BIOCITY TURKU

Optimal platform for interdisciplinary collaboration

biocityturku.fi









Introduction

BioCity Turku is a joint organization of the University of Turku and Åbo Akademi University, supporting and coordinating life science research in the Turku region.

BioCity Turku has a key position in representing and coordinating research in bioscience both on a national and regional level. In the Turku region, BioCity Turku has a unique opportunity to support the researchers' networking between two different universities, the University Hospital, and an exceptionally active business field.









BioCity Turku organization overview

Welcome to a world of cutting-edge scientific research and innovation. BioCity Turku is a hub of excellence in the field of life sciences and technology.

Establisahed in 1989, BioCity Turku is a joint organization of the University of Turku and Åbo Akademi University, supporting and coordinating bioscience research in the Turku region.



Welcome to campus

University of Turku and Åbo Akademi University share one campus area close to the center of the city of Turku and the Aura river. Other higher education institutions, Turku Science Park companies and the Turku University Central Hospital and also the important services are found close to the campus.

The campus area is Finland's oldest university campus: as the first university in Finland, the Academy of Turku was established here in 1640. Today the area is an international home area for tens of thousands students and staff. And there is something going on each day, e.g. international conferences, seminars, workshops, science events, academic celebrations and different kinds of training and courses.









City of Turku

Turku is an international and energetic centre of growth in the Baltic Sea area. The city is known for its archipelago which, according to many people, is the most beautiful archipelago in the world.

In addition to top class selection of education and magnificent the city provides a versatile livelihood structure and good services. Multiple choices to enjoy culture and take part in sports are also available.

There are around 184 000 residents in Turku. A large proportion of Turku residents are students. In addition to residents, students and companies, Turku attracts many tourists. The city is one of the most popular travel and congress destinations in Finland.









BioCity Turku organization structure



BF Biocenter Finland

Biocenter Finland is a distributed national research infrastructure of five biocenters in six Finnish universities, where BioCity Turku represents both University of Turku and Åbo Akademi University. Biocenter Finland provides technology services to the entire Finnish research community, in academia and industry, and to a limited extent also to users abroad. All services are based on the concept of open access.

Ett Anger **Biocenter Oulu, University of Oulu Biocenter Kuopio**, **University of Eastern Finland** BF **Faculty of Medicine and** Health Technology, **Tampere University** (BF) (BF) (BF) **BioCity Turku, University** of Turku and Åbo **Akademi University** Helsinki Institute of Life Science HiLIFE, **University of Helsinki**







BioCity Turku Research Programs 2022–2026

BioCity Turku research programs strengthen the multidisciplinary and interdisciplinary research collaboration within the Turku campus.

BioCity Turku research programs are composed of several active research groups representing different research units, faculties, hospitals and/or universities.









BioMed

CellCom

Biomaterials and Medical Devices Research Program

The BioMed research program supports the basic and applied research efforts under the umbrella of biomaterials and medical devices. The goal of the BioMed program is to promote collaboration of research groups in University of Turku and Åbo Akademi University on research and education of biomaterials and medical device fields and to raise the excellence of its scientific quality. The BioMed program aims to provide a strong interactive platform to assist the researchers and students to collaborate and be exposed to broader scientific, industrial and technological communities.

Chairs: Sufyan Garoushi (<u>sufgar@utu.fi</u>) and Hongbo Zhang (<u>hongbo.zhang@abo.fi</u>)

FoS-committee representative: Hongbo Zhang (hongbo.zhang@abo.fi)

More information: https://biomaterials.utu.fi/









CellCom

CellCom

Cell Communication Research Program

The Cell Communication research program gathers researchers and clinicians from University of Turku, Åbo Akademi University, and Turku University Central Hospital with common interest in cellular signaling and communication ranging from basic mechanisms to clinical translation. The program members support each other in gaining and maintaining scientific excellence and in translating their results for the benefit of both patients and the society in large.

