ORIENTATION TO LABORATORY SAFETY AT THE MNI
(Updated August 2018)

INTRODUCTION

Welcome to the Neuro!

The MNI is in a unique situation, being an Institute of McGill University in a building owned by McGill, but deriving many services from the McGill University Heath Centre (MUHC) through our affiliation with 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), housekeeping and security at the MNI/MNH are under the jurisdiction of the MUHC. Thus, the MNI 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 MNI Safety Committee and the Neuro Radiation Committee will meet with you in person to guide you through the orientation materials and to answer your questions (contact information below). Orientation is also offered by McGill EHS for their services Laboratory Safety Orientation | Environmental Health and Safety - McGill University. EHS conducts a safety inspection of each laboratory on an annual basis and provides a report to you and to the MNI Safety Committee.

This orientation package and the MNI 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 under the heading ‘Research’, then by clicking on ‘Research Services’ on the left hand side and on ‘Lab Safety’. When you arrive at the MNI, 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 MNI 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 MNI laboratories and Material Safety Data Sheets (MSDS) 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 MNI Safety Committee has jurisdiction over the chemical inventory module of myLab, whereas the Neuro Radiation Safety Committee has jurisdiction over radiological materials.

To establish your chemical inventory, the Chair of the MNI Safety Committee will introduce you to the McGill hazardous materials officer (parisa.parang@mcgill.ca). You will be asked to name a Laboratory Safety Representative, an individual you designate to manage safety issues in your lab and to serve as a 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@mcmill.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 at the MNI, contact the Radiation Safety Officer for the Neuro: Christian Janicki christian.janicki@mcgill.ca Local: 8888-43866. The radiation safety manual is located at http://www.mcgill.ca/ehs/lab/safety/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.
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GETTING STARTED

- MNI Laboratory Safety Website including MNI Laboratory Safety Manual
- Centre for Neurological Disease Models and the MNI 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 MNI
  - Introduction to Emergency Measures at the MNI - Powerpoint presentation
    - Fire Alarm (Code Red)
    - Evacuation (Code Green)
    - Medical Emergency (Code Blue)
    - Chemical Spill (Code Brown: MNI Plan)
  - Biohazardous spill (see MNI Laboratory Safety Manual; and section 3.3 of the Biosafety Manual | Environmental Health and Safety - McGill University)

- Online Chemical Inventory Database and MSDS: 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 MSDS). For more information about this system and for training consult the myLab web pages. The Chair of the MNI 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.

- 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 MNI safety Committee's administrative assistant, Linda Michel, at labsafety.mni@mcgill.ca (see details on page 2, MNI Laboratory Safety Manual). 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
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- Posting appropriate signage:
  - Laboratory Information Card in front of each laboratory, identifying persons responsible and hazards - [Lab Information Card Generator](https://myMcgill.com) (sign in to ‘My McGill’ with your McGill username and password to access)
  - 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](https://McgillEHS.com) 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-aidKitInspectionForm.pdf](https://McgillEHS.com).

- Organizing hazardous waste disposal (see [MNI Laboratory Safety Manual](https://MNI.com))
- Reporting any accidents - [Accident and Incident Report Form](https://MNI.com) (see [MNI Laboratory Safety Manual](https://MNI.com))

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 particular 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:** When an individual joins the laboratory, the individual will be provided with a checklist. The PI or lab supervisor must identify training requirements and assist the individual with registration.

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](https://MNI.com) as a template. Note review of the [MNI Lab Safety Manual](https://MNI.com) and procedures for accessing the my Lab Inventories are required in addition to items specified on the form.

**Training Record for MNI Personnel.** As a supervisor, you are required to identify all training required both for yourself and individuals under your supervision.

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](https://McgillEHS.com). However, it is important for everyone to review the [MNI laboratory safety manual](https://MNI.com) and emergency response procedures specific to the MNI/MNH on the [MNI Lab Safety website](https://MNI.com) as certain procedures follow MUHC protocols, which may differ from McGill's.

- Register for [Hazardous Waste Management & Disposal Training for Laboratory Personnel](https://McgillEHS.com)
- **Safety Data Sheets (SDS):** All personnel must know how to find SDS in myLab and how to interpret them
- [MNI Laboratory Safety Manual](https://MNI.com) - the primary reference for lab safety at the MNI.
- [McGill Lab Safety Manual](https://Mcgill.com) (for reference - the MNI Laboratory Safety Manual specifies important sections)
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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 MNI Laboratory Safety Manual)
- Chemical Waste Inventory Form
- 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 MNI Laboratory Safety Manual, page 7.

RADIATION SAFETY

- Contact the Radiation Safety Officer for the MNI/MNH christian.janicki@mcgill.ca Local from Neuro phone: 8888-43866 or (514) 934-1934 ext 43866
- Radiation Safety is governed by McGill University. For procedures related to training and usage of radioactive materials at the MNI consult with the Radiation Safety Officer and the McGill Radiation Safety Manual http://www.mcgill.ca/ehs/laboratory/radiation
- 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.
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RESEARCH ETHICS BOARD

• Consult Neuroscience Research Ethics Board

MAGNETIC RESONANCE

• Consult the Magnetic Resonance Research Committee

RESEARCH RESOURCES

• Neuro Media Services - illustrative, photographic materials, posters, desktop publishing...
• 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)
• Neuro library is on the 2nd floor Penfield wing MNI 8888-35290
• Experimental Therapeutics Program
• McGill University and Genome Quebec Innovation Centre
• McGill Life Sciences Complex - Core Facilities
• McConnell Brain Imaging Centre
• McGill Comparative Medicine and Animal Resources Centre – services