

Poster title	List of all authors	Presenting author	Research group leader	Primary keyword	Secondary keyword	Day	Poster number
Maternal coxsackievirus B antibodies reduce the risk of early coxsackievirus B infections – implications for preventive vaccine	Nanna Kangasmäki, Amir-Babak Sioofy-Khojine, Jussi P. Lehtonen, Leena Puustinen, Jorma Toppari, Riitta Veijola, Johanna Lempainen, Kalle Kurppa, Suvi Virtanen, Mikael Knip, Jutta Laiho, Heikki Hyöty	Nanna Kangasmäki	Heikki Hyöty	immunology	virology	Thu	1
Protease-targeted strategies against enterovirus-induced myocarditis: discovery of a 2A/3C inhibitor through FRET-based screening and a P4 medicine perspective	Kaumali Liyanaarachchilage, Vesa P. Hytönen, Amirbabak Sioofy Khojine	Kaumali Liyanaarachchilage	Heikki Hyöty	virology	molecular biology	Thu	2
Decoding prostate tumor immune dynamics through spatial transcriptome profiling	Decoding Prostate Tumor Immune Dynamics Through Spatial transcriptome Profiling	Sini Eerola	Alfonso Urbanucci	molecular biology	cancer	Thu	3
Age-associated changes in non-CpG methylation in humans	Jo Ciantar, İkra Emirbaşoğlu, Pashupati P. Mishra, Olli Raitakari, Terho Lehtimäki, Emma Raitoharju, Saara Marttila	Saara Marttila	Emma Raitoharju	molecular biology	genomics	Thu	4
BMI in early adulthood is associated with descendants' epigenetic pace of aging in three generation especially in the maternal line	Jo Ciantar, Ilari Taskinen, Saara Marttila, Virva Liski, Pashupati P Mishra, Leo-Pekka Lyytikäinen, Mika Kähönen, Olli Raitakari, Terho Lehtimäki, Ville Kivimäki, Emma Raitoharju	Emma Raitoharju	Emma Raitoharju	epidemiology	genomics	Thu	5
Grandpaternal BMI in youth associates with DNA methylation of paternal grandchildren	Jo Ciantar, Ilari Taskinen, Saara Marttila, Virva Liski, Pashupati P Mishra, Leo-Pekka Lyytikäinen, Mika Kähönen, Olli Raitakari, Terho Lehtimäki, Ville Kivimäki, Emma Raitoharju	Jo Ciantar	Emma Raitoharju	epidemiology	genomics	Thu	6
Genome-wide meta-analysis identifies genetic drivers of bile acid metabolism in intrahepatic cholestasis of pregnancy	Jaakko S Tyrmi, Juha Karjalainen, Samvida S Venkatesh, Clara Benoit-Pilven, Susanna M Lemmelä, Søren Brunak, Bitten Aagaard, Mie T Bruun, Christian Eriksen, Henrik Ullum, Ole B Pedersen, Karina Banasik, Erik Sørensen, Christina Mikkelsen, Michael Schwinn, Arni Sturluson, Sisse R Ostrowski, FinnGen, Estonian Biobank research team, DBDS Genomic Consortium, Johannes Kettunen, Henriette Svarre Nielsen, Mette Nyegaard, David Westergaard, Thorunn Rafnar, Patrick Sulem, Kari Stefansson, Triin Laisk, Taru Tukiainen, Cecilia M Lindgren, Mark Daly, Aki S Havulinna, Hannele M Laivuori	Jaakko Tyrmi	Hannele Laivuori	genomics	epidemiology	Thu	7
Genetic and epidemiological architecture of 5-alpha reductase inhibitor users	Rafeul Hasan, Vilma Lammi, Satu Strausz, Lea Urpa, Reyhane Eghtedarian, Vidal Fey, Matti Nykter, FinnGen, Hanna M. Ollila, Alfonso Urbanucci	Rafeul Hasan	Alfonso Urbanucci	genomics	epidemiology	Thu	8
How rifampicin changes the transcriptome of <i>E. coli</i> over time	MM Azevedo, AM Arsh, R Jagadeesan, and AS Ribeiro	Miguel M. Azevedo	Andre Ribeiro	genomics	bioinformatics and computational biology	Thu	9
Microbial extract as a nature exposure material reduces the need for atopic dermatitis medication	Johanna E Kalmari, Iida Mäkelä, Vesa Hytönen, Heini Huhtala, Heikki Hyöty, Olli H Laitinen, Aki Sinkkonen	Johanna Kalmari	Vesa Hytönen	autoimmune diseases	immunology	Thu	10
JAK kinases in the pathogenesis and treatment of type 1 diabetes	Vivian Kettunen, Anniina Virtanen, Heikki Hyöty, Olli Silvennoinen	Vivian Kettunen	Olli Silvennoinen	autoimmune diseases	immunology	Thu	11
X-ray microtomography enables the detection of early mucosal changes in potential celiac disease	Aino Reunamo, Sofia Kröger, Markus Hannula, Katri Lindfors, Juha Taavela, Linnea Aitokari, Laura Kivelä, Johannes Mäkyinen, Johannes Virta, Heini Huhtala, Katri Kaukinen, Jari Hyttinen, Kalle Kurppa	Aino Reunamo	Jari Hyttinen	autoimmune diseases	biomedical imaging	Thu	12
Exploring the relevance of the mechanical TME in prostate cancer	Alvar LV Saarinen, Austin D Evans, Alfonso Urbanucci, Aino Siltari, Teemu J Murtola	Alvar Saarinen	Teemu Murtola	cancer	cell and tissue models	Thu	13
Epithelial stromal interaction 1 (EPSTI1) is an epithelial modulator of chemotherapy response in colorectal cancer	Erdogan Pekcan Erkan, Emmi Hämäläinen, Julia Kolikova, Kornelia Kuc, Kalle Ojala, Meiju Kukkonen, Ismail Hermelo, Selja Koskensalo, Timo Tarvainen, Alli Leppä, Ilona Keränen, Carola Haapamäki, Essi Karjalainen, Monika Carpelan-Holmström, Laura Renkonen-Sinisalo, Laura Koskenvuo, Pauli Puolakkainen, Jukka-Pekka Mecklin, Elina Virolainen, iCAN, Matti Nykter, Lauri A. Aaltonen, Anna Lepistö, Ari Ristimäki, Toni T. Seppälä	Erdogan Pekcan Erkan	Toni T Seppälä	cancer	cell and tissue models	Thu	14
Specialist palliative care reduces the need for acute health care services in patients with nonmalignant pulmonary diseases and lung cancer: a nationwide study	Pihlaja H, Piili RP, Nuutinen M, Saarto T, Lehto JT, Carpen T	Hanna Pihlaja	Juho Lehto	cancer	clinical medicine	Thu	15
