BioCity Announcement 16/2023

This week

* Cancer Research Seminar, April 17th at 15:00
* MBC Bioinformatics Consultation, April 18th at 10:00
* InFLAMES Seminar, April 19th at 14:15
* SomaScan Assay Seminar, April 21st at 14:00

Next week

* INITIALISE Minisymposium, April 26th at 08:30
* Infections and Immunity Seminar, April 26th at 11:15, Pulliainen
* Frontiers of Science, April 27th at 12:00, Sheltzer
* IPP Seminar, April 28th at 13:00, Lehtiniemi and Velasco

In near future

* Start-Ups Rising from Academia, May 8th at 13:30
* FICAN West Science Day, May 9th at 09:00
* InFLAMES Corporate Corner, May 11th at 11:45
* Studia Generalia: Honorary Doctors of the Faculty of Medicine, May 25th at 09:15

Open positions

* Postdoctoral Researcher / Project Researcher

Save the Date

* 49th Annual Meeting and Summer School of the Scandinavian Society for Immunology, June 4th–7th
* 2nd FinnBrain International Congress on Prenatal and Early Life Stress, June 8th – 9th
* 2nd Nordic Conference on Personalized Medicine (NORPM2023), June 14th-16th
* 32nd BioCity Symposium, August 24th–25th
* Finnish-Japanese Immunology Symposium in Turku, August 29th–30th

Links to recruitment pages

Turku BioNet Seminar Calendar
Kiinamyllyn viikkokalenteri
PGE Course Calendar

Cancer Research Seminar

April 17th at 15:00
Hybrid event
Haartman hall, T-sairaala / Zoom

Syövälle altistavat harvinaissairaudet – Neurofibromatoosi

Puheenjohtaja Maria Sundvall

15.00 Professori Sirkku Peltonen – Neurofibromatoosin kliininen diagnoosi ja seuranta
15.35 Dosentti, erikoislääkäri Maria Haanpää – Neurofibromatoosin geenitutkimukset ja ERN

Genturis
15.55 Dosentti, erikoislääkäri Pilvi Riihilä – Tyypin 1 neurofibromatoosipotilaan seuranta Tyksissä
16.10 -16.30 Kysymyksiä ja keskustelua

Zoom ID: 692 0798 1823
Passcode: 646152

MBC Bioinformatics Consultation

April 18th at 10–12
On-site event / Virtual event
Medisiina-D, 5th floor meeting spaces / Zoom

Open bioinformatics consultation sessions are organized regularly on-site (BioCity and Medisiina-D) and in Zoom. Feel free to pop in without reservation and ask about bioinformatics, experimental design and data analysis. Medical Bioinformatics Centre organizes the Consultation sessions under the Biocenter Finland Bioinformatics platform and they are open to all academic researchers.

All discussions are private and you may wait for your turn in the zoom waiting room or in the lobby near the meeting room.

Join the Zoom: https://utu.zoom.us/j/63674596027

Full schedule for the spring: https://elolab.utu.fi/mbc-bioinformatics-consultation/
Please note that last minute changes to the schedule are possible and will be updated on this website.

Read more about MBC and the training and support options available: https://elolab.utu.fi

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InFLAMES Seminar

April 19th at 14:14
On-site event
Arje Scheinin auditorium, Dentalia

Welcome to the InFLAMES Flagship seminar. Just like the last time, the seminar is in Arje Scheinin lecture hall, Dentalia building, at 14:15. Coffee, tea, smoothies and pulla will be served during the event.

Programme

14:15 Brief update on topical issues, Academician **Sirpa Jalkanen**, InFLAMES Flagship
14:30 Eureka! Innovation insights, Research Manager **Jarkko Koivunen**, InFLAMES Flagship
14:45 Ubiquitin, caspases and flies - Molecular mechanisms of inflammation, Senior University Lecturer **Annika Meinander**, Åbo Akademi University
15:05 Coffee break and networking

15:20 Introduction to PI's Research, Head of Research **Eleanor Coffey**, Åbo Akademi University
15:40 Introduction to PI's Research, InFLAMES PI **Janne Leivo**, University of Turku

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SomaScan Assay Seminar

April 21st at 14:00
On-site event
Memdisiina B304

You are warmly welcome to join Introduction to SomaScan Assay technology for high multiplex protein analysis by **Jouni Rantanen**, Sr Sales Manager at SomaLogic Inc. in Medisiina B304 on 21st of April at 14:00-14:30.

SomaScan assay offers analysis of up to 7000 proteins from single samples. Their technology offers the largest panel of analytes from a small sample volume allowing you to find out biomarkers, find out the mechanism of action or follow the treatment response as an example.

