of AI in ID** <br> *Chairs: Joe Tucker & Lisa Hightow-Weidman* |
| 11:55 AM | **Talking About AI in a Clinic: European Perspective** <br> **Joni Komulainen, LLB** <br> Ministry of Social Affairs and Health, Finland |
| 12:15 PM | **From Concept to Practice: Implementing AI for Equitable TB Screening** <br> **Florent Geerts, BBA** <br> Delft Imaging Systems B.V., The Netherlands |
| 12:35 PM | **Keeping up with New AI Developments** <br> **Dino Rech, MD, MBA** <br> Audere CEO, South Africa / United States |
| 12:55 PM | **Live Discussion** |
|  | **Closing of the Workshop** |
| 13:25 AM | **Closing Words** <br> **Joseph Tucker, MD, PhD, AM** <br> UNC Chapel Hill, United States |
| 1:35 PM | End of the Workshop |

**Artificial Intelligence in Infectious Disease Workshop 2024 - Program Book**

## Support

### EXHIBITOR



### ENDORSERS