Implementation of a self-sampling into the cervical cancer screening program in Pirkanmaa region in 2024	Saara Kyllönen, Satu Saloranta, Saara Kares, Anu Mustila, Karolina Louvanto	Saara Kyllönen	Karolina Louvanto	cancer	clinical medicine	Thu	16
Trends in cervical cancer screening participation and HPV genotype distribution among young women in Finland	Pikkujämsä Hanna, Leino Aarno, Numminen Eero, Kares Saara, Kholová Ivana, Louvanto Karolina	Hanna Pikkujämsä	Karolina Louvanto	cancer	epidemiology	Thu	17
Hyperglycaemia and antidiabetic medication use as prognostic factors in ovarian cancer	Tiina Jäntti, Synnöve Staff, Aino Siltari and Teemu Murtola	Tiina Jäntti	Teemu Murtola	cancer	epidemiology	Thu	18
Cytokine induced plasticity in a prostate cancer cell line model	Thomas Cecchetto, Mikael Marttinen, Antti Kiviäho, Anni Perämäki, Karishma Sajani, Barbara Zerbato, Elina M. Lassila, Sini K. Eerola, Konsta Kukkonen, Hanna Rauhala, Tapio Visakorpi, Kirsi J. Rautajoki, Matti Nykter, Alfonso Urbanucci	Thomas Cecchetto	Alfonso Urbanucci	cancer	molecular biology	Thu	19
Analysis of colorectal cancer microenvironment in the FinCRC cohort	Iida Salonen, Kaisa Lehtomäki, Aliisa Tiihonen, Reetta Särkelä, Ivana Kholová, Masi Valkonen, Maarit Ahtiainen, Teijo Kuopio, Tiia Ilomäki, Sonja Mäntylä, Amanda Laurila, Pekka Ruusuvaara, Juha Väyrynen, Pia Österlund, Juha Kononen, Kirsi Rautajoki, Pirko-Liisa Kellokumpu-Lehtinen	Iida Salonen	Kirsi Rautajoki	cancer	immunology	Thu	20
Generation of cardiac organoids for hypertrophic cardiomyopathy (HCM) modeling	Anni Marjomaa, Martta Häiki, Katriina Aalto-Setälä	Anni Marjomaa	Katriina Aalto-Setälä	cell and tissue models	cardiovascular science	Thu	21
Engineered 3D skeletal muscle myobundles with functional vascular networks	Ella Lampela, Vilma Jokinen, Susanna Miettinen, Miina Björninen	Ella Lampela	Susanna Miettinen	cell and tissue models	bioengineering and biotechnology	Thu	22
Gluten-induced transcriptomic changes in celiac patient-derived iPSC small intestinal epithelial cells	Elsa Sundholm, Juha Kesseli, Outi Liang, Pauliina Kukkoaho, Xin Huang, Matti Nykter, Katriina Aalto-Setälä, Katri Lindfors, Francisco Barro, Kati Juuti-Uusitalo	Elsa Sundholm	Kati Juuti-Uusitalo	cell and tissue models	genomics	Thu	23

Assessing vascularization capacity and barrier properties of BBB-specific endothelial cells and pericytes	Johanna Laakkonen, Zahra Miri, Veeti Laine, Hanna Vuorenperä, Sanna Hagman, Susanna Miettinen	Johanna Laakkonen	Susanna Miettinen	cell and tissue models	bioengineering and biotechnology	Thu	24
Developing a border zone-on-chip	Katriina Taipalus, Annika Ahvenjärvi, Antti Ahola, Joose Kreutzer, Hannu Välimäki, Katriina Aalto-Setälä, Jari Hyttinen, Pasi Kallio, Mari Pekkanen-Mattila	Katriina Taipalus	Katriina Aalto-Setälä	cell and tissue models	cardiovascular science	Thu	25
Modeling hypertrophic cardiomyopathy with human heart organoids	Martta Häkli, Katriina Aalto-Setälä	Martta Häkli	Katriina Aalto-Setälä	cell and tissue models	cardiovascular science	Thu	26
POMtool: open source tool for creating population of models	Ossi Noita, Olli Ylinen, Jari Hyttinen	Ossi Noita	Jari Hyttinen	cell and tissue models	biomedical engineering	Thu	27
Heparan sulphate loss and ECM remodelling in persistent CVB-1 infection: linking proteomics to tissue vulnerability	Sanni Laurikkala, Heikki Hyöty, Amirbabak Sioofy Khojine	Sanni Laurikkala	Heikki Hyöty	cell and tissue models	virology	Thu	28
Software for multifaceted analysis of microelectrode array data	Valtteri Vuolanto, Andrey Vinogradov, Oskari Kulta, Susanna Narkilahti	Valtteri Vuolanto	Susanna Narkilahti	cell and tissue models	biomedical engineering	Thu	29
Physioxia-driven maturation of iPSC-derived hepatic cells	Siiri Suominen, Joose Kreutzer, Hannu Välimäki, Leena Viiri, Pasi Kallio, Katriina Aalto-Setälä	Siiri Suominen	Katriina Aalto-Setälä	bioengineering and biotechnology	cell and tissue models	Thu	30
Patient-derived lamin A/C mutant cardiomyocytes demonstrate altered electrophysiological characteristics and responses to hypoxia induced stress	Lönnrot Aliisa, Kuusela Elias, Kim-Poikkimäki Jiyeong, Taimen Pekka, Heliö Tiina, Kreutzer Joose, Kallio Pasi, Räsänen Esa, Pekkanen-Mattila Mari, Aalto-Setälä Katriina	Elias Kuusela	Katriina Aalto-Setälä	cardiovascular science	cell and tissue models	Thu	31
Severe genetic arrhythmia (CPVT) studied with iPSC-cardiac model derived from pediatric patients	Henna Lappi, Katriina Aalto-Setälä	Henna Lappi	Katriina Aalto-Setälä	cardiovascular science	cell and tissue models	Thu	32
Microscopic degeneration in ascending aortic aneurysms: comparative analysis by anatomical location	Tero Halmesmäki, Ari Mennander, Timo Paavonen, Ivana Kholová	Tero Halmesmäki	Ivana Kholová	cardiovascular science	surgery	Thu	33
External pressure-induced stenosis for simulating hemodynamic changes resembling deep vein thrombosis	Sami Maja, Nuutti Korhonen, Anna Karhu, Roni Ahola, Antti Vehkaoja	Sami Maja	Antti Vehkaoja	cardiovascular science	biomedical engineering	Thu	34
