LUXEMBOURG INSTITUTE OF HEALTH

LECTURE*

Dr. Máté Maros

08.06.2026

EDISON - Room Katalin Kariko
1A-B, rue Thomas Edison,
L-1445 Strassen - Luxembourg

13:00 - 14:00

Building trusted AI for precision medicine: from multimodal clinical data to federated learning and synthetic cohorts

Artificial intelligence is changing how clinical data are used to understand disease, predict outcomes, and support more personalized patient care. In this lecture, Dr. Maros will present examples from his research on real-world clinical data, including medical imaging, text, and molecular data, with applications in stroke, brain tumors, dementia, and predictive disease modeling.

The lecture will focus on the opportunities and challenges of building trusted AI for clinical use, including model robustness, calibration, data quality, shift, and the evaluation of both self-developed and commercial AI tools. It will also address how federated learning, predictive forecasting, and synthetic cohort generation can support privacy-preserving, scalable, and clinically meaningful precision medicine.

SPEAKER:

Máté Maros

Department of Biomedical Informatics (DBMI) at the Center for Preventive Medicine and Digital Health (CPD)
Head of the Junior Research Group MIDorAI of the MIRACUM Consortium of the Medical Informatics Initiative (MII), Germany
Department of Neuroradiology (NRAD)
Co-head of the AG Applied Medical Imaging and Data Science Lab (AMIDL)

HOST:

Prof. Ulf Nehrbass

* Please register by sending an email to: **Florence.Henry@lih.lu**