Centre for Neuroscience Studies

fMRI Facility

Standard Operating Procedures #12

MRI Data Handling

Revision #2, January 2010

1. Introduction

i.   The 3T 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 facility resources are available to peer-reviewed grant funded scientific collaborators with appropriate Review Ethics Board (REB) protocols in place. See SOP# 04 "New Protocols and Ethics Procedures".

ii. Full-time technical support for scanner operation is provided and included in hourly rates (see SOP# 13"System Billing Guide and Standard Rates") during regular weekday hours, Monday through Friday, 9:00 am – 4:30 pm. Scanning support for after-hours and weekend scanning may be arranged on a subcontract basis.

2. Data Handling

i.   All data collected in the 3T MRI Facility is stored in a DICOM database. At the end of the study the Operator will extract the images in DICOM format into a temporary directory. Within 1 business day, the operator will transfer the data to the data storage server with access restricted to on-campus Queen's access only via this link \\130.15.106.115\data . Image data will be in DICOM format. Once transferred, the image data will be removed from the image database on the MRI system.

ii. Each Principal Investigator paying for time on the 3T system will be given a user account on the data storage server, with a unique user name and password and a single assigned directory for data storage. The data on the server will be accessible for read only.

iii. The data will remain available on the server for 1 month, but will also be backed-up with an automated tape archival system. Daily incremental backups and weekly full backups will be carried out and a data archive to a USB drive will be maintained.

iv. Users are expected to transfer their data from the server to their own computers for analysis, and for maintaining their own data archives. The analyzed data will not be allowed to be transferred back to the server for archival purposes. Only original data will be included in the archive.