Why you should join and what can SomaScan® Assay offer you:

- Most proteins: 7000 from 55µl sample
- Most precise, median CVs of 5% across batches and over time
- Most sensitive, 10 log dynamic range
- Greatest degree of orthogonal validation (4984 reagents confirmed)
- Largest number of proteogenomic associations (2400 cis-pQTLs)
- Only proteomic platform with validated predictive test used in healthcare

More information from the event from Juho-Antti Mäkelä (jasmak@utu.fi)

INITIALISE Minisymposium

April 26th at 8:30
President Auditorium, BioCity
Flyer

INITIALISE is a new EU-funded project that aims to elucidate how exposures and the genome impact gut microbiome, host immune system and metabolism, and how the interplay of these factors impact life-course health. INITIALISE aims to define the role of immune system maturation as a mediator between exposures and life-course health.

Register latest April 17th at https://link.webropolsurveys.com/S/A2E98F4614DA0061

Program
08.30 Coffee
08.50 Welcome, Matej Oresic & Riitta Lahesmaa
09.00 Alexandra Zhernakova, University of Groningen: Development of gut microbiota during the first year of life
09.40 Paul Fowler, University of Aberdeen: A SAFeR way to understand fetal human exposure risks

10.20 Tuulia Hyötyläinen, Örebro University: Metabolic signatures of exposome in early life
11.00 Lunch
12.00 Johnny Ludvigsson, Linköping University: Some previous and ongoing “INITIALISE-related” studies based on ABIS
12.40 Eric Triplett, University of Florida: Insights from ABIS as a platform to prospectively study drivers of autoimmune diseases and neurocognitive disorders: emphasis on the microbiome and metabolites
13.20 Mikael Knip, University of Helsinki: Heterogeneity of type 1 diabetes
14.00 Coffee
14.20 Qiushui He, University of Turku: Waning of pertussis vaccine-induced immunity and maternal immunization
15.00 Olli Raitakari, University of Turku: Introduction to the Cardiovascular Risk in Young Finns Study
15.40 Closing, Matej Oresic

Organised by INITIALIZE, InFLAMES, MIST, IMMUNOCAP, Turku Bioscience Centre

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Infections and Immunity Seminar

April 26th at 11:15
Hybrid event
Lauren 1 / Zoom

Arto Pulliainen
Molecular mechanisms of bacterial pathogen-host cell interaction

Zoom: https://utu.zoom.us/j/67311220029

Frontiers of Science

April 27th at 12:00
on-site event
Pha1 auditorium, Pharmacity
Spring 2023 program

Prof. Jason Sheltzer, Yale School of Medicine, USA
Mischaracterized anti-cancer agents and their true targets
Host: Jukka Westermarck (jukwes@utu.fi)

Coffee and sandwich served at 11:45

Six students and early-career postdocs are welcome to **have a lunch in restaurant Mauno and discuss with Prof. Sheltzer** after the seminar. This is a great possibility to learn hosting skills in friendly environment and create connections for future. Every student are welcome to join, in spite of which research group they belong to. BioCity Turku will offer the lunch.

If you got interested, please send an email to biocityturku@bioscience.fi

The Sheltzer Lab studies the genetic changes that drive cancer progression and cause developmental disabilities. The group is particularly interested in a condition called aneuploidy – a state in which cells gain or lose whole chromosomes. Aneuploidy is found in more than 90% of human tumors and is the most common cause of miscarriage and intellectual disability, but its effects on cell physiology are poorly understood. We apply a variety of complementary technologies, including chromosome engineering, CRISPR/Cas9 mutagenesis, and single cell sequencing, in order to develop new ways to model aneuploidy and to better understand its cellular and organismal consequences. The genetic alterations that occur during tumorigenesis re-wire the underlying architecture of cancer cells and create certain cancer "dependencies": genes and pathways that are required for cancer cell growth but that are dispensable in normal tissue. Drugs that inhibit the function of a cancer dependency can serve as potent therapeutic agents. Using CRISPR/Cas9, the Sheltzer Lab is working to identify novel cancer dependencies, and to improve the characterization of the drugs that target them.

