



From Data and Models to E-Health

Program

4 – 6 May 2026 · Mannheim, Germany · sbmc2026.org

Monday, 4 May

- 13:00 **Welcome by Steven Dooley and Beat Müllhaupt**
- 13:35 **MTZ Award Lectures**
- 14:30 **Keynote Lecture 1: Mathias Uhlén (Stockholm, Sweden)**
KTH Royal Institute of Technology, Stockholm — "The Human Protein Atlas"
- 15:30 *Coffee Break*

Towards Spatial Resolution of (Patho)physiology at Single Cell Level – Heterogeneity & Evolution

- 16:00 **Itay Tirosh**
Weizmann Institute of Science, Rehovot — "Pan-cancer analysis of tumor spatial organization"
- 16:30 **Aimée Bugler-Lamb**
VIB-UGent Center for Inflammation Research, Ghent
- 17:00 **Christoph Harmel**
Roche Pharma Research and Early Development, Institute of Human Biology (IHB), Basel —
"Mechanistic Organoid Representations"
- 17:15 **Johanna Huber**
Technical University of Applied Sciences Mannheim, Mannheim — "Metabolic Fingerprinting at the Cellular Level by MALDI Mass Spectrometry Imaging"
- 17:30 **Erwin Schoof**
Technical University of Denmark (DTU), Kgs. Lyngby — "Characterising complex cell hierarchies with single-cell proteomics"
- 18:00 *1st Poster Session and Welcome Reception*

ORGANIZED BY



FUNDED BY



ENDORSED BY



SPONSOR



Tuesday, 5 May

Cellular Scale – Integrating Signal Transduction & Metabolism for cell fate decisions

- 09:00 **Christiane Opitz**
German Cancer Research Center (DKFZ), Heidelberg — "Integrating signal transduction and metabolism in cancer"
- 09:30 **Nikolaos Meimetis**
Massachusetts Institute of Technology, Cambridge — "Interactome-based deep learning and path-level decomposition reveal TGF β -IFN α competition in MASH"
- 09:45 **Evangelia Petsalaki**
EMBL-EBI, Hinxton — "From data to digital twins of biological systems: Network-based approaches to study context-specific cell signalling"
- 10:15 **Stein-Erik Gullaksen**
Haukeland University Hospital, Bergen — "Single cell immune and phospho-signaling profiling for response prediction in chronic myeloid leukemia"
- 10:30 **Katsuyuki Yugi**
RIKEN Center for Integrative Medical Sciences, Tokyo — "Systems pharmacology of metformin action in the liver"
- 11:00 *Coffee Break*

Artificial Intelligence – Reasoning models in Systems Biology and E-HEALTH

- 11:30 **Jan Hasenauer**
University of Bonn, Bonn — "AI-supported Analysis of Longitudinal Health Data"
- 12:00 **Marija Cvijovic**
University of Gothenburg, Gothenburg — "What doesn't kill you makes you older: synergistic effects of damage accumulation, nutrient signalling and metabolism in the context of cellular rejuvenation and health span"
- 12:30 *Lunch Break*
- 13:00 *2nd Poster Session*

Artificial Intelligence continued – Pattern Recognition for Pathophysiology Prediction

- 14:00 **Alexander Skupin**
Luxembourg Centre for Systems Biomedicine (LCSB), Esch-sur-Alzette — "Systems Biology of Parkinson's disease"
- 14:30 **Xuechun Xu**
Karolinska Institute, Stockholm — "A hybrid recurrent dynamical model of cancer cell metabolism predicts metabolic state transitions and drug responses"
- 14:45 **Álvaro Martins**
Institute for Research and Innovation in Health (i3S), Porto — "Unveiling the molecular cargo of cancer-derived extracellular vesicles"

ORGANIZED BY



FUNDED BY



ENDORSED BY



SPONSOR



Tuesday, 5 May (continued)

Digital Twins

- 15:00 **Irene Vignon-Clementel**
INRIA, Palaiseau — "Digital Twins for Interventional Treatment of Liver Disease: How Fluid is It?"
- 15:30 **Paul Macklin**
Indiana University Bloomington, Bloomington — "Rapid simulation model development for virtual tissue laboratories and digital twins"
- 16:00 *Coffee Break*
- 16:30 **Lukas Neckermann**
Heidelberg University, Medical Faculty Mannheim, Mannheim — "Trajectory-Based Modeling of Injury-to-Recovery Cell States Reveals Metabolic Reprogramming and Early Prognosis in ACLF"
- 16:45 **Lutz Brusch**
Technical University Dresden, Dresden — "Collaborative Modeling and Simulation of Multiscale Disease Processes using Morpheus"
- 17:00 **Adil Mardinoglu**
King's College London, London — "Human Metabologenomics for Integration of Multi-Omics Data"
- 17:30 *Short Break*
- 17:45 **Panel Discussion/Interactive Session: Potential and Challenges in E-HEALTH – New Frontiers**
Ethics, Clinician, Industry, Data Protection, Young Scientist Modelling + Experimental
- 19:30 *Networking Dinner*

