

User Guidelines



MICROSCOPY IN-HOUSE SERVICE

OCT 1ST, 2023

1 FACILITY ACCESS

Microscopy In-house Service is accessible to all research groups from CMMC, the University and University clinic and any other research institutes. The Microscopy In-house Service offers well-maintained state-of-the-art light microscopes. Services include, but are not limited to, microscope training, consultations during booking, advice on microscope techniques and sample preparation, software usage and image processing.

Access to the CMMC building is managed by the University Clinic. The Microscopy In-house Service provides the necessary paperwork and helps with the process to obtain access to the building.

An initial training is mandatory before access to the Microscopy In-house Service resources is granted.

RESOURCES

Upright Brightfield Microscope (Olympus BX53)
16 Channel multi-wavelength fluorescence Microscope (Olympus IX83)
6 Channel LCI widefield fluorescence Microscope with CO₂/Temp Incubator (Leica DMI8)
Confocal Laser Scanning Microscope (Stellaris 5 Leica Microsystems)
Stereomicroscope with Fluorescence and Camera (Olympus SZX16)
Stereomicroscope with Fluorescence (Leica M165 FC)
Analysis Station for Image Analysis (Imaris, Fiji)

FACILITY STAFF & CONTACTS

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Contact to TEHU (tissue embedding and histology unit) can be communicated on enquiry.

2 COSTS AND BILLING

The Microscopy In-house Service charges for training and booking time of specific resources. Resource booking is charged in 30 min intervals and users only have to pay for the time they actually use the equipment. Current price lists are available in the facility or on enquiry. Fee changes will be announced at least 3 months in advance. Booking times are recorded with an online booking system and PI's are billed quarterly.

These fees are used to maintain equipment, pay for consumables and software updates to provide best working conditions.

Costs for the training and usage of the microscopes can be seen in the following table:

Resources	Training	Costs per hour of Usage
Stellaris 5	50€ p.P.*	20€
Leica DMI8	50€ p.P.*	10€

* Trainings are done in groups of a maximum of two participants. In such cases, the cost per person would be 30€.

3 GENERAL RULES AND USER RESPONSIBILITIES

Users are obliged to handle equipment according to the instructions given during training. Workspaces should be left clean and data should be removed from the workstations according to the instructions. The PI is responsible for the behaviour of the user and the safety features of the particular experiments. The Microscopy In-house Service provides the necessary training and equipment maintenance.

S1 areas within the facility are clearly marked and common S1 rules apply within these areas, e.g. no food and drink at all times, lab coats mandatory. The PI is responsible to register any S1 work with the authorities; following these guidelines, the PI (or authorized person) is required to be a project manager for the particular user within the Microscopy In-house Service. The project manager has to register the user's work within the Microscopy In-house Service with the authorities and copies of according documents ("Formblatt Z) have to be provided.

The CLSM (Stellaris 5) is equipped with class 3 laser systems. These require that we adhere to German legislation regarding their safe use. Mandatory measures include yearly user training. Users have the responsibility to perform a laser safety training at least once a year to work in the Microscopy In-house Service Room 3.022 (also concerning usage of Olympus IX83). The Microscopy In-house Service offers this laser safety training.

Official working times in the Microscopy In-house Service are Mo-Fr 9:00-17:00. Outside these times, the user is responsible to follow safety rules applicable to the particular experiments and to assure that help can be called in case of emergency.

The user has the responsibility to ensure that the employer's liability insurance covers the work in the Microscopy In-house Service.

RESOURCE BOOKING GUIDELINES

An online booking calendar is used to create, modify and delete reservations of Microscopy In-house Service resources. After training, a user obtains access to the respective resources in this calendar. User data (Name, email, PI) are stored in the booking calendar and secured with a personal login. The booking software is used to record booked time and calculate bills.

BOOKING CHANGES

Reservations in the booking calendar are mandatory prior to the usage of the Microscopy In-house Service resources.

Reservations can be cancelled prior to the start of the reservation; however, we ask users to be considerate with this short-term cancelling, which should only be used as an exception. In case

this booking freedom is abused, we reserve the right to restrict possible cancellations of individual users.

Only Microscopy In-house Service staff can change times during, or after, an active reservation. However, if the duration of an experiment changes (e.g. work done prior to the end of a reservation), we will change the reservation duration (30 minute intervals).

In case of technical issues or required maintenance work, Microscopy In-house Service staff will block resources as early as possible and users with conflicting reservations will be notified.

BOOKING PRIORITIES

Most cases of conflicting reservations should be directly handled between respective users; the Microscopy In-house Service can help mediate these discussions. If this is not possible, or no solution is found, following rules apply:

1. CMMC users have priority access
2. Resource access to meet publication deadlines are prioritized
3. Worst case, Head of Microscopy In-house Service and/or staff will determine which user will be given priority access. This decision will be made case dependent and as quickly as possible.

MICROSCOPY USAGE GUIDELINES

Training is mandatory prior to microscopy usage; this training is microscope specific. A maximum of 3 people can participate in a group training. After this training, a user can independently book and use the microscopes he has been trained on. For the first few sessions, we recommend to work during core hours in case further assistance is needed. It is absolutely forbidden for users to train other people (e.g. students from their group), misconduct will lead to exclusion of the whole research group from the Microscopy In-house Service and information of the PI.

At any time during microscope usage, users are free to ask Microscopy In-house Service staff for assistance. If continuous assistance is necessary or experiments require more support by the Microscopy In-house Service, possible collaborations should be discussed.

DATA HANDLING AND STORAGE GUIDELINES

During microscope usage, data is usually stored on local workstations. Each workstation has a dedicated data storage partition (D:\ drive); data stored on the system partition (C:\ drive) will be deleted without further notice. After data acquisition, users have to transfer their data off these workstations within a week (4 weeks for data analysis workstation). Old data will be deleted without further notice to ensure that other users can use the microscope workstations without any problems.

4 RULES FOR CITATION AND CO-AUTHORSHIP

The German Science Foundation (DFG) evaluates the impact and importance of core facilities to the cluster/institute/university based on their number of acknowledgments, citations and co-authorships. To ensure that the Microscopy In-house Service can continue to provide the best service possible, maintain staff and equipment and acquire new equipment, software and licenses, it is important that all users adhere to the following guidelines.

ACKNOWLEDGMENTS

As soon as data were acquired or analysed within the Microscopy In-house Service or by Microscopy In-house Service staff, the role of the facility has to be cited within the acknowledgments. This includes publications, talks, as well as Bachelor, Master and PhD theses. Also, please let us know whenever you acknowledge the CMMC Microscopy In-house Service!

Example:

We thank the CMMC Microscopy In-House Service (and STAFF MEMBER) for their support (in microscopy/ technique/ data analysis).

CO-AUTHORSHIP

Core facilities have to bill for their service to keep the equipment in excellent condition, maintain staff, pay for software updates and consumables to obtain an optimal working environment for their users. Despite these fees, common rules for co-authorship also apply to Microscopy In-house Service staff (substantial intellectual or experimental contributions). Prior to a substantial contribution, the user has to inform the PI; the Microscopy In-house Service further strongly suggests that a meeting between everyone involved (user, PI, Microscopy In-house Service staff and Head) should be held.