CIBM Pre-Clinical Imaging EPFL Infrastructure and Service Fees and Access Policy

Updated May 1, 2025

The following fees and access policy are applicable to services provided by members of the CIBM Pre-Clinical Imaging EPFL section for the usage of Infrastructure 9.4T MRI, 14.1T MRI, PET, Neurochemistry Laboratory and other equipment located at the EPFL CH-F0 and EPFL CH-F1 building in Lausanne.

Pre-Clinical Imaging Infrastructure		**9.4T MRI, 14.1T MRI, PET**	
Research	**Description**	**Mon-Fri 7h-23h00**	**Mon-Fri 23h00-7h00 & wknd**
Type 1: Application	**Type 1a. Application: in-vivo**	143 CHF/h	**Not available**
	Type 1b. Application : ex-vivo[&]	46 CHF/h	46 CHF/h
Type 2: Development*	**Type 2a. Development*: in-vivo**	120 CHF/h	**Not available**
	Type 2b. Development*: ex-vivo[&]	46 CHF/h	23 CHF/h
		Neurochemistry Laboratory	
Application[‡]	**Application: ex-vivo** **Application: Biochemistry test**	25 CHF/h	
Bench top EPR	**Biosafety level** 1	10 CHF/h	
Fluorescence Microscope	**Biosafety level** 1	10 CHF/h	
Services	**Technical and scientific user support**	97 CHF/h	
	Safety Briefing	Free of charge	
	Operator Training	1500 CHF/person	

Table 1 CIBM Pre-Clinical Imaging EPFL Access to Infrastructure and Service Fees

Type 1. Application corresponds to time slots used for data acquisition of biological samples, animal cohorts or any closed-access development.

Type 1a. Application in-vivo: includes basic user support to enable routine experiments with animal physiology monitoring and standard consumables.

Type 1b. Application ex-vivo : includes phantoms/solutions/organs[&].

Type 2. Development* corresponds to time slots used to develop an acquisition sequence, a protocol, a new RF coil or piece of equipment which will be added to the CIBM portfolio of resources and made available to the CIBM research community via a user manual and a recording on how to use, calibrate the acquisition protocol and process the data.
Two presentations per year will be expected on the advancement of these types of projects in the CIBM Pre-Clinical EPFL user meetings.

Type 2a. Development* in-vivo: Limited number of hours and agreed upfront during the acceptance of the "Preclinical Imaging Research Project Application ".

Type 2b. Development* ex-vivo : includes phantoms/solutions/organs[&].

[&] Priority is given for usage of **Type 1a. Application in-vivo**.
***** For projects of **Type 2. Development***, there is a pro-rata annual fee capped to

- 6,000 CHF/year for PhD students
- 12,000 CHF/year for Post-Doctoral researchers.

[‡] For projects which do not make use of the MRI infrastructure and only require access to the Neurochemistry laboratory, there is a pro-rata annual fee capped to 500 CHF/year.

Research

In-vivo animals / ex-vivo samples Studies:

No animal study can be performed without a current, valid, authorization for animal experiments delivered by the appropriate authority. It is the User's responsibility to ensure that a valid authorization for animal experiments is in place, and that all aspects of the animal study shall be performed consistent with that approval.

Specific quarantine and transfer rules apply for animal transport from and to other animal facilities. The User should contact the CIBM PCI EPFL vets (cibm-vets@groupes.epfl.ch) for details.

- Study feasibility needs to be discussed in advance.

- If the study involves live animals, an approved authorization for animal experiments is mandatory and a copy of the **Form A:** Application for licence to perform animal experiment and **Form B** need to be submitted to CIBM PCI EPFL vet team (cibm-vets@groupes.epfl.ch).

- If one or many CIBM PCI EPFL staff members are to perform experiments, their names and the location of the experiment should be explicitly included in the animal authorization.

- Studies in animals must be performed by a CIBM PCI EPFL research/technical staff scientist or by an investigator employed by the USER who has written approval by the CIBM PCI EPFL Operational Manager to scan independently (hereafter "Scanner Operator").

- The Scanner Operator is responsible for the safety of the scan.

- The CIBM PCI EPFL staff can perform feasibility studies, when Acquisition Protocols are already available, involving a max of 2-3 animals. If the requirements of the Project are higher, then a person from the User's Principal Investigator's group needs to be trained to perform the study under the Project or a CIBM PCI EPFL Scanner Operator needs to be requested. EPFL may invoice additional costs for such training or for extended assistance with scanner operation.

- Studies involving human samples should be discussed with the CIBM PCI EPFL NCL manager and biosafety officer Dr Katarzyna Pierzchala (katarzyna.pierzchala@epfl.ch).

- Studies involving viral vector injection should be discussed with the CIBM PCI EPFL NCL manager and biosafety officer Dr Katarzyna Pierzchala (katarzyna.pierzchala@epfl.ch) and vet team (cibm-vets@groupes.epfl.ch).

