

Usage Conditions and Rules of the Life Imaging Center (LIC)

at the Albert-Ludwigs University of Freiburg

(Effective from December 12th 2023)

The usage conditions and rules of the Life Imaging Center take into account the quality standards for access to research infrastructures (RIs) at the European level worked out by the European Science Foundation (ESF Member Organization Forum on Research Infrastructures) and issued in 04/2011 and comply to the DFG specifications for “Gerätezentren” (latest version 11/2021).

(https://www.dfg.de/download/pdf/foerderung/programme/wgi/basic_requirements_research_infrastructures.pdf)

(http://www.dfg.de/formulare/55_04/55_04_de.pdf)

1. LIC Access

The use of our devices and equipment is, after prior consultation in principle, freely accessible for workgroups of all Faculties of the University and the Max Planck Institute for Immunobiology and Epigenetics (central E-mail: lic@imaging.uni-freiburg.de, Web address: <https://miap.eu>). Access can also be given to researchers and research groups outside the University if sufficient equipment capacity and user fees for external users are paid. **External users (guests or those with no working contract with the University Freiburg) are only allowed to use LIC instrumentation located in the Signalhaus, Schänzlestr. 18 due to restrictions of the “Gemeinnützigkeit” (Non-Profit-Status) of the LIC building in Habsburgerstrasse 49.** These restrictions do not apply to the usage of LIC instruments located in Schänzlestr. 18. Further usage conditions must be discussed individually if required.

Access to all equipment of the LIC is via an electronic key card system (Unicard). The LIC is open 24 hours / 7 days, but only for experienced users. The LIC staff is usually available for support between Mo - Fri from 8.00 – 16.00 for other users.

2. Equipment and Techniques

The microscope, computer equipment, and the techniques available in the LIC are described in detail on the LIC's website: [Infrastructure \(en\)](#).

3. User support

The LIC staff will advise the users on their specific technical, experimental or analysis questions before and during the application period and the ongoing project phase. The staff's

phone numbers and mail addresses are listed on the LIC webpage ([LIC Team / contact](#)) and in [the booking calendar](#).

4. LIC Application

All users must complete a PDF application form including general personal information and project-related data. The data will be processed by EDV internally, and all legal data privacy regulations will be fulfilled. Further declarations must be made to chemical and biological safety and operational security by the experimenter and the supervising project manager. Without a correctly filled out questionnaire including the particular permission number of the working group for S1/S2, access to the equipment of the LIC is not possible.

In case of inquiries, in the context of already authorized projects, which fall under the biological security level S2, a pro forma notification has to be made by the LIC via the delegate for biological safety (Dr. Carsten Kallfaß 203-4204) to the Regierungspräsidium Tübingen **before the start of any S2 work** in the LIC. Thereafter, the user will receive access to the microscope equipment of the LIC.

The online registration system can be found at the following URL <https://miap.eu/miap-units/freiburg/life-imaging-center-lic/application-to-lic>.

5. Workplace assignment

After evaluation of the application and a personal consultation about the scientific project with the LIC staff, the head of the LIC or its representative recommends which microscope set-up is expected to be best suited for the imaging project, which time effort has to be expected, and which additional equipment may be required.

6. Personal access to the LIC facility and the equipment

The Uni-Cards of the user will be activated to give access to the LIC rooms. Correctly, registered users get an individual Login and password to use the equipment of the LIC. It is not allowed to book for other users or to give the login account data or Uni-Cards for LIC access to others! Misuse in singular cases leads to blocking the user account for at least one week; in case of repeated violations, a permanent exclusion from the LIC is possible. With the end of the employment, a change of the workgroup of the user or the end of the scientific project at the LIC, the user has to notify the LIC about these changes, so that the user account, LIC access and personal data folders will be deactivated. For external users, Uni guest cards will be issued via the LIC staff.

7. Logging and storage of equipment usage times

The IT department records the individual use of equipment, which has to be confirmed after each session by the user's signature on the log sheet, which is available at all workstations. The login times of individual users are monitored via additional software and are, amongst other data, the base of the usage fee calculation (see under 8.). These usage data are read out and evaluated with software tools on a monthly basis by the LIC staff to generate invoices and anonymous usage statistics. These data are deleted within 3 months. The use of this information for purposes other than those specified here and transfer to third parties is explicitly excluded. The University Work Council and the data protection officials of the University of Freiburg approved this proceeding.

Repeated incorrect (or missing) log sheet entries and transfer of individual login data to other users will result in exclusion from LIC workspaces.

