

General Usage Rules for Confocal Microscopes (Leica SP8, Leica SPE, CARV II)

Usage rules

1. Reservation. The microscope can be reserved at <https://biomed.cas.cz/rezervace/>. The access is granted only for registered users and the permission is issued by the IT Department helpdesk@fgu.cas.cz after an approval of microscope's manager ("Manager") (<http://www.fgu.cas.cz/articles/663-kontakty-czbi>). The user's login credentials will be sent back to the user's e-mail address. For non-registered users the microscope can be reserved only through the Manager. To display the reservations, click on "Plánování a vytvoření rezervací" and then on the blue triangle next to the heading "Přehled rezervací". Then select "Bioimaging Facilities" and reserve the time slot at the microscope. The right to use the microscope is exclusively reserved for the person stated in the reservation system. The users are obliged to conduct an experiment at the reserved time slot, otherwise, the reservation has to be edited or cancelled. Any problems with the reservation system should be reported to IT Helpdesk, IPHYS CAS (helpdesk@fgu.cas.cz).

Reservation through the website can be created maximum one month in advance. The reservation has to be edited/cancelled as soon as the need of change is known – in any case the edit/cancellation cannot be made later than 24 hours before the beginning of the session. To edit or cancel the reservation within 24 hours before the start, contact the Manager. The reservations which are not cancelled will be charged the full price. If the reserved time slot is not used repeatedly, the reservation time at the microscope will be restricted. The facility safety rules and conditions for acquiring the login credentials are stated on page 2 of Training protocol see the relevant document – link below.

2. Users training. After registration into the reservation system, the user gains a status of the untrained user. To acquire a status of the trained user (who can work on the microscope independently), it is necessary to complete a mandatory training. This training includes working safety rules, microscope control and operation and application tips. The Training protocol is issued and signed after the successful training. For training please contact the Manager.

3. Guidelines for handling the microscope. The user is obliged to fill in all the items in the Microscope attendance book (name, start time, end time, affiliation, financial source for payment, experiment duration, purpose and notes), which is located at the microscope location, and sign at the end of the experiment.

All the microscope configuration changes (hardware, for example filters) must be consulted with the Manager in advance. The configuration can be changed by the user if and only if the user is trained and explicitly allowed by the Manager to change the

specific microscope configuration. However, the microscope configuration changes have to be returned to the default state at the end of the experiment unless stated otherwise by the Manager.

The mercury lamp should not be switched on earlier than 5 minutes in advance. Do not turn off the mercury lamp when it is planned to use the mercury lamp again within 20 minutes. Do not turn on the mercury lamp when it is still hot due to potential exposure to mercury vapour.

Do not directly touch any optical parts by hand (objective lenses, filters, etc.). Do not use excessive force to change the microscope setting (objectives, incubator box, etc.) and rather contact the Manager.

At the end, the user is obliged to clean the working area, i.e. place used glass into the dedicated container and remove the immersion media from the objectives by using lens cleaning tissues. The user also immediately reports any unusual behaviour of the system to the Manager and states the problem into the Microscope attendance book. If not stated otherwise by the Manager, the user always returns the microscope site into its default state.

At the end, the user will fill in specifications of his/her usage into the Microscope attendance book (name, start time, end time, affiliation, financial source for payment, experiment duration, purpose and notes), if any of the information was not filled at the start. Sign the information filled.

Any further questions (e.g. experimental design) and requirements (e.g. different set of filters) should be requested via the Manager.


When the results are used for a publication, the users have to indicate that in Acknowledgments. The precise form is stated below and any questions will be answered by the Manager.

Microscope-specific Usage rules

Leica SP8: Lasers in general must be turned off in LAS X software. Special attention must be pointed to Argon laser usage, which requires special system shut down procedure. DO NOT turn off the hardware laser power button, the system must stay turned on for about 15 minutes for Argon laser to cool down. Not following this rule will result in decreased service life of Argon laser or to its complete malfunction.

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Usage fees: see the document - link below:

[Internal users](#)

[External users](#)