    - Studies involving animal sacrifice for ex-vivo living tissue EPR at CIBM PCI EPFL Section need to be coordinated for the use of animal facility benches. No sacrifice can be performed at the NCL infrastructure. The User should contact the CIBM PCI EPFL NCL manager Dr Katarzyna Pierzchala (katarzyna.pierzchala@epfl.ch) and vet team (cibm-vets@groupes.epfl.ch) for details.
    - Study feasibility needs to be discussed in advance. If the study involves *ex-vivo* animal tissue (e.g., *ex-vivo* living tissue EPR), an approved authorization for animal experiments is mandatory and a copy of the Form A: Application for licence to perform animal experiment and Form B need to be submitted to CIBM PCI EPFL vet team (cibm-vets@groupes.epfl.ch).

Phantom Studies:

Should there be a need to scan a new and non-standard phantom (mimicking a real object) such as self-made phantoms, moving phantoms, phantoms with electronic components etc., their use first has to be approved by the designated CIBM PCI EPFL Operational Manager via email CIBMprojects@epfl.ch.

Human Samples Studies:

- Study feasibility needs to be discussed in advance.

- Specific safety rules apply for human studies when body fluids or fresh tissue are used in experiments. The User should contact the CIBM PCI EPFL NCL manager Dr Katarzyna Pierzchala (katarzyna.pierzchala@epfl.ch) for details.

- An approved authorization from ethical committee of canton Vaud (Federal Office of Public Health (FOPH) - Research involving humans https://www.cer-vd.ch/ , https://www.bag.admin.ch/bag/en/home/medizin-und-forschung/forschung-am-menschen.html, https://swissethics.ch/en , Federal Act on Research involving Human Beings (Human Research Act, HRA RS 810.30: https://www.admin.ch/opc/en/classified-compilation/20061313/index.html)) is mandatory and a copy of the authorization needs to be submitted to the CIBM PCI EPFL NCL manager (katarzyna.pierzchala@epfl.ch).

    - If the original authorization concerns other canton than Vaud and CIBM PCI EPFL is not included in the authorization an amendment is obligatory. PI of the project is obliged to contact the Human Research

Ethics Committee of Canton Vaud (CER-VD) https://www.cer-vd.ch/ to authorize research on human samples at CIBM PCI EPFL.

- The Principal Investigator is responsible for ensuring that all research on human samples carried out under their supervision is legal and ethical, and that those executing the work have received proper training in "working with human tissue", as well as health and safety concerns.

- Information to be described in the online application is as follows:
  - Type of biological sample and sample class (Biosafety level 1 (BSL1) or Biosafety level 2 (BSL2)),
  - Sample analysis procedures,
  - Sample identification/coding practices for confidentiality,
  - Where the sample will/should be stored,
  - Who will have access to the sample (researchers responsible for the study and CIBM PCI EPFL staff),
  - Storage duration of the sample at CIBM PCI EPFL,
  - Plans for the destruction of the sample, if any.

- **Transferring human tissue and patient data** from one institution to another requires a **Material Transfer Agreement (MTA)** for the transportation of human tissue between institutions for research purposes. Even if ethical approval has been granted, this is still required and under the responsibility of the Principle Investigator (PI). The PI is invited to contact the legal service of their institution, the Legal Affairs team of EPFL (research@epfl.ch), and Dr Katarzyna Pierzchala (katarzyna.pierzchala@epfl.ch).

Grant Submissions:

Should grant submissions be planned that include MR as part of the study protocol, the feasibility of the MR study and the allocation of resources needs to be discussed with the CIBM PCI EPFL Section Team and assigned CIBM PCI EPFL staff prior to submission. For grants that are submitted without prior discussion, access to the scanner and adequate support may not be guaranteed.

Co-Authorship:

Co-authorships of an individual from the CIBM PCI EPFL shall be according to the User's internal regulations. However, notwithstanding the foregoing, co-authorship of an individual from the CIBM PCI EPFL is warranted if substantial contributions to conception and design of the study, scanner protocol design and acquisition of data, or analysis and interpretation of data have been made. After drafting the article or revising it critically for important intellectual content, final approval of the version to be published has to be granted.

Acknowledgments:

Should part of the results obtained in collaboration with the CIBM PCI EPFL and/or through the use of the Equipment be published, the User agrees to include the following sentence in the 'Acknowledgments' section of the publication:

"We acknowledge the CIBM Center for Biomedical Imaging for providing expertise and resources to conduct this study."

Services

Members of the CIBM PCI EPFL Section may offer research and/or technical support, and it should be clearly requested in the online project application form.

For studies on animals, the CIBM PCI EPFL provides veterinary support for monitoring animal physiology under anaesthesia during MRI experiments.

