



Center for Advanced Brain Imaging
Georgia State University and Georgia Institute of Technology
831 Marietta St, Atlanta GA 30332, USA
Phone (404) 385-8619
Fax (404) 385-8620

CABI research etiquette and suggestions for a successful scan

Before you scan

1. For any experimenter who is new to scanning at the CABI, you must have shadowed at least 2 scanning sessions from preparation before participant arrives to post scan responsibilities, in order to observe the proper procedures. The hope is that you will feel 100% confident when you go in for your first scanning appointment.
2. Make sure you know your experiment runs without errors. It would be a shame to have to pay for an hour of wasted time because your stimuli didn't load properly or you forgot to log participant responses. Test your experiment from start to finish outside the scanner before testing participants.
3. If you need help with your experiment, ASK! There are many researchers around who are very experienced scanners and happy to help you get your study running. Most of the time, you can't just take an Eprime study that you used for a behavioral study and expect to obtain robust fMRI results.
4. Use your pilot time to make sure your study looks/sounds/feels the way you expect. Image size and position can be calculated before scanning but it's always a good idea to be able to see for yourself what it will look like for your participants in the magnet.
5. Choose your participants carefully. A phone conversation is always better than an email for getting to know your participant. Does he sound like he isn't that interested or serious about participating? Maybe he will be a no-show. A no-show may not be a huge deal for a behavioral experiment but will cost you dearly for MRI studies.
6. Screen your participants carefully. You must have your participants review the CABI screening forms before they are scheduled and definitely before they arrive. Depending on your IRB protocol, these forms can be read to the participants over the phone or emailed to the participant. Make sure your participant actually read/heard these screening questions. It would be a shame to have your participant show up at CABI only to be sent home because you neglected to ask about his history as a metal worker!
7. It is a good idea to call your participants to provide "gentle reminders" about their upcoming scanning appointments. If you scheduled a participant 3 weeks ago, he may not remember his appointment. A good idea is to call several days before and perhaps also the day before the appointment to remind him. Thus, if he needs to cancel, you can avoid being charged for the unused time.
8. Make sure your participant knows how to get to CABI. A map is available on the website. You can even mail this with directions to your participant. Make sure your participant is aware of where to park; spaces in the front of the building marked with the yellow reserved signs. **If he parks in any other spot in the lot, he may get a ticket.**
9. Tell your participant to arrive early (see #10 below).

On scanning day

10. You and your participant need to arrive early! It's a good idea to arrive before your participant, as you may need time to get your files together so you aren't rushing around when your participant shows up.
 - a. Have your participant arrive with enough time so you can take care of all consent forms, screening, practice, glasses fitting, etc. so that your participant is being positioned on the scanner bed right when your scheduled time begins. 30-45 minutes seems reasonable for most studies but you may want to allow for more time if you have special populations, like children or older adults that might

require more practice time, for example. **Remember, you are billed for the time you scheduled PLUS any extra time you are in the MRI suite because you started late (e.g. if you booked 10-11 am but you aren't ready until 10:15 and you don't finish until 11:15, you will be billed for 90 minutes, as billing is done in 30 minute increments.)**

11. Before you and your participant enter the MRI suite, make sure you both have de-metaled yourselves. Credit cards, piercings, zipper-laden clothing, steel-toe boots, hair barrettes, etc. You can quickly get into the MRI suite, put these items in the lockers and get started.
12. Ask your participant to visit the restroom before going into the scanner.
13. Take a look at your fMRI localizer. It's the first image acquired and you can tell very quickly if your participant is positioned too high/low to acquire your regions of interest. We have excellent MR Technologists who are watching out for this but you should get to know what you are looking for too.
14. Talk to your participant throughout the scan. If you have a 45 minute study, don't let your participant lie there for 45 minutes without hearing your voice. Break your experiment into runs so that you can talk to your participant between runs. Make "checking in" a regular event so that your participant knows he will hear from you and can ask you questions when the scanner goes quiet. Make sure he is comfortable, happy, and still following your task.
15. If your task records button presses, check to make sure the responses are registering as the participant is performing the task. You can check this on the fiber optic box in the control room. Sometimes there are problems with the button boxes but sometimes your participant will get sleepy and stop responding. This is another good reason to check on your participant throughout the study.
16. Avoid discussing your study in front of the participant. You want your participants to be naïve to the goals of the research so as not to change how they approach your tasks (e.g. if the participant heard you say this is a memory study but you want the memory test to be a surprise, you may have just ruined it). Wait until the debriefing period to tell them about the details of the project.

After scanning

17. Use a flash drive or external hard drive to back up your behavioral data immediately after your scan. Hard drives fail and files accidentally get deleted and you shouldn't count on the data being there the next time you come to CABI.
18. Always remember this is a multi-user facility. Don't move, rename, or delete any files that do not belong to you.
19. Get your belongings and those of your participant together quickly so you can exit the MRI suite directly after your finish so that the next user can begin setting up without interference. In other words, get in quickly and get out quickly.

General

20. Try to avoid coming into the MRI suite, as some of the participant populations are more vulnerable and extra traffic might interfere with their scanning preparation.
21. If you are planning on bringing someone through the center for a tour, please try to make prior arrangements.

These same procedures should be followed for the mock scanner and pre/post testing rooms.