

ORIENTATION TO LABORATORY SAFETY AT THE NEURO

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INTRODUCTION

Welcome to the Neuro!

The Neuro is in a unique situation, with the MNI being an Institute of McGill University in a building owned by McGill, but deriving many services from the McGill University Health Centre (MUHC) being in the same building as the Montreal Neurological Hospital. Our research grants are administered through [McGill's Office of Sponsored Research](#), and as such, investigators are governed by the policies and procedures of the University's [Environmental Health and Safety \(EHS\)](#). On the other hand, emergency responses (e.g. fire, medical, hazardous spills) and security at The Neuro are under the jurisdiction of the MUHC. The jurisdiction for Housekeeping depends on the pavilion of the Neuro: in the North Wing, BTRC and Molson pavilions, housekeeping is operated by the McGill preferred vendor, with the other pavilions under the MUHC. Thus, the Institute plans must incorporate policies and procedures of both institutions.

We work closely with McGill EHS and the MUHC to provide services and information to you and the members of your laboratory. The Chair of the Neuro Research Laboratory Safety Committee and a Safety Officer from McGill EHS will meet with you in person to guide you through the orientation materials and to answer your questions (contact information below). In addition to this document, you should refer to [Laboratory Safety Orientation | Environmental Health and Safety - McGill University](#). EHS conducts a safety inspection of each laboratory on an annual or biennial basis and provides a report to you, to which you must respond.

This orientation package and [The Neuro Lab Safety website](#) in general, provide a central portal to access policies, procedures, databases and forms relevant to lab safety that you will need to set up and/or operate your laboratory. You can find this site from the [Neuro home page, at the bottom of the page](#) under the heading 'Research'. When you arrive at The Neuro, the administrative assistant for your unit will assist you with human resources' aspects.

Although under separate jurisdictions, we also include basic information for the [Centre for Neurological Disease Models](#) and [The Neuro Animal Care Committee](#) in this package, as well as contact information for the Radiation Safety Officer and Magnetic Resonance Imaging Committee, and a link to the [Neuroscience Research Ethics Board](#) for those conducting research using human subjects or tissues.

Inventory of Chemicals, Compressed Gases and Radioactive Materials held in all Neuro research laboratories and Safety Data Sheets (SDS) is maintained using the McGill system [myLab](#). Each Principal Investigator takes responsibility for adding the lab's inventory to the central database, keeping the information current, and providing read-only access to all laboratory personnel. The Neuro Research Laboratory Safety Committee has jurisdiction over the chemical inventory module of myLab, whereas the McGill Radiation Safety Officer oversees radiological materials. MyLab is also integrated with [McGill MarketPlace](#) and with *MSDSonline* for Safety Data Sheet (SDS) management. This provides access to their database of

over 14 million electronic SDS'. To view their database collection, you must first login to your chemical inventory on myLab.

To establish your chemical inventory, the Chair of The Neuro Research Laboratory Safety Committee will ask you to name a **Laboratory Safety Representative**, an individual you designate to manage safety issues in your lab and to serve as an additional contact person for safety information and in emergencies. This person is usually a senior technician or lab manager, or under special circumstances a postdoctoral fellow, but never a student. **It is very important to keep your inventories up-to-date and to notify labsafety.mni@mcgill.ca of any major changes, including changing the person designated as your Lab Safety Representative.**

Radiation Safety is governed by McGill University. For procedures related to training and usage of radioactive materials in Neuro research laboratories, contact the McGill Radiation Safety Officer, Dr. Mario Badillo 398-2245 mario.badillo@mcgill.ca. The radiation safety manual is located at <http://www.mcgill.ca/ehs/laboratory/radiation>.

Principal Investigators are responsible for identifying hazards in their laboratories, for knowing and following proper procedures and policies, and for ensuring that all trainees and personnel under their jurisdiction receive the appropriate training in those areas as well as in general emergency measures (fire, *etc.*). Our Committees are here to help you fulfill that obligation, so please don't hesitate to contact us with your questions and comments.

