

User rules of the Combinatorial NeuroImaging Core Facility (CNI)

Preamble

The Combinatorial NeuroImaging (CNI) at the Leibniz Institute for Neurobiology (LIN) in Magdeburg combines the imaging infrastructure for non-invasive human imaging, translational animal imaging and high-resolution light microscopy.

It is our declared goal to offer an efficient neuroimaging infrastructure and dialogue platform to local and external users, thereby promoting integrated approaches especially in learning and memory research.

(1) Equipment

The CNI Core Facility provides a wide range of state-of-the-art equipment for non-invasive human imaging, translational small animal imaging and high-resolution light microscopy.

Detailed descriptions of all CNI devices are available on our website www.lin-magdeburg.de/cni.

(2) Access

The devices of the CNI can be used by the following user groups for scientific studies:

- LIN employees
- employees of the Magdeburg University Otto von Guericke and other research institutes in Magdeburg
- users from academic organizations in Germany and abroad.

Studies are approved according to the criteria given under *Project planning and process*. Bookings of all devices are made on a *first-come-first-served-basis*.

CNI operating hours are from Monday to Friday, 8 a.m. to 4 p.m.. Users authorized by the CNI can also use the devices outside of regular business hours. All equipment can only be used after an appropriate introduction and safety instruction by CNI staff.

15 % of measuring time related to our operating hours are reserved for external users.

Generally, the use of the CNI equipment is possible for industry and business. In this case special arrangements have to be concluded.

(3) Fees

The users bear the costs for the projects conducted in accordance with the real expenses. Invoices are issued by the LIN, the owner and operator of all CNI devices.

Invoicing shall be based on booked measuring times or in case of longer use on the actual duration of use. This includes preparation and follow-up at the device.

All fees for the use of the CNI equipment are specified in *Appendix I*.

If the LIN has a documented interest in a study funding by the LIN is possible. In this case, costs are cleared internally, an invoice is not issued. The PI will be notified by the CNI.

(4) Study application and authorization

For every study an application specifying personal and project related data is required. Additionally, the principle investigator declares to provide further information on financing and other relevant issues (ethics vote, animal test proposals, BfArM-application etc.) if necessary as well as the acceptance of these user rules.

The study application has to be filled in online on the CNI homepage (www.lin-magdeburg.de/cni). Additionally, it can be downloaded as PDF file.

A new study application for a running study is necessary, if

- the measuring time is exceeded by more than 10 %,
- you want to address a new question/topic,
- persons in charge of the project change.

(5) Booking rules

Measurements can only be made by persons who have been properly instructed and trained on the respective device and who have signed the safety instructions.

The web-based booking system EGroupware (<https://egroupware.lin-magdeburg.de/egroupware>) is used to organize and schedule measuring times according to the prioritization you can find under *Access* and in consultation with the CNI.

Reserved measuring times have to be used efficiently. In case reserved times have to be canceled or rescheduled this has to be reported to the CNI immediately and not later than 2 working days, for SPECT/CT 5 working days, for life cell imaging 6 hours before the planned measurements. Later cancellations usually lead to a full invoicing of the costs.

(6) User support

The CNI provides support and consulting services to its users in the planning phase, during the project realization as well as during the evaluation of the studies in all specific technical and experimental questions.

The contact data of the CNI staff are listed in *Appendix II* and on the CNI homepage www.lin-magdeburg.de/cni.

(7) Project plan and process

To apply for a study it is necessary to fill in the study application mentioned above including a short project draft consisting of work schedule, previous work, experiences, hypotheses, required technology and support from service staff, measuring methods to be used and animal species and number of animals, if applicable.

This project draft is evaluated by two scientists, depending on the required modalities. On this basis, a decision concerning the feasibility of the study with a reasonable effort involved as well as its consistency with the scientific profile of the LIN is taken. The CNI designates a contact person for the study.

Main criteria for the decision are:

- scientific quality of the concept
- feasibility (availability of adequate equipment, required technical support, review of legal issues),
- ratio of effort and chance of success,
- financing.

(8) Data export and storage

The CNI provides storage media only limited in time. The principle investigator of the study is in charge of data export and storage. The required storage media have to be provided by the users. Data shall be saved during measurement or immediately thereafter. In principle, data will be deleted without prior notification after 14 days.

(9) General user guidelines

The CNI provides highly specialized and cost intensive devices. Incorrect use may cause serious health problems. Therefore, all devices and laboratory equipment have to be used responsibly and carefully. Malfunctions of a device have to be reported immediately to the CNI staff. Only authorized staff may perform repair or modification actions.

In addition to these user rules, the laboratory rules specific to the modality used apply.

(10) Acknowledgements

In publications such as bachelor, master and doctoral theses, all users are obliged to acknowledge the CNI through citation within the Acknowledgements section:

„We acknowledge the support of the Combinatorial NeuroImaging Core Facility at the LIN in Magdeburg.”

Magdeburg, 2024/04/17

Prof. Stefan Remy
Scientific Director of the LIN

Dr. André Brechmann
CNI Coordinator

Fees (per hour)

| | Unsupervised operation* | Service operation* |
|-----------------------------------|--|--------------------|
| Human 3T MRI | 100.00 € | 150.00 € |
| Human 7T MRI | 200.00 € | 250.00 € |
| Mock Scanner | 10.00 € | 60.00 € |
| EEG | 10.00 € | 60.00 € |
| Animal 9.4 T MRI | 50.00 € excl. costs for animals, narcotic gases etc. | 100.00 € |
| Animal SPECT/CT | 50.00 € excl. radionuclide and tracer costs | 100.00 € |
| Confocal Microscope | 25.00 € | 60.00 € |
| Lightsheet Microscope | 25.00 € | 60.00 € |
| Thunder Microscope | 25.00 € | 60.00 € |
| STED Microscopes | 35.00 € | 70.00 € |
| In-vivo 2-Photon Microscope | 30.00 € | N/A € |
| FLIM Microscope | 35.00 € | 70.00 € |
| Workstations for image processing | 10.00 € | 45.00 € |

All prices quoted are net prices and may be subject to VAT.

Every user has an appropriate time slot for introduction to the respective device(s) for free. Support and services beyond this will be charged based on time and effort.

*Unsupervised and service operation:

Service operation: All measurements and preparations of measurements are done by CNI staff.

Unsupervised operation: The users work on the instruments without direct supervision.

**In-vivo 2-photon microscope users must use the devices by themselves after having received sufficient training.

External users can book STED microscopes exclusively in the service operation mode.

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