

**NEUROIMAGING IN
MONTREAL**

**NEUROIMAGERIE
À MONTRÉAL**

 neuro  UNF  Concordia *Douglas*

8 – 9 a.m. **Breakfast and registration**

9 – 9:05 a.m. **Opening Remarks and Welcome (Julien Doyon)**

9:05 a.m. **BIC MCCONNELL BRAIN IMAGING CENTRE**

Presentation of the BIC

Julien Doyon, Director, McConnell Brain Imaging Centre, The Neuro

(Sessions of 8 flash talks)

Multi-frequency Neurophysiological Changes in Parkinson's Disease

Alex Wiesman, Postdoctoral Fellow

Staging Alzheimer's Disease in vivo using PET Imaging

Joseph Therriault, PhD Student

Atypical Functional Connectome Hierarchy Impacts Cognition in Temporal Lobe Epilepsy

Fatemeh Fadie, PhD Student

Spinal cord fMRI to investigate the sensorimotor network in Health and Parkinson's disease

Caroline Landelle, Postdoctoral Fellow

Hippocampal Texture as an Early Marker of Alzheimer's Pathology

Alfie Wearn, Postdoctoral Fellow

Tools for Multimodal, Multiscale Annotation of Brain Networks

Justine Hansen, PhD Student

MRI Analysis Methods to Reduce, Reuse, & Recycle Big Data for Brain-Environment Interactions

Jasmine Cakmak, PhD Student

The Myelin-Weighted Connectome

Wen Da Lu, PhD Student

Keynote Presentation: Designing Neuroimaging Tools Towards Population Neuroscience and Global Health

Udunna Anazodo, Assistant Professor

Dept. of Neurology & Neurosurgery, McGill University

Member, Neuroimaging and Neuroinformatics Research Group, The Neuro

10:25 – 10:45 a.m. **Networking Break**

10:45 a.m. **DOUGLAS CEREBRAL IMAGING CENTRE**

Presentation of the Douglas Cerebral Imaging Centre (CIC)

Mallar Chakravarty, Director, Brain Imaging Centre, Douglas Research Centre

(Sessions of 8 flask talks)

Whole Brain Examination of the Impact of Alpha-Synuclein Spreading on Brain Structure and Behavioural Symptom Progression in a Mouse Model of Parkinson's Disease

Stephanie Tullo, PhD Student

Rodent Automated Bold Improvement of EPI Sequences (RABIES): A Standardized Image Processing and Data Quality Platform for Rodent fMRI

Gabriel Desrosiers-Gregoire, PhD Student

White Matter Hyperintensity Trajectories in Progressive and Stable Mild Cognitive

Farooq Kam, Postdoctoral Fellow

Spatial Extent of Tau Pathology Over Time in the Alzheimer's Disease Spectrum

Frederic St-Onge, PhD Student

Age-Related and Off-Target Retention of MK6240 Tau-PET Tracer

Cecile Tissot, PhD Student

Using Partial Least Squares to Investigate the Impact of Menopause on the White Matter Correlates of Spatial Context Memory

Rikki Lissaman, Postdoctoral Fellow

Imaging Monoamine Oxidase B (MAO-B) as a New Imaging Biomarker in Psychosis using Positron Emission Tomography (PET) with the Novel Radiotracer [11C]SL25.1188

Kankana Nisha Aji, PhD Student

Longitudinal Inference of Multiscale Markers in Psychiatric Disorders

Katie Lavigne, Postdoctoral Fellow

Keynote Presentation: Using Longitudinal Neuroimaging to Better Characterize Clinical Trajectories Following a First Episode of Psychosis

Martin Lepage, PhD

FRQS Research Chair in Cognitive Neuroscience and Schizophrenia

Professor, Department of Psychiatry

Deputy Scientific Director, Douglas Research Centre

Clinical Psychologist, Douglas Mental Health University Institute

James McGill Professor, Department of Psychiatry, McGill University

Associate Professor, Department of Psychology, McGill University

12:05 – 1:20 a.m. **Lunch and Networking**

Presentation of the UNF

Pierre Bellec, Scientific Director, Unité de Neuroimagerie Fonctionnelle (UNF)

(Sessions of 8 flask talks)

Neuroimaging Data Management at UNF

Basile Pinsard, PhD, MSc, Data Manager, UNF/CNeuromod Project

How Resting-State Functional Connectivity is influenced by Intensive Language Therapy : a Combined Action of Phonology and Visual Orthographic Cues

Michèle Masson-Trottier, PhD student

qMRI-BIDS: An Extension to the Brain Imaging Data Structure for Quantitative Magnetic Resonance Imaging Data

Nadia Blostein, MSc Student

Head Over Fields: Multimodal investigation of contact sports athletes over the course of a season

Samuel Guay, PhD Student

PRISME: Psychosis Research using Integrated Serial Measurements and Evaluations

Sabrina Loudjani, BSc Student

Impact of Confound Removal Strategies on Functional Connectivity Generated from fMRIPrep Preprocessed Data

Hao ting Wang, Postdoctoral Fellow

More Than Meets the Eyes: A Brain Signature Predicting the Facial Expression of Pain

Marie-Ève Picard, MSc Student

Open Design and Validation of a Video Game Controller for MRI and MEG

Yann Harel, PhD Student

Keynote Presentation: The Canadian Open Parkinson Network

Oury Monchi, PhD

Scientific Director

Centre de Recherche de l'Institut Universitaire de Gériatrie de Montréal (CRIUGM)

2:40 – 3 p.m. **Networking Break**

3 p.m.

CONCORDIA UNIVERSITY PERFORM CENTRE

Presentation of PERFORM

Habib Benali, Scientific Director, PERFORM

(Sessions of 8 flask talks)

Rapid and Unbiased Estimates of Functional Connectivity: Cross-Modality Validation and Reproducibility of Detrended Fluctuation Analysis

Zaki Alasmar, MSc Student

The Effect of a 10-week Neuromuscular Electrical Stimulation Intervention with the StimaWELL 120MTRS System on Multifidus Muscle Morphology and Function in Chronic Low Back Pain Patients

Daniel Wolfe, PhD Student

Effect of Executive Function Training on Cognitive-Motor Dual-Tasking in Middle Aged and Older adults: Insights from Functional Near Infrared Spectroscopy

Rachel Downey, PhD Student

Neuroimaging Biomarkers of Treatment Response to Cognitive-Behavioural Therapy for Chronic Insomnia (CBT-I)

Nyissa Walsh, PhD Student

Impact of Amyloid Status on Cerebral Blood Flow in Subjective Memory Loss Population

Laetitia Jeancolas, Postdoctoral Fellow

Bayesian Framework for Classification to Investigate Tau, Cortical Thickness, and Large-Scale Brain Networks Across the Alzheimer's Disease Spectrum

Clyde Belasso, MSc Student

Vascular and metabolic changes in individuals with and without the ApoE ϵ 4 allele

Julia Huck, PhD Student

Multimodal Investigation of Neurovascular Coupling Processes in Epilepsy and Interactions with Sleep

Edouard Delaire, PhD Student

Keynote Presentation: Quantitative Imaging of Brain Physiology in Health and Disease

Claudine Gauthier, PhD

Associate Professor, Physics

Co-op Director, Physics

4:20 – 4:30 p.m.

Harmonization: Initiatives in Montreal Related to Data Acquisition and Databasing

4:30 – 4:50 p.m.

Town Hall - Q&A Session

4:50 – 5 :30 p.m.

Special Lecture - Q&A Session: Functional MRI of Intrinsic Brain Dynamics and Physiological States

Catie Chang, PhD
Assistant Professor of Electrical and Computer Engineering
Assistant Professor of Computer Science
Assistant Professor of Biomedical Engineering
Vanderbilt University, School of Engineering

Cocktail Reception

5:30 – 7 p.m.