Spatial Biology

SciLifeLab Science Summit 2024

Uppsala, October 1

SciLifeLab

Poster List

1	*The effects of acute and chronic inflammation on aortic function in Sprague-Dawley rats* **Ramsamy, Adalayne, University of the Witwatersrand**
2	*BioImage Informatics, SciLifeLab, Sweden* **Corbat, Agustin, Uppsala University**
3	*A topographic lung cell atlas reveals regional variation in cell-type specific gene programs and identifies healthy and diseased cellular neighborhoods* **Firsova, Alexandra, Stockholm University**
4	*Strained Cyclooctynes with Photocages for Subcellular 3D Photolithographic Barcoding* **Larsson, Alfred, Uppsala University**
5	*Molecular Pixelation: Spatial proteomics of single-cells by next generation sequencing* **Martinez Barrio, Alvaro, Pixelgen Technologies AB**
6	*A Comprehensive Approach for Sequential MALDI-MSI Analysis of Lipids, N-Glycans, and Peptides in Rodent and Alzheimer's Brain Tissues* **Lee, Yea Rin Olivia, Uppsala University**
7	*Spatial Transcriptomics @ NGI* **Mezger, Anja, KTH Royal Institute of Technology**
8	*NBIS - SciLifeLab Bioinformatics Platform* **Johansson, Anna, Uppsala University**
9	*Spatial metabolomics of Parkinson's Disease Dementia and Dementia with Lewy Bodies* **Nilsson, Anna, Uppsala University**
10	*Enabling high-content phenotyping in pooled CRISPR screens by in situ guide RNA readout* **Schmierer, Bernhard, Karolinska Institutet**
11	*Investigating the impact of inter-organelle interactions on axonal transport in motor neuron models of neurodegeneration* **Williams, Chloe, Umeå University**
12	*Metabolomics Platform* **Wegler, Christine, Umeå University**
13	*TissUUmaps: interactive visualization, exploration, and quality assessment of large-scale spatial omics data* **Avenel, Christophe, Uppsala University**
14	*SciLifeLab Proteomics Platform* **Fredolini, Claudia, KTH Royal Institute of Technology**
15	*Quantifying the Spatial Coherence of DNA Barcode Networks* **Fernandez Bonet, David, KTH Royal Institute of Technology**
16	*FunCoup 6: advancing functional networks across species with directed links and improved user experience* **Buzzao, Davide, Stockholm University**
17	*Spatial Proteomics Unit* **O'Roberts, Eleanor, KTH Royal Institute of Technology**
18	*Optimizing sample substrates for single-cell metabolomics* **Szombati, Eszter, Uppsala University**
19	*Clinical Genomics platform* **Berglund, Eva, Uppsala University**
20	*A Tailored Data Handling Workflow for Metabolite Profiling of Single Cells* **Friedrich, Felix, Uppsala University**
21	*A spatio-temporal atlas of human spermatogenesis based on single-cell transcriptomics and multiplex antibody imaging* **Hikmet, Feria, Uppsala University**
22	*A high-resolution, large-scale method to study the subcellular location of proteins in ciliated cells* **Bertilsson, Filippa, Uppsala University**

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23	*Multimodal imaging of oxidized cholesterol in multiple sclerosis lesions of human brain tissue* **Toth, Gabor, Uppsala University**
24	*The Cellular Molecular Imaging platform* **Blom, Hans, KTH Royal Institute of Technology**
25	*Hydrazide-based Reactive Matrices for the Sensitive Detection of Aldehydes and Ketones by MALDI MSI* **Loden, Henrik, Uppsala University**
26	*Integrative proteo-transcriptomic characterization of advanced fibrosis in chronic liver disease across etiologies* **Yang, Hong, KTH Royal Institute of Technology**
27	*Mass spectrometry imaging reveals region-specific alterations of brain lipids induced by parkinsonism and L-DOPA-induced dyskinesia* **Kaya, Ibrahim, Uppsala University**
28	*Mass Spectrometry Imaging Provides Insights Into The Fate Of Carnitine And Acylcarnitines In Ischemic Mouse Brain* **Lanekoff, Ingela, Uppsala University**
29	*Untangling the Complexity of Lewy Body Disorders Using Spatial Proteomics* **Sutevski, Iva, KTH Royal Institute of Technology**
30	*Training Hub Mission and Vision* **Jaworski, Jill, Stockholm university**
31	*InfraLife* **Lundgren Gawell, Josefin, SciLifeLab**
32	*Integrated RNA and protein profiling in the same tissue section: deciphering tumor microenvironment dynamics via automated spatial multiomics analysis* **Zaborowska, Justyna, Lunaphore**
33	*Spatial Transcriptomics As A Complete Service At The Scilifelab National Genomics Infrastructure – From Tissue To Gene Counts* **Bachmann, Jörg, Stockholm University**
34	*Implementation of spatial transcriptomics to study the murine enteric nervous system* **Phipps, Lauren, Karolinska Institutet**
35	*Single Cell Map Of The Human Ovarian Cortex: Unravelling Molecular Dynamics From Birth To Reproductive Maturity And Across Treatment Exposures* **Méar, Loren, Karolinska Institutet**
36	*Novel quantitative mass spectrometry imaging strategy using the method of standard addition* **Davidová, Lucie, Uppsala University**
37	*Computational inference reveals cancer lineages and identifies early markers of tumor invasion* **Tarbier, Marcel, Karolinska Institutet**
38	*Mapping the effect of fludarabine in leukemia cells using single-cell spatial proteomics* **Globisch, Maria, Uppsala University**
39	*The Swedish National Genomics Infrastructure (NGI)* **Hägglund, Maria, Uppsala University**
40	*Spatially mapping lipid mediator heterogeneity in pulmonary tissue using targeted mass spectrometry imaging* **Smith, Matthew James, Karolinska Institutet**
41	*Sensitivity validation to DSB signatures in XRCC4 and DNA-PKcs deficient colorectal cancer cells* **Hariri, Mehran, Uppsala University**
42	*Integration of Spatial Transcriptomics and Function in Pancreatic Disease Progression* **Dalman, Mercedes Aline Joy Petenera, University of Gothenburg**
43	*Host-pathogen interactions in the Plasmodium-infected mouse liver at spatial and single-cell resolution* **Urrutia, Miren, Stockholm University**
44	*The transcription factor LHX2 mediates and enhances BMP signaling in Medulloblastoma* **Ali, Mohamad, Uppsala University**

