

# McConnell Brain Imaging Centre (BIC) The Neuro and PERFORM Centre, Concordia University Researcher Retreat

The Neuro, 3801 University Street, de Grandpre Communications Centre, Montreal  
February 21, 2020

## Program

- 9:00 **Welcome and Brief Overview of BIC and PERFORM**  
Dr. Julien Doyon; Dr. Habib Benali
- Review of Objectives and Format**  
Dr. Louis Collins; Ms. Lynn Roy
- Presentations from BIC Researchers (five-minute talks)**
- 9:30 **Sensory-cognitive factors associated with brain structure and function in older adults with or a risk for dementia**  
Natalie Phillips
- 9:35 Rick Hoge, *Director MRI*
- 9:40 David Rudko, *Director MRI pre-clinical*
- 9:45 **Neuroimaging Pathways to Addictions**  
Marco Leyton, *Ludmer Research and Training*
- 9:50 Gassan Massarweh, *Director Radiochemistry-cyclotron uni*
- 9:55 Jean-Baptiste Poline, *Co-Director Neuroinformatics, Director NeuroHub*
- 10:00 Alan Evans, *Director, Neuroinformatics*
- 10:05 Sylvain Baillet, *Director MEG*; Marc Lalancette, *MEG Systems Manager*
- 10:10 **Mechanisms, modeling and analysis of resting-state fMRI and high-resolution fMRI**  
Amir Shmuel
- 10:15 **Ongoing MRS investigations of tissue chemistry in the brain and body at BIC and PERFORM**  
Jamie Near, *Douglas Mental Health University Institute*
- 10:20 Jean-Paul Soucy, *PET Research Unit*
- 10:25 **Health Break**
- Presentations from PERFORM Researchers (five minute talks)**
- 10:40 **Multimodal assessment of brain function**  
Jean-Paul Soucy
- 10:45 **Both theoretical and applied researches on the development of algorithms, protocols and systems for addressing challenging issues lying in the loop of data lifecycle, with special applications in eHealth**  
Gang Li for Jun Cai

- 10:50      **Making sense of the data trove in ultrasound data**  
Hassan Rivaz
- 10:55      **Glial neurotransmitters regulation, critical determinant of whole brain physiology: a computational model**  
Obaï Bin Ka'b Ali for Habib
- 11:00      **Pharmacological Neuroimaging**  
Najmeh Khalili-Mahani
- 11:05      **Coffey Lab: Audition, Sleep and Plasticity**  
Emily Coffey
- 11:10      **Multimodal functional data integration: applications in epilepsy and sleep studies**  
Christophe Grova
- 11:15      **Brain development, epigenetic processes and risk for psychopathology**  
Linda Booij
- 11:20      **Big Data Infrastructures for Neuroinformatics**  
Tristan Glatard
- 11:25      **The intersection between behaviour, psychological factors, and non-communicable chronic diseases**  
Simon Bacon
- 11:30      **Neural Architecture, Behaviour, and Connectivity**  
Christopher Steele
- 11:35      **EEG Signal Processing for BCI: From Motor Imagery to Visual Evoked Potentials**  
Arash Mohammadi
- 11:40      **Applied Perception Lab: Visualization, Interaction and Display in the Clinical Domain**  
Marta Kersten-Oertel
- 11:45      **Special Announcement**  
Dr. Julien Doyon; Dr. Habib Benali
- 12:00      **Lunch**