UCSD Center for Functional MRI
Policies and Procedures for Using the 3T Scanners
(Last Updated: 07/19/2021)

Investigators holding faculty (or equivalent) appointments within the San Diego research community may apply for access to the 3T whole-body imaging systems for research studies at the UCSD Center for Functional MRI (CFMRI). Investigators not employed by UCSD will require that their home institution establish a standard License and Equipment Use Agreement with UCSD in order to apply for access to scan.

Summary of Key Steps

1. Contact CFMRI (cfmri@ucsd.edu) if you have questions about getting started or to discuss the feasibility of your proposed study.
2. PIs who currently have projects on the 3T scanners can login to CFMRI CALPENDO and Create a New Project. *New PIs* - if you do not have access to the CFMRI CALPENDO system, please refer to the online User Guide and request an ID.
3. Obtain protocol approval from the appropriate UCSD IRB (human studies) or IACUC (animal studies).
4. UCSD projects require a current Index number while non-UCSD projects need a PO prior to approval.
5. When the project is approved by the Science and Finance teams at CFMRI, a project code is assigned and the Investigator may schedule time through CFMRI CALPENDO .
6. Invoices are generated monthly based on scheduled time.

These steps are described in more detail below. The goal is to keep these procedures simple and straightforward, but they are subject to change when required. Suggestions are always welcome. For questions about these policies and for inquiries about the status of a submitted project, please email cfmri@ucsd.edu.

Project Submission

Current PIs – PIs who currently have projects on the 3T scanners can login to CFMRI CALPENDO and Create a New Project.

New PIs - if you do not have access to the CFMRI CALPENDO system, please refer to the online User Guide and request an ID. When you receive your login information you can access Calpendo and go to *Projects/Create Project* to submit a new project.

Project Review

When the New Project is received by the CFMRI it will be considered by the Science and Finance teams and you will be notified if any additional information is required. Projects must have a current valid index number or PO, current designated Operator and IRB approval before final approval. When the proposal is approved you will be notified that it is ready for bookings in Calpendo. See User Guide for more information.

IRB or IACUC Review

In addition to the review at the CFMRI, all projects must also have appropriate UCSD IRB or IACUC approvals. Proposals for human studies can be reviewed by the CFMRI before the UCSD IRB approval is complete, but the IRB approval must be on file at the CFMRI before a project code is assigned. A copy of the letter of approval from the appropriate UCSD review board must be attached to the project or e-mailed to cfmri@ucsd.edu.

Access to 3T Magnet Rooms

Access to the 3T magnet rooms is generally limited to personnel who have received MRI Safety Certification from the Center. A more detailed policy is available at (http://cfmriweb.ucsd.edu/policies.html). More information about safety training can be found at http://cfmriweb.ucsd.edu/info/gettingstarted.html.

Operator Certification and Training

A training course covering scanner operation and safety is run by the Center and leads to certification as an independent Certified Operator. Information on training is available at http://cfmriweb.ucsd.edu/info/gettingstarted.html. Only Certified Operators are allowed to run the scanner, and the right to withhold or withdraw certification is at the discretion of the CFMRI Director. Certification will expire if an Operator does not scan for 4 months. In addition, each Operator must pass the Safety Certification test each year.

***Eligibility*:** Only students and staff members affiliated with UCSD or a partner institution that has signed the License and Equipment Use Agreement with UCSD are eligible to become an Operator. Volunteer faculty and staff members at UCSD or the partner institutions are not eligible. Further information on operator eligibility and responsibilities is available at (http://cfmriweb.ucsd.edu/policies.html).

Scheduling

Once approvals are on file at the CFMRI and a Certified Operator has been identified, a project code is created in CFMRI CALPENDO under the PI's name. The PI or a member of the PIs Lab who has been associated with the project as an Operator, Trainee Operator or Research Coordinator can schedule approved resources in Calpendo as needed.

Billing

Billing is done in half hour increments. Hourly rates are subject to change, and are currently as follows:

UCSD Recharge Rate	$597 per hour
Non-UCSD Invoice Rate	$866 per hour

The non-UCSD invoice rate includes a 45% differential fee to fund University resources. This 45% is normally recovered via indirect costs by UCSD researchers from their sponsored research grants. For non-UCSD users, the same fee must be recovered by the University.

3T Cancellation Policy

CFMRI CALPENDO must be used to reserve time for any activity that is performed on the scanner console or magnet. Time reserved using the Calpendo system will be billed to the PI who books it whether or not the time is used, with these exceptions:

1. A reservation that is made and cancelled within two hours will not be billed. PI's can use this feature to temporarily hold time on the scheduling calendar while coordinating with others.
2. If a PI cancels a reservation and another PI books the same slot, the PI who originally reserved will not be billed.
3. A slot that is cancelled more than 30 days before the scheduled time will not be billed to the PI who reserved it.
4. When Center staff move the time to "technical difficulty".