GETTING STARTED

- [The Neuro Laboratory Safety Website](#) including **The Neuro Laboratory Safety Manual**
- [Centre for Neurological Disease Models](#) and the [Neuro Animal Care Committee](#)
- [Neuroscience Research Ethics Board](#)
- [McGill Environmental Health and Safety](#) web site
 - [Contact Information](#): McGill Environmental Health and Safety
- [Internal responsibility system](#) (responsibilities and accountabilities of individuals, supervisors, and administrative units for environmental health and safety)

- **Emergency Response Procedures at The Neuro**
- EMERGENCY CODES: Responses to specific codes can be viewed/downloaded from the [Neuro Lab Safety Website](#):
 - Fire Alarm (Code Red)
 - Evacuation (Code Green)
 - Medical Emergency (Code Blue)
 - Chemical Spill (Code Brown)

- Biohazardous spill: see 3.3 of the [Biosafety Manual | Environmental Health and Safety - McGill University](#)
- Radioactive spill: see [Response to Radioactive Spills | Environmental Health and Safety - McGill University](#)

- **Online Chemical Inventory Database and SDS:** A legal requirement of WHMIS is to maintain an accurate inventory of WHMIS controlled substances. The MNI has implemented the McGill University [myLab](#) system for management of hazardous substances (chemicals and radioactive compounds and related SDS). For more information about this system and for training consult the [myLab](#) web pages.

The Chair of the Neuro Laboratory Safety Committee will assist you in establishing your inventory and obtaining a read-only access for members of your lab by introducing you to the McGill EHS Hazardous Materials Officer and [instructions for using myLab \(search IT knowledgebase for 'myLab'\)](#).
- **Laboratory Safety Representative**

Each PI must identify an individual to serve as the official contact in the laboratory for laboratory safety issues and provide the name and contact information to The Neuro Research Laboratory Safety Committee's administrative assistant, Linda Michel, at labsafety.mni@mcgill.ca. See the file [Laboratory Safety Representative – Duties](#) (see details on page 2, [MNI Laboratory Safety Manual](#) – download from [The Neuro Laboratory Safety Webpage](#)). Specific duties include, but are not limited to:

 - Maintaining inventory of chemicals in the laboratory and safe storage (required by law) in myLab
 - Assisting PI with safety training and orientation
 - Ensuring compliance with safety regulations and practices
 - Identifying hazards in your laboratory: [Assessment Tool to Identify Laboratory Safety Hazards](#).
 - Conducting monthly safety inspections of the lab and correcting deficiencies - [Monthly Laboratory Safety Inspection Form](#) (download from the [Neuro Laboratory Safety Webpage](#))
 - Posting appropriate signage:
 - Laboratory Information Card in front of each laboratory, identifying persons responsible and hazards – (sign in to myLab to generate card; you must be using a McGill IP address, either locally or through VPN)
 - [Signs for Cold Room Doors](#)
 - [Signs for relevant hazards on doors](#) (radioactivity, biohazard, *etc.*)
 - Freezers in public areas must a folder/binder attached listing contents, PI and emergency contacts
 - Emergency contact information inside the laboratory and post location of a First Aid kit. You may use the [First aid poster form](#) provided by McGill EHS, **BUT YOU MUST ADD "MNI - 55-555" to the SPILLS/URGENCE ENVIRONMENT SECTION**. If maintaining a first aid kit in the lab, keep up to date through quarterly inspections – [First Aid Inspection Form](#)
 - Organizing hazardous waste disposal (see [Neuro Laboratory Safety Manual](#))
 - Reporting any accidents - [Accident and Incident Report Form](#) (see [Neuro Laboratory Safety Manual](#) at the [Neuro Laboratory Safety Webpage](#))

IDENTIFYING, OBTAINING AND RECORDING SAFETY TRAINING

Principal Investigators (PIs) are legally responsible for ensuring that all personnel undergo WHMIS/lab safety training, as well as specialized training required for your circumstances, e.g., use of biosafety hoods, animal use training/workshops, research with human subjects or tissues, radiation safety, laser safety, MRI, and any other specialized training required for your laboratory. **Note: The PI or lab supervisor must identify training requirements and assist the individual with registration. A checklist [Training Record for MNI Personnel](#) is available to assist you in identifying and tracking the required training courses for you and your personnel.**

The PI and/or supervisor must also provide a local orientation to the lab's emergency plan, location of eye wash stations, emergency showers, fire extinguishers, etc. and orientation to lab rules and procedures. Use the [Lab Safety Orientation Checklist](#) as a template. Note review of the [Neuro Laboratory Safety Manual](#) (download from [The Neuro Laboratory Safety Webpage](#)) and procedures for accessing the myLab Inventories are required in addition to items specified on the form.

