



UNIVERSITÄT
DES
SAARLANDES

Terms of Use

High Resolution Microscopy - Core Facility

Prof. Dr. Franziska Lautenschläger | Prof. Dr. Laura Aradilla Zapata

Saarbrücken | 21.10.2025

User regulations of **high-resolution microscopy** core facility

§1 SCOPE OF APPLICATION

The Core Facility 'High-Resolution Microscopy' is part of the interfaculty Center for Biophysics (ZBP) on the Saarbrücken campus. It is open to all scientists at the university and offers a broad spectrum of optical microscopy for both fixed samples and live cell microscopy. Instruments of different resolution classes are available, ranging from epi-fluorescence microscopy to confocal microscopy and super-resolution microscopy (STED). In addition, the Core Facility specializes in the integration of biophysical measurements into imaging devices, so that cell mechanical measurements (RT-DC) or dynamic measurements (FRAP) are also possible. The Core Facility offers training in the use of its microscopes to enable users to operate these devices independently. In addition, we offer support in evaluating and interpreting the data obtained. Due to the expertise available on site, we can also assist in the design of microscopy-based experiments and the development of customized protocols in advance.

The use of the Core Facility is governed by the current version of the Saarland University Framework Regulations for Core Facilities and the following specified regulations.

§2 AUTHORIZED USERS

The use of the system is permitted to all working groups of Saarland University, as well as to the working groups of the various affiliated research institutes located on the university campus.

External institutes and institutions with a commercial orientation may be granted permission to use the facilities upon prior authorization.

Applications for authorization of use shall be submitted to the competent persons designated in §3.

§3 SCIENTIFIC AND TECHNICAL MANAGERS

The people responsible for the facility are:

Current Directors:

Prof. Dr. Franziska Lautenschläger

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Prof. Dr. Laura Aradilla Zapata

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Core Facility Managers:

Dr. Divyendu Goud Thalla

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§3 CLASSIFICATION OF AVAILABLE EQUIPMENT

Class I

Name	Company
Axio Cell Observer	Zeiss
Axiovert 200M with MICROFLUIDICS	Zeiss
Real Time Deformability Cytometry (RT-DC)	Zell Mechanik
White Light Interferometer (WLI)	Bruker

Class II

Name	Company
Spinning Disk Confocal	Nikon
LSM710	Zeiss
LSM900 with AiryScan 2	Zeiss
Stellaris 5	Leica
AX Confocal	Nikon
Ring Total Internal Reflection Fluorescence (TIRF)	ViSiTron
Atomic Force Microscope (AFM)	JPK

Class III

Name	Company
Stellaris 8 with STED	Leica
Two-Photon	Planned

§4 ACCESS REGULATIONS

The facility is primarily available to members of Saarland University for the purpose of fulfilling their research and teaching responsibilities. When equipment capacities allow, access may also be granted to external users, upon request.

Use of the equipment is categorized into **self-use** (generally limited to members of Saarland University) and **service use**.

The facility managers reserve the right to provide certain work exclusively in service mode if, after evaluation of the request, it is determined that self-use would not be practical or efficient, such as in cases involving small-scale projects, high complexity, or other special circumstances.

1. Self-Use

The members of Saarland University requiring the services of the core facility **must contact** the facility managers for access. Users must obtain **prior authorization** from the **group leader** to validate the necessity of equipment use and ensure appropriate cost allocation.

Upon approval, mandatory instructions on the **proper operation** of the equipment will be provided by the facility managers. **Users may operate the equipment independently only** after successfully completing all required training and instructions. Equipment use is permitted **during regular working hours**, unless otherwise authorized.

Specific procedures and additional requirements are defined by the facility managers.

2. Service Use

Service requests are accepted and processed by the facility managers. For internal requests from Saarland University, users must clarify the necessity of the service and cost coverage with the responsible group leader and discuss feasibility with the managers. External requests must be directed to the core facility directors / managers for further review and coordination.

§5 GENERAL REGULATIONS OF THE FACILITY

- **Compliance with Safety Regulations:** All general **safety regulations** for samples and laboratory work, including **mandatory laboratory** rules, must be strictly followed.
- **Acknowledgment and Authorship:** For publications, **core facility** contributions must be recognized in accordance with **scientific standards**. In cases of scientific or creative

collaboration between users and **core facility scientific staff**, co-authorship or shared authorship should be considered.

For example: "We acknowledge the use of the XXX instrument at the Core Facility-High Resolution Microscopy, Saarland University, for image and data acquisition."