8. Equipment Booking

Booking of all equipment (microscopes, computers, cell culture, and incubators) can be made via any web browser at <http://booking.zbsa.uni-freiburg.de/artologik>

Access to the booking calendar will be permitted via an E-mail sent to the user after the application form is completed and LIC has processed it. For the booking of analysis computers, it must be first considered, which software will be optimal for use, as for some software packages, only a limited number of licenses is available (floating license) and/or their availability is assigned to certain computer workstations. More details can be found on the website of the booking calendar, the LIC website and in the computer lab (all accessible via <https://miap.eu>). For data or data analysis discussion, the offline computers in the LIC computer lab (room 00.041) with the necessary software packages must be used and booked. **Microscope computers should be used only for data recording!**

9. Cancellation or no-show appointment, appointment shift

If a user can't keep an appointment, he/she must announce it in advance. Cancellation of a booking appointment 24 hours in advance is always free of charge. For cancellations within the 24-hour time range of the start time of the booking, 50% of the usage fee has to be paid, except if another user uses the booked instrument time. You have to notify the persons, who have booked before and after your session (and possible 2nd chance bookers) as well as the LIC personnel by phone ([97132](tel:97132) or [2902](tel:2902)) or, if you do not reach us, via E-mail to lic@imaging.uni-freiburg.de. See also further remarks in the last sections of 11.

10. Regulation of usage priorities

At present (01.1.2021), all users have, in principle, the same priorities regarding the reservation of LIC devices. Per week, a maximum of 2 half days or a whole day may be booked by a user and/or individual projects at one microscope workstation, whereby nights and weekends are not considered until further notice. More than 3 weeks in advance, bookings must be discussed with the LIC head or staff.

In case of complete utilization of some equipment, the reservation will be distributed over a key priority derived from the different funding sources for that specific equipment. Therefore, users might have different priorities for access to the individual devices of the LIC. In this case, an appropriate list will be sent to all users via E-mail.

For necessary deviations from this regulation due to experimental needs and whenever other booking problems occur, the head of the LIC or its representatives decides on the assignment and/or the workplace access.

11. LIC Pricelist (prices are per hour of usage)

Equipment	Price in €/h
Leica SP8-I-STED	30
Leica SP8-U-FLIM, Nikon A1-FLIM	30
Zeiss LSM-I-NLO, Zeiss LSM-U-NLO, Zeiss LSM-V	30
Nikon-SIM-STORM	24
Zeiss SD-I-ABL, FEI SD-TILL	24
Zeiss LSM-I, Nikon-C2	22
Zeiss Z1 Lightsheet	30
Zeiss Celldiscoverer widefield mode/SR mode	15/30
Zeiss Imaging 1, 3 and 4, Zeiss AxioImager	12
Zeiss AxioZoom	12
Nikon AZ100	12
Screen-TILL	8
Nikon Biostation 1 and 2	4
Fluorescence Stereomicroscopes	3
STED lasers	12
2-photon lasers on LSM-I-NLO, LSM-U-NLO	12
Ablation lasers on SD-I-ABL	6
TIRF lasers on Imaging 4	6
LightZ1-Ana (PC with Arivis, Huygens, etc.)	4
PCs in the computer lab with software (Imaris, Huygens, Amira, Metamorph, ZEN, LAS, Volocity, NIS etc.)	4

Multiprocessor-server (Huygens deconvolution)	4
Experimental Assistance (additional)	20
Introduction (additional)	10

Certain reductions (explained below) can be applied to specific user groups and instruments.

For the usage time calculation, the LIC staff takes into account information in the log sheet, reservation times in the online booking calendar, and the individual user login files recorded via the workstation log-in. The collected data is analyzed for billing and statistics.

Important: The fees for usage hours in the LIC can be (co-)financed via DFG (research grants, scientific networks), Collaborative Research Centers (SFB), Emmy Noether or Heisenberg), BMBF or EU grant applications. So you can apply within your grant application for 6.000 € covering app. 250 hours of usage of a confocal microscope. More information can be found on the DFG web page at:

http://www.dfg.de/formulare/55_04/55_04_de.pdf or [55_04_en.pdf](http://www.dfg.de/formulare/55_04/55_04_en.pdf)

http://www.dfg.de/formulare/52_01/52_01_de.pdf or [52_01_en.pdf](http://www.dfg.de/formulare/52_01/52_01_en.pdf)

A most recent copy of the signed PDF “Usage Conditions and Rules for the Life Imaging Center (LIC)” should be sent with the application. The LIC will support all users in writing the specific imaging part of their grant application to achieve a high success rate in funding imaging usage fees.

Single labs, groups or research centers, which dedicate equipment to the LIC or support the LIC financially (or equally in other ways) can have different conditions (e.g. free hours, reduced fees or a combination of both) for up to 5 years in total. Usually, a certain number of free usage hours per year on specific instruments during the warranty period will be applied, plus a general reduction of the usage fee on other instruments. The detailed conditions will be negotiated during the grant application, depending on the instrumentation provided to the LIC. Therefore, groups of users can have deviating rates of user fees.

The money collected via user fees is used for specific instrument repairs, replacement and add-on equipment for existing microscopes (objectives, incubators, etc.), building customized tools for microscopy in the workshop, and special, specific user support by LIC personnel as well as supporting material for the LIC users (e.g. antibodies and dyes for test purposes/pilot experiments). This is in accordance with the DFG rules for equipment usage fees and will maintain the infrastructure on a high level in the LIC.

