



Monday, November 28, 2022 - Day 1	
1:15 pm – 1:30 pm	Welcome Speeches Nicola Scholz, BMBF Michael Boutros, DKFZ Heidelberg Julie George and Rainer Spanagel, e:Med PK Spokespersons
1:30 pm – 2:15 pm	Keynote Lecture Markus Nöthen, University Hospital of Bonn <i>Opening Keynote Lecture: Genomic Variation and Disease</i>
2:15 pm – 2:45 pm	Technologies in Systems Medicine I
2:15 pm – 2:30 pm	Michael Hartung, University of Hamburg <i>An online knowledge base for network based mechanism exploration and drug repurposing in oncology</i>
2:30 pm - 2:45 pm	Cihan Erkut, German Cancer Research Center and National Center for Tumor Diseases Heidelberg <i>Shallow nanopore RNA sequencing enables transcriptome profiling for precision cancer medicine</i>
2:45 pm – 3:15 pm	Coffee Break
3:15 pm – 3:45 pm	Technologies in Systems Medicine II
3:15 pm – 3:30 pm	Lucia A. Torres Fernández, University of Cologne <i>Enhancing Neoantigen Expression in Small Cell Lung Cancer via Inhibition of Nonsense-Mediated Decay</i>
3:30 pm -3:45 pm	Hryhorii Chereda, University Medical Center Göttingen <i>Stability of feature selection utilizing Graph Convolutional Neural Network and Layer-wise Relevance Propagation</i>
3:45 pm – 5:00 pm	Poster Session I
3:45 pm – 4:15 pm	Poster Flash Talks I (10 Talks à 2 min)
4:15 pm – 5:00 pm	Poster Discussion I
4:15 pm – 5:00 pm	Snacks
5:00 pm – 6:15 pm	Bioinformatic Approaches in Systems Medicine
5:00 pm – 5:15 pm	Stefan Schrod, University Medical Center Göttingen <i>Machine learning for treatment optimization in personalized medicine</i>
5:15 pm – 5:30 pm	Daria Doncevic, Heidelberg University <i>From black box to grey box - How to shed light on Variational Autoencoder models</i>
5:30 pm – 5:45 pm	Olga Tsoy, University of Hamburg <i>From alternative splicing events to mechanistic insights</i>
5:45 pm – 6:00 pm	Olga Zolotareva, University of Hamburg; Technical University of Munich <i>UnPaSt: Identification of differentially expressed biclusters for unsupervised patient stratification</i>
6:00 pm – 6:15 pm	Bence Oláh, TU Braunschweig and Hannover Medical School <i>Personalized prediction of mortality risks in chronic kidney disease patients</i>
6:15 pm – 7:00 pm	Evening Lecture on <i>Climate Changes</i> Bjorn Stevens, Max Planck Institute for Meteorology, Hamburg <i>Taking Earth's Temperature</i>
7:00 pm – open end	Mocktail Hour, Live Music and Appetizers



Tuesday, November 29, 2022 - Day 2	
9:00 am – 9:30 am	Keynote Lecture Kristel Van Steen, KU Leuven & Université de Liège <i>Individual-specific networks: wonder networks or something to wonder about?</i>
9:30 am – 10:15 am	Modeling in Systems Medicine I
9:30 am – 9:45 am	Dagmar Waltemath, University Medicine Greifswald <i>A guide to the Computational Modeling in Biology Network (COMBINE): Navigating through specifications, mailing lists and tools</i>
9:45 am – 10:00 am	Mahdi Jaber, Charité Berlin <i>OMIBONE: OMICs-driven computer model of BOne regeNERation for personalized treatment</i>
10:00 am – 10:15 am	Paul Lang, University of Oxford <i>Improving our Mechanistic Understanding of Cell Cycle Dynamics</i>
10:15 am – 11:00 am	Coffee Break
11:00 am – 11:45 am	Modeling in Systems Medicine II
11:00 am – 11:15 am	Florian Tran, Kiel University <i>Basis of molecular-medicine based reporting in IBD therapy guidance – Experiences from the GUIDE-IBD trial</i>
11:15 am – 11:30 am	Jan Hasenauer, University of Bonn <i>Multi-stage model facilitates assessment of the spread of breast cancer metastasis</i>
11:30 am – 11:45 am	Fabian Konrath, Jana Wolf, Max-Delbrück-Center Berlin <i>Elucidating the temporal regulation of IKK/ NF-κB signaling upon genotoxic stress by computational modeling</i>
11:45 am – 12:15 pm	PG Networking Jan Baumbach, Stephanie Witt <i>e:Med Project Group Data Security and Ethics</i> Jana Wolf, Sara Checa <i>e:Med Project Group Modeling of Disease Process</i> Stefan Kalkhof, Helena U. Zacharias <i>e:Med Project Group MS- and NMR-based Omics</i>
12:15 pm – 1:30 pm	Lunch
1:30 pm – 2:00 pm	Keynote Lecture Harald H.H.W. Schmidt, Maastricht University <i>Redefining diseases for precision diagnosis and drug repurposing</i>
2:00 pm – 3:15 pm	Systems Medicine of Diseases I
2:00 pm – 2:15 pm	Daniela Bastos Dias, Charité Universitätsmedizin Berlin <i>Dysregulated Energy Balance Impairs Scaffold-Guided Bone Regeneration In Type 2 Diabetes</i>
2:15 pm – 2:30 pm	Neha Mishra, Christian-Albrechts-University Kiel and University Medical Center Schleswig-Holstein, Kiel <i>Early molecular signatures of therapeutic response to vedolizumab therapy in Inflammatory Bowel Disease patients identified using a longitudinal multi-omics approach</i>
2:30 pm – 2:45 pm	Matti Hoch, University of Rostock <i>Network-based enrichment analysis of molecular data from large-scale disease maps</i>
2:45 pm – 3:15 pm	Coffee Break