Technical and Scientific User Support:

Applied hourly upon request in addition to the Application or Development cost and agreed upfront. Services include, but are not limited to:

- Specific surgeries or cares/follow-up/scoring *before* or *after* MRI experiments and, if required, the training of the veterinary team.
- Assistance during processing of the data or preparation of phantoms or ex-vivo samples for MRI/MRS.
- Usage of the bench.
- Development of a new Acquisition Protocol based on a scientific question and requested by a PI.
- Feasibility studies performed by CIBM staff on a limited number of samples (max of 2-3 animals/samples). *For example, when a PI intends a long collaboration with CIBM on the topic and the acquired data are aimed for submitting a grant request as preliminary results to obtain the needed human resources for independent scanning.*
- Assistance in PET experiments for PET tracer preparation and injection
- Microscopy and EPR experiments.
- Assistance during data processing: e.g., EPR, IHC, ELISA.

The recommended session duration for the use of the **PET scanner** is of 5 hours according to the availability of the Operational manager and of the availability of the tracer which comes from off-site and on specific days.

Extra services provided by a CIBM PCI EPFL staff, extra equipment, and the use of contrast agents, PET tracers or other drugs, chemicals and consumables are not included in the hourly rates, these will be predefined and charged separately, if any.

MRI Safety Briefing Test: A safety test for working in an MRI and/or NCL environment must be successfully completed by the User in order to enable their booking rights in the Calpendo online booking system. Information is provided by the CIBM PCI EPFL Operational Manager on the process and modalities of such safety test.

Operator Training: To scan independently without CIBM PCI EPFL staff support, all investigators must undergo MRI Scanning Training done by the CIBM PCI EPFL Operational Managers. The training in not supposed to be used for acquiring publishable datasets, it involves a maximum of 3 times slots (magnet time fees need to be covered for two of the time slots, the 3rd being free as pilot test) with standard phantoms.

NCL User Training: To have access to the Neurochemistry lab independently without CIBM PCI EPFL staff support, all investigators must undergo training done by CIBM PCI EPFL NCL manager.

Operations

Scanner Upgrades:

Software and or hardware upgrades on the Equipment may occur occasionally. Such upgrades lead to improved scanner performance and the CIBM PCI EPFL can therefore continuously provide its users with the latest MR technology and methodology. While most of the scanner protocols can easily be transferred from one software release to the next, there may be exceptions. For those users who program their own sequences upgrades may necessitate additional steps. For these reasons, notifications will be sent via email to all the PI's prior to the planned upgrade. You can request to be added to the list of recipients of that e-mail by contacting CIBMprojects@epfl.ch

Non-Standard Use of Equipment:

Research involving installation of a research software or hardware modifications requires the prior approval of the CIBM PCI EPFL Section Head (cristina.cudalbu@epfl.ch).
At the end of each session, the system must be put back into its original state.

Disclosure:

The CIBM PCI EPFL provides MRI machine time and is not responsible for the success or failure of an MRI study nor of the Project in general, or for failures due to non-standard MRI pulse sequences, study protocols, detector coils, interface electronics or ancillary equipment owned in full or in part by the investigator or by other third parties.
While CIBM PCI EPFL staff will apply best scientific standards to support the study performed under the Project, the User acknowledges that such study is to be construed as research which by its nature, involves uncertainty.

CIBM PCI EPFL staff is not responsible for the failure of the study to deliver the desired results or any results.

Conduct of Study & Citizenship:

It is the responsibility of the User to ensure on-time arrival of animals, their suitability for the study, and the availability of any non-standard materials (hardware, coils, software, pulse sequences, ancillary equipment) required for the study. The User needs to follow a specific protocol for animal arrival in the CIBM PCI EPFL animal facility and should contact the CIBM PCI EPFL vets (cibm-vets@groupes.epfl.ch).

The user is fully responsible for the correct use of the scanner within its operating limits and for any damage caused by his/her use of the scanner. Any scanner or equipment problem is to be reported immediately to CIBM PCI EPFL staff.

As a courtesy to the others and for fair access, the User is responsible for finishing their study on time. Time for set-up, clean-up and data storage must not infringe on the time of the following investigator. Unforeseen events such as failure of the equipment, etc. do occur and may shift or prolong the examination with a resultant infringement of the right of the subsequent investigator to start on time. While this should be a very rare exception and flexibility of all involved parties is expected, an overtime that exceeds 15min is not tolerated. The User on whose watch the overtime occurs is responsible to communicate the delay to all the investigators with reservations who follow.

Data Storage, Handling and Transfer:

The capacity of the scanner for data storage is limited. To ensure successful operation of the scanner, the database on the scanner needs to be cleared periodically.

For this reason, it is the User's responsibility to store and backup their data on their own external hard drives.