“Metricize” the performance of cell-to-cell communication channels with Deep Learning approach	Minh Nguyen, Aapo Tervonen, Soile Nymark, Jyrki Nummenmaa, Huy Tran	Minh D Nguyen	Huy Tran	bioinformatics and computational biology	biomedical engineering	Thu	35
Towards the integration of in-silico cardiovascular system, vessel and electro-chemo-mechanical smooth muscle cell models	Jose Suihkonen, Francesca Menna, Nicole Anderton, Joan Duprez, Jussi T Koivumaki, Virginie Le Rolle, and Jari Hyttinen	Nicole Anderton	Jari Hyttinen	bioinformatics and computational biology	biomedical engineering	Thu	36
First steps toward the integration of an <i>in-silico</i> electro-chemo-mechanical smooth muscle cell and a cardiovascular system model	Nicole Anderton, Francesca Menna, Joan Duprez, Jose Suihkonen, Jussi T Koivumaki, Virginie Le Rolle, and Jari Hyttinen	Nicole Anderton	Jari Hyttinen	bioinformatics and computational biology	biomedical engineering	Thu	37
Rest, activate, repeat: ionic dynamics in stimulated and quiescent cardiomyocytes <i>in silico</i>	Paavo Virtanen, Huy Tran, Jussi Koivumäki	Paavo Virtanen	Jari Hyttinen	bioinformatics and computational biology	cardiovascular science	Thu	38
Comparative assessment of advanced hiPSC-derived liver organoid protocols for metabolic disease modeling	Roza Parveen, Mina Aminlou, Siiri Suominen, Katriina Aalto-Setälä	Roza Parveen	Katriina Aalto-Setälä	biomedicine	cell and tissue models	Thu	39
TRPA1 regulates cytokine storm signaling and chemokine expression in response to acute antiviral-type inflammation in vitro.	Leevi Halonen, Samu Luostarinen, Antti Pemmari, Eeva Moilanen	Leevi Halonen	Eeva Moilanen	pharmacology	biomedicine	Thu	40
Lingonberry supplementation prevents high-fat diet-induced low-grade inflammation and gut microbiota dysbiosis: an experimental dose-response study	Iiro Piippo, Antti Pemmari, Mari Hämäläinen, Eeva Moilanen	Iiro Piippo	Eeva Moilanen	pharmacology	nutrition	Thu	41
Three-dimensional tapered polished stem has lower periprosthetic femoral fracture risk than taper slip stems: an analysis of 6800 total hip arthroplasties from a high-volume hospital	Aleksi Aartola, Aleksi Reito, Perttu Neuvonen, Antti Eskelinen	Aleksi Aartola	Aleksi Reito	surgery	clinical medicine	Thu	42
Effect of liner geometry on jumping distance when it comes to total hip arthroplasty: as relevant as femoral head size	Mikko Pulkkanen, Perttu Neuvonen, Jose Ochoa, Jari Hyttinen, Jari Viik, Antti Eskelinen, Aleksi Reito	Mikko Pulkkanen	Aleksi Reito	surgery	surgery	Thu	43
Acute type A aortic dissection and cysts	Essi Pirskanen, Ivana Kholova, Timo Paavonen, Ari Mennander	Essi Pirskanen	Ari Mennander	surgery	cardiovascular science	Thu	44
Hypertensive disorders of pregnancy increase the risk of major adverse cardiovascular events during reproductive years	Kivioja Anna , Saarela Tanja, Tyrmi Jaakko, Jääskeläinen Tiina, Haukka Jari, Laivuori Hannele	Anna Kivioja	Hannele Laivuori	clinical medicine	epidemiology	Thu	45
General health and long-term outcomes in celiac disease patients identified through screening in a population-representative cohort: findings from a prospective study	Iida Ahonen, Kalle Kurppa, Heini Huhtala, Katri Kaukinen, Laura Kivelä, Juha Taavela	Iida Ahonen	Celiac Disease Research Center, Tampere University	clinical medicine	autoimmune diseases	Thu	46
Nationwide register-based analysis of pediatric antibiotic prescribing for acute otitis media in Finland, 2017–2022	Janina Hansas, Péter Csonka, Anna-Leena Vuorinen	Janina Hansas	Anna-Leena Vuorinen	clinical medicine	public health	Thu	47
Analysis of crypt geometry in small intestine biopsies using X-ray microtomography	Markus Hannula, Johannes Mäkynen, Farnaz Javanpour, Aino Reunamo, Katri Lindfors, Kalle Kurppa, Jari Hyttinen	Markus Hannula	Jari Hyttinen	biomedical imaging	autoimmune diseases	Thu	48
Quantitative monitoring of phototoxicity in live-cell microscopy via machine learning-based synthetic nuclear labelling	Sanni Erämies, Jenni Karttunen, Outi Paloheimo ja Teemu Ihalainen	Sanni Erämies	Teemu Ihalainen	biomedical imaging	cell and tissue models	Thu	49
Structure preserved, noise reduced: micro-CT in prostate cancer histopathology	Santiago Laguna-Castro, Teemu Tolonen, Jari Hyttinen, and Antti Kaipia	Santiago Laguna Castro	Jari Hyttinen	biomedical imaging	cancer	Thu	50
A keypoint framework for multimodal registration	Farnaz Javanpour , Antti Ahola, Markus Hannula, Reetta Sartoneva, Jari Hyttinen	Farnaz Javanpour	Jari Hyttinen	biomedical imaging	cell and tissue models	Thu	51
3D imaging of engineered heart tissues using inverted selective plane illumination microscopy	Walls Kaisla, Kulmala Lotta, Valtonen Joona, Pekkanen-Mattila Mari, Hyttinen Jari, Belay Birhanu	Kaisla Walls	Jari Hyttinen	biomedical imaging	cardiovascular science	Thu	52