Selected publications

Schukken KM, Sheltzer JM. 2022. Extensive protein dosage compensation in aneuploid human cancers. Genome Res. 32:1254-1270

Smith JC, Sheltzer JM. 2022. Genome-wide identification and analysis of prognostic features in human cancers. Cell Rep. 38:110569

Chen WC, Zhou J, Sheltzer JM, Kinney JB, McCandlish DM. 2021. Field-theoretic density estimation for biological sequence space with applications to 5' splice site diversity and aneuploidy in cancer. Proc Natl Acad Sci U S A. 118:e2025782118

Vasudevan A, Schukken KM, Sausville EL, Girish V, Adebambo OA, Sheltzer JM. 2021. Aneuploidy as a promoter and suppressor of malignant growth. Nat Rev Cancer. 21:89-103

Lin A, Sheltzer JM. 2020. Discovering and validating cancer genetic dependencies: approaches and pitfalls. Nat Rev Genet. 21:671-682

Smith JC, Sheltzer JM. 2018. Systematic identification of mutations and copy number alterations associated with cancer patient prognosis. Elife. 7:e39217

General information

- You can download all spring 2023 FoS-seminars in your calendar from here: https://seafile.utu.fi/d/4a0b831f23ef420786b0/
- Registration is not needed for the on-site seminars
- Participation list is circulated in the audience

- If you are a student and later wish to get a certificate of attendance from the Frontier of Science seminars, please print out this seminar diary and after the seminar ask the BioCity coordinator to sign it
- Please note that any audio or video recording of the seminars is strictly forbidden.

IPP Seminar

April 28th at 13:00
Virtual event in Zoom

Tiina Lehtiniemi, MSc (NK)
Chromatoid body and the male germ cell transcriptome

Inmaculada Velasco, PhD, University of Washington, USA
Unraveling the role of KNDy neurons-derived kisspeptins: fertility and gonadotropin pulsatility implications

Chair: Anja Hjelt

Zoom: https://utu.zoom.us/j/62415869446

Bimonthly IPP seminar series covers the diversity of biomedical/medical research performed in Integrative Physiology and Pharmacology research unit plus interesting talks by visitors from national and international research collaboration networks.

Start-Ups Rising from Academia

May 8th at 13:30
On-site event
Workshop meeting room, Joki Innovation Cenre 3rd floor

Did you come up with an excellent tech idea but you wonder how to take the next steps?
Do you want to meet like-minded scientists and get motivation for your innovative work?
Have you heard about Entrepreneurial Hub Konttori?
Are you interested in listening (success)stories from the spinoffs rising from Turku academia?

Come and join this Thematics TeamUp networking event where you will hear how to succeed in the startup world and to get motivation and gentle push for taking the big leap towards entrepreneurship. You will have the opportunity to exchange ideas and to find people who can support you on your startup path. Join us to network and get invaluable insights into the latest developments.

The program will be updated once we get more start-ups abroad!

Program

13:30 Mix and Mingle with snacks and drinks

14:00 Welcome words
Jaakko Järvi, FTDS chair
Jyrki Heino, HDDD chair

14:10 Key-note talk: The story of CardioSignal - Transforming science into health tech business
Mikko Pänkäälä, Precordior Oy
14:30 Q&A

14:40 Support and motivation for researchers with great ideas
Marjo Pihlavisto, UTU support services for research based spin-offs
David Oliva, TUAS approach to launch innovations
Tom Palenius, Turku Business Region
15:10 Q&A

15:20 Five-minute talks by spin-offs raising from Turku academia
Henri Muurimaa, Eduten Ltd
Isabella Pönkkä and **Nellie Inkinen**, Pure LuminescenceTechnologies Oy

15:40 Q&A

15:50 Mix and mingle with snacks and drinks
16:30 Event ends

Register to the event by Wednesday 3 May
https://link.webropolsurveys.com/S/EC946220AAA11D29

Final program and up-to-date information from
https://www.utu.fi/en/research/thematic-collaborations-in-research/team-up/start-ups-rising-from-academia

Welcome!

The event is hosted by Future Technologies and Digital Society (FTDS) and Health, Diagnostics and Drug Develepment (HDDD) strategic profiles of the University of Turku together with Health Campus Turku.

FICAN West Science Day

May 9th at 09:00
On-site event
Argentum, Aurum, Henrikinkatu 2

The 1st FICAN West Science Day – Co-operation in translational cancer research

Invited speakers

Bruno Sainz, Department of Biochemistry, Universidad Autónoma de Madrid (UAM), Department of Cancer Biology, Instituto de Investigaciones Biomédicas Alberto Sols CSIC-UAM, Madrid, Spain
Jukka Westermarck, Turku Bioscience Centre, University of Turku and Åbo Akademi, Institute of Biomedicine, University of Turku
Kari Kurppa, MediCity Research Laboratory, Institute of Biomedicine, University of Turku
Janne Leivo, Department of Life Technologies, University of Turku
Peter Boström, Department of Urology, Turku University Hospital
Johanna Schleutker, Institute of Biomedicine, University of Turku, and Department of Genomics, Turku University Hospital
Maija Hollmén, Medicity Research Laboratory and InFLAMES Flagship, University of Turku
Satu Mustjoki, Department of Clinical Chemistry and Hematology, University of Helsinki, and HUS Comprehensive Cancer Center

