MEG@MCGILL

www.mcgill.ca/bic/core-facilities/meg
Our Mission

The MEG Program @ McGill was created September 2011 as part of the Montreal Neurological Institute’s McConnell Brain Imaging Centre.

Our mission is to provide state-of-the-art support and expertise to investigators interested in using MEG as a tool for their cognitive and clinical neuroscience studies.
Our Team

**Sylvain Baillet, PhD, Professor**
Director of MEG Research
McConnel Brain Imaging Centre

**Elizabeth Bock, MSc**
Manager, MEG Lab

**Marc Lalancette, MSc**
Manager, MEG Lab
(starting May 2018)

**Martin Cousineau, MSc**
Software Developer of Brainstorm
Our Program

Over 50 MEG Studies from over 30 research labs

- **Cognitive neuroscience studies**, including resting state, pain, decision making, working memory, speech, motor learning, cross-modal entrainment, 3D perception, auditory frequency tagging, neurofeedback, language, posture, sleep, attention, auditory perception and memory, vision research and more.

- **Clinical research with special populations**, including epilepsy, Alzheimer’s disease, ADHD, autism, spinal cord stimulation, Amusia, MCI, stroke, Parkinson’s and the list is growing
The MEG@McGill
Data Collection

- 275 gradiometers, CTF system
- Integrated 64 channel EEG
- Integrated subject stim and response
- Sampling rate up to 12kHz
- Typical measurements ~ 10Gb/hour
- Data storage, formatting and sharing solutions, including BIDS formatting and open science cataloging
Subject stimulus and response

- Matlab, Psychtoolbox, Presentation, ePrime
- Auditory, visual, somatosensory, olfactory, pain, etc.
- Button response, finger tapping, speech, keyboard, joystick, hand gripper
- Event markers and timing info integrated datasets
Data Analysis

- Brainstorm suite of tools
- Hands-on training opportunities
- One-on-one assistance for learning best practices
www.mcgill.ca/bic/core-facilities/access

- To start a new MEG study
  - Contact the Director of MEG Research (sylvain.baillet@mcgill.ca)
  - Approval from MEG Research Committee and Research Ethics Board
  - Develop and test your paradigm, perform pilot scans
- Booking through central scheduler: mni-bic.mcgill.ca
- MEG Operator certification
  - Training is done during pilot sessions and the first three subjects
  - Access to the MEG after hours and weekends
  - Discounted rates
## Access

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
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<tbody>
<tr>
<td>Non-Profit Agency funded</td>
<td>$500/hour, with technical assistance $400/hour, for certified users</td>
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<tr>
<td>Development Pilot</td>
<td>$200/hour</td>
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<tr>
<td>Anatomical MRI (T1)</td>
<td>$100/participant</td>
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<tr>
<td>Technical Assistance Availability</td>
<td>Contact MEG Manager</td>
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<tr>
<td>User Certification</td>
<td>Require 3 sessions of requested study at $500/hour. User certification remains valid for all future sessions and studies of the requestor</td>
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<tr>
<td>Industry Sponsored Scans</td>
<td>Contact Core Director</td>
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### Hours of operation:
- 24Hrs/7 days a week for certified users
- 08:30-17:30, Monday-Friday with technical assistance
Training Opportunities

• MEG@McGill Comprehensive Training: A week of hands-on training experience with MEG imaging from paradigm design to advanced data analysis
  
  www.mcgill.ca/bic/training-events/meg-training-program

• IPN rotations and summer internships

• Brainstorm hands-on training