A novel blue light crosslinking fibrin-hyaluronan hydrogel for vascular tissue engineering	Anastasiia Mykuliak, Milja Nekala, Jarkko Liedes, Arjen Gebraad, Austin D. Evans, Antti Eskelinen, Kirsi Kuismanen, Oommen P. Oommen, Susanna Miettinen	Anastasiia Mykuliak	Susanna Miettinen	biomaterials	cell and tissue models	Thu	53
Following long-term calcium signaling dynamics with smart photonic DR1 approach	Rittik Bhati, Heidi Peussa, Märi Isomäki, Arri Priimägi, Teemu O. Ihalainen, Soile Nymark, Huy Tran	Rittik Bhati	Huy Tran (Academy Research Fellow)	biomaterials	biomedical imaging	Thu	54
Polysaccharide gum enhanced porous biomaterials for bone tissue regeneration	Tasneem Un Nissa, Jari Hyttinen, Minna Kellomäki, Sweeta Akbari	Tasneem Un Nissa	Jari Hyttinen and Minna Kellomäki	biomaterials	biomedical engineering	Thu	55

Ascorbic acid 2-phosphate-releasing poly(trimethylene carbonate) biomaterials for pelvic organ prolapse tissue engineering	Katri Ala-Mononen, Dirk Grijpma, Saana Mustakoski, Susanna Miettinen, Reetta Sartoneva	Katri Ala-Mononen	Susanna Miettinen	biomaterials	biomedical engineering	Thu	56
Quality standard for digital therapeutics products	Alpo Värri	Alpo Värri	Mark van Gils	health informatics	biomedical engineering	Thu	57
Biomicrofabrication services provided by a staff scientist	Tomi Ryyänänen, Pasi Kallio	Tomi Ryyänänen	Pasi Kallio	biomedical engineering	cell and tissue models	Thu	58
Deep learning-based estimation of iPSC-cardiomyocyte myofibrillar structure from light microscopy	Antti Ahola, Jari Hyttinen	Antti Ahola	Jari Hyttinen	biomedical engineering	cell and tissue models	Thu	59
Bioimpedance of human liver and tumor measured in vivo from tip of biopsy needle	Sanna Halonen, Ali Ovissi, Sonja Boyd, Juho Kari, Kai Kronström, Juhani Kosunen, Hanna Laurén, Kirsti Numminen, Harri Sievänen and Jari Hyttinen	Sanna Halonen	Jari Hyttinen	biomedical engineering	clinical medicine	Thu	60
Longitudinal scalp-EEG spectral analysis of ANT-DBS in epilepsy	Elaheh Sabbaghi; Herkko Mattila; Narayan Puthanmadam Subramaniyam; Jari Hyttinen; Jukka Peltola	Narayan Puthanmadam Subramaniyam	Jukka Peltola	anatomy	neuroscience	Thu	61
Electrocardiogram markers predicting ischemic stroke after acute coronary syndrome	Matilda Hurskainen, Juho Tynkkynen, Leo-Pekka Lyytikäinen, Terho Lehtimäki, Kjell Nikus, Jussi Hernesniemi	Matilda Hurskainen	Jussi Hernesniemi	cardiovascular science	neurology	Thu	62
Comparison of platforms for 3D cocultures of neurons and adipocytes	Sini Saarimaa, Miia Juntunen, Sudipta Swarna, Susanna Narkilahti, Susanna Miettinen	Sini Saarimaa	Susanna Miettinen	cell and tissue models	bioengineering and biotechnology	Thu	63
Modelling ischemic stroke <i>in vitro</i> with human induced pluripotent stem cell derived neurons	Venla Harju, Kai Härkönen, Ulla Impola, Saara Laitinen, Susanna Narkilahti	Venla Harju	Susanna Narkilahti	cell and tissue models	neuroscience	Thu	64
Quantitative electroencephalography (EEG) measures for prediction of neurological outcome of aneurysmal subarachnoid hemorrhage (aSAH)	Fizra Khan, Heikki Kiiski, Narayan Puthanmadam Subramaniyam	Fizra Khan	Jari Hyttinen	neuroscience	biomedical engineering	Thu	65
Modeling neuroinflammation in human-derived neuronal tricultures	Iisa Tujula, Tanja Hyvärinen, Johanna Tilvis, Susanna Narkilahti, Sanna Hagman	Iisa Tujula	Sanna Hagman	neuroscience	cell and tissue models	Thu	66
Computational simulation of electrical temporal interference stimulation of a myelinated and unmyelinated neuron	Iván Perez-Torres, Annika Ahtiainen, Jarno M. A. Tanskanen, and Jari A. K. Hyttinen	Iván Perez-Torres	Jari A. K. Hyttinen	neuroscience	bioinformatics and computational biology	Thu	67
Suppressing neuronal seizure-like activity <i>in vitro</i>	Siiri Sihvonen, Oskari Kulta, Lotta Isosaari, Andrey Vinogradov, Taina Viheriälä, Pasi Kallio and Susanna Narkilahti	Siiri Sihvonen	Susanna Narkilahti	neuroscience	cell and tissue models	Thu	68
Human-specific model to study foamy microglia in multiple sclerosis	Tanja Hyvärinen, Johanna Tilvis, Lassi Virtanen, Roosa Kattelus, Sanna Hagman	Tanja Hyvärinen	Sanna Hagman	cell and tissue models	neuroscience	Thu	69
Bridging scales in astroglial calcium dynamics: from nanoprocesses to whole-cell modeling in the cerebellum	Laura Keto, Tiina Manninen	Laura Keto	Marja-Leena Linne	neuroscience	bioinformatics and computational biology	Thu	70
Exploring multicellular interactions between glioblastoma and the brain: a 3D open-top microfluidic chip model with integrated neurovascular networks	Lotta Isosaari, Tarek Gensheimer, Antti Paananen, Marjukka Pollari, Kirsi Rautajoki, Susanna Miettinen, Andries D. van der Meer2 and Susanna Narkilahti	Lotta Isosaari	Susanna Narkilahti	cell and tissue models	cancer	Thu	71
Expressions of specific human endogenous retroviruses of the HERV-K (HML-2) family are associated with activation and suppression of HLA class I genes in the brain	Arttu Autio-Kimura, Tapio Nevalainen, Kalle Keisu, Mikko Hurme	Arttu Autio-Kimura	Mikko Hurme	virology	bioinformatics and computational biology	Thu	72