Registration by April 27:
https://link.webropol.com/s/FICANWestScienceDay2023

Take a look at the program of the event:
https://biocityturku.fi/wp-content/uploads/2023/04/v050423-Program-FICAN-West-Science-Day.pdf

The training has been applied for eligibility in PhD doctoral studies and medical doctor specializing education (Kirurgia / runkokoulutus, Kliininen hematologia, Radiologia, Sisätaudit / eriytyvä koulutus, Geriatria, Kliininen farmakologia ja lääkehoito, Korva,- nenä- ja kurkkutaudit, Neurokirurgia, Patologia, Sisätaudit / runkokoulutus, Syöpätaudit, Yleiskirurgia, Endokrinologia, Ihotaudit ja allergologia, Neurologia, Perinnöllisyyslääketiede, Urologia, Yleislääketiede) at the University of Turku.

InFLAMES Corporate Corner

May 11th at 11:45
On-site event
Cave Theatre, Visitor and Innovation Centre Joki

Welcome to the InFLAMES Research Flagship's Corporate Corner titled *Novel Technologies to Improve Human Health* on Thursday May 11th, 2023 at 11:45–16:00. The event will be held in Cave Theatre, Visitor and Innovation Centre Joki, Lemminkäisenkatu 12b, Turku. The event starts with lunch at 11:45 and you are welcome to the networking event at Sokos Hotel Kupittaa after the official programme from 16:00.

We have a great list of speakers from InFLAMES, Gilead, Finnish Red Cross Blood Service, Brinter, Finnadvance and much more!

All interested parties are welcome.

Take a look at the detailed program and register to the event by May 3
https://inflames.utu.fi/events/inflames-corporate-corner-novel-technologies-to-improve-human-health/

Studia Generalia: Honorary Doctors of the Faculty of Medicine

May 25th at 09:15
On-site event
Alhopuro hall, Medisiina D

In connection with the Ceremonial Conferment of Doctoral Degrees at the Faculty of Medicine, Studia Generalia lectures will be organized in Medisiina D's Alhopuro hall on Thursday, 25 May from 9:15 to 11:00. Lectures will be given by the Faculty's Honorary Doctors.

Please register on 17 May at the latest: https://link.webropolsurveys.com/S/BDE3040696581E74

Coffee is available from 8.45am.

Programme

9.15 Welcome by Dean Pekka Hänninen
9.20 Professor Emeritus Mikael Knip: The unsolved puzzle of type 1 diabetes
Discussion 5 min
9.40 Professor Emeritus Björn Klinge: The link between oral and systemic health
Discussion 5 min
10.00 Professor Manuel Tena-Sempere: Connecting body weight and reproduction: Physiological basis and pathological implications
Discussion 5 min
10.20 Professor Adelaida Zabalegui: Implementation of Advanced Practice Nursing in Spain
Discussion 5 min
10.40 Chief Physician Hanna Nohynek: What did the covid-19 pandemic teach us about vaccines?
Discussion 5 min
11.00 Closing by Dean Pekka Hänninen

Postdoctoral Researcher / Project Researcher

We are opening new opportunities to join our research team investigating the mechanisms of neurological diseases. The team develops and applies optical tools (probes and actuators), imaging and lab automation instrumentation together with proteomics analyses to acquire novel biological insight. This project establishes methods for high-throughput monitoring of the integration of neurons into synaptically-connected circuits. The project builds on proteomics data and analyses with the aim to identify druggable events leading to perturbed synaptic connectivity. The impact of protein loss associated with early-stage Alzheimer's disease on the sustained integrity of the circuit is investigated.

Key Tasks and Responsibilities

- Investigating the relation between single cell signalling networks and integration into neuronal circuits in models of synaptopathies, especially Alzheimer's disease. Techniques

include fluorescent probe and actuator design and/or implementation, viral preparation and gene transfer, human and/or rat neuronal culture, adaptation of high-throughput microscopy instrumentation, data analysis pipelines as well as integration with synaptic proteomics.
- Supervision of junior researchers and collaboration with colleagues and project partners
- Documentation and reporting

Take a look at the full call text:
https://rekry.saima.fi/certiahome/open_job_view.html?did=5600&lang=en&id=000014785&jc=14

The start of employments is negotiable, preferably in May-June 2023. The position is fixed-term for 24 months (negotiable), with a possibility for extension.