Mandatory Training in WHMIS, Chemical Safety, General Lab Safety

- Register for the WHMIS course offered by McGill EHS [WHMIS Training | Environmental Health and Safety - McGill University](#). However, it is important for everyone to review [the Neuro Laboratory Safety Manual](#) and [emergency response procedures](#) specific to The Neuro on the [Neuro Laboratory Safety website](#)) as **certain procedures follow MUHC protocols, which may differ from McGill's.**
- Register for [Hazardous Waste Management & Disposal Training for Laboratory Personnel](#)
- **Safety Data Sheets (SDS):** All personnel must know how to find SDS in myLab and how to interpret them
- [The Neuro Laboratory Safety Manual](#) - the primary reference for lab safety at the MNI.
- [McGill Lab Safety Manual](#) (for reference - the Neuro Laboratory Safety Manual specifies important sections)

Posters

- Internal Responsibility System [poster](#)
- [Laboratory Responsibilities](#)
- [Personal Protective Equipment Policy](#)
- [Safety in the Laboratory – Graduate Students](#)

WASTE MANAGEMENT AT THE MNI

- MNI Waste Management Procedures (chemical, biological, sharps, batteries, etc) (See page 15 of the [Neuro Laboratory Safety Manual](#))
- [Chemical Waste Inventory Form](#) (download from [The Neuro Laboratory Safety Webpage](#))

- [McGill Waste Management](#) (for reference and training opportunities - McGill Waste Management serves the MNI, but procedures for waste disposal are specific to the MNI)

BIOSAFETY

The MNI follows McGill's policies, procedures and training.

- [Biosafety Manual | Environmental Health and Safety - McGill University](#)
- Training - [Biosafety Training | Environmental Health and Safety - McGill University](#)
- Permission to use biohazardous materials and organisms: [Application to Use Biohazardous Materials](#)
- For permits to import biological products and organisms see the Neuro Laboratory Safety Manual (download from [The Neuro Laboratory Safety Webpage](#), page 7.

RADIATION SAFETY

Radiation Safety for MNI McGill labs is governed by McGill University <http://www.mcgill.ca/ehs/laboratory/radiation>.

For procedures related to training and usage of radioactive materials at the Neuro consult with the Radiation Safety Officer and the McGill Radiation Safety Manual Contact the Radiation Safety Officer for Neuro McGill labs is Dr. Mario Badillo 398-2245 mario.badillo@mcgill.ca.

- Training is provided by McGill Environmental Health and Safety: [Radiation Safety Training | Environmental Health and Safety - McGill University](#)

ANIMAL FACILITY AT THE MNI

- Consult these links: [Centre for Neurological Disease Models](#) and the [MNI Animal Care Committee](#).
- For permission to use animals in research and orientation to the Centre, contact the MNI Animal Care Committee Administrator (acc.mni@mcgill.ca). Applications for animal use protocols are submitted through [Darwin Animal Care and Use Software](#).

RESEARCH ETHICS BOARD

- Consult [Neuroscience Research Ethics Board](#)

MAGNETIC RESONANCE

- Consult the [Magnetic Resonance Research Committee](#)

RESEARCH RESOURCES

- [Neuro Meeting Services](#) – reservations and technical support for conference and multi-media rooms
- [NeuroInformation Technology Services](#) (computing-related products and services)
- Neuro [Microscopy Core Facility](#) (at the Neuro)
- [Experimental Therapeutics Program](#)
- [The McGill Genome Centre](#)

- [Technology Platforms of the MUHC Research Institute](#)
- [McGill Life Sciences Complex - Core Facilities](#)
- [McConnell Brain Imaging Centre](#)
- [McGill Comparative Medicine and Animal Resources Centre - services](#)