Therapeutic reprogramming of glioblastoma phenotypic states using multifunctional heparin nanoparticles	Vadim Le Joncour, Austin Donnelly Evans, Camilla Bergström, Vignesh Kumar Rangasami, Sumanta Samanta, Nithiyandanan Krishnan, Yuji Teramura, Bo Nilsson, Patricia Hedenqvist, Elin Manell, Jons Hilborn, Marianne-Jensen Waern, Oommen P. Varghese, Pirjo Laakkonen, Oommen P. Oommen	Austin Donnelly Evans	Oommen P. Oommen	cancer	biomaterials	Thu	73
Presence and spatial organization of dendritic cells and T-cells in diffuse gliomas	Iida Salonen, Miina Hoikka, Laura Huhtala, Göktug Karabiyik, Aliisa Tiihonen, Hannu Haapasalo, Joonas Haapasalo, Kirsi Rautajoki	Miina Hoikka	Kirsi Rautajoki	cancer	immunology	Thu	74

Poster title	List of all authors	Presenting author	Research group leader	Primary keyword	Secondary keyword	Day	Poster number
Graphene field-effect transistors as measurement devices for in vitro neuronal activity	Vilhelmiina Hännikäinen, Kardelen Yilmaz, Timo Salpavaara, Aku Lampinen, Andreas Johansson, Mika Pettersson, Pasi Kallio, Susanna Narkilahti	Vilhelmiina Hännikäinen	Susanna Narkilahti	neurology	bioengineering and biotechnology	Fri	1
How neuronal and glial cells interact: modeling brain networks for information processing and memory	Marja-Leena Linne, Han-Jia Jiang, Jugoslava Ačimović, Tiina Manninen, Iiro Ahokainen, Jonas Stappmanns, Mikko Lehtimäki, Markus Diesmann, Sacha J. van Albada, Hans Ekkehard Plesser	Marja-Leena Linne	Marja-Leena Linne	neuroscience	bioinformatics and computational biology	Fri	2
How does metabolism influence neural activity? A comparative analysis of brain neuron models integrating metabolism	Thiago Ohno Bezerra, Ilona Mäkinen, Marja-Leena Linne, Tuomo Mäki-Marttunen	Thiago Ohno Bezerra	Marja-Leena Linne	neuroscience	bioinformatics and computational biology	Fri	3
Snapshot of reaction-diffusion simulations tools in neuroscience research	Saana Seppälä, Laura Keto, Derek Ndubuaku, Annika Mäki, Tuomo Mäki-Marttunen, Marja-Leena Linne, Tiina Manninen	Saana Seppälä	Marja-Leena Linne	neuroscience	biomedical engineering	Fri	4
Longitudinal analysis of network activity in PD-related LRRK2-mutant neurons	Fikret Emre Kapucu, Susanna Narkilahti	Fikret Emre Kapucu	Susanna Narkilahti	neuroscience	biomedicine	Fri	5
Monitoring early-stage osteoarthritis in a tissue-engineered in vitro model using near-infrared spectroscopy	Harini Karunarathna, Nithin Sadeesh, Omar Elkadi, Antti Eskelinen, Ervin Nippolainen, Susanna Miettinen, Isaac O. Afara, Arjen Gebraad	Harini Karunarathna	Susanna Miettinen	bioengineering and biotechnology	biomedicine	Fri	6
Modulating matrix remodeling via engineered fibronectin fragments	Mombeinipour M., Ek F., Rahikainen R., Turkki P., Hytönen V.	Mandana Mombeinipour	Vesa Hytönen	bioengineering and biotechnology	biomedicine	Fri	7
Human cardiac innervation-on-a-chip platform for disease modeling	Emma Pesu, Elias Kuusela, Anna-Mari Moilanen, Andrey Vinogradov, Kaisa Tornberg, Henna Lappi, Lassi Sukki, Tomi Rynnänen, Timo Salpavaara, Fikret Emre Kapucu, Pasi Kallio, Katriina Aalto-Setälä, Susanna Narkilahti	Emma Pesu	Katriina Aalto-Setälä	bioengineering and biotechnology	cardiovascular science	Fri	8
Multi-omics integration to identify biomarkers related to T1D risk in children	Erika Antola, Jake Lin, Jutta Laiho, Heikki Hyöty, Matti Nykter, HEDIMED Investigator group	Erika Antola	Matti Nykter	bioinformatics and computational biology	autoimmune dise.	Fri	9
HallmarkGraph: a cancer hallmark informed graph neural network for classifying hierarchical tumor subtypes	Qingsong Zhang, Fei Liu, Xin Lai	Xin Lai	Xin Lai	bioinformatics and computational biology	cancer	Fri	10
miREA – a network-based tool for cancer-specific miRNA-oriented enrichment analysis	Zhesi Zhang, Xin Lai	Zhesi Zhang	Xin Lai	bioinformatics and computational biology	cancer	Fri	11
Uncovering the shared lipidomic-wide markers of carotid artery plaque and metabolic dysfunction-associated fatty liver disease in non-overlapping individuals: the Young Finns study	Haniyeh Danest Doost, Terho Lehtimäki, Reija Autio, Juhani S. Koskinen, Reijo Laaksonen, Nina Mononen, Mika Kähönen, Olli Raitakari, Juha Mykkanen, Katja Pahlkala, Suvi P. Rovio, Binisha Hamal Mishra*, Pashupati Mishra	Haniyeh Danest Doost	Terho Lehtimäki	bioinformatics and computational biology	cardiovascular science	Fri	12
Prospective association of circulating inflammatory biomarkers with epigenetic ageing in the Young Finns Study	Lauri Humaloja, Saara Marttila, Emma Raitoharju, Nina Mononen, Sirpa Jalkanen, Marko Salmi, Mika Kähönen, Olli T. Raitakari, Terho Lehtimäki, Pashupati P. Mishra	Lauri Humaloja	Terho Lehtimäki	bioinformatics and computational biology	epidemiology	Fri	13
Integrating biomarkers into polygenic risk models for autism	Niina Välijä, Karoliina Salenius, Sini Thusberg, GEMMA Study, Matti Nykter, Jake Lin, Reija Autio	Niina Välijä	Matti Nykter	bioinformatics and computational biology	genomics	Fri	14
Enformer prediction performance evaluation leveraging deep learning to interpret genetic variation in prostate cancer	Waseeq Ahmad Minhas	Waseeq Ahmad Minhas	Matti Nykter	bioinformatics and computational biology	genomics	Fri	15
