

ICON Flow Cytometry Core Facility

Overview

The **Flow Cytometry Core Facility at Interfaculty Center for Endocrine and Cardiovascular Disease Network Modelling and Clinical Transfer (ICON)** provides advanced multiparameter *spectral flow cytometry* for comprehensive cellular phenotyping and high-performance precise population *cell sorting* technology services. The platform supports phenotyping of immune cells, platelets, and other cellular populations across basic, translational, and clinical research applications.

Established expertise includes:

- Immunophenotyping
- Platelet phenotyping
- High-resolution biomarker profiling
- Functional cellular assays
- Rare cell detection and isolation



The **Core Facility service** provides access to **laboratory space** and **essential technical equipment** for final-stage sample preparation and flow cytometric measurements for independent use by ICON members following mandatory instrument-specific training.

Available resources include:

- Bench space for sample preparation
- Quality control and calibration beads
- Pipettes and standard consumables (e.g., tips)
- Supporting equipment required for cytometric analysis
- **Temporary** refrigerated storage for short-term sample handling



Collaboration

The Flow Cytometry Core Facility is available for collaborative projects requiring advanced cytometric expertise. The scope of scientific contribution is defined on a project-specific basis.

For project collaboration request please contact:

PD Dr. med Leo Nicolai, Email: leo.nicolai@med.uni-muenchen.de

Dr. Afra Anjum, Email: afra.anjum@med.uni-muenchen.de

Booking & Access

Instrument time, training sessions, and service requests are managed via the PPMS: <https://ppms.eu/klinikum-lmu/login/>

New users must:

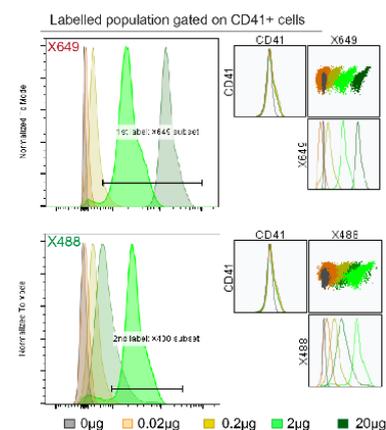
1. Register in PPMS
2. Contact Technical support for introductory lessons
3. Complete mandatory instrument-specific training
4. Request access to the Flow Cytometry Core Facility

Only approved users with assigned user rights may book instrument time independently. All bookings, cancellations, and incident reports must be handled through PPMS.

For **booking and training**, please contact:

Anna Titova, Email: anna.titova@med.uni-muenchen.de

Location: **Room: S 01.014**, Feodor-Lynen-Str. 19, 81377 Munich, Germany



Instruments

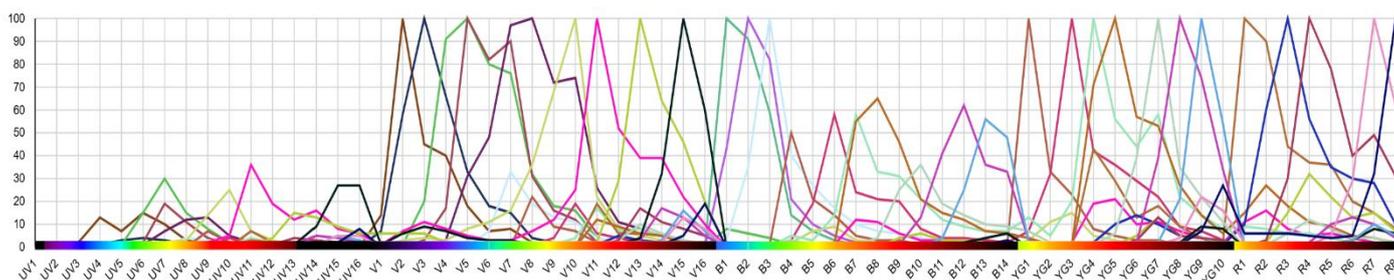
The Flow Cytometry Core Facility operates state-of-the-art instrumentation for spectral cytometry and high-precision cell sorting.

Cytek Aurora 5L Spectral Flow Cytometer

The Cytek Aurora 5L is a full-spectrum flow cytometer designed for high-dimensional multiparameter phenotyping. The system enables comprehensive cell profiling as well as complex biomarker analysis using advanced spectral unmixing technology.

Technical Specifications:

- 5 spatially separated lasers
- 64 optical detectors
- Full spectral signal acquisition
- Advanced spectral unmixing algorithms
- Panels with up to 40+ fluorochromes



BD FACSria Fusion Cell Sorter

The BD FACSria Fusion is a high-performance cell sorting platform enabling precise isolation of defined cell populations for downstream applications.

Technical Features

- Multi-parameter high-speed sorting
- High purity and recovery rates
- Multiple nozzle configurations
- Index sorting capability
- Biosafety-compliant sorting environment

Applications

- Isolation of immune cell subsets
- Platelet population sorting
- Rare cell enrichment
- Downstream genomic and transcriptomic analyses
- Functional in vitro assays

Sorting is available as a staff-operated service or for certified users in self-operated mode.



Price list and billing

The Flow Cytometry Core Facility in ICON operates on a transparent, category-based fee structure to ensure sustainable operation, maintenance of high-end instrumentation, and continuous technical support. Usage fees are calculated based on instrument type, service mode (self-operated or staff-operated), and user category. All fees are charged on an hourly basis and are subject to the conditions outlined below.

- A complete billing address must be provided prior to commencement of work.
- Usage fees are calculated according to the instruments used, the scope of services provided, and the duration of use.
- Additional consumable costs, unless supplied by the user, will be charged separately.
- Billing is conducted via PPMS or by formal invoice, depending on user category.

The following fees (EUR/h) apply from 12/2025 until further notice:

Category A: ICON employees

Category B: academic users outside the ICON

Category C: non-academic users

Instrument	Mode	Costs Euro/hour			Cancellation	
		Cat A	Cat B	Cat C	Policy	Costs
Cytek Aurora	Self operated	10	25	60	<6h	25%
	Service operation	30	40	120	<24h	25%
BD	Self operated	15	40	145	<6h	25%
FACSAriaFusion	Service operation	45	80	200	<24h	25%

ICON Flow Cytometry Core Facility Contacts:

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