ORGANIZED BY



FUNDED BY



ENDORSED BY



SPONSOR



Wednesday, 6 May

E-Health – Translation into Clinical Practice

- 09:00 **Foad Rouhani**
The Francis Crick Institute, London
- 09:30 **Jens Kleesiek**
University Hospital Essen, Essen — "From Data to Actions: Operationalizing Clinical AI"
- 10:00 **Florian Markowitz**
Cancer Research UK Cambridge Institute, Cambridge — "All models are wrong and yours are useless – how to make clinical prediction models impactful for patients"
- 10:30 **Agustin Rodriguez Gonzalez**
German Cancer Research Center (DKFZ), Heidelberg — "Development of a ML-informed ODE Model as Clinical Decision Support System (CDSS) to Personalize Anemia Treatment in Chronic Kidney Disease Patients"
- 10:45 **Andrej Shevchenko**
MPI of Molecular Cell Biology and Genetics, Dresden — "Absolute quantification of apolipoproteins in human liver and plasma"
- 11:00 *Coffee Break*
- 11:30 **Ana Ramírez de Molina**
Madrid Institute for Advanced Studies, Madrid
- 12:00 **Lorenz Adlung**
University Medical Center Hamburg-Eppendorf, Hamburg — "From integrative omics to a phase IIa clinical trial in liver disease"
- 12:30 **Keynote Lecture 2: Wolfram Goessling (Boston, USA)**
Harvard Medical School, Boston
- 13:15 **Poster Prizes**
- 13:30 **Closing remarks**

ORGANIZED BY



FUNDED BY



ENDORSED BY



SPONSOR



Invited Speakers

Lorenz Adlung	University Medical Center Hamburg-Eppendorf	Hamburg, DE
Aimée Bugler-Lamb	VIB-UGent Center for Inflammation Research	Ghent, BE
Marija Cvijovic	University of Gothenburg	Gothenburg, SE
Wolfram Goessling	Harvard Medical School	Boston, US
Jan Hasenauer	University of Bonn	Bonn, DE
Jens Kleesiek	University Hospital Essen	Essen, DE
Paul Macklin	Indiana University Bloomington	Bloomington, US
Adil Mardinoglu	King's College London	London, UK
Florian Markowitz	Cancer Research UK Cambridge Institute	Cambridge, UK
Christiane Opitz	German Cancer Research Center (DKFZ)	Heidelberg, DE
Evangelia Petsalaki	EMBL-EBI	Hinxton, UK
Ana Ramírez de Molina	Madrid Institute for Advanced Studies	Madrid, ES
Foad Rouhani	The Francis Crick Institute	London, UK
Erwin Schoof	Technical University of Denmark (DTU)	Kgs. Lyngby, DK
Alexander Skupin	Luxembourg Centre for Systems Biomedicine (LCSB)	Esch-sur-Alzette, LU
Itay Tirosch	Weizmann Institute of Science	Rehovot, IL
Mathias Uhlén	KTH Royal Institute of Technology	Stockholm, SE
Irene Vignon-Clementel	INRIA	Palaiseau, FR
Katsuyuki Yugi	RIKEN Center for Integrative Medical Sciences	Tokyo, JP

Short-Talk Speakers

Lutz Brusch	Technical University Dresden	Dresden, DE
Stein-Erik Gullaksen	Haukeland University Hospital	Bergen, NO
Christoph Harmel	Roche Pharma Research and Early Development, Institute of Human Biology (IHB)	Basel, CH
Johanna Huber	Technical University of Applied Sciences Mannheim	Mannheim, DE
Álvaro Martins	Institute for Research and Innovation in Health (i3S)	Porto, PT
Nikolaos Meimetis	Massachusetts Institute of Technology	Cambridge, US
Lukas Neckermann	Heidelberg University, Medical Faculty Mannheim	Mannheim, DE
Agustin Rodriguez Gonzalez	German Cancer Research Center (DKFZ)	Heidelberg, DE
Andrej Shevchenko	MPI of Molecular Cell Biology and Genetics	Dresden, DE
Xuechun Xu	Karolinska Institute	Stockholm, SE

ORGANIZED BY



FUNDED BY



ENDORSED BY



SPONSOR

