Monday, November 28, 2016

13.00–13:20 Opening

Opening Lecture

13.20–13.55 **The future of DBS - New treatment strategies or better targets for DBS?**
A. Lozano

Session 1 *Parallel basal ganglia motor, cognitive and limbic circuits*

14.05–14.30 **Basal ganglia loops – segregation or overlap?**
B. Draganski

14.30–14.50 **How the STN-GPe loop may include prior knowledge during the exploration in re-learning**
F.H. Hamker

14.50–15.10 **Basal ganglia-cerebellar interactions**
A. Quartarone

15.10–15.20 Abstract presentation 1

15.20–15.30 Abstract presentation 2

15.30–15.40 Session wrap-up, Discussion

15.40–16.00 Coffee Break

Session 2 *Local and distant effects of DBS on network function*

16.00–16.35 **Network effects of DBS assessed by MEG**
V. Litvak

16.35–17.00 **Can we improve speech by STN DBS?**
S. Pinto

17.00–17.20 **Effects of thalamic and basal ganglia DBS on language-related functions – Conceptual and clinical considerations**
F. Klostermann

17.20–17.30 Session wrap-up, Discussion

17.30–17.45 Break

17.45–18.10 **Mechanisms of tremor reduction and ataxia in thalamic DBS**
J. Volkmann

18.10–18.30 **The role of the STN in adaptive motor control**
W.-J. Neumann

18.30–18.40 Abstract presentation 3

18.40–18.50 Session wrap-up, Discussion

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Session 3 *Animal models – Basal ganglia physiology*

09.00–09.35 **Neuronal signature in progressive models of Parkinson's disease – are oscillations enough?**
J. L. Vitek

09.35–09.55 **Oscillation models in vitro**
J. Geiger

09.55–10.15 **Temporal development of oscillations in experimental Parkinsonism**
C. van Riesen

10.15–10.25 Session wrap-up, Discussion

10.25–10.40 Break

10.40–11.15 **Neurobiological and neurophysiological correlates of mental disorders**
A. Grace

11.15–11.40 **Behavioral and neurophysiological characterization of the DAT model**
C. Winter

11.40–11.50 Abstract presentation 4

11.50–12.00 Abstract presentation 5

12.00–12.10 Session wrap-up, Discussion

12.10–13.10 Poster Session

13.10–14.00 Lunch

Session 4 *Biomarker in movement disorders*

14.00–14.35 **Complex dynamics of neuronal oscillations and its functional role in health and disease**
K. Linkenkaer-Hansen

14.35–14.55 **Cortico-subcortical interactions and metastable neural dynamics in Parkinson's Disease**
V. Nikulin

14.55–15.15 **Are LFP useful chronic bio-markers for motor behaviour?**
A. Kühn

15.15–15.40 **The role of high frequency oscillations in movement disorders**
A. Schnitzler

15.40–15.50 Session wrap-up, Discussion

15.50–16.10 Coffee break