

Laboratory Rules

for the microscopes at the Combinatorial NeuroImaging Core Facility (CNI)

Preamble

The Combinatorial NeuroImaging Core Facility (CNI) is an interdisciplinary research facility within the Leibniz Institute for Neurobiology (LIN). In accordance with the structural and educational concept of the LIN, the CNI provides open access to highly advanced state of the art microscopic infrastructure as well as service and training for the research groups of the LIN and external users.

In addition, the CNI pursues research projects on human and small animal imaging, functional neuromorphology and the analysis of dynamic processes in pre- and postsynaptic structures and strives to advance technological progress and methodological developments in the field of structural and functional imaging.

Access

Access is provided according to the CNI General User Guidelines.

The following rules and regulations must be followed by individuals who intend to work in the CNI. The CNI is liable to S1 safety regulations and it is imperative that all users act responsibly with the equipment of the lab. Principal investigators are responsible for their staff, guests and students. The prime rule for all users is:

BE CAREFUL AND BE CONSIDERATE TO ALL OTHER USERS.

1. Microscopes are delicate and complex instruments that may bear laser hazards. Misuse can cause damage and serious personal injury. Any mistake on your part could damage objectives, microscopes or samples and may put you and others at great risk. Proper handling is expected from all users.
2. It is not allowed to use any equipment before being properly instructed and trained. All new users must attend instrument training by CNI staff. Generally, users are **not** entitled to train fellow group members without prior agreement of the CNI or authorized personnel.
3. Due to S1 safety regulations it is forbidden to bring food or drinks into microscope rooms. Appropriate clothes should be worn.
4. Booking rules: The web-based booking system of CNI (<https://egroupware.lin-magdeburg.de>) is used to organize and schedule working times at the different microscope systems. The following principles of prioritization will be applied to all approved studies: (1) experiments of living specimens have higher priority than fixed samples; (2) for foreign guests a time of up to 15 % is reserved during main operating hours from 8.00 a.m. to 6:00 p.m.

For supervision and assistance users must make proper arrangements at least 7 calendar days in advance by contacting the CNI (cni-mic@lin-magdeburg.de).

Please, do not reserve an instrument over the maximum booking time of 4 hours per day without prior permission. Due to the high degree of utilization of the microscopes, please, only reserve the time you need. Local users are not entitled to reserve a specific instrument continuously for more than 2 consecutive days (4 hours a day) without special permission by the CNI staff. Longer usage is possible during the advanced time in the evening (6:00 p.m. - 7:00 a.m.) and during weekends. Please, do not book the imaging facility more than two weeks in advance without previous agreement with the CNI staff.

5. Go through the operation manual and training materials to get familiar with the safe use of the microscope and periphery in the correct manner. In cases of doubt about proper utilization of equipment it is essential to ask the CNI staff. Technical assistance is available during office hours, 8:00 a.m. to 6:00 p.m., Monday through Friday, except for public holidays.

6. Individual authorized users are responsible for the proper use of CNI instruments. LIN principal investigators are responsible for their staff, guests and students who use the facility and any costs incurred. At the end of an experiment, the user must leave the instrument in the default condition. Only authorized staff is allowed to change the microscope configuration (e.g., exchange of filters, objectives, motor stages, etc). If you need a certain configuration ask in advance.

7. Users are requested to keep their appointments. If any instrument reservation needs to be canceled or rescheduled this must be done immediately after occurrence of the cancellation reason via 'eGroupware' calendar (<https://egroupware.lin-magdeburg.de>). The previous and the next registered user as well as the microscope responsible of CNI should be informed by e-mail or phone. Cancellations < 48 h (for fixed specimen) and < 6 h (for live cell specimen) usually will be charged 100 %.

8. Principal investigators are responsible for informing their lab members about the rules pertaining to the use of the core facility and for acquainting new users with the supervisor. Any problems or damages that might occur from unauthorized use of core facility equipment will be charged to the principal investigator.

9. Do not insert any hazardous materials / specimens inside microscopes. Keep the microscopes and the workstations clean. In case of gross negligence the user is held responsible for the liability of any damage.

10. In case of any malfunction or problems that prevent the normal operation or need prompt service, document all relevant information and report them immediately to the CNI staff. **Never** attempt to repair or modify the microscope without specific direction from the laboratory staff.

11. It is the users' responsibility to download / backup their own results. Data stored for longer than 3 months on the microscope computers will be removed without prior notification. For urgent exceptions make arrangements with the CNI staff.

12. During main operating hours (see above) users must leave the laser lights and mercury lamps of the laser microscopes switched on for the next user. If there is a break of ≥ 2 h, please, switch them off. The last user of the day (according to the time schedule) must take the responsibility to switch off the system, cover the microscope with the fiber cover and lock the center door.

13. Users, who do not follow these rules and regulations may have their booking privileges suspended for 2 weeks or revoked. Reasons for temporary exclusion from the booking system:

(i) You permanently do over-booking.

- (ii) You let untrained or unregistered members operate microscopes unattended during your booking time slots. (You may take untrained or unregistered associations with you, but they are not allowed to operate microscopes independently).
- (iii) You use microscopes without signing up (instant sign-up in case the instrument is free is allowed). You will receive a warning message for the first time when you break the rules. Your booking privilege will be suspended if you keep doing this.

14. It is not allowed to use the internet at the workstations or to individually download and install any programs. If you need a special program or consider it useful, please contact the CNI staff.

Fees: Each approved project has a time contingent of up to 8 h free of charge, to be used for introduction and training at the microscopes (4 h CLSM, 4 h STED, 4 h FLIM, 4 h TEM) and the use of the graphics workstations (4 h Imaris / Huygens / Arivis / ImageJ). Further technical assistance will be charged separately. Prices for using the equipment and services are listed in the attachment of CNI's General Access Guidelines. On request, charges may be reduced or waived if the use is in the interest of the LIN (scientific collaborations, teaching).

Acknowledgements: Users are requested to use the following format in their manuscripts, meeting presentations, and research proposals to acknowledge the CNI. "The author(s) acknowledge the Combinatorial NeuroImaging Core Facility at Leibniz Institute for Neurobiology, Magdeburg, for instrument use, scientific and technical assistance."

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