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High-capacity screening site

University of Helsinki (UH) – Faculty of Pharmacy

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„The Faculty of Pharmacy EU-OPENSREEN site has expertise on specialised screening, for instance for antimicrobials, as well as on *in silico* and *in vitro* ADMET evaluations, and hosts international level expertise and infrastructure for these studies.“

At a glance

- Specialised screening site
- Target- and cell-based antimicrobial assay development and screening, incl. biofilm, advanced 3D and host-pathogen co-culture models
- Computational and *in vitro* ADMET profiling
- Development of tailored assays e.g. for novel materials
- Expertise on utilizing natural products in screening
- Organotypic cell models, cellular and vesicular drug transport assays and predictive pharmacokinetic models

Infrastructure and technical focus

- Expertise in antimicrobial screening, assay development, and miniaturization
- Biosafety level 1 and 2 microbiology and cell culture facilities
- Platform designed for antimicrobial screening workflows and follow-up assays
- Expertise in natural product discovery
- Predictive computational ADMET models
- Chem-/bioinformatics resources, access to supercomputing facilities

Projects past and present

2020 | SPRINGBOARD for excellence in advanced development of antibacterials [➔ Link](#)

2019 | NO-ESCAPE Evolving the next generation of Gram-negative antimicrobials through a synergetic approach encompassing medicinal chemistry, microbiology and nanomedicine tools [➔ Link](#)

2019 | RESET-ME Restoring *E. coli* sensitivity for antibiotics by blocking TolC-mediated efflux [➔ Link](#)

Our science in selected publications

Ocular barriers to retinal delivery of intravitreal liposomes: Impact of vitreoretinal interface [➔ Journal of Controlled Release \(2020\), 328, 952-961](#)

Defining conditions for biofilm inhibition and eradication assays for Gram-positive clinical reference strains [➔ BMC Microbiology \(2018\), 18, 173](#)

Binding Site Interactions of Modulators of Breast Cancer Resistance Protein, Multidrug Resistance-Associated Protein 2, and P-Glycoprotein Activity [➔ Molecular Pharmaceutics \(2020\), 17, 2398-2410](#)

A New Cell-Based AI-2-Mediated Quorum Sensing Interference Assay in Screening of LsrK-Targeted Inhibitors [➔ ChemBioChem \(2020\), 21, 1918-1922](#)

Further info and site-contact

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