

**Electrical Stimulation in Neurologic Rehabilitation**  
**A Symposium Sponsored by:**  
**The Neuro-Cognitive Rehabilitation Research Network (NCRRN) and**  
**The Center for Experimental Neurorehabilitation Training (CENT)**

Meeting Dates: June 5 – 6, 2009 (Arrive Thursday PM, meet Friday, Saturday until 2PM, depart Saturday afternoon/evening)

Location: The Inn at Penn, Philadelphia PA

Friday, June 5

General Introduction: 8:00 – 8:10

I. Session 1: 8:10 – 10:10 **Overview of Techniques – will include discussion of basic science**

- A. History and Physiology of Electrical Stimulation (30): Wasserman
- B. TMS (30): Pascual-Leone
- C. Transcranial Electrical Stimulation: tDCS, tACS, tRNS (30): Paulus
- D. Discussion (30): Edwards

**Coffee Break (20)** 10:10 – 10:30

II. Session 2: 10:30-12:30: **Applications to Rehabilitation: Sensory and Motor Function**

- A. Transcranial Magnetic Stimulation (TMS) as a predictor of motor recovery and treatment to enhance recovery of motor function (45): Celnik
- B. Transcranial Direct Current Stimulation (TDCS) (30): Nitsche
- D. Discussion (45): Cohen (including somatosensory stimulation)

**Lunch** (12:30 – 1:30)

III. Session 3: 1:30-3:30 **Applications to Rehabilitation: Language and Attention**

- A. Language (45): Naeser
- B. Neglect/Attention (45): Oliveri
- C. Discussion (30): Hamilton

**Coffee Break (30)** 3:30 – 4:00

IV. Session 4: 4:00-5:30 **Electrical Stimulation and Rehabilitation: Where do we go from here?**

- A. Introduction of issues: Study designs, subject selection, outcome measures, reality constraints (30): Whyte
- B. Discussion of study design decisions made by participating researchers, issues that others may confront (60): Whyte

**V. Drinks followed by dinner:** 6:00-9:00

Saturday, June 6

**Continental Breakfast** 8:00 – 8:30

VI. 8:30- 10:30 **Applications to Rehabilitation: Executive Function and other topics**

- A. Frontal/Executive Functions (45): Grafman
- B. Additional Domains (45): Pain, vision, seizures, etc: Fregni
- C. Discussion (30): Walsh

**Coffee Break** 10:30 – 11:00

VII. Session 6: 11:00 – 1:30 **Discussion of Specific Proposals**

- A. Breakout sessions to generate Specific Proposals (90)
  - 1. Language – Schwartz, Naeser
  - 2. Attention – Oliveri, Buxbaum
  - 3. Motor – Celnik, Cohen
  - 4. Other topics by popular demand
- [--pick up lunch and reconvene for discussion]
- B. Presentations of Proposals and group discussion

VIII. Session 7: 1:30 – 2:00 **Wrap up**

2:00 Adjourn