



TURKU BIOIMAGING

NEWSLETTER



TURKU
BIOIMAGING

WELCOME TO THE DECEMBER EDITION OF THE TBI NEWSLETTER!

Turku Bioimaging (TBI) is an independent umbrella organization that coordinates imaging activities, funding, and education in Turku, Finland. TBI also provides open access services in image data analysis. In this TBI newsletter, we cover the latest TBI news and events. Sign up for the **TBI Newsletter mailing list** and follow us in social media **LinkedIn** and **X (Twitter)** to stay up to date. Happy holidays from TBI team!

RECORD FIRI FUNDING GRANTED TO FIAM NODE



We are pleased to share that the **Finnish Advance Microscopy (FiAM) Node of Euro-BioImaging** received its highest ever FIRI funding from the Academy of Finland (**FIRI 2023: roadmap research infrastructures 2021–2024**), a total of 7.2 million euros, of which 2.4 million euros to Turku. The decision can be found [here](#). TBI's Pasi Kankaanpää is the FiAM consortium director. FiAM is one of the most popular service providers in Euro-BioImaging, and it consists of the top imaging facilities in Helsinki (University of Helsinki), Turku (University of Turku & Åbo Akademi University), and Oulu (University of Oulu). With the FIRI funding, FiAM will establish an extensive set of the newest microscopy methods, capable of high-resolution 3D imaging, AI-based 3D image analysis services, and a remote access model for the green transition. All the new services are critically needed by FiAM's users and will significantly broaden the Node's scientific impact. What great news just before Christmas!

BIOCENTER FINLAND SAB 2024 EVALUATION

In December, the Biocenter Finland (BF) BioImaging platform (Helsinki, Turku, Tampere, Kuopio, and Oulu Nodes) submitted an application for its renewal to the BF Scientific Advisory Board (SAB). The SAB will conduct interviews and evaluation of the Platforms in early 2024. From Turku, BF BioImaging includes the Cell Imaging and Cytometry Core (CIC), the Laboratory of Electron Microscopy, and the TBI Operations Team. TBI also holds vice-chairmanship of the platform.



BF BIOIMAGING MEETING IN OULU

In December, Biocenter Finland BioImaging Core Personnel Meeting took place in Oulu. Representatives from Helsinki, Turku, Tampere, Kuopio and Oulu presented recent news from their sites, participated in working group discussions and had a chance to visit local imaging facilities. From Turku, the Cell Imaging and Cytometry Core and TBI Operation Team participated in the event.



Image by Teija Luoto

MSC PROGRAMME IN BIOMEDICAL IMAGING - OPEN CALL FOR APPLICATIONS IN 2024

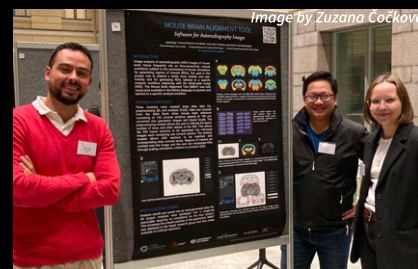
Do you want to study in a stimulating research environment in the happiest country in the world? Are you interested in studying Biomedical Imaging in the laboratories where Stefan Hell did his Nobel prize-awarded research in super-resolution microscopy? If YES, then hurry up: in January we will open the 2024 call for applications to two-year (120 ECTS) **International MSC Programme in Biomedical Imaging (BIMA)**, jointly administrated by Åbo Akademi University and the University of Turku. The interdisciplinary curriculum provides the graduates with a broad spectrum of the most recent knowledge in biomedical imaging related to many application areas in cell biology, medicine, and nanotechnology. For more information visit our [webpage](#) or contact us via bima-office@bioimaging.fi. Application period: 3-17.01.2024.



Image by Suvi Harvisalo, University of Turku

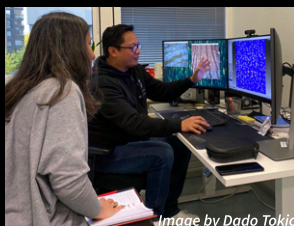
TBI AT CYTODATA 2023 SYMPOSIUM

The **CytoData 2023** symposium and hackathon took place in Helsinki in October. The goal of the symposium was to bring together the bioimage analysis community from academia and industry interested in image-based profiling of biological phenotypes. The event was organized by the Institute for Molecular Medicine Finland (Lassi Paavolainen) and the University of Turku (Pekka Ruusuvaori). The symposium consisted of workshops, scientific talks, and poster sessions. TBI Operations Team members (left to right) Dado Tokic, Junel Solis, and Irina Belaia participated in the symposium and presented TBI's services, activities, and case studies. More info is [here](#).



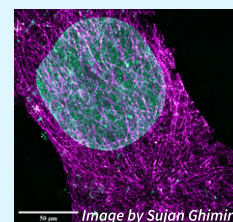
LANA ZORIC VISITED TBI

In October, TBI was honored to host Professor **Lana Zoric** from the **University of Novi Sad**, Serbia, during her one-week Erasmus exchange visit. Lana delved into our activities, immersing herself in the world of AI-driven image analysis. She learned about applying AI to image processing and shared knowledge of plant anatomy. In addition, Christoffer Lagerholm (CIC) gave a tour for Lana through the local imaging facilities. This dynamic exchange was a fun experience, and we anticipate future enriching collaborations.



EXPANSION MICROSCOPY WORKSHOP

The **Jacquemet Lab** (ÅAU), the **Mattila Lab** (UTU), and the **Hämälistö Lab** (UTU) organized the Expansion Microscopy (ExM) workshop, aimed to provide BioCity researchers with a solid foundation in the use of ExM. The event consisted of an introductory session followed by a hands-on workshop organized and run by Amna Music, Sujan Ghimire, and Marie-Catherine Laisne in November. The workshop gathered more than 30 participants who found it very interesting and useful for their projects.



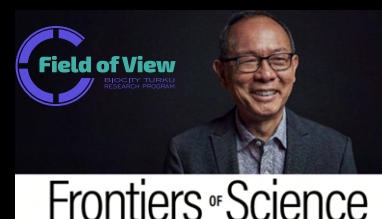
FIELD OF VIEW GUEST SEMINAR

Field of View and **BIMA** invited Professor Ludovic Galas from the **University of Rouen, PRIMACEN**, France to give a talk while he was visiting Erasmus partners at the UTU & ÅAU. Hosted by Associate Professor Diana Toivola, Professor Galas presented a lecture "Tunneling NanoTubes (TNTs): emerging, side or main route for cell-to-cell communication?", which was very well received and sparked many questions and a lively conversation among the audience. Professor Galas's visit strengthened the international collaboration between universities, providing future exchange and research opportunities to our imaging master's students and researchers.



FRONTIERS OF SCIENCE SEMINAR

In October, **Frontiers of Science (FoS) BioCity Turku** seminar was given by Professor **Alpha Yap** from the **University of Queensland**, Australia. Our host Associate Professor **Guillaume Jacquemet**, introduced Professor Alpha Yap, who then gave a fantastic talk about the adherens junction: tissue mechanics and epithelial homeostasis. This was the 2023 FoS seminar of the **Field of View** Research Program in imaging.



UPCOMING EVENTS

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| Jan 9 | BioImage Archive User Forum
BioImage Archive, online |
| Jan 18 | Image.sc LIVE! Around the world
GatherTown, organized by RMS |
| Mar 5-15 | Electron Microscopy workshops
Utrecht, Netherlands |
| Apr 9-12 | 3rd BNMI symposium
Geilo, Norway |

DEEP TISSUE IMAGING COURSE

Christoffer Lagerholm (CIC) has teamed up with the **Oxford-Zeiss Centre of Excellence, Kennedy Institute of Rheumatology, University of Oxford** to organize a joint "Practical Course on Deep Tissue Imaging" in Oxford, UK, in November. The aim of the course was to explore the use of a range of fluorescence microscopes in order to gain a better understanding of the advantages and limitations of these microscopes for imaging of thicker samples. More info is [here](#).

