

Details

Advanced Light and Fluorescence Microscopy Facility (ALFM)

The aim of the ALFM Facility is to provide researchers with the best possible support for light microscopy and correlative light and electron cryo-microscopy (cryoCLEM). To this end, the facility, which is located at the Center for Structural Systems Biology (CSSB), is equipped with state-of-the-art infrastructure and devices. All users can receive in-depth training. Furthermore, the ALFM Facility offers support in the planning and execution of microscopy experiments and in data analysis. Research collaborations are possible and welcome.

Address: Notkestr. 85, CSSB, Building 15
22607 Hamburg
Hamburg
Deutschland
[To website](#)

Host Institution

Universität Hamburg (UHH)

Mittelweg 177
20148 Hamburg
Hamburg
Deutschland
<https://www.uni-hamburg.de>

Leibniz-Institut für Virologie (LIV)

Martinistr. 52
20251 Hamburg
Hamburg
Deutschland
<https://www.leibniz-liv.de>

Bernhard-Nocht-Institut für Tropenmedizin (BNITM)

Bernhard-Nocht-Str. 74
20359 Hamburg
Hamburg
Deutschland
<https://www.bnitm.de>

Scientific Domain

Primary Subjects:

- Biology
- Medicine

Secondary Subjects:

- Agriculture, Forestry, Horticulture and Veterinary Medicine
- Chemistry
- Physics

Category

Structural Biology Facilities

Scientific Services

According to the need of users, we offer different levels of support: - Independent use of instruments after training; - Accompanying support for imaging projects; - Collaborative development and implementation of imaging project. We also support users with image processing and image analysis and provide common image analysis software. All microscopes are in biosafety level 2 (BSL2) laboratories. Upon request, users of the facility can access laboratories for sample preparation, which are located next to the microscopes. These laboratories are equipped with lab work benches, safety cabinets, and incubators for culturing mammalian cells and plants.

Scientific Equipment

- Leica SP8 confocal microscope with FALCON FLIM/FCS unit
- Leica cryoCLEM wide field microscope
- Leica DMI8 with Primo Alveole micropatterning unit
- Leica DMI8 with Thunder
- Abbelight SAFe 360 super-resolution microscope
- 3 x Leica DM6 B
- Nikon Ti2-E with spinning disc unit and FRAP unit
- Nikon Ti2-E with SoRa spinning disc unit and TIRF unit
- Zeiss LSM880 Airyscan confocal microscope
- Zeiss Elyra PS.1
- Zeiss Lattice Lightsheet 7
- Leica Stellaris 8 confocal microscope with cryo-stage
- Leica M125C stereo microscope
- HIVE data storage and data analysis server
- Possibility to carry out cell culture and sample preparation

Keywords

- cryoCLEM
- light cyro-microscopy
- live cell microscopy
- confocal microscopy
- spinning disc microscopy
- TIRF
- FLIM
- FCS
- FRET
- FRAP
- super-resolution microscopy
- SIM
- SMLM
- image analysis
- deconvolution

Networks

Technology Platform Light Microscopy (TPLM) of University of Hamburg (UHH)

<https://www.uni-hamburg.de/en/technologieplattformen/technologien/lichtmikroskopie.html>

German Bioimaging

<https://www.gerbi-gmb.de/>

Users per annum

Internal Users: 120

External Users in total: 25

External Users: 20

External Users in the EU: 3

External Users outside of EU: 2