



Western

Centre for Functional
and Metabolic Mapping

3T/7T MRI FACILITY

SOP Number:	310.03
Title	3T MRI End of Session Protocol

Revision Chronology		
Version Number	Date	Changes
310.01	01 March 2010	First version
310.02	22 January 2013	Updated procedures
310.03	28 May 2019	Updated/revised

Facility Manager Signature: _____

Date: _____

ROBARTS RESEARCH INSTITUTE
CENTRE FOR FUNCTIONAL AND METABOLIC MAPPING
3T/7T MRI FACILITY

Standard Operating Procedure #310.03

3T MRI End of Session Protocol

1. Introduction

- 1.1. Research involving Magnetic Resonance Imaging (MRI) at high magnetic field strengths presents unique hazards to both research subjects and individuals working within and around the MRI system. Consequently, the potential for serious personal injury is present due to the sheer magnitude and strength of the static magnetic field along with the immense flexibility of the research system and associated peripheral hardware.
- 1.2. Equipment in the 3T MRI Facility is sensitive to the order used in powering the system up and down. If the proper procedures are not followed, the equipment may be damaged or malfunction. Only authorized Level 2 MRI Personnel are permitted to perform these procedures.
- 1.3. Extensive training is required before performing any procedure on the 3T MRI system, see SOP#130: "[MRI Personnel Training](#)".

2. End of Scanner Session

- 2.1. For standard scans, it is the responsibility of the MRI Technologists/Operators to ensure that the scanner and all 3T/7T MRI Facility equipment used are left in a functional state after each scan session.
- 2.2. Occasionally, investigators and contract studies utilize non-standard scanning and/or change scanner settings. Upon completion of these sessions, restore scanner settings to their default values, and run the **Goodbye Scan**. This scan ensures that the scanner is in proper working order for the next user.
 - 2.2.1. The protocol for the Goodbye Scan can be found in the Exam Explorer under "Goodbye Scan". This protocol includes a 3-plane localizer (37s) and a diffusion scan (1m 14s).
 - 2.2.2. For the Goodbye Scan, use the 32-channel head coil with the standard bottle phantom. The phantom can be found in the 3T MRI room on the upper left shelf.



3. Return Equipment

- 3.1. Please return all coils and equipment to their proper storage locations. It is good practice to wipe down coils and surfaces using the disinfectant wipes provided in the lab.
- 3.2. Turn off all peripheral devices used, e.g. the projector, coil and store all cables and cords and tidy the MRI and operators console room.
- 3.3. Close all patient information in the Exam Card, Viewing Card, 3D card, and Neuro 3D card.
- 3.4. Lock the MRI room door and return the key to the wooden cabinet on the left side of the MRI window in the control room.
- 3.5. Place dirty laundry in the hamper, and if the laundry bag is full please place the bag in the hallway outside of the MRI Suite.
- 3.6. If the Siemens BlueTooth heart rate (finger pulse oximeter) or ECG monitor was used, make sure they are returned to the charger and are properly seated (see below). The charge light on the unit will begin to flash when they are seated appropriately. The lights will turn to solid green (no flashing) once they are fully charged.



- 3.7. If you have completed the last scan of the week, shut the system down. See SOP#300: “3T System Start-Up and Shutdown”.