MRI Data Handling

1. Introduction

1.1 The Centre for Functional and Metabolic Mapping (CFMM) Core at Western’s Robarts Research Institute houses Canada’s only collection of high-field (3T human) and ultra-high field (7T human and 9.4T animal) MR systems. The Centre is dedicated to establishing the anatomical, metabolic and functional characteristics of normal brain development and healthy aging across the lifespan; as well as establishing the brain basis of developmental, neuropsychiatric and neurodegenerative deficits. CFMM resources are available to grant funded scientific collaborations, as well as industry sponsored contract studies with appropriate Review Ethics Board (REB) or Animal Care Committee (ACC) approval.

2. Data Handling

2.1 All data collected on the CFMM MRI scanners (3T, 7T and 9.4T) is stored on an internal CFMM DICOM server accessible through: https://dicom.cfmm.uwo.ca/

2.2 MRI data is immediately transferred to the CFMM DICOM server upon completion of a scan for storage and archival purposes.

2.3 It is the responsibility of each study team to download and archive their data in the appropriate locations for processing, analysis and long-term storage.

2.4 For information regarding how to download the data please follow the instructions described in the following resource: https://dicom.cfmm.uwo.ca/dm/docs/accessing_data.

3. Transferring Data from the MRI Console

3.1 Data transfer from the MRI Console to the CFMM DICOM server is only to be performed by Level 1 and 2 MRI Personnel.

3.2 Local disk space on the MRI consoles is limited. As such, MRI study data within the local database is retained only for a short period of time. It is imperative that data be moved to the CFMM DICOM server immediately to ensure the data is backed up and accessible to investigators for transfer.

3.3 Data within the local database can be transferred at any time, however it is preferable to perform a transfer immediately upon completion of the scan. The Level 1 or 2 operator must network the study data to the internal CFMM DICOM server through the following procedures:

3.3.1 For the Siemens 3T/7T MRI – highlight the exam in the patient browser window. Select the patient name only, to ensure you send the entire exam. Then, click ‘Transfer’, ‘Send To’ and select ‘CFMM DICOM’ then hit ‘OK’. Transfer
status can be monitored under ‘Transfer’ and ‘Network Job Status’. Upon completion of the data transfer, a message at the bottom of the screen will indicate ‘Commitment of DICOM Storage Successful’.

3.3.2 **For the Bruker 9.4T MRI** — Select the Subjects, Studies or Examinations in the Workspace Explorer window, clicking “Export to DICOM...” to transfer data to DICOM server. Upon completion of the data transfer, a message will indicate data transfer finished. Select the study name only, to ensure you send the entire exam.
## MRI Data Handling

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<th>Version Number</th>
<th>Date</th>
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<tbody>
<tr>
<td>250.01</td>
<td>07 April 2020</td>
<td>First Version</td>
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<tr>
<td>160.02</td>
<td>07 April 2020</td>
<td>Combination of 3T, 7T and 9.4T</td>
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<tr>
<td>160.03</td>
<td>12 May 2020</td>
<td>Addition of Transfer from MRI Consoles (TS, JG, AL)</td>
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CFMM Director Signature:  

Date: 12 – May – 2020