3T Pilot Hour Program (applicable only to UCSD-funded projects)

1. ***Paid Hours***: Hours actually paid for. Each month the Paid Hours used by each project are tallied.

2. **Lost Hours**: Lost Hours are time slots that go unused but were previously reserved by a PI for more than 2 hours during the previous 30 days. Lost Hours are also tallied monthly by project.

3. **Pilot Hours**: Pilot Hours will be calculated for each project at a rate of:

   1 Pilot Hour awarded for each 4 Hours of Paid Scan time.

   To calculate the number of **net** Pilot Hours, the Center will subtract the number of Lost Hours from the number of potential Pilot Hours (e.g. potential Pilot Hours – Lost Hours = net Pilot Hours). See Example below.

   Examples:

Paid Hours of Scanner time	Potential Pilot Hours (4:1)	Actual Lost Hours	Pilot Hours Awarded/Deducted
32	8	0	8
32	8	5	3
32	8	10	-2

5. **Reconciliation of accounts**: Periodically the Center will reconcile all accounts for a PI, removing Pilot Hours from their other accounts, if necessary, to offset deficits in other Pilot Hour accounts. If a PI accrues a negative Pilot Hour balance, then the Center reserves the right to invoice for scan time that was previously used and scheduled with Pilot Hours.

6. **Scheduling Pilot Hours.** When making a scan time booking in CFMRI CALPENDO the booker will have the option of using Pilot Hours for the scan. Details of the current Pilot Hour balance can be viewed under the "Admin Use Only" section of the Project.

Technical Problems

A "technical problem" includes basic scanner functions as well as functionality of the standard ancillary equipment (projectors, button boxes, etc.). Problems should be reported immediately through the **Problem Report** page of the website. This will let Center personnel know of the problem, and all other investigators will be able to see if there are current problems with the scanner that may require them to change their plans. The best procedure for avoiding lost time due to technical problems is:

1. **Check CFMRI CALPENDO before arriving**. Before arriving for a study, the PI and/or the Operator should login to CFMRI CALPENDO and check the current reported problems (if any) that might preclude their planned study. Scheduled time will be moved by Center staff to the technical difficulty category so that automated billing does not occur.

2. **Check the FAQ's on the CFMRI Website.** If a technical problem is encountered after the study begins, first consult the FAQ section of the web site to see if this is a known problem that can be easily fixed.

3. **Report all problems.** If this is a new problem, the PI or Operator should report the problem under the "Technical Problems" section in the booking for the relevant scan. Note that even if direct help for the problem is obtained from someone in the Center, the problem still must be reported, including how it was fixed. This benefits everyone and provides a better record of how often problems occur.

Billing Adjustments for Technical Problems

If technical problems arise with the scanner, there will be no charge for lost time. CFMRI CALPENDO is also the billing database so it is important to report the technical problem within **72 hours** of the incident.

The Center's policy is that billing will not be adjusted for:

1) Technical problems that have not been reported by the PI or Operator within 72 hours;
2) Time lost due to problems that are the responsibility of the PI or Operator (e.g., if the subject doesn't show, the PI's computer fails, or the Operator uses the wrong pulse sequence parameters);
3) Minor system glitches that do not prevent completion of the scan session (e.g. the scan could be completed after a TPS reset).

Note that the physiological monitoring equipment is **not** considered standard equipment and is provided free of charge as an optional service that may be of benefit; billing will not be adjusted because of issues with this monitoring equipment. Please note that the Pilot Hours provided to each account (see above) are absorbed by the Center in an effort to help the PI deal with the various problems associated with getting good data, such as optimization of their techniques and minor system glitches. The hours used will be adjusted only if there is a major failure of the functionality of the 3T MRI system that prevents completion of the scan session.

Pilot Studies

There are no "free" pilot hours available at the start of a new project. Instead, Pilot Hours will be awarded monthly in accordance with the cancellation policy described above.

Annual Report

Each year the IRB or IACUC approval for a project will need to be renewed and current copies of these approvals must be emailed to cfmri@ucsd.edu. At the time of renewal, we also ask that each PI submit a brief report on the progress of the study. This should include the number of studies performed, results to date, and any problems encountered.

APPENDIX 1

CFMRI - Scanner Usage Rates

The current UCSD Recharge Rates and Outsider Users' Rates are as follows:

Note that these rates are subject to change.

Service Description	Unit	7/1/2021
UCSD Recharge Rates		
3T MRI Scanner for humans	Hour	$ 597
3T MRI Scanner for humans, with Center Technical Specialist	Hour	$ 679
Outside Users' Rates		
3T MRI Scanner for humans	Hour	$ 866
3T MRI Scanner for humans, with Center Technical Specialist	Hour	$ 985