Simulation of astrocyte calcium dynamics in a biologically detailed neuron-astrocyte-vascular model and implementation in NEURON simulator	María Taboada Pérez, Marja-Leena Linne	María Taboada Pérez	Marja-Leena Linne	bioinformatics and computational biology	neuroscience	Fri	16
Towards multiscale brain simulations for personalized medicine: extending neuron–astroglia–vasculature in the Virtual Brain	Rok Virant, Marja-Leena Linne	Rok Virant	Marja-Leena Linne	bioinformatics and computational biology	neuroscience	Fri	17
Computational modelling of brain energy metabolism in schizophrenia	Ilona Mäkinen, Marja-Leena Linne, Tuomo Mäki-Marttunen	Ilona Mäkinen	Marja-Leena Linne	bioinformatics and computational biology	neuroscience	Fri	19
Supercomputer-assisted literature mining for predictive modeling in COVID-19 care	Antti Kallonen	Antti Kallonen	Mark van Gils	health informatics	bioinformatics and	Fri	20
Personalizing alarms for patient monitoring in hospital settings with artificial intelligence	Milla Kosonen	Milla Kosonen	Mark van Gils	health informatics	biomedical engineering	Fri	21
CircoNET: an interactive platform for multi-modal data visualization in complex networks	Liang Zhang, Xin Lai	Liang Zhang	Xin Lai	health informatics	biomedical imaging	Fri	22
Integrated decision support system for Hypertrophic cardiomyopathy stratification and disease management	Nabid Faiem, Antti Kallonen, Mark van Gils	Nabid Faiem	Mark van Gils	health informatics	biomedical imaging	Fri	23
Prognostic risk assessment of hypertrophic cardiomyopathy in the context of sarcomere gene variation: insights from multimodal phenotypic characterization using unsupervised clustering approaches	Long Dang, Prof. Mark van Gils	Long Dang	Mark van Gils	health informatics	cardiovascular science	Fri	24
Data-driven decision support for unruptured intracranial aneurysms	Iftehaz Newaz, Jeremias Tarkiainen, Mark van Gils, Juhana Frösen	Iftehaz Newaz	Mark van Gils	health informatics	neurology	Fri	25
Trustworthy impact assessment of a federated machine learning system in healthcare product development	Antti Happonen and Mark van Gils	Antti Happonen	Mark van Gils	health informatics	public health	Fri	26
Advancing research with liquid chromatography mass spectrometry (LC-MS): establishing a state-of-the-art facility at Tampere University supported by the Research Council of Finland (FIRI 2024–2026)	Lackson Kashobwe, Praveena Nukareddy, Janna Uuttu, Jaana Jurvansuu, Kirsi-Maarit Lehto	Lackson Kashobwe	Kirsi-Maarit Lehto	public health	epidemiology	Fri	27
Designing accessible leadership and management education: learning enablers and barriers among specializing doctors and dentists	Mirkka Forssell, Olli Nuutinen	Mirkka Forssell	Mirkka Forssell	public health		Fri	28
Evaluating calprotectin as novel biomarker in dermatitis herpetiformis	Olga Albó, Esko Kempainen, Kaisa Hervonen, Noora Nilsson, Katri Kaukinen, Teea Salmi, Katri Lindfors	Olga Albó	Katri Lindfors	autoimmune diseases	biomedicine	Fri	29

Field asymmetric ion mobility spectrometry measurements of human induced pluripotent stem cells for celiac HLA-haplotype detection	Anni Honkanen, Meri Mäkelä, Susanna Kaksonen, Fatima Siddique, Henna Lappi, Anton Kontunen, Katri Kaukinen, Katri Lindfors, Antti Roine, Teea Salmi, Katriina Aalto-Setälä, Kati Juuti-Uusitalo	Anni Honkanen	Kati Juuti-Uusitalo	autoimmune diseases	cell and tissue models	Fri	30
Unveiling heterogeneous clinical phenotypes from bulk transcriptomics data in dermatitis herpetiformis	Helka Kaunisto, Esko Kempainen, Teea Salmi, Päivi Saavalainen, Katarzyna Leskinen, Heli Pessa, Rebecka Ventin-Holmberg, Kaisa Hervonen, Tuire Ilus, Katri Kaukinen, Katri Lindfors	Helka Kaunisto	Katri Lindfors	autoimmune diseases	immunology	Fri	31
Metabolism at the core of inflammation-driven differentiation defect in celiac disease	Roselia Davidsson, Valeriia Dotsenko, Elina Virtanen, Markus Ojanen, Hana Hien Le, Laura Martin-Diaz, Veera Räikköläinen, Markku Mäki, Keijo Viiri	Roselia Davidsson	Keijo Viiri	immunology	autoimmune diseases	Fri	32
Development of an mRNA vaccine for tuberculosis	Anni Saralahti, Topias Isotalo, Mirja Niskanen, Martín González-Rodríguez, Laura Kummola, Maiju Junno, Susanna Valanne, Ilkka Junttila, Bernadette Saunders and Mika Rämetsä	Anni Saralahti	Mika Rämetsä	immunology	biomedicine	Fri	33
Unraveling transcriptomic landscapes in overt and potential celiac disease using spatial transcriptomics	Emilia Siukola, Helka Kaunisto, Esko Kempainen, Alina Popp, Antonio Federico, Dario Greco, Kalle Kurppa, Katri Lindfors	Emilia Siukola	Katri Lindfors	immunology	genomics	Fri	34
Pathogen type and host genotype shape mitochondrial responses to infection	Yuliya Basikhina, Laura Vesala, Tea Tuomela, Matthew K. Maasdorp, Juhana Juutila, Kari Moisio, Susanna Valanne, Mika Rämetsä, Ville Hietakangas, Tiina S. Salminen	Yuliya Basikhina	Tiina S. Salminen	immunology	genomics	Fri	35