Chairs: Annika Meinander (<u>annika.meinander@abo.fi</u>) and Emilia Peuhu (<u>emilia.peuhu@utu.fi</u>)

FoS-committee representative: Guillaume Jaquemet (guillaume.jaquemet@abo.fi)

More information: https://biocityturku.fi/research-programs/cellcom/









CompLifeSci

Computational and molecular methodologies for life sciences

The Computational and Molecular Methods in Life Sciences (CompLifeSci) BioCity Turku research program advances research on life science methodology. The program supports networking and training within the local research community as well as industry collaborations in Turku region and thrives to facilitate timely adoption and dissemination of state-of-the art methods in the rapidly evolving life sciences.

Chairs: Leo Lahti (<u>leo.lahti@utu.fi</u>), Tiina A. Salminen (<u>tiina.salminen@abo.fi</u>) and Anne Filppula (<u>anne.filppula@abo.fi</u>) FoS-committee representative: Outi Salo-Ahen (<u>outi.salo-ahen@abo.fi</u>) Coordinator: Tuomas Borman (<u>tuomas.v.borman@utu.fi</u>) More information: <u>https://biocityturku.fi/researchprograms/complifesci/</u>



MIRP

SmartBIO

MIRP

Microbes and Immunity Research Program

MIRP is a highly multidisciplinary, translational and collaborative research program targeting the major areas of microbiology, infection immunity, and infectious diseases. MIRP includes researchers working on basic science related themes, on clinical aspects of infectious diseases, and on topics where basic science observations are translated into clinically useful practices. MIRP is likely to contribute to better knowledge of microbes and diseases caused by them, understanding of disease mechanisms in infectious diseases, and to improvement of patient care and diagnostics of infectious diseases.

Chairs: Jukka Hytönen (jukhyt@utu.fi) and Arto Pulliainen (arto.pulliainen@utu.fi)

FoS committee representative: Arto Pulliainen (arto.pulliainen@utu.fi)

More information: https://biocityturku.fi/research-programs/mirp/









MIST

The Multiverse of Immune System

The MIST research program consists of groups who are leveraging omics technologies and computational approaches to study different aspects of immune regulation. Our common goal is to achieve a more comprehensive understanding of how the immune system works in health and disease. With the MIST research program, we are advancing the next generation of multidisciplinary medical research.

Chairs: Pia Rantakari (piaranta@utu.fi), Laura Elo (laura.elo@utu.fi) and Tapio Lönnberg (<u>taplon@utu.fi</u>)

FoS Committee representatives: Pia Rantakari (piaranta@utu.fi) and Tapio Lönnberg (<u>taplon@utu.fi</u>)

More information: https://mist.utu.fi/









Field of View

Turku Biological and Medical Imaging Research Program

Field of View is a BioCity Turku research program focusing on imaging and how it can be applied in meaningful biological and medical discoveries. Field of View brings together imaging applications, methodology and analysis expertise and facilitates multi-disciplinary collaboration across different application areas and approaches within the Turku campus

Chairs: Pasi Kankaanpää (<u>pkanka@utu.fi</u>) and Tiina Saanijoki (<u>tiina.Saanijoki@utu.fi</u>)

FoS-committee representative: Pasi Kankaanpää (<u>pkanka@utu.fi</u>) and Tiina Saanijoki (<u>tiina.Saanijoki@utu.fi</u>)

More information: <u>https://www.bioimaging.fi/field-of-view/</u>











Advanced Bioresources and Smart Bioproducts

SmartBIO research program accelerates innovation in nature-inspired emerging technologies and sustainable circular bioeconomy strategies to support the transition towards a fossil-free society. SmartBIO consists of active, multidisciplinary research groups from both University of Turku and Åbo Akademi University who utilize the synergy emerging from combining basic research with applied science and engineering, as well as extensive cooperation with industry.

