

Center for Brain Science Neuroimaging Training Levels and Criteria

The rules about working in and around the Neuroimaging center as well as having an access key are as follows:

Level 1: Observer - Anyone and everyone wishing to observe research around the MRI magnet must first watch the safety video. Once you have done this you are permitted to be in the magnetic environment as an observer only. You must be accompanied by a fully trained MR user (or Tammy Moran). You may not help run the scanner, screen subjects or load subjects into the scanner. **ACCESS KEY NOT PERMITTED**

Level 2: Scan Buddy/ MR User in Training (Yellow Badge) - In order to become a scan buddy (a trained users second in command) you must first watch the safety video and attend a full safety class* with Tammy Moran, followed by a test to verify your knowledge of safety procedures. Once you have done this you are permitted to work in the magnetic environment with a fully trained MR user's (or Tammy Moran) supervision. You may act as a fully trained user's second during an experiment and offer help in an emergency situation. You may provide supervised help in running the scanner and loading subjects into the magnet. **ACCESS KEY NOT PERMITTED**

Level 3: Fully Trained MR User (Green Badge) - In order to become a fully trained MR user, you must first have completed levels 1-2 of training. You must then gain as much experience as you can observing and helping to run the scanner with the assistance of another fully trained user within your labs (or Tammy Moran if no one within your lab is fully trained) for no less than 20 scans. This is a self-paced process and it is your responsibility to find time to come down to the scan room to get the experience you need to complete your training. Please list trainees names in the log book in the scan room each time you attend a scan session as a way for you to keep a record. Once you have sat in and/or run the scanner for no less than 20 sessions AND you feel you are proficient in all aspects of scanning, please contact Tammy Moran to schedule 1-2 certifying scans, depending on time needed. You will be tested orally and practically on your scanning skills and knowledge of emergency procedures. During the certifying tests you are expected to be able to boot up the scanner, screen subjects, load subjects in the scanner, run an experiment from start to finish, properly end an exam, back up your

data to the server as well as be able to recite the imaging center's emergency procedures that you will learn in the safety class. Once you pass these tests you are considered a fully trained MR user and will be given access to the MR suite and control room via your Harvard ID*.

ACCESS KEY GRANTED

*The safety classes are scheduled on an as needed basis. When the date of the next class has been confirmed, it will be announced on the MR users email list. **To sign up for the email list please follow this link:** <http://lists.hcs.harvard.edu/mailman/listinfo/mrusers-list>

Training Program Contents

Magnet Safety

- Safety video and Test
- Emergency procedures
- Stop Scan buttons
- Electrical Power Off buttons
- Quench buttons
- Calling for help
- Fire extinguishers
- Getting the subject out of the magnet
- Control room orientation
- Rules for equipment use
- Reporting equipment problems
- Where to find; coils, linens, supplies
- How to use; coils, linens, supplies
- Subject preparation
- Informed consent
- MR screening
- Demetaling
- Hearing protection
- Positioning in magnet and land marking
- Squeeze ball

Operating the Magnet

- Login/Logout
- Scanning
- Archiving Data to the server and DVD
- Incidental findings

Handouts

- MR Suite Rules and Procedures
- Potential MRI Hazards
- CBS Neuroimaging Research Policies
- Metal Screening Form
- Responsibilities Agreement
- Emergency Procedures
- Subject Screening Policies

Evaluation and Certification Procedure

- Attend safety class and view safety video
- Complete a test to verify your knowledge of safety procedures
- Complete training with fully trained MR user
- Scan with Tammy Moran for a qualifying exam

Center Record Keeping

The CBS Neuroimaging Center will keep records of all investigators certified to operate scanners including:

- Date safety video was viewed
- Date safety class was attended and test was taken
- Date of qualifying scan sessions
- Personal Screening Form
- Initialed Center's Research Policies
- Agreement to conduct research according to CBS guidelines signed by Investigator and their PI.