Clean Up:

It is the responsibility of the User to clean up when finished:

- trash is to be emptied;
- clean the NCL benches, computer and animal preparation rooms;
- all coils and scanner equipment are to be cleaned and put away properly;
- animals must be returned to the animal facility (needs to be discussed in advance with the vet team)
- cleaning and sanitizing of NCL equipment:
    - prevent contamination
    - maintains health and safety compliance
    - keep the lab organized
    - clean the reusable lab glass- and plasticware and put away properly
- human samples must be stored in designated storage place.
- any equipment problem is to be reported immediately to CIBM PCI EPFL staff
- human samples must be stored in designated storage place.

Booking

The Calpendo online booking system cibm-ch.calpendo.com was chosen by CIBM so as to give the project PI and researchers easy access to the booking and scanner usage information throughout the project. Once the study is approved, the PI and designated researchers will be sent a user account login information.

For users who rely on CIBM PCI EPFL staff for scanning, the scan time bookings will be done internally, allowing for both scanner and staff availability. For users who rely on CIBM PCI EPFL staff for sample preparation or work executed at the Biosafety Level 2 (BSL2), the bookings will be done internally, allowing for both NCL and staff availability.

For autonomous users of the MRI systems and of the NCL (except BSL 2) at CIBM PCI EPFL, the scan time bookings can be made independently.

Please note that access to the scan time booking for resources approved in the project will be granted after proper training - if required - and successful completion of a MR safety test and questionnaire about the MR facility and procedures.

A tutorial for properly booking in Calpendo will be provided to each user before the first booking.

For any enquiries on the Calpendo booking system please contact itsupport@cibm.ch.

Time slots:

Users are allowed to book scanner time 60 days in advance. Exemptions to the 60-day notice may be considered upon application to the CIBM PCI EPFL Section Head (cristina.cudalbu@epfl.ch) for extraordinary reasons, such as logistics peculiar to the specific research study. The scanner is being continuously monitored. The user is responsible to ensure that all scanner bookings including nights and weekends are accurately registered in the online calendar. Investigators with calendar bookings are entitled to have access during their reserved time.

MONDAY TO FRIDAY: A maximum of two time slots/week can be booked for each study during weekdays, if available.

NIGHTS AND WEEKENDS: Over-the-weekend slots are permitted for very long ex-vivo acquisitions and can be started on Friday afternoon (3pm) and finished on Monday morning (7am). Presence alone in the building outside office hours (6pm - 8am) is not permitted, and investigators who are not in possession of an EPFL Camipro Card with building access should be accompanied by CIBM PCI EPFL technical or scientific staff on evenings and weekends. EPR and microscope usage is restricted to weekdays.

Note: Scanning of phantoms, ex-vivo samples and technical developments which do not require veterinary support are strongly encouraged during nights and weekends. Time slots should be booked starting 7am till 3pm, if possible, to allow the usage of the MRI scanners in the evening and nights.

Billing:

The fees applicable to the use of the Equipment are those indicated in Table 1. The billing will occur twice annually in accordance to the hours reserved in the Calpendo booking calendar.

A project booking and usage report will be sent to the Principal Investigator for validation
- early May for bookings occurring between November 1st - April 30th
- early November for bookings occurring between May 1st - October 31st

An invoice according to the booking and usage report will follow mid-May, mid-November, respectively.

Should a booked slot not be used, justification is required and cancellations are accepted until 24 hours prior to the slot at no charge.

Should payment for the prior cycle be outstanding, the CIBM may revoke your permission for scheduling.

Should a study end before the billing periods, an invoice may be requested at that time.

An additional overhead % to the hourly fees are applicable for projects led by Principal investigators not affiliated to the CIBM founding partner institutions CHUV, UNIL, EPFL, UNIGE, HUG according to
- + 20%: Swiss academic institutions
- + 60%: Non-Swiss academic institutions
- + 100%: Industry: Start-Up
- + 300%: Industry: Small Medium Enterprise (SME), Multi-National Company (MNC)

Annex 1 – CIBM Pre-Clinical Imaging EPFL Team contact information

- **Section Head**
  - Dr. Cristina Cudalbu, cristina.cudalbu@epfl.ch
- **9.4T MRI Operational Manager & Safety Officer**
  - Dr. Thanh Phong Lê, thanh.le@epfl.ch
- **14.1 MRI & PET Operational Manager**
  - Dr. Bernard Lanz, bernard.lanz@epfl.ch
- **Bio-Safety Officer & Neurochemistry Lab Manager**
  - Dr. Pierzchala Katarzyna, katarzyna.pierzchala@epfl.ch
- **Animal Physiologists**
  - Estelle Gerossier, estelle.gerossier@epfl.ch
  - Jocelyn Grosse, jocelyn.grosse@epfl.ch
  - **Vet Team** cibm-vets@groupes.epfl.ch