



OXFORD AUTUMN
SCHOOL IN
NEUROSCIENCE



Oxford Autumn School in Neuroscience 2018

Thursday 27th September

09.25 Welcome: Professor Masud Husain, Chair Autumn School in Neuroscience

Development | Environmental influences on thalamocortical circuit assembly and plasticity

Chair: Professor Zoltán Molnár, Department of Physiology, Anatomy and Genetics, University of Oxford

09.30 - 10.10 Professor Heiko Luhmann, University Medical Center, Johannes Gutenberg University, Mainz, Germany

The earliest activity patterns in cortical circuits

10.10 - 10.50 Professor Patrick Kanold, Department of Biology, University of Maryland, USA

Transient circuits and cortical plasticity

10.50 - 11.20 Break

11.20 - 12.00 Professor Henry Kennedy, LabEx Cortex, University of Lyon, France

Regulation of neurogenesis and cortical areal identity by early sensory inputs in the primate brain

12.00 - 12.40 Professor Holly Bridge, Nuffield Department of Clinical Neurosciences, University of Oxford

Organisation of the visual system in humans with and without visual function

12.40 - 13.30 Lunch break and Poster session

Cognitive Neuroscience | From Cognitive map to meta cognition

Chair: Professor Jill O'Reilly, Nuffield Department of Clinical Neurosciences, University of Oxford

13.30 - 14.10 Professor John Dylan-Haynes, Bernstein Center for Computational Neuroscience, Humboldt University, Berlin, Germany

What does(n't) neuroimaging reveal about the problem of free will?

14.10 - 14.50 Dr Benedetto De Martino, Institute of Cognitive Neuroscience, UCL, London

Beliefs, Confidence and Behavioural Control

14.50 - 15.20 Break

15.20 - 16.00 Professor Kate Jeffery, Department of Experimental Psychology, UCL, London

Neural encoding of complex space

16.00 - 16.40 Professor Christoph Ploner, Department of Neurology, Charité - University Medicine, Berlin, Germany

Beyond Neuropsychology: Clinical studies of hippocampal function in humans

16.40 - 17.20 Dr Hugo Spiers, Department of Experimental Psychology, UCL, London

The cognitive map in humans: spatial navigation and beyond



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Friday 28th September

Neurophysiology | To spike, or not spike: monitoring and manipulating the electricity of the brain
Chair: Professor Peter Magill, MRC Brain Network Dynamics Unit, University of Oxford

09.00 - 09.40 Professor Beatriz Rico, MRC Centre for Neurodevelopmental Disorders, King's College, London

Building cortical networks: from molecules to function

09.40 - 10.20 Dr David Dupret, MRC Brain Network Dynamics Unit, University of Oxford

A hippocampal-nucleus accumbens circuit motif to