Chairs: Yagut Allahverdiyeva-Rinne (<u>allahve@utu.fi</u>) and Henrik Grénman (<u>henrik.grenman@abo.fi</u>)

FoS-committee representatives: Yagut Allahverdiyeva-Rinne (allahve@utu.fi) and Henrik Grénman (henrik.grenman@abo.fi)

More information: <u>https://smartbio.fi/</u>









CompLifeSci

MIRP

MIST

TREMENDO

Etiology, Prevention and Treatment of Metabolic, Endocrine and Developmental Disorders

TREMENDO is a translational research program that combines preclinical molecular and mouse modeling with human cohort studies. Our aim is to understand the mechanisms and etiology of metabolic, endocrine and developmental disorders, and to develop better means for their treatment and prevention. The focus areas include diverse endocrine tissues, hormoneregulated diseases, obesity, metabolic and cardiovascular disorders, nutrition, and early development and growth. <complex-block>

METABOLIC DISORDERS PREVENTION DEVELOPMENTAL DISORDERS MULTIGENERATIONAL EFFECTS DISEASE MODELING PRECLINICAL RESEARCH ENDOCRINE DISORDER

Chairs: Noora Kotaja (nookot@utu.fi) and Katja Pahkala (katpah@utu.fi)

FoS-committee representative: Aleksi Tornio (aleksi.tornio@utu.fi)

More information: <u>https://biocityturku.fi/research-programs/tremendo/</u>









BioCity Turku activities

BioCity Turku arranges yearly several activities to its researchers, including Frontiers of Science seminars, BioCity Symposium, Elias Tillandz publication prize nomination and Collaborative Research Funding call.









Frontiers of Science

Weekly Frontiers of Science (FoS) seminars bring BioCity Turku researchers together to listen to prominent international scientists.

The Frontiers of Science seminar series was started in 1998.

On-site on Thursdays at 12:00

Coffee and sandwich served at 11:45

BioCity Turku EVENTS

Frontiers • Science

READ MORE biocityturku.fi







Elias Tillandz Publication Prize

BioCity Symposium

Annual BioCity Symposium, a series of meetings organized since 1991, has become the most important get-together in the fields of biosciences and molecular medicine in Turku.

The symposium gathers hundreds of participants each year and offers talks from top-level international researchers.









BioCity Symposium

Elias Tillandz Publication Prize

Elias Tillandz Prize

The yearly awarded best publication prize of BioCity Turku has been named after Professor Elias Tillandz who was the first empirical life scientist in Turku.

Tillandzs' life's work was a combination of medicine and biology, and his research also aimed at new innovations in the treatment of human diseases.

The Prize is supported by Åbo Akademi Stiftelsen

BioCity Turku

Elias Tillanz Publication Prize

READ MORE <u>biocityturku.fi</u>









Collaborative Research Funding

Collaborative Research Funding is designated for researchers affiliated with BioCity Turku Research Programs. This annual call aims to support interdisciplinary initiatives that foster collaboration within the BioCity Turku community.

Funded proposals should involve a minimum of two BioCity Turku Research Programs and contribute to the broader bioscience community. Proposals may encompass training sessions or lectures, accessible to BioCity Turku researchers and students.

BioCity Turku FUNDING CALL

Collaborative Research Funding

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12





Throughout the years BioCity Turku has had the honor to host several Nobel Prize awardees, both as Frontiers of Science lecturers and BioCity Symposium speakers.



Peter J. Ratcliffe 2022



Brian K. Kobilka 2020

















Research Infrastructure











Our location

BioCity Turku Tykistökatu 6A, FI-20521, Turku

Follow us on X formerly Twitter @BioCityTurku

and order our newsletter from biocityturku@biocsience.fi

BioCity Turku, University of Turku and Åbo Akademi University



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BIOCITY TURKU BIOCITY TURKU BIOCITY TUR ACADEMIC EXCELLENCE IN LIFE SCIENCE AND MEDICINE

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University