3:15 pm – 3:45 pm	Systems Medicine of Diseases II
3:15 pm – 3:30 pm	Stefan Florian, Charité Universitätsmedizin Berlin <i>Stromaless organoids of mammary ductal carcinoma in situ suggest that myoepithelial cells are an integral part of premalignant breast lesions</i>
3:30 pm – 3:45 pm	Martina Guggeis, Kiel University <i>A step closer to Personalized Medicine: the application of a gnotobiotic mouse model to investigate the role of the microbiome in IBD-therapy</i>
3:45 pm – 4:00 pm	Rutuja Patwardhan for Olink <i>Olink Proteomics for systems biology: Rise of Precision Proteomics in Integrated Multiomics</i>
4:00 pm – 5:15 pm	Poster Session II
4:00 pm – 4:30 pm	Poster Flash Talks II (10 Talks à 2 min)
4:30 pm – 5:15 pm	Poster Discussion II
4:30 pm – 5:15 pm	Snacks
5:15 pm – 5:45 pm	Keynote Lecture Muzlifah Haniffa, Newcastle University and Associate Faculty at the Sanger Institute <i>Decoding the developing human immune system</i>
5:45 pm – 6:30 pm	Systems Medicine of Diseases III
5:45 pm – 6:00 pm	Matthia A. Karreman, Universitätsklinik Heidelberg, Deutsches Krebsforschungszentrum Heidelberg <i>Targeting network communication to inhibit melanoma brain metastatic growth in vivo</i>
6:00 pm – 6:15 pm	Danielle Harris, Universitätsklinikum Schleswig-Holstein <i>Tryptophan catabolism associates with severity and long-term disease control in chronic inflammatory diseases</i>
6:15 pm – 6:30 pm	Jiangyan Yu, University of Bonn <i>Disease stage-related cellular and molecular markers identified in patients with idiopathic pulmonary fibrosis</i>
7:00 pm – open end	Conference Dinner at Bräustadl Heidelberg <i>(6:45 pm guided 10' walk to dinner location starting at registration desk)</i>



Wednesday, November 30, 2022 - Day 3

9:00 am - 9:30 am	Keynote Lecture
	Stefan Pfister, Hopp Children's Cancer Center (KITZ), German Cancer Research Center (DKFZ), German Cancer Consortium (DKTK); Heidelberg <i>Assessing intra-tumoral heterogeneity in genetically simple tumors - what can we learn?</i>
9:30 am - 10:15 am	Translational Approaches in Systems Medicine I
9:30 am - 9:45 am	Joshua D'Rozario, University Hospital of Cologne <i>Patient derived organoids demonstrate hallmark characteristics of small cell lung cancer for therapeutic screening and functional analyses</i>
9:45 am - 10:00 am	Julio Vera, UK Erlangen and FAU Erlangen-Nürnberg <i>Integration of systems, network and machine learning modeling to select tumor-associated antigens for immunotherapy in metastatic melanoma</i>
10:00 am - 10:15 am	Clemens A. Schmitt, Charité Berlin <i>Senescence systems medicine for individualized lymphoma therapy</i>
10:15 am - 10:30 am	Richard Broadhead - for life&brain <i>The Use of Novel Proteograph Technology to facilitate in-depth exploration of the Proteome at Scale and Speed</i>
10:30 am - 11:00 am	Coffee Break
11:00 am - 11:45 am	Translational Approaches in Systems Medicine II
11:00 am - 11:15 am	Marion Friske, Central Institute of Mental Health, Mannheim <i>Transcriptomic signatures in AUD - a translational approach</i>
11:15 am - 11:30 am	Nusrat Yasmin, Technical University Dresden <i>Immunogenicity of primary tumor cell lines derived from melanoma brain metastases</i>
11:30 am - 11:45 am	Bella Banjanin, Erasmus Medical Center Cancer Institute, Rotterdam <i>Activation of metaphyseal progenitor cells in bone marrow fibrosis drives the fibrotic transformation via a Wnt axis</i>
11:45 am - 12:00 pm	Breaking News Talk
	Michael Altenbuchinger, University Medical Center Göttingen <i>Spatial cellular networks from omics data</i>
12:00 pm - 12:15 pm	Thea Ziegler - for PacBio <i>Highly accurate (and affordable!) long reads in biomedical research</i>
12:15 pm - 1:15 pm	Lunch
1:15 pm - 1:45 pm	Molecular Disease Board
	Daniel Huebschmann, DKFZ Heidelberg, NCT Heidelberg Peter Horak, NCT Heidelberg Wolfgang Merkt, University Hospital Heidelberg Philip Rosenstiel, University Hospital Schleswig-Holstein, Campus Kiel <i>From neoplasms to non-clonal diseases</i>
1:45 pm - 2:15 pm	Closing Remarks & Award Ceremony
	e:Med Poster Award 2022, NaWik Creative Award Julie George and Rainer Spanagel, e:Med PK Spokespersons
2:30 pm - 3:00 pm	Project Committee Meeting
	<i>By invitation only</i>