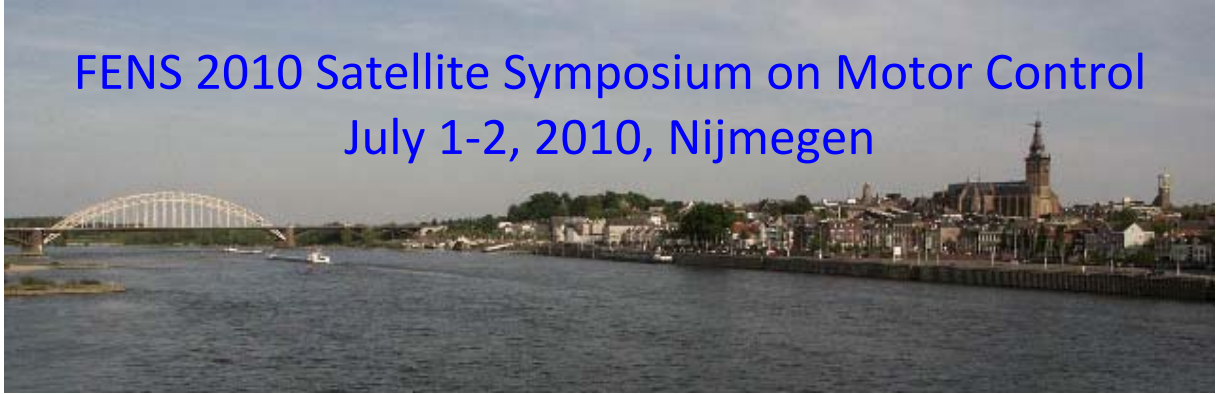


FENS 2010 Satellite Symposium on Motor Control July 1-2, 2010, Nijmegen



Dear colleagues and friends,

Research in Motor Control is a truly multi-disciplinary endeavor. It includes a broad range of approaches such as molecular neuroscience, neurophysiology, anatomy, behavior, neurology, neuro-imaging, and computational modeling. The aim of this satellite symposium is to bring together researchers from different backgrounds, to create an integrated view on novel developments in the field of motor control, and to encourage cross-fertilization of intellectual ideas.

We look forward to welcoming you in Nijmegen, the oldest city in The Netherlands where excellent science and quality leisure time go hand in hand!

With best wishes,

Stan Gielen, Bas Bloem and Jens Bo Nielsen, co-chairs



FENS Satellite Motor neuroscience symposium, Nijmegen 1-2 July 2010

Thursday - 1st of July

Session 1 – Organisation of spinal cord networks and control of gait

Chairman: Hans Hultborn

09:00 - 09:20: Physiological and molecular deciphering of mammalian locomotor networks/
Ole Kiehn

09:20 - 09:40: Development of a locomotor rheostat in the spinal cord of amphibian tadpoles/
Keith Sillar

09:40 - 10:00: Rules governing recruitment of neurons in the adult zebrafish locomotor circuit
/ Abdel El Manira

10:00 - 10:20: The development of an action based body representation in the spinal cord/
Jens Schouenborg

10:20 - 10:40: *Coffee and tea*

10:40 - 11:00: Reflexes change gait as gait changes reflexes. A mutual love affair/ Jacques
Duyssens

11:00 - 11:20: Control of knee extensors during human walking/ Caroline Iglesias &
Veronique Marchand-Pauvert

11:20 - 11:40: Recurrent inhibition during gait and maintenance of posture/ Rose Katz

11:40 - 12:00: Spinal injury in vitro: damage and protection/ Andrea Nistri

12:00 - 12:20: Spinal cord injury and Lokomat training and how this impacts on measures of
sensory and motor physiology/ Bernard Conway

12:20 - 13:50: *Lunch and Poster session*

Session 2 – Motor cortex

Chairman: John Rothwell

13:50 – 14:10: A tale of 2 primary motor areas: 'Old' and 'New' M1/ Peter Strick

14:10 - 14.30: The representation of movements in the motor cortex / Inge Zijdewind

14:30 - 14:50: How many brain areas does it take to grasp a light bulb?/ Ivan Toni

14:50 - 15:10: Measures of Cortical Excitability in Humans Provide Insights into Mechanisms of Cognitive Inference / Svend Bestmann

15:10 - 15:30: Do plasticity in the primary motor cortex contribute to Neurorehabilitation?/ Leo Cohen

15:30 - 15:50: When plasticity gets out of hand and produces neurological symptoms/ Angelo Quartarone

15:50 - 16:10: Coffee and tea

Session 3 – Cerebellum

Chairman: Hartwig Siebner

16:10 - 16:30: Trans-spinal reticulo-cerebellar loop/ Elzbieta Jankowska

16:30 - 16:50: Linking cerebellar microcircuitry properties and motor control/ Henrik Jorntell

16:50 - 17:10: C7: Cerebellar-Cortical Control: Cells, Circuits, Computation and Clinic/ Chris Miall

17:10 -17:30: Activity of feline spinocerebellar tract cells during fictive locomotion and scratching / Katinka Stecina

18.00 – 22.30 Banquet for all participants

Friday 2nd of July

Session 4 - Basal ganglia

Chairman: Stan Gielen

09:00 - 09:20: Structure-function relationships in human basal ganglia/ Hartwig Siebner

09:20 - 09:40: Beta activity in the BG-cortical circuit: the Jekyll and Hyde of the motor system / Peter Brown

09:40 - 10:00: How do the basal ganglia generate resting tremor?/ Rick Helmich

10:00 - 10:20: The basal ganglia – an evolutionary conserved structure for selection of Motor programs / Sten Grillner

10:20 - 10:40: *Coffee and Tea*

Session 5: Balance

Chairman: Bas Bloem

10:40 - 11:00: Why employ two vestibular systems to control balance?/ Brian Day

11:00 - 11:20: Neuronal networks underlying feedback postural control in simple animal models/ Tatiana Deliagina

11:20 - 11:40: Postural anticipatory constraints to limb movements coupling/ Fausto Baldissera

11:40 - 12:00: Age-related dual-task deficits in walking depend on task type, but not on task difficulty/ Otmar Bock

12:00 - 12:40: *Lunch*

Session 6: Development, ageing and plasticity

Chairman: Jens Bo Nielsen

12:40 - 13:00: Changes in brain activation as a result of aging during the performance of motor tasks/ Stefan Swinnen

13:00 - 13:20: Development in children with brain damage/ Bouwien Smits

13:20 - 13:40: Plasticity of the Human oculomotor system: Behavioural and neurophysiological study of saccadic adaptation/ Denis Pelisson

13:40 - 14:00: Development of fine motor skills/ Hans Forsberg

14:20 - 14:40: Analysing the creating brain - neural mechanisms of musical improvisation / Fredrik Ullen

14:40 - 15:00: Motor synergies in reaching with rods / Raoul Bongers

15:00 - 15:20: Subliminal motor learning / Jesper Lundbye-Jensen

15:20 - 15:40: *Coffee and Tea*

Session 7: Computational neuroscience

Chairman: John Rothwell

15:40 - 16:00: Dimensionality reduction in kinematic and muscle spaces during pointing beyond arm length/ Thierry Pozzo

16:00 - 16:20: Sensorimotor integration: what is optimised?/ Jeroen Smeets

16:20 - 16:40: Multiperson coordination/ Alan Wing

16:40 - 17:00: Collaborative motor control/ Ruud Meulenbroek

17:00 - 17:20: Optimal control in noisy, uncertain environments/ Stan Gielen

Departure to Amsterdam