

# BiotechNet Conference Report: Clinics Meets Data Science 2024



## Quick Facts



September 10, 2024 at the University Hospital Zurich



90 participants onsite, 150 online  
Mix of academic, industrial, clinical, and international



11 presentations



4 sponsors: BiotechNet, Roche, Swiss Institute of Bioinformatics, University of Zürich



Organized by: Abdullah Kahraman (FHNW), Michael Krauthammer (USZ), Janna Hastings (UZH/UniSG), Francesca Faraci (SUPSI)

## Takeaway



The symposium showcased the ever-increasing importance of data science technologies at hospitals that help to develop new treatment options for complex diseases.



Next event: 28th August 2025, University Hospital Basel

## Additional Information



<https://www.usz.ch/4th-clinic-meets-data-science-symposium/>

## Session Highlights

In the first keynote, Lorenzo Ruinelli from the Ente Ospedaliero Cantonale presented the challenges and opportunities of digitalization in Swiss hospitals, focusing on optimizing clinical workflows through data science.

Yiqi Yang from the ETHZ showcased how machine learning approaches can help predict antifungal resistance, while Fabio Dennstädt from the Inselspital introduced the SMARAGD project, which aims to utilize large language models for patient data management.

Prof. Chloé-Agathe Azencott from the Institut Curie and INSERM gave a keynote speech in which she tried to draw lessons from her recent efforts in applying deep learning to health data.

The afternoon started with another keynote from Danielle Bitterman from the Harvard Medical School on Interrogating language model capabilities and risks for medical applications.

Alberto Pagnamenta from the Ente Ospedaliero Cantonale presented innovative approaches for predicting ventilator-associated pneumonia using machine learning techniques, while Daniele Malpetti from the University of Applied Sciences of Southern Switzerland discussed federated learning using clinical transcriptomics data.

The day ended with a last keynote from Prof. Julio Saez-Rodriguez, who presented various projects from his lab where knowledge-based machine learning and multi-omics data are used to detect disease mechanisms, followed by a panel discussion led by Beatrice Zanchi, Charlotte Tumescheit, Diane Duroux, Zsolt Balazs on future challenges of data science in the clinics.