For the first and second introduction of users by the LIC personnel, a fee of at least 3 hours will be charged in addition to the fee for assistance of 10 €/h. Beyond that, if more

support is necessary and/or strongly required, the head of the LIC decides, after consultation with the user or the user's supervisor, about additional costs or further regulations.

The usage fees will be evaluated and adjusted based on the real costs over a period of 2-3 years. Fee invoices will be sent out every 3 months and must be paid within 14 days. The invoice will be sent to the section chief responsible for the workgroup, who also has signed the individual user application form. No VAT is charged within the University or the Medical Clinics as long as this complies with the German tax laws.

If a user, who booked equipment does not show up in time for her/his booking appointment within 45 min after the starting time and/or does not send an explanatory cancellation message by e-mail to lic@imaging.uni-freiburg.de, at least 50% (up to 100% if notorious) of the booked time according to our current price list will be charged. This applies even if the person normally is free of charge for the microscopes and computers. Bookings, made for a certain time, have to be paid 50% even when the user stops working before the end of the booked time.

The LIC reserves the right to shift or cancel individual appointments for technical or organizational reasons after consultation with the affected users.

12. User responsibilities

The users must operate the devices based on the criteria learned in their first instruction at the microscope. Manual instructions are also available at each workspace in written form and on the LIC homepage in electronic form. The personnel of the LIC should always be contacted in case of any doubt concerning an operating step. To avoid damage to other users and equipment the LIC staff has to be immediately notified when uncontrolled release of experimental solution at the workplace or other chemical or biological contamination happens.

During and after using the equipment and instruments, the workspace must be kept and left clean (clean lenses and microscope stage, rinse containers for experimental solutions, **no glass leftovers**, put immersion medium injection needles in the designated tray). Laser lines and fluorescent lamps have to be handed over in switched-on or off condition, depending on which reservations follow thereafter (lasers and fluorescence light sources stay on if the gap is <2h; check the booking calendar and/or ask the staff of the LIC).

The respective work group leader is responsible for its employees concerning their behaviour at the microscopes, the general briefing into the basic experimental work, the general safety briefings, and further introduction into biological safety. The LIC staff will communicate specific rules in the LIC. Work of biological safety levels S1 and S2 is only permitted if the LIC is informed about the relevant project permission numbers of AGs. Work

of the biological safety level S2 can only be started after prior permission through the LIC, the delegate for biological security (Dr. Carsten Kallfaß 203-4204) of the university and after an official message and/or permission from the Regierungspräsidium Tübingen.

13. Image data storage

The user fee does not cover the cost of permanent storage of the experimental data. Experimental data for a current project can be saved only to a limited extent after consultation with the LIC. In general, usually, no more than 10 GB of data should remain on the local microscope computers after finishing an experiment. The LIC personnel will request the users on a regular basis to move data going beyond this capacity to different storage media; otherwise, after two written reminders, the data can be deleted by the LIC personnel.

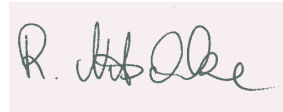
The user commits itself to adhere to the signed terms of use. Data stored outside the designated areas are subject to no security and can be deleted at any time. Any storage on drive C, desktop and other areas such as user/document folders are strictly forbidden. The personal, temporal areas are automatically deleted when logging out from the workstation. The usage of computers for private activities is not allowed.

14. Acknowledgment of the Life Imaging Center in publications

The use of instrumentation in the LIC has to be acknowledged in an appropriate way in each publication containing images or other data obtained in the LIC. **The DFG rules also require since 04/2020 that the usage of all DFG-funded large equipment in publications has to be documented in the Acknowledgements by the DFG funding number of the equipment** (Example: Confocal microscopy has been performed with the instrument funded by Deutsche Forschungsgemeinschaft (DFG) - Projektnummer XXXXXXXX). The LIC staff will proofread the microscopy methods part of these publications to ensure the appropriate description of the methods and equipment used. **PDF files of all publications with LIC acknowledgement must be sent to the LIC by the responsible author after the final publication. This proof of excellence is extremely important for the LIC as the publication output will be part of the LIC's reviewing process and other funding organizations.** Co-authorship on publication or patents is only warranted when substantial scientific input contributes to the publication. This has to be discussed between the LIC and principal investigators in advance. A typical example text for the acknowledgement can be downloaded here: [Acknowledgements.pdf](#)

15. Liability and Liability Insurance

For users, it is strongly recommended to negotiate professional liability insurance (approximately 60 € per year) to cover any residual risk using devices in the LIC. Correspondingly, the University of Freiburg offers inexpensive insurance to students, undergraduates, graduate students, and other University staff members.



Freiburg, 10.12.2023

Dr. R. Nitschke
Academic Director
Head Life Imaging Center

I have read and accepted the usage conditions and rules of the LIC.

Freiburg, date

Name of user (printed)

Signature