CIBM MRI EPFL Human MR Imaging Research Infrastructure
Fees and Access Policy
Effective January 2023

These access Policies are applicable to the CIBM MRI EPFL Infrastructure (7T MRI Magnetom and related equipment) located at the EPFL CH-F0 building.

Equipment and Service Fees

Access to CIBM equipment fee structure has been revised in CIBM Convention Execution n°37 to an hourly rate scheme as described in Table 1.

<table>
<thead>
<tr>
<th>Human MR Imaging Infrastructure</th>
<th>7T MRI, EPFL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Mon-Fri 8h-18h00</td>
</tr>
<tr>
<td>Type 1: Application</td>
<td>149 CHF/h</td>
</tr>
<tr>
<td>Type 2: Development</td>
<td>52 CHF/h</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Services</th>
<th>7T MRI, EPFL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator Service</td>
<td>58 CHF/h</td>
</tr>
<tr>
<td>Specific Service</td>
<td>73 CHF/h</td>
</tr>
<tr>
<td>Safety Training</td>
<td>Free of charge</td>
</tr>
<tr>
<td>Operator Training</td>
<td>125 CHF/h/person max 1500 CHF/person</td>
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</tbody>
</table>

Table 1 CIBM MRI EPFL Human MRI Infrastructure and Service Fees

Type 1. Application corresponds to time slots used for data acquisition outside of development purposes.

Type 2. Development involves designated time slots for creating acquisition sequences, protocols, new RF coils, or projects aligned with section objectives. The scientific and technical outcomes of this development will be integrated into the CIBM resources portfolio and shared with the CIBM research community upon completion. Approval for accessing Type 2 Development hours and associated fees must be obtained from the MRI Section.

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.
**Operator Service:** Applied hourly in addition to the Application or Development cost, agreed upfront when a PI does not have the resources to run the scans independently after training, available for a limited number of MRI/MRS protocols and as a feasibility study, when Acquisition Protocols are already available, involving a max of 3 scans.

**Specific Service:** Applied hourly upon request and agreed upfront. Examples of specific services include, but not limited to,
- Assistance during processing of the data
- Preparation of phantoms or ex-vivo samples

Extra services provided by a CIBM MRI EPFL AIT staff, and extra equipment are not included in the hourly rates, these will be predefined and charged separately, if any.

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)

**Booking**

The Calpendo online booking system [cibm-ch.calpendo.com](http://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 MRI EPFL staff for scanning, the scan time bookings will be done internally, allowing for both scanner and staff availability.

For autonomous users of the MRI systems at CIBM MRI 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 an on-line MR safety test. All researchers entering the scanner room will have to repeat the safety test on an annual basis.

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](mailto: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 request to the CIBM MRI EPFL Section Head (dimitri.vandeville@epfl.ch) for extraordinary reasons. All scanner bookings including nights and weekends have to be registered in the online calendar.
MONDAY TO FRIDAY: A maximum booking hours per week per study may be enforced depending on the activity at the scanner.

NIGHTS AND WEEKENDS: Over-the-weekend slots are permitted for very long ex vivo acquisitions and can be started on Friday afternoon and finished on Monday morning. 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 MRI EPFL staff on evenings and weekends.

Note: Scanning of phantoms, ex vivo samples and technical developments are strongly encouraged during nights and weekends.

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.

Studies in Human Subjects:

Current Ethics Committee Approval is mandatory for human studies, and it's the principal investigator's responsibility to ensure full compliance in these matters.

Here are some specific requirements of the CIBM MRI EPFL AIT platform:

- Study feasibility needs to be discussed with the operational team in advance.
- Approval to conduct human MR studies must be obtained via the project application form.
- Studies in human subjects must be performed by an investigator who has trained and obtained written approval by the Operational Manager to scan independently.
- Prior to entering the scan room, the study subject must have read, understood, signed and dated the consent form.
- The consent form must be signed and dated by the PI.
• The safety checklist must be completed, signed and dated by both the PI and the study subject.
• The operator is responsible for the safety of the study subject and individuals who meet exclusion criteria cannot be scanned.
• The scanner and coil status has to be entered into the logbook at the scanner.
• During off-peak hours (6 PM - 8AM, public holidays and on weekends) a minimum of two investigators need to be present simultaneously at the scanner console and scanning of patients is not permitted.

Animals Studies:

A valid authorization for animal experiments delivered by the appropriate authority is required to perform in-vivo animal study. It is the User’s responsibility to perform the study consistently with that approval and local animal handling regulations.

Studies with animals should be performed preferably during off-peak hours. Please contact CIBM staff to minimize the interference with human studies.

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 MRI EPFL Operational Manager via email CIBMprojects@epfl.ch.

MRI Operator Training:

All investigators who want to scan independently without CIBM MRI EPFL staff support must undergo a training provided by the CIBM MRI EPFL Operational Managers or a researcher already accredited to scan alone. In this case a final approval by the CIBM MRI EPFL Operational Manager will be needed. The duration of this training may depend on the involvement and prior knowledge of the trainee.

MRI Safety Training:

All investigators who want to scan independently must undergo safety training and test. An annual safety test for working in an MRI environment must be successfully completed by the User in order to maintain their booking rights of MRI scan time in the Calpendo online booking system. Information is provided by the CIBM MRI EPFL AIT Operational Manager on the process and modalities of such safety test.

Support and Services

CIBM MRI EPFL may offer research/technical support and it should be clearly requested in the formal study protocol application.
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 Section Head, Operational Manager and assigned CIBM MRI EPFL staff prior to submission. For grants that are submitted without prior discussion, access to the scanner and adequate support may not be guaranteed.

Scanner Upgrades

Software and or hardware upgrades on the Equipment may occur occasionally. Such upgrades lead to improved scanner performance and the CIBM MRI 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, use WIP product from the vendor, or who benefit from C2P arrangements or, upgrades may necessitate additional steps. For these reasons, notifications will be sent via email to all the PI's 6-8 weeks 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:

The CIBM MRI 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.

Research involving installation of a research software or hardware modifications requires the prior approval of the CIBM MRI EPFL Head (dimitri.vandeville@epfl.ch).

At the end of each session, the system must be put back into its original state.

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

Conduct of Study & Courtesy Guidelines:

It is the responsibility of the User to ensure on-time arrival of participants, their suitability for the study, and the availability of any non-standard materials (hardware, coils, software, pulse sequences, ancillary equipment) required for the study.
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.

**Incidental findings**

The investigators must inform the study subjects about the rare but known risk of Incidental findings on the consent form. If an incidental finding arises during your study, it will necessitate the involvement of a physician trained in medical imaging. Therefore, investigators are required to secure the agreement of a qualified medical imaging specialist for their study before submitting the study protocol to the Ethics Committee. If you have any additional questions about the procedure, please don't hesitate to contact the CIBM MRI EPFL AIT team.

**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:

a) all coils and scanner equipment are to be cleaned and put away properly;

b) clean the magnet room, operation room and preparation room;

c) any scanner or equipment problem is to be reported immediately to CIBM MRI EPFL staff.

**Co-Authorship**

Co-authorship of an individual from the CIBM MRI EPFL is warranted if:

1. 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;
2. drafting the article or revising it critically for important intellectual content is involved; and
3. final approval of the version to be published has been granted.

Authors should meet conditions 1, 2, and 3.
Acknowledgments:

Should part of the results obtained in collaboration with the CIBM MRI 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."

Annex 1 – CIBM MRI EPFL 7T MRI team contact information

Section Head:

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RF Coil Research Engineer:

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