Please submit your application through the online application system no later than **19.5.2023**. Kindly use a link to the online application system https://www.utu.fi/en/university/come-work-with-us/open-vacancies (job ID 14785)

In case you need help with the application process, please turn to biocityhrservices@utu.fi
For further information about the position, please don't hesitate to contact michael.courtney@utu.fi

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49th Annual Meeting and Summer School of the Scandinavian Society for Immunology

June 4th–7th
On-site event
Marina Palace Turku

The SSI2023 meeting brings together immunologists at all career stages, from PhD students to experienced senior scientists, interested in various aspects of immunology. Join us to hear the latest research from basic immunology to translational and clinical studies!

Abstract submission DL is March 13th

More information, registration and program: https://ssi2023.fi/

2nd FinnBrain International Congress on Prenatal and Early Life Stress

June 8th –9th
On-site event
Turku Boat Yard, Hevoskarintie 23, Turku, Finland

Accumulating evidence is showing that both prenatal and early postnatal stress is related to a wide variety of child outcomes. Recently also the possibility of epigenetic inheritance of stress related phenotypes across generations has been put forward. The 2nd FinnBrain International Congress covers these topics on early life stress exposure and its influences on development and health. Multidisciplinary program with interesting keynote speakers.

Registration deadline on May 5th

More information, registration and program: https://sites.utu.fi/finnbraincongress/

2nd Nordic Conference on Personalized Medicine

June 14-16
On-site event
Marina Palace Turku

The Finnish Society of Clinical Pharmacology in collaboration with the University of Turku is organizing the Second Nordic Conference on Personalized Medicine (NORPM2023) in Turku on 14-16 June 2023. The programme is covered by distinguished international experts and formed around state-of-the-art sessions focusing on research and implementation of personalised medicine.

More information, program, registration and abstract submission are available at the Conference web page at www.norpm2023.fi

Abstract deadline 31 March 2023 and early bird – registration deadline 25 April 2023.

32nd BioCity Symposium

Sculpting Tissues – cells, matrix and forces
August 24th – 25th
On-site event
Mauno Koivisto Centre, BioCity, Turku

Registration is now open until **Friday 11 August 2023, 23:59** (CET+1)
If you wish to submit poster abstract please register at latest **Friday 9 June 2023, 16:00** (CET+1)
Register to the event here, click!
Details regarding the abstracts and posters here, click!

The 32nd BioCity Symposium will explore the mechanisms regulating tissue architecture and homeostasis in biological organisms. This complex and dynamic "sculpting" process is carefully coordinated from the very beginning of life. Cells build tissues by proliferating, migrating, altering phenotype and generating a modifiable extracellular matrix (ECM).

In turn, the ECM's biochemical and biomechanical properties determine cell behaviour and cell-cell crosstalk to control gene expression and cell state and the response to injury and insult (tissue repair, fibrosis, inflammation, cancer) and therapeutic targeting. Next year's BioCity Symposium will focus on this reciprocal interplay between cells and their microenvironment to build healthy tissues, and how dysregulation ultimately leads to disease.

All latest information from: https://biocityturku.fi/biocity-symposium/

Invited speakers

Christopher Chen, The Biological Design Center; Boston University; Harvard University, US
Miki Ebisuya, European Molecular Biology Laboratory (EMBL) Barcelona, Spain
Peter Friedl, Radboud University Medical Center, Netherlands
Edouard Hannezo, Institute of Science and Technology Austria, Austria
Kairbaan Hodivala-Dilke, Barts Cancer Institute, Queen Mary University of London, UK
Daniel Krueger, Hubrecht Institute, Netherlands
Rachel Lennon, Wellcome Trust Centre for Cell-Matrix Research, UK
Alexandra Naba, University of Illinois at Chicago, USA
Erik Sahai, The Francis Crick Institute, UK
Michael Sixt, Institute of Science and Technology Austria, Austria
Fiona Watt, European Molecular Biology Organization (EMBO), Germany

Welcome!

Finnish-Japanese Immunology Symposium

August 29th–30th
On-site event
in Turku

Emerging concepts in immunology - from basic mechanisms to treating immune mediated diseases

Save the date, more details will follow later!

Links to recruitment pages

University of Turku in Finnish and in English
Ådo Akademi University in Swedish and in English
FinBioNet

If you have events you would like to add to BioCity Announcement please contact biocityturku@bioscience.fi

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