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45	*In situ detection and subcellular localization of 5,000 genes using Xenium Analyzer in cancer tissue samples* **Van Houts, Patrick, 10x Genomics**
46	*Met-ID: An Open-Source Software for Comprehensive Annotation of Multiple On-Tissue Chemical Modifications in MALDI-MSI* **Bjärterot, Patrik, Uppsala University**
47	*In Situ Sequencing Facility. Targeted Spatial Transcriptomics* **Spalinskas, Rapolas, Stockholm University**
48	*Quantitative Mass Spectrometry Imaging of neurotransmitters using standard addition methods* **Shariatgorji, Reza, Uppsala University**
49	*The neurophysiological effects of CBD on the regional expression of inflammatory markers and oxidative properties in a healthy rodent model* **Xhakaza, Sanelisiwe, University of the Witwatersrand**
50	*Nuclear export-based RNA velocity models to explore cellular dynamics in situ* **Marco Salas, Sergio, Stockholm University**
51	*Hidden network preserved in Slide-tags data allows reference-free spatial reconstruction* **Kolmodin Dahlberg, Simon, KTH Royal Institute of Technology**
52	*Mass spectrometry imaging identifies AAS-specific changes in monoamine neurotransmitter signaling and metabolism, together with alterations in the brain lipidome of the male rat brain* **Zelleroth, Sofia, Uppsala University**
53	*Molecular Pixelation: Spatial proteomics of single cells by next generation sequencing* **Petkov, Stefan, Pixelgen Technologies**
54	*Development of an Ultra High-Plex Antibody Panel for Spatial Phenotyping of Murine Cancer Models* **Logan, Stuart, Akoya Biosciences Inc.**
55	*Origin, structure, and composition of the spider major ampullate silk fiber revealed by genomics, proteomics, and single-cell and spatial transcriptomics* **Sonavane, Sumalata, Swedish University of Agricultural Sciences**
56	*The Live Cell Imaging core facility at KI Flemingsberg campus* *Le Guyader, Sylvie, Karolinska Institutet*
57	*Spatial profiling of RNA of insulin-producing beta cells on human biopsies and pancreatic islets* *Pereira, Teresa, Uppsala University*
58	*Activation of the NLRP3 inflammasome drives dysregulation of the heart-brain axis in chronic, systemic inflammation* *Maluleke, Tiiso, University of the Witwatersrand*
59	*Unraveling the molecular mechanisms of spider glue production: Insights from single-cell RNA sequencing and spatial transcriptomics* **Fietze, Tobias, Karolinska Institutet**
60	*Integrating in situ Proximity Ligation Assay for PD1-PDL1 interaction with multiplexed immunofluorescence imaging* **Ullman, Tony, KTH Royal Institute of Technology**
61	*Parallel data acquisition for multiplexed mass spectrometry imaging enables isobaric and isomeric resolution* **Sharma, Varun, Uppsala University**
62	*Spatial Transcriptomics in non-model organisms at NGI* **Abalo, Xesus, KTH Royal Institute of Technology**
63	*Detection of protein-protein interactions by bio-orthogonal fluorogenic proximity probes* **Torell, Andreas, Uppsala University**
64	*Chemoselective primer extension for sequencing in fixed and living cells* **Yuan, Chengxiang, Cold Spring Harbor Laboratory**
65	*Spatial omics analysis reveals immune diversity and landscape* **Kashima, Yukie, The University of Tokyo**