- **Sample Submission and Data Handling:** Samples are supposed to be brought to the Core Facility in person, if this is not possible, they may be submitted by mail, in compliance with applicable shipping regulations, or directly to the facility manager by **prior appointment**. Upon acceptance and completion of measurements, the collected data will be transferred **electronically** to the user in accordance with the data policy of their respective institute.

§6 TASKS, RIGHTS AND OBLIGATIONS FOR THE AUTHORIZED USERS

1. Access authorization

Upon receiving instructions from the core facility staff, users must sign the facility usage agreement and the standard operating procedure (SOP) for the respective equipment. They are required to comply with all regulations outlined in these documents.

2. Booking and usage policy

Microscope bookings are managed through the **Shifts app in Microsoft Teams**. External users should contact the **core facility managers** directly to reserve microscopy slots.

Microscopy slots are released **two weeks at a time**, meaning reservations can only be made **up to two weeks in advance**. In exceptional cases, users may contact the core facility managers to request bookings **beyond the two-week window**.

If users are unable to use their booked slots, they may choose to **swap** or **offer** their slots to other users through the **Shifts app**. To **cancel** a slot completely, users must notify the core facility managers via Teams at least **twelve hours before the scheduled booking**.

Compliance Requirement: Use of any microscope without a confirmed booking is strictly prohibited. In urgent situations where immediate access is required, users must notify in the core facility communication channel in advance and obtain temporary authorization before using the microscope.

3. Technical Modification and Accessory Policy

- Any **technical modifications** to the imaging systems must be carried out **only by qualified personnel (core facility managers/microscope technician)**.

- Users must obtain prior approval from the core facility managers before introducing any accessories or attachments to a microscope, including but not limited to **custom stage inserts, environmental chambers, microfluidic devices, third-party components, or software integrations.**
- Users must ensure that all accessories are **removed**, and the system is **restored to its original configuration after each session**. In exceptional cases, accessories may be left in place for an extended period only with prior discussion and **official authorization** from the core facility managers.

4. Data storage and transfer

- Each **user is solely responsible** for the **storage and backup** of data acquired during microscopy sessions.
- Users must **transfer and securely store** their data **immediately after completing** their imaging session, preferably via **web-based data transfer** methods such as the **HIZ cloud storage service** or by using an **external HDD/SSD**.
- Users must ensure that any external storage devices used for data transfer have been properly scanned and verified to be **free from viruses** or **malicious software** prior to use.
- To maintain system performance and data security, **all data stored on microscope computers will be deleted every four weeks**. The facility **will not be responsible for any data loss** resulting from non-compliance with this policy.

§7 USAGE COSTS AND BILLING

The usage fees (**see Appendix I**) charged to working groups and their research projects primarily **include** operating expenses, preventive maintenance and repairs, and any additional scientific support required, in accordance with the **equipment classification (§3), condition, and lifecycle**.

* Exceptions

The following exceptions shall apply to the standard usage fee regulations of the core facility:

- In cases where facility managers perform service measurements for a specific user group during designated free usage hours, the applicable service charge rate shall be applied, excluding the microscope-related charges.

- A **flat-rate annual fee of ten thousand euros (€10,000.00)** per user group may be applied. This fee grants the group **unlimited access to all equipment within the core facility** for a continuous period of **twelve (12) months**.
 - Alternatively, if a user group's cumulative usage fee amounts to **€10,000 within a year**, any additional usage during that same 12-month period will **not incur further charges**.
- Usage fees shall not apply to activities related to **teaching**, nor to usage by core facility staff for maintenance, optimization of equipment, or the development of new techniques.

Billing/Invoicing

Usage fees are calculated **bi-weekly**, in accordance with the core facility's booking policy, by the facility management. **Invoicing**, however, shall be carried out on a **quarterly basis**. At the end of each quarter, user groups will receive an invoice issued by the core facility.

§8 ALLOCATION OF USAGE TIME

Upon submission of booking requests in accordance with **§6**, time slots shall be allocated on a **first-come, first-served basis**.

§9 CONSEQUENCES OF NON-COMPLIANCE WITH THE USER REGULATIONS

Failure to comply with the regulations may result in the suspension or revocation of access to the core facility up to **6 months**.

§10 COMMENCEMENT OF TERMS

The **Terms of Use** will become effective as of **01.11.2025**



Prof. Dr. Franziska Lautenschläger
Saarbrücken, 30.10.2025



Prof. Dr. Laura Aradilla Zapata
Saarbrücken, 30.10.2025