FINAL PROGRAM

DATE	TIME	SESSION
15 June 2022	09:00-09:05	**Welcome to ESM 2022, Staffan Strömblad**
	09:05-12:00	**SESSION I: Systems Biology of Cancer.** Chair: Sven Nelander
	09:05-09:35	**Andrew E. Teschendorff, Chinese Academy of Sciences, Shanghai, China:** *Single-cell entropy identifies preneoplastic cells of high stemness and cancer risk* (online lecture)
	09:40-10:10	**Sven Nelander, Uppsala University, Sweden:** *Charting the invasion routes of glioblastoma and their patient-specific vulnerabilities*
	10:15-10:45	**COFFEE BREAK**
	10:45-11:15	**Janne Lehtiö, Karolinska Institutet, Sweden:** *Connecting cancer genotype with molecular phenotype with proteogenomics*
	11:20-11:35	Short talk: **David Mauduit, KU Leuven, Belgium:** *Deciphering and exploiting the enhancer regulatory code in melanoma states*
	11:40-11:55	Short talk: **Michael Tyler, Weizmann Institute of Science, Israel:** *The Curated Cancer Cell Atlas enables a comprehensive characterisation of intra-tumour heterogeneity*
	12:00-13:00	**LUNCH**
	13:05-16:00	**SESSION II: Spatiotemporal analysis of disease models.** Chair: Staffan Strömblad
	13:05-13:35	**Garry Nolan, Stanford University, USA:** *Cancer cheats the game rules of immune-tissue schematics* (online lecture)
	13:40-14:10	**Olivier Pertz, University of Bern, Switzerland:** *Spatio-temporal MAPK signaling dynamics in breast cancer*
	14:15-14:45	**COFFEE BREAK**

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15 June 2022	14:45-15:00	Short talk: **Jianjiang Hu, Karolinska Institutet, Sweden**: *Local temporal Rac1-GTP nadirs and peaks restrict cell protrusions and retractions in migrating cancer cells*
	15:05-15:20	Short talk: **Liza Löf, Uppsala University, Sweden:** *Monitoring drug responses by signaling pathways for precision medicine*
	15:25-15:55	**Lucas Pelkmans, University of Zurich, Switzerland:** *Finding information in heterogeneity: from cellular decision making to personalized drug responses in clinical trials*
	16:00-18:00	**POSTER SESSION (incl. drinks and hors d'oeuvres)**
16 June 2022	09:00-12:00	**SESSION III: Systems Biology of Brain Disease.** Chair: Sten Linnarsson
	09:00-09:30	**Gioele La Manno, EPFL, Lausanne, Switzerland:** *A spatial lipidomics atlas of the mouse brain*
	09:35-10:05	**Jussi Taipale, University of Cambridge, UK, and Karolinska Institutet, Sweden:** *Transcriptional control of cancer cell proliferation*
	10:10-10:40	**COFFEE BREAK**
	10:40-11:10	**Ernest Arenas, Karolinska Institutet, Sweden:** *Systems biology of human midbrain development and Parkinson's disease*
	11:15-11:30	Short talk: **Victor Olariu Ahnell, Lund University, Sweden**: *3D model of the neural tube with midbrain predictions*
	11:35-11:50	Short talk 10x Genomics: **Eduardo Villablanca, Karolinska Institutet, Sweden**: *Systems approach to identifying novel therapeutic targets to treat IBD*
	11:55-13:00	**LUNCH**
	13:00-16:00	**SESSION IV: Host-pathogen interactions and responses to infection.** Chair: Ylva Ivarsson
	13:00-13:30	**Joel Selkrig, EMBL, Heidelberg, Germany:** *Global mapping of host-pathogen interactions*
	13:35-14:05	**Anna Överby, Umeå University, Sweden:** *Cellular tropisms of tick-borne flavivirus infection in mouse brains*
	14:10-14:40	**COFFEE BREAK**

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16 June 2022	14:40-15:10	**Mika Gustafsson, Linköping University, Sweden**: *Time-series multi-omic analysis for the identification of network-based models of multiple sclerosis*
	15:15-15:30	Short talk: **Ylva Ivarsson, Uppsala University, Sweden:** *Proteome-wide discovery of motif-mediated interactions in health and disease*
	15:35-15:50	Short talk: **Leandro Simonetti, Uppsala University, Sweden:** *A pan-viral atlas to the short linear motif-based hijacking of human proteins*
	18:00-	**CONFERENCE DINNER**
17 June 2022	09:00-12:00	**SESSION V: Data-driven methods for biomarker and drug discovery.** Chair: Mika Gustafsson
	09:00-09:30	**Luis Serrano, Center for Genomic Regulation, Spain:** *Translational adaptations of human viruses to the infected tissues* (online lecture)
	09:35-10:05	**Andrea Califano, Columbia University, USA:** *Systematic Elucidation and Pharmacologic Targeting of non-Oncogene Cancer Dependencies at the Single Cell Level*
	10:10-10:40	**COFFEE BREAK**
	10:40-11:10	**Sergio Baranzini, University of California, San Francisco, USA:** *Embedding of millions of electronic health records onto a biomedical knowledge graph to predict medical outcomes*
	11:15-11:30	Short talk: **Andrey Alexeyenko, Karolinska Institutet, Sweden:** *Discovery of drug response biomarkers and cancer driver genes: a deep data mining approach via network analysis*
	11:35-11:50	Short talk: **Carmen Bravo Gonzalez-Blas, KU Leuven, Belgium:** *The regulatory code of liver zonation*
	11:55-12:00	**Closing remarks, Staffan Strömblad**
	12:00-13:00	**LUNCH**

10x GENOMICS