Monday, April 27th, 2015

8:00 Registration
8:20-8:30 Opening remarks

Keynote speaker
8:30-9:30 Mark Hallett
Brain Stimulation: Past, Present and Future

Session 1. Different approaches of brain stimulation
Chairs: Abraham Zangen & Hartwig R Siebner

9:30-10:00: Michael Nitsche, Georg-August-University, Germany
Basic and functional effects of tES.

10:00-10:30: Marom Bikson, The City College of New York of CUNY, US
Comparing the focality of TMS and HD-tDCS

10:30-11:00: Angel Peterchev, Duke University, US
Leveraging the TMS pulse waveform for selective neural recruitment and enhanced neuromodulation

11:00-11:30: Coffee break

11:30-12:00 Jeff Daskalakis, University of Toronto, Canada
MST treatment and biomarker data in depression

12:00-12:30: Alfonso Fasano, University of Toronto, Canada
Recent advantages in deep brain stimulation: indications, targets and technology

12:30-1:30 Lunch (on-site) and poster setup

Session 2. Combining non-invasive brain stimulation with neuroimaging
Chairs: Edwin Robertson & Jeff Daskalakis

1:30-2:00: Abraham Zangen, Tel Aviv University, Israel
Right Prefrontal Deep TMS Effects on Attention: Behavioral Outcomes and Electrophysiological Correlates

2:00-2:30: Hartwig R Siebner, University of Copenhagen, Danemark
Shaping effective connectivity in functional brain networks - a combined TMS-fMRI approach

2:30-3:00: Charlotte Stagg, University of Oxford, UK
Transcranial Direct Current Stimulation (tDCS): a potential new tool for stroke rehabilitation?

3:00-3:30: Coffee break

3:30-4:00 Hugo Theoret, Université de Montréal, Canada
Genetic determinants of abnormal corticospinal tract anatomy.

4:00-4:30: Sven Bestmann, UCL, UK
Computational neurostimulation

4:30-4:45 Best submitted abstract: Giovanni Pellegrino, Università Campus Bio-Medico and McGill University.
Val66Met BDNF haplotype shatters the relationship between acute cortical LPT/LTD-like plasticity and clinical outcome in stroke patients.

4:45-5:00 Best Submitted abstract: Nicolas Mavromatis, Université Laval and University Claude Bernard Lyon 1.
Conditioning effect of experimental pain on corticospinal plasticity induced by an ischemic nerve block.

5:00-6:00: Poster session
Tuesday, April 28th, 2015

**Session 3. The study of cognition and behaviors with non-invasive brain stimulation**

*Chairs:* Julien Doyon & Leo Cohen

- **8:00-8:30:** Shirley Fecteau, Université Laval, Canada  
  *rTMS in autism spectrum disorders*

- **8:30-9:00:** Edwin Robertson, University of Glasgow, UK  
  *Understanding the regulation of memory consolidation using brain stimulation*

- **9:00-9:30:** Antonio P. Strafella, University of Toronto, Canada  
  *Investigating frontal-basal ganglia interactions in the human brain through Parkinson’s disease.*

- **9:30-10:00:** Eric Wassermann, NINDS, NIH, US  
  *Motor cortex and procedural learning: A "virtual lesion," which is neither.*

- **10:00-10:30:** Coffee break

- **10:30-11:00:** Leo Cohen, NINDS, NIH, US  
  *Modulation of motor learning of possible impact in neurorehabilitation*

- **11:00-11:30:** Oury Monchi, University of Calgary, Canada  
  *Investigating the effect of TBS stimulation as a potential therapeutic tool for cognitive deficits in PD*

- **11:30-11:45** Best submitted abstract: Ephrem Zewdie, University of Calgary,  
  *Ipsilateral corticomotor neurophysiology in children with perinatal stroke*

- **11:45-12:00** Best submitted abstract: Zhen Ni, University of Toronto and Toronto Western Research Institute,  
  *Effect of internal globus pallidus stimulation on primary motor cortex in dystonia*

- **12:00-1:00** Lunch (on-site)

**Session 4. Clinical applications of brain stimulation**

*Chairs:* Michael Nitsche & Antonio Strafella

- **1:00-1:30:** Lisa Koski, McGill University, Canada  
  *Safety, tolerability and efficacy of non-invasive brain stimulation for treatment of post-concussion symptoms*

- **1:30-2:00:** Coleen Hanlon, Medical University of South Carolina, US  
  *What goes up, can come down: understanding the efficacy of TMS for addiction through neuroimaging*

- **2:00-2:30:** Robert Chen, Toronto Western Research Institute, University of Toronto, Canada  
  *TMS in Parkinson's disease*

- **2:30-3:00:** Coffee break

- **3:00-3:30:** Alexandre Thiel, McGill University, Canada  
  *Non-invasive brain stimulation for post-stroke recovery: from translational neuroscience to clinical trials*

**Session 5. Open discussion and announcement of the two best posters**

*Chairs:* Antonio Strafella, Edwin Robertson, Eric Wassermann, Hartwig R Siebner, Leo Cohen, Mark Hallett, Michael Nitsche