



# Standard Operating Procedure

## General Procedures for Bio Imaging Suite Access

### PC-SOP-IM-001-v04

#### Revision History

Version	Reason for Revision	Date
04	To reflect the change from the PERFORM Centre to the School of Health. Fire extinguisher update.	Aug/4/2023

## I. Overview

The imaging facility in the PC building consists of specialized equipment including a 3T MRI, a PET-CT, a SPECT-CT, DEXA and Ultrasound imaging equipment. Working around such equipment could involve exposure to ionizing radiation or electromagnetic fields. A minimum understanding of safety procedures is required for all those requesting access.

## 2. User Responsibilities

All users of the Bio Imaging suite are responsible for:

- 2.1. Following all applicable regulations, safety rules and practices outlined in this SOP, applicable Concordia policies and obligations of any professional bodies/orders to which they belong.
- 2.2. Reporting any deviation from normal operations, injuries, damage to equipment or property to the designated staff member and/or the Radiation Safety Officer (RSO).
- 2.3. Using and wearing all relevant personal protective equipment (lead aprons, lab coats, gloves etc.) as required by study protocols and postings in the Bio Imaging suite.
- 2.4. Attending a Bio Imaging safety orientation and all training courses as directed by the designated staff member, RSO and/or Environmental Health & Safety (EHS).



- 2.5. Booking the platform for the time required using the School's building's online booking system.
- 2.6. Accessing the platform only during booked times to avoid interfering with other users' work and minimize potential safety hazards.
- 2.7. Properly cleaning the equipment and any touched surfaces between participants and prior to leaving the area.
- 2.8. Identifying evacuation routes and understanding procedures for emergency response.
- 2.9. Ensuring that no eating, drinking, smoking, vaping, or application of cosmetics takes place in the Bio Imaging Suite.
- 2.10. Ensuring that the user or their participant(s) do not expose others to unnecessary risk if they have symptoms of illness or have been exposed to someone with symptoms in the last 14 days.
- 2.11. Users are expected to keep the number of persons in the Imaging Suite at any given time to the minimum number necessary for conducting all procedures safely and correctly.
- 2.12. Data transfer and notes taken during a session should be electronically transferred as soon as possible following the session for back up and ease of access.
- 2.13. Following all directives, recommendations and guidelines provided by Concordia University or governmental bodies to ensure safe practices.

### **3. MRI Safety**

#### **3.1. General**

- 3.1.1. All users entering the MRI suite must be aware that the static magnetic fields of the superconducting magnets are always present, as the scanner is always on, and are not detected by human senses.
- 3.1.2. Any individual entering the MRI scanner area will need to have completed the MRI Safety Screening form and be authorized by the MRI technologist or delegate before accessing the scanner room. Authorization for regular users is required on an annual basis or when they have experienced physical changes, surgery, health problems or implants.
- 3.1.3. Implant devices and other objects within or on any individuals intending to enter the magnetic environment must be deemed safe for use in an MR environment prior to the individual or research participant entering the scanner magnet room.
- 3.1.4. Individuals who are, or may be, pregnant are not allowed to remain in the MRI scanning room while the radiofrequency system is operating.

#### **3.2. Fire Safety**



**\*\* IMPORTANT: Red Fire extinguishers are not to be brought into the MRI magnet room\*\***

- 3.2.1. In the event of a fire or suspected fire in the MRI magnet room, help evacuate any participants or individuals from the room and close the door. Standard fire extinguishers are not compatible with the magnetic environment. We have one MRI safe extinguisher that is white and has the following MR safe symbol on it:



### **3.3. Medical Emergency**

- 3.3.1. An individual or research participant who becomes ill or injured must be removed from the magnetic environment immediately by the researcher or technologist in order to be attended to.
- 3.3.2. Contact security **at ext. 3717 or 514-848-3717** to help coordinate the appropriate response.

## **4. Radiation Safety**

- 4.1. Radionuclides and/or radiation emitting devices are handled only by authorized members of staff, researchers and students who have received training in radiation safety.
- 4.2. Do not enter a room or area if there are indications that a procedure involving radiation is being performed.

## **5. Prolonged Outages**

- 5.1. During prolonged outages the equipment will be put into appropriate standby mode by authorized members of staff. If access is denied to members of staff normally operating a system, a designated staff member will be guided through the necessary steps to ensure safe shut down of equipment.
- 5.2. Researchers with active, current, projects will be advised of the situation as soon as possible.