Conducting Research at the DBIC

This guide outlines the roles and shared practices that help research teams maintain a safe environment, support reliable image quality, and keep scanner operations running smoothly. Please contact Mike Pearl or Courtney Rogers whenever you have questions or need help applying these guidelines.

Scanner Suite Access

Scanner suite access is based on each researcher's role and level of training. All personnel must complete the required safety education before entering the scanner environment. Researchers who want to operate the scanner independently must also complete supervised experience and a practical assessment covering scanner operation, safety, and emergency procedures.

Research Roles

MR Researcher

An **MR researcher** is anyone involved in conducting MRI research at the DBIC, including research faculty, postdoctoral fellows, graduate students, undergraduates, and full-time research staff.

Scan Buddy

A **Scan Buddy** is a safety-trained researcher who assists a certified MR Operator during a scanning session. To serve in this role, research personnel must complete MRI Technologist-led safety training and an online module on safe conduct in the scanning environment. During scanning, two researchers must be present: one certified MR Operator and one Scan Buddy.

MR Operator

An **MR Operator** is a researcher who is certified to operate the scanner independently. The certification pathway has two stages: first becoming an operator-in-training, and then completing MRI Research Technologist-led safety, console, hands-on, and practical training.

Shared Expectations

The following shared expectations support a safe, respectful, and well-organized scanner environment for all research teams.

Safety

Everyone on the scanning team shares responsibility for maintaining a safe environment for research participants. Please follow the guidance provided during safety training and ask DBIC staff whenever a situation is unclear.

- Complete the pre-scan experimenter form before entering the scanner room.
- Review the participant screening forms before the scanning session.
- If any screening question is answered “yes,” obtain clearance from Mike Pearl before scanning.

Courtesy

- Please check with Mike Pearl and the equipment owner before removing cables or equipment belonging to another research group from the scanner suite.
- Return equipment and setups to their original condition after use.
- Secure loose cables and return them to their designated storage location after use to help prevent image artifacts.
- Please leave the screen in its marked position. If it needs to be moved, realign it with the floor markings when finished.

Cleanliness

- Keep the control room clean and dispose of trash, earplugs, and other waste.
- Return equipment to its designated storage location after use.
- Fold and store linens and cushions when finished.
- Place used linens and scrubs in the laundry basket in the changing room.
- Keep scrub drawers neat and organized.

Responsibilities

Along with the expectations above, MR Operators are expected to:

- Complete the logbook and screening forms in full.
- Back up all scan data according to the research team’s data-management procedures.
- Report broken equipment to Mike Pearl promptly by email or in person.
- Report scanner or image-quality issues promptly so they can be addressed as quickly as possible.

Devices Brought into the Scanner Room

The DBIC is a shared research environment. Before introducing a new device or piece of equipment into the control or scanner room, please have Mike Pearl review it. This review confirms that the item:

- Is safe for use in the scanner environment.
- Will not adversely affect image quality.
- Can be removed and stored safely and effectively.

All electrical equipment and cabling must be shielded and positioned as far from the magnetic field as possible. Because shielding does not necessarily make an item nonmagnetic, every item must still complete the equipment review described above. Please speak with Mike Pearl before moving any permanently mounted or installed equipment. Equipment placement is intentional and may support safety, scanner operation, or image quality.