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High-capacity screening site

High Throughput Biomedicine Unit (HTB), Institute for Molecular Medicine Finland – FIMM

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Prof. Päivi Tammela (Head of Unit)

„As a member of the EU-OPENSREEN network, our FIMM HTB Unit is looking forward to building exciting new collaborations and to supporting screening projects stemming from your research with our expertise and infrastructure for high-throughput screening.“

At a glance

- High-end integrated laboratory automation with versatile liquid handling and signal detection instruments
- Access to the EU-OPENSREEN European Chemical Biology Library and the European Academic Compound Library as well as to local libraries
- Cell-based and biochemical HTS projects utilizing small molecules and/or genome-wide siRNA library
- Established practices for ex vivo testing of patient samples against oncology drugs
- Visiting scientists are welcome to work with our team

Infrastructure and technical focus

- Expertise in screening project planning, assay development, and miniaturization
- HighRes Biosystems automated A-cell robotic platform for fully automated screening projects
- BeckmanCoulter Access platform and ECHOs for acoustic dispensing of liquids at nanolitre scale
- Optical, imaging, RT-qPCR and HT flow cytometry based signal detection modalities
- Data analysis tools and pipelines

Projects past and present

2020 | Drug repurposing for SARS-CoV-2 with an open high throughput drug screening platform

2020 | Multiplexed and miniaturized immunofluorescence assay for SARS-CoV2 immunity measurement with AI-assisted image analysis

Our science in selected publications

Therapeutic targeting of KSP in preclinical models of high-risk neuroblastoma
➔ [Science Translational Medicine \(2020\), 12: eaba4434](#)

Breeze: an integrated quality control and data analysis application for high-throughput drug screening
➔ [Bioinformatics \(2020\), 36, 3602-3604](#)

Network pharmacology modeling identifies synergistic Aurora B and ZAK interaction in triple-negative breast cancer
➔ [NPJ Systems Biology and Applications \(2019\), 5, 20](#)

Methods for high-throughput drug combination screening and synergy scoring.
➔ [Methods in Molecular Biology \(2018\), 1711, 351-398](#)

Further info and site-contact

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