

## 3T/7T MRI FACILITY

<b>SOP Number:</b>	<b>250.03</b>
<b>Title</b>	<b>MRI Data Handling</b>

<b>Revision Chronology</b>		
<b>Version Number</b>	<b>Date</b>	<b>Changes</b>
<b>250.01</b>	<b>19 August 2008</b>	<b>New Version</b>
<b>250.02</b>	<b>31 January 2013</b>	<b>Updated procedures</b>
<b>250.03</b>	<b>27 October 2015</b>	<b>Update server address</b>

**Associate Director Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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

**Standard Operating Procedure #250.03**

**MRI Data Handling**

**1. Introduction**

- 1.1 The 3T/7T MRI Facility is used primarily for *in-vivo* studies of human and animal structure and function. These studies include assessment of metabolism and physiology, cognitive function and vascular dynamics, not only in normal and research patient populations, but also in *in-vitro* and animal models using a variety of advanced nuclear magnetic resonance imaging and spectroscopy techniques. The 3T/7T Facility represents a unique national resource for state-of-the-art evaluation of structure and functional activity using a variety of MRI and MRS techniques in a research setting. The facility resources are available to peer-reviewed grant funded scientific collaborators with appropriate Review Ethics Board (REB) protocols in place, see SOP#210: "New Protocols and Ethics".
- 1.2 Certified MR Tech support is provided for scanner operation and is included in hourly rates. The CFMM also employs the services of casual MR technologists and technical staff who may be available to scan off-hours. Specific enquiries should be made through the unit Head Operator.

**2. Data Handling**

- 2.1 All data collected in the 3T/7T MRI Facility is stored on disk in an assigned temporary directory. The MRI Technologists/Operator is responsible for informing the investigator and/or the Research Personnel of the location of the data. The data will remain within that disk location for a minimum of 7 days unless otherwise specified.
- 2.2 The data collected at the 3T/7T MRI Facility is also backed up on a daily basis. Data will remain backed up for a minimum of one month. Data will then be overwritten with new data, so facility backups should not be used as an archival service.
- 2.3 Upon special request Imaging Lab disk space and user accounts can be made available to investigators at additional yearly costs.
- 2.4 There are post-processing algorithms available for reconstructing the raw data collected at the 3T/7T MRI Facility and converting it to a format readable by Brain Voyager, Stimulate and other imaging programs. The investigator and/or Research Personnel are responsible for reconstructing and analysing the data and are encouraged to do so in the allocated temporary scratch directories.

**3. Downloading Data**

- 3.1 Data collected in the 3T/7T MRI Facility is transferred to an assigned temporary directory,

accessible by FTP or SMB for 7 days. Follow these steps to download your data:

- 3.1.1 Open your FTP client and select secure FTP (SFTP, port 22), or on a Mac type Command + K to open the “Connect to Server” window.
  - 3.1.1.1 Connect to: **data.cfmm.robarts.ca**
  - 3.1.1.2 Enter your username and password. Contact the Facility Manager to obtain your login information.
  - 3.1.1.3 Select the volume to mount.
    - 3.1.1.3.1 For 3T scans, select: **3T\_DATA**
    - 3.1.1.3.2 For 7T scans, select the directory as instructed by your MRI Operator.
  - 3.1.1.4 Navigate to your data folder.
    - 3.1.1.4.1 3T scans: Data is organized by PI name, then by student/study name, and then by date/subject code.  
Example: **3T\_DATA > PI\_Name > Student\_Name > 2013\_01\_26.Subject1**
    - 3.1.1.4.2 7T scans: select the subdirectory as instructed by you MRI Operator.