Exploring the genetic basis of biofilm-driven antibiotic tolerance in <i>Mycobacterium marinum</i>	Emilia Lintilä, Nelli Vahvelainen, Jesse Anttila, Erika Niininen, Laura Kantanen, Milka Hammarén, Matalena Parikka	Emilia Lintilä	Matalena Parikka	immunology	molecular biology	Fri	36
The inflammasome adaptor pycard is essential for immunity against <i>Mycobacterium marinum</i> infection in adult zebrafish	Meri Uusi-Mäkelä, Sanna-Kaisa Harjula, Maiju Junno, Alina Sillanpää, Reetta Nätkin, Mirja Niskanen, Anni Saralahti, Matti Nykter, Mika Rämetsä	Maiju Junno	Mika Rämetsä	immunology	molecular biology	Fri	37
The ubiquitin-conjugating enzyme Ect2 regulates hemocyte differentiation in <i>Drosophila melanogaster</i>	Susanna Valanne, Laura Vesala, Petra Vornanen, Joanna Ciantar, Tea Tuomela, Tiina S. Salminen and Mika Rämetsä	Susanna Valanne	Mika Rämetsä	immunology	molecular biology	Fri	38
Spyforce – a molecular force sensor series for tissue tension imaging	Ek, F., Martínez-Martin, I., Mykuliak, V.V., Athale, M., Ouala, S., Tapia-Rojo, R., Hytönen, V.P. and Rahikainen, R.	Frans Ek	Rolle Rahikainen	molecular biology	bioengineering and	Fri	39
Phosphorylated LCK as a response biomarker for Dasatinib sensitivity in T-ALL	Jonne Nieminen, Charlotte Rinne, Laura Oksa, Merja Heinäniemi, Olli Lohi	Jonne Nieminen	Olli Lohi	molecular biology	biomedicine	Fri	40
SRSF3 shapes the structure and processing of miR-17-92 cluster in colorectal cancer	Jenni Rapakko, Madara Ratnadiwakara, Mohamed NM Bahrudeen, Erika Aikio, Piia Takabe, Rebekah M Engel, Thierry Jardé, Paul J McMurrick, Helen E Abud, Minna-Liisa Änkö	Jenni Rapakko	Minna-Liisa Änkö	molecular biology	cancer	Fri	41
Studying the evolutionary conservation of fish avidins and the role of zebrafish in development and microbial resistance of zebrafish	Anni K. Saralahti, Markus J.T. Ojanen, Matalena Parikka, Mika Rämetsä, Vesa P. Hytönen	Markus Ojanen	Vesa Hytönen	molecular biology	immunology	Fri	42
Fluorescence imaging as a tool to study the 3D structure of <i>in vitro</i> and <i>ex vivo</i> mycobacterial biofilms	Nelli Vahvelainen, Leena-Maija Vanha-aho, Milka Hammarén, Aleksandra Svorjova, Alina Sillanpää, Saara Lehmusvaara, Matalena Parikka	Nelli Vahvelainen	Matalena Parikka	molecular biology	immunology	Fri	43
Optimizing bacterial protein extraction from coronary artery samples for in-depth proteome analysis	K Musta, M Ojanen, M Stensland, J Alkula, K Sundström, T Lehtimäki, P.J. Karhunen, TA Nyman and V Hytönen	Kirsikka Musta	Terho Lehtimäki	cardiovascular science	molecular biology	Fri	44
Impact of gestational hypertension duration on long-term cardiovascular disease risk	Nina Keitaanpää, Jaakko Tyrmä, Elli Toivonen, Heini Huhtala, FinnGen, Tiina Jääskeläinen, Hannele Laivuori	Nina Keitaanpää	Hannele Laivuori	clinical medicine	cardiovascular sci	Fri	45
Relation of changes in PEF and FEV1 during bronchodilation in adults	Leon L. Csonka, Antti Tikkakoski, Liisa Vuotari, Jussi Karjalainen, Lauri Lehtimäki	Leon L. Csonka	Lauri Lehtimäki	clinical medicine	physiology	Fri	46
Clinical Frailty Scale as a tool to predict outcomes after lower extremity amputation among patients with diabetes	Hilma Tillqvist, Miska Vuorlaakso, Mika Helminen, Juha Kiiski, Ilkka Kaartinen	Hilma Tillqvist	Miska Vuorlaakso	clinical medicine	surgery	Fri	47
Combinatorial study of vorapaxar and phenyl derivative targeting GPR17 receptor in glioblastoma multiforme cells	Sana Kari, Parthiban Marimuthu Akshaya Murugesan, Meenakshisundaram Kandhavelu	Sana Kari	Meenakshisundaram Kandhavelu	pharmacology	cancer	Fri	48
Smart hospitals as data hubs for next-generation pharmacovigilance	Francesco De Pretis; Mark van Gils; Markus Varheenmaa; Miia Tiihonen; Markus M. Forsberg	Francesco De Pretis	Mark van Gils	pharmacology	public health	Fri	49
Wastewater surveillance of the human virome in Finland during the COVID-19 pandemic (2020–2021)	Sipponen Eevi, Lepola Tero, Lehto Kirsi-Maarit, Jurvansuu Jaana and Oikarinen Sami	Eevi Sipponen	Oikarinen Sami	epidemiology	public health	Fri	50
More begets more: patient heterogeneity and prior cancer burden as an independent risk factor in Lynch syndrome	Kalle E. Hokkanen, Joni Panula, Kalle Ojala, Toni T. Seppälä, Prospective Lynch Syndrome Database Collaborators	Kalle E. Hokkanen	Toni Seppälä	epidemiology	cancer	Fri	51
Characterizing genetic and structural variants in opsin genes associated with color vision deficiency using ultra-long nanopore sequencing	Olivia E. Lilja, Michael P. Backlund, Jussi Tiihonen, Harri Kangas, Kati Donner, Petri Ala-Laurila, Joni A. Turunen	Olivia Lilja	Soile Nymark	genomics	molecular biology	Fri	52
Chemical targeting of epigenetic vulnerabilities in atypical teratoid/rhabdoid tumors	Göktuğ Karabiyik, Laura Huhtala, Kirsi Rautajoki	Göktuğ Karabiyik	Kirsi Rautajoki	cancer	molecular biology	Fri	53
Functional characterization of ACSL4 in ETV6::RUNX1-positive B-cell acute lymphoblastic leukemia	Iiris Leino, Laura Oksa, Merja Heinäniemi, Olli Lohi	Iiris Leino	Olli Lohi	cancer	molecular biology	Fri	54
Single nucleus level investigation of epigenetic regulation and neurodevelopmental processes in atypical teratoid rhabdoid tumors	Huhtala, L., Karabiyik, G., Annala, M., Mäkelä, H., Hyvärinen, T., Marttinen, M., Nykter, M., Narkilahti, S., Rautajoki, K. J.	Laura Huhtala	Kirsi Rautajoki	cancer	molecular biology	Fri	55
CD4+ T-cells promote the survival of prostate cancer cells in culture	Karishma Sajani, Mahmudul Tanvir, Idun Dale Rein , Sini Eerola, Konsta Kukkonen, Hanna Rauhalä, Tapio Visakorpi, Alfonso Urbanucci	Karishma Sajani	Alfonso Urbanucci	cancer	immunology	Fri	56
DNA methylation-based regulation and neuro-developmental trajectories of central nervous system tumors	L. Huhtala, A. Hartewig, M.. Pekkarinen, M. Mohammadlou, J. Kesseli, M. Nykter, K. J. Rautajoki	Anja Hartewig	Kirsi Rautajoki	cancer	bioinformatics and computational biology	Fri	57
Machine learning based classification of meningiomas to clinically relevant molecular subtypes using methylation profiling	Tomi Viitanen, Juha Kesseli, Elaheh Moradi, Kirsi Rautajoki	Tomi Viitanen	Kirsi Rautajoki	cancer	bioinformatics and computational biology	Fri	58
PCaKG - a prostate cancer knowledge graph	Tuulikki Suomela, Xin Lai	Tuulikki Suomela	Xin Lai	cancer	bioinformatics and computational biology	Fri	59
Investigating subtype-specific migration of patient-derived glioma cells in 3D matrix models	Uzma Hasan, Göktuğ Karabiyik, Lotta Isosaari, Joonas Haapasalo, Kirsi Rautajoki, Susanna Narkilahti	Uzma Hasan	Susanna Narkilahti	cancer	biomedical engineering	Fri	60
Tumor microenvironment and molecular signatures underlying staging transitions in colorectal cancer	Tiia Nikupaavola, EmmiHämäläinen, Juha Väyrynen, Erdogan Peckan Erkan, Toni T. Seppälä	Tiia Nikupaavola	Toni T. Seppälä	cancer	molecular biology	Fri	61
Asymmetric coalescence of microbubbles subjected to ultrasound	Viivi-Maaria Ulenius, Craig S. Carlson, Nicole Anderton, Momoka Yamasaku, Mamoru Hashimoto, Nobuki Kudo, Michiel Postema	Viivi-Maaria Ulenius	Michiel Postema	biomedical imaging	biomedical engineering	Fri	62

A setup dedicated to measuring acoustic attenuation through artificial bone matching layers	Eedit Koivukangas, Sofia Voimanen, Nonna Nurmi, Antonia Ressler, Michiel Postema	Eedit Koivukangas	Michiel Postema	biomedical imaging	biomaterials	Fri	63
Thiol–ene click chemistry enables low-temperature gelation of norbornene-functionalized gelatin and PEG-thiol hydrogel	Heidi Vänskä, Vijay Singh Parihar, Minna Kellomäki	Heidi Vänskä	Minna Kellomäki	biomaterials	biomedical engineering	Fri	64
Investigating the role of S53P4 bioactive glass in osteogenic differentiation of 3D bioprinted human bone marrow stem/stromal cells with animal-free bioinks	Kati Rinnekari, Roope Ohlsbom, Kartikeya Dixit, Karoliina Hopia, Paula Puistola, Anni Möörö, Jonathan Massera, Janne T. Koivisto, Susanna Miettinen	Kati Rinnekari	Susanna Miettinen	biomaterials	biomedical engineering	Fri	65
Photocrosslinkable graphene-enhanced biomaterial inks for improved printability and structural fidelity	Shambhavee Annurakshita, Hatai Jongprasitkul, Minna Kellomäki, Vijay Singh Parihar	Shambhavee Annurakshita	Minna Kellomäki	biomaterials	biomedical engineering	Fri	66
Laser induced graphene (LIG) based stretchable antenna	Ali Raza, Leena Ukkonen, Naveen Tiwari	Ali Raza	Leena Ukkonen	biomedical engineering	biomaterials	Fri	67
Robustness of self-healing passive UHF RFID tags to mechanical damage: toward skin-like electronics	Muhammad Usama Javed, Minna Hakala, Jarkko Tolvanen, Toni Björninen, Jari Juuti, Nikta Pournoori, Leena Ukkonen	Muhammad Usama Javed	Leena Ukkonen	biomedical engineering	biomaterials	Fri	68
Self-healing UHF RFID tag antennas: the concept and first results with a slot-type antenna	Nikta Pournoori, Jarkko Tolvanen, Toni Björninen, Mari Rocham, Jari Hannu, Lauri Sydänheimo, Jari Juuti, and Leena Ukkonen	Nikta Pournoori	Leena Ukkonen	biomedical engineering	biomaterials	Fri	69
Development of equivalent circuit model for UHF RFID IC and its validation with self-healing elastomer RFID tags	Ramin Heydarzadeh Azar, Nikta Pournoori, Toni Björninen, Leena Ukkonen	Ramin Heydarzadeh Azar	Leena Ukkonen	biomedical engineering	biomaterials	Fri	70
Development of an explainable-AI enabled decision support system for improved risk assessment of atrial fibrillation in cardiac patients during hospital stay	Miriana C. Torquati, Matteo Bulloni, Pedro A. Moreno-Sánchez, Antti Kallonen, Antti Vehkaoja, Leo-Pekka Lyytikäinen, Mark van Gils	Miriana Carla Torquati	Mark van Gils	biomedical engineering	cardiovascular science	Fri	71
Non-contact impedance measurement to assess kidney degradation in real-time	Jarno M. A. Tanskanen, Mari Lehti-Polojärvi, Annika Ahtiainen, Ilmari Tamminen, Jari A. K. Hyttinen	Jarno M. A. Tanskanen	Jari Hyttinen	biomedical engineering	cell and tissue mo	Fri	72
Multiclass motor imagery EEG classification pipeline using a spiking neural network	Praveen Dedigamage, Marja-Leena Linne, Tuomo Mäki-Marttunen	Praveen Dedigamage	Marja-Leena Linne	biomedical engineering	neuroscience	Fri	73