



ISBN 2022  
MEETING SCHEDULE  
St. John's, Newfoundland, Canada  
Organizers: Gary Turner and Melanie Cohn

All talks will take place in the Alt Hotel par le Germain in St. John's, 125 Water St, St. John's.

**THURSDAY, JUNE 9<sup>TH</sup>**

7:00 – 9:00PM Opening Reception at the Alt Hotel

**FRIDAY, JUNE 10<sup>TH</sup>**

**Symposium I - Frontiers in neuromodulation research: Brain intervention towards functional enhancement**

Organizers: Natalie Ebner\* and Cherie Marvel

8:30 – 9:00

*Breakfast*

9:00 – 9:05

Conference welcome by organizers Mel Cohn and Gary Turner

*Session Chair: Karen Rodrigue*

9:05 - 9:35

**Melanie Cohn**, Krembil Brain Institute, Canada

Enhancing cognition using DBS in advanced Parkinson's disease

9:35 - 10:05

**Cherie Marvel**, Johns Hopkins University School of Medicine, USA

Motor system interactions during motor tapping and motor imagery in conjunction with real-time fMRI neurofeedback training

10:05 - 10:35

**W. Dale Stevens**, York University, Canada

Enhancing cognition in older adults using home-based real-time EEG neurofeedback training: Results from a randomized control trial

*\*Natalie is unable to attend*

10:35 - 11:00

*Coffee Break*

**NEW MEMBERS**

*Session Chair: Jutta Peterburs*

11:00 - 11:20

**Magdalena Wojtowicz**, York University, Canada,

Exploring the Elite Brain: From Injury to High Performance

11:20 - 11:40

**Massieh Moayed**, University of Toronto, Canada

A motivational framework for pain cognition interactions

11:40 - 12:00

**Steven Greening**, University of Manitoba, Canada

Fear in the theater of the mind: The relationship between mental imagery and fear conditioning

12:00 - 2:00	<i>Lunch</i>
<b>Work in Progress</b>	<i>Session Chair: Angela Gutchess</i>
2:00 – 2:20	<b>Jutta Peterburs</b> , Medical School, Hamburg, Germany Targeting the error-related negativity (ERN) with cerebellar TMS
2:20 – 2:40	<b>Philip Servos</b> , Wilfrid Laurier University, Canada Tactile Inhibition of Return
2:40 – 3:00	<b>Bradley Buchsbaum</b> , Rotman Research Institute, Canada Neural reactivation and judgements of vividness reveal separable contributions to mnemonic representation
3:00 – 3:30	<i>Coffee Break</i>
3:30 – 3:50	<b>Simon Overduin</b> , GERAS Centre for Aging Research, Canada Understanding how the mind is wired to remember language
3:50 – 4:10	<b>Sebastian Ocklenburg</b> , Medical School, Hamburg, Germany Ecological validity in affective and cognitive neuroscience: Using mobile EEG and VR
4:10 - 4:30	<b>*Andrea Potzner</b> , University of Calgary, Canada High-resolution virtual brain modelling to simulate individually unique network responses to deep brain stimulation for treatment resistant depression <i>*Traditional Paper</i>

## **SATURDAY, JUNE 11<sup>TH</sup>**

All day excursion to [O'Brien's](#) whale watching tour. We will leave the hotel Saturday morning (transportation provided) for Bay Bulls where we will enjoy a 2-hour boat tour, searching for whales and puffins (and maybe icebergs!). Lunch (included in the cost) will be offered after the tour. We will return to the hotel late afternoon.

10:30	Pick up from the Alt Hotel
11:30	2-hour boat tour
1:30	Lunch
4:00	Estimated time of return to the Alt Hotel

## **SUNDAY, JUNE 12<sup>TH</sup>**

### **Symposium II - Neurobehavioral markers of health outcomes in aging and neurological disease**

Organizer: Scott Hayes

9:00 – 9:30	<i>Breakfast</i>
	<i>Session Chair: Kristen Kennedy</i>
9:30 - 10:00	<b>Scott M. Hayes</b> , The Ohio State University, USA Examining the relationship between modifiable health variables, brain metrics, and cognition in aging and mild cognitive impairment.
10:00 - 10:30	<b>Gary R. Turner</b> , York University, Canada Aging, white matter lesion burden, and functional network changes.
10:30 - 11:00	<i>Coffee Break</i>
11:00 - 11:30	<b>Mary Pat McAndrews</b> , Krembil Brain Institute and University of Toronto, Canada

11:30 - 12:00 Probing network integrity: Using rs-fMRI to predict cognitive outcomes following surgery for temporal-lobe epilepsy.  
**Alice Cronin-Golomb**, Boston University, USA  
fNIRS investigation of prefrontal regions associated with single-task and dual-task walking: Next stop, Parkinson's disease.

12:00 – 2:00 *Lunch*

### Traditional Papers

*Session Chair: Cherie Marvel*

2:00 – 2:20 **Nathan Spreng**, McGill University, Canada  
The impact of loneliness on functional brain network organization across the lifespan

2:20 – 2:40 **Ludise Malkova**, Georgetown University Medical Center, USA  
Pharmacological inactivation of the bed nucleus of the stria terminalis increases prosocial behavior in rhesus macaques

2:40 – 3:15 *Coffee Break*

3:15 - 4:30 *Presidential Lecture, Introduction by Gary Turner:*  
**Dr. Carolyn Harley** (Memorial University of Newfoundland)

**Title:** *Pretangle tau in the locus coeruleus and the aging brain*

**Abstract:** The discovery that pretangle tau is a nearly ubiquitous feature in some cells of the human locus coeruleus laid the foundation for our development of a rat model of locus coeruleus pretangle tau. I will outline our rat model, highlighting its parallels to the human condition both physiologically and behaviorally. Our recent evidence that different temporal patterns of locus coeruleus activation alter its functional output and can be either protective or deleterious for aging brain locus coeruleus function will be discussed.

6:30 – 9:00pm Banquet Dinner  
[St. John's Fish Exchange Kitchen and Wet Bar](#), 351 Water St., St. John's

### MONDAY, JUNE 13<sup>TH</sup>

8:00 – 9:00 *Breakfast*

**8:00-9:00 Business Meeting (over breakfast)**

9:00-9:10 *Bathroom break*

### Traditional Papers

*Session Chair: Philip Servos*

9:10 - 9:30 **Lorna Jakobson**, University of Manitoba, Canada  
Individual Differences in Emotion Contagion

9:30 - 9:50 **Christine Smith**, University of California San Diego, USA  
The relationship between news event memory and performance on standard neuropsychological tests

9:50 - 10:10 **Jessica Andrews-Hanna**, University of Arizona, USA  
Measuring the Dynamics of Unprompted Thought

10:10 - 10:30 **Donna Rose Addis**, Rotman Research Institute, Canada  
Reassessing the functional significance of BOLD variability