

Details

Lighthouse Core Facility (Lighthouse)

The Lighthouse Core Facility is located in the Zentrum für Translationale Zellforschung (ZTZ) at the Universitätsklinikum Freiburg and was founded to give investigators access to a variety of fluorescence-based technologies. Equipment belonging to the facility include 3 high speed cell sorters, numerous FACS analysers, 2 confocal microscopes, 1 automated microscope/image cytometer, quantitative PCR machines and a droplet digital PCR system. The facility also has several workstations dedicated to offline analysis of experiments carried out on the above-mentioned systems.

Address: Breisacher Strasse 115
79106 Freiburg
Baden-Württemberg
Deutschland
[To website](#)

Host Institution

Klinik für Innere Medizin I, Hämatologie, Onkologie und Stammzelltransplantation, Universitätsklinikum Freiburg

Hugstetter Strasse 55
79106 Freiburg
Baden-Württemberg
Deutschland

<https://www.uniklinik-freiburg.de/medizin1.html>

Tumorzentrum Freiburg - CCCF, Universitätsklinikum Freiburg

Hugstetter Strasse 55
79106 Freiburg
Baden-Württemberg
Deutschland

<https://www.uniklinik-freiburg.de/cccf.html>

Centrum für Chronische Immundefizienz (CCI), Universitätsklinikum Freiburg

Hugstetter Strasse 55
79106 Freiburg
Baden-Württemberg
Deutschland

<https://www.uniklinik-freiburg.de/ci.html>

Scientific Domain

Primary Subjects:

- Biology
- Medicine

Secondary Subjects:

- Chemistry
- Physics

Category

Analytical Facilities

Scientific Services

Cell sorting is available as a facility-operated service, requiring the help and availability of one of our sort operators. The facility offers both theoretical and practical instruction in the areas of flow cytometry and fluorescence imaging, in particular to help students and investigators who are new to the field. The FACS analysers can be operated by the users themselves, after proper instruction from facility staff. The same is true for the use of the facility microscopes

and QPCR/digital PCR systems. The facility staff performs QC protocols regularly on all of the machines and also ensures that they are used correctly and are well-maintained. The facility staff assists investigators with experimental planning and setup, as well as with strategies and advice on data analysis in the areas mentioned above.

Scientific Equipment

- FACS Aria III cell sorter, 5 lasers, 17 colors
- FACS Aria Fusion cell sorter, 4 lasers, 16 colors
- MoFlo Astrios EQ, 4 lasers, 14 colors
- LSM 880 Airyscan confocal microscope, climate chamber, inverse
- LSM 710 confocal microscope, climate chamber, inverse
- SP2 confocal microscope, inverse
- Scan[^]R automated microscope, climate chamber, inverse
- 5 LSR Fortessa FACS analysers, 3-4 lasers, 8 - 17 colors
- SP6800 FACS spectral analyser, 3 lasers, 20+ colors
- Gallios FACS analyser, 3 lasers, 10 colors
- Navios FACS analyser, 3 lasers, 10 colors
- FACSCanto FACS analyser, 3 lasers, 8 colors
- 2 droplet digital PCR systems (QX100 und Naica)
- 2 Lightcycler 480 QPCR, 384-well block
- Analysis workstations (FACS, microscopy, QPCR)

Keywords

- flow cytometry
- FACS
- cell sorting
- single cell sorting
- confocal microscopy
- widefield fluorescence microscopy
- automated microscopy
- image cytometry
- high content analysis
- image analysis
- deconvolution
- digital PCR
- ddPCR
- Quantitative PCR
- QPCR

Networks

Microscopy and Image Analysis Platform Freiburg (MIAP-Freiburg)

<http://www.imaging.uni-freiburg.de/>

CYTOMETRY.DE

<http://www.cytometry.de>

Users per annum

Internal Users: 500

External Users in total: 15

External Users: 13

External Users in the EU: 2

External Users outside of EU: 0