



# 2<sup>ND</sup> MOPRED SYMPOSIUM

## ALGORITHMS AND APPLICATIONS FOR MULTI-MODAL DATA INTEGRATION

### AGENDA

October 16, 2024 Goethe University Hospital Frankfurt, Building 22

Time	Subject	Presentation title
10:00	Welcome and opening	
OMICs integration and networks		
10:10-10:30	Markus Joppich	PICASO: Profiling Integrative Communities of Aggregated Single-cell Omics data
10:30-10:50	Arber Qoku	Pathway-centric Latent Variable Models for Spatial Multi-omics
10:50-11:10	Ekaterina Esenkova	Unbiased multi-omics data integration and clustering of individuals with heart failure
11:10-11:30	Asad Usmani	DNA-Based storage of RDF graph data: A futuristic approach to data analytics
11:30-11:50	Poster short talks	
11:55	Group photo	
12:05-12:30	lunch break	
12:30-13:45	lunch + poster session	
Prediction Models		
13:45-14:05	Robin Mayer	AI Model Transferability: Using Noisy Ensembles to overcome domain differences without prior knowledge
14:05-14:25	Ingvild Froberg Mathisen	Gene expression prediction for patient stratification in muscle invasive bladder cancer
14:25-14:45	Shamim Ashrafiyan	A systematic comparison of methods for the prediction of enhancer-gene interactions from epigenomic data
14:45-15:20	Ivan Costa - Keynote	Optimal transport based multi-scale analysis from single cell and spatial omics data
15:20	Poster award	
15:25-16:20	Poster session and coffee	
Biological application		
16:20-16:55	Eva Herrmann and Iulia Dahmer - Teaching	Multimodal statistical modelling approaches in patients with liver cirrhosis
16:55-17:15	Konstantinos Makris	Correlation guided Network Integration (CoNI) reveals energy homeostatic genes impacting on catecholamine sensitivity
17:15-17:35	Zahra Moslehi	Multi-Omics data analysis with Gibbs sampling for analysing lung cancer sub-types
17:35-17:55	Aakanksha Singh	Evaluating the efficacy of methodologies for Deconvolution of multi-modal transcriptomic data: A benchmarking study
17:55	Closing Remarks	