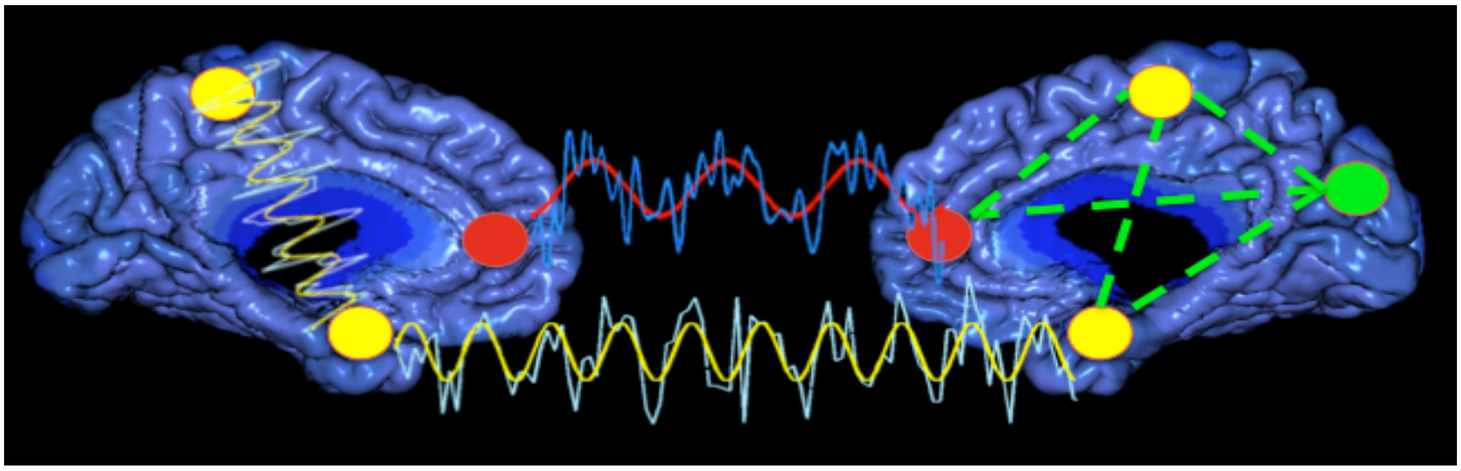
MONTREAL RESTING-STATE FMRI WORKSHOP
MAY 29 2014

Montreal Neurological Institute, Jeanne Timmins Amphitheater



In less than a decade, resting-state functional MRI has become an important paradigm for studying the network properties of brain function, providing convincing evidence for the Hebbian concept of neuronal assemblies that act in coherence, and constitute the functional organization of the brain.

Home to Wilder Penfield and Donald Hebb, Montreal has a proud legacy in the science and technology aimed at characterizing the functional topography of the brain and its relation to neurophysiology. Sponsored by McGill Center for Integrative Neuroscience (MCIN), and supported by McConnell Brain Imaging Center and Montreal Neurological Institute, this workshop provides an opportunity to learn about the status of RSfMRI research in Montreal, and to become familiar with important neurophysiological, clinical and methodological aspects of this research.

This is an opportunity for sharing unique insights, finding collaborative grounds and conceptualizing the methodological approach and computational infrastructure needed for multimodal functional neuroimaging with MRI, TMS, EEG and MEG.

On behalf of the Ludmer Center and MCIN,

Najmeh Khalili-Mahani, PhD
Pierre Bellec, PhD

Please register before May 9 2014, by email to Najmeh.khalilimahani@mcgill.ca, with RSfMRI workshop in the subject line.

A few Poster panels will be provided. If you are interested in presenting your ongoing RSfMRI research, please email an abstract.

PROGRAMME

8:45-9:00 **Welcome remarks and Introduction**

9:00-10:15 RS-fMRI Methods

Najmeh Khalili-Mahani, McGill University & Leiden University

Dual Regression versus Eigenvector Centrality Mapping in RSfMRI, a Pharmacological perspective

Pierre Bellec, University of Montreal

Characterization of inter-individual differences in rs-fMRI network topography using stable cluster cores

Mona Maneshi, Jean Gotman, Christophe Grova, McGill University

Shared and Specific ICA (SSICA), new data-driven functional connectivity analysis method and its application in epilepsy.

10:30-12:00 Neurophysiological Considerations

Jean Gotman, McGill University

Epileptic discharges and the default mode network

Amir Shmuel, McGill University

Laminar-dependent neurophysiological activity underlying spontaneous fluctuations in hemodynamic signals

12:00-1:00 Lunch

1:15-2:15 Multimodal RSfMRI

Peter Donhauser *& Sylvain Baillet, McGill University*

Dynamics of cross-frequency coupling in the resting & active states

Oury Monchi, University of Montreal

Combining TBS and RS-fMRI for the study of fronto-striatal connectivity

2:30-3:45 New Frontiers

Shahab Vahdat & Julien Doyon, University of Montreal

Sleep-dependent consolidation of motor sequence learning revealed by fMRI

Maxime Parent & Pedro Rosa-Neto, McGill University

Functional connectivity impairments in a transgenic rat model of Alzheimer's Disease

Francois Chouinard, Alan Evans, Pierre Bellec, McGill University

Heritability of Functional Connectivity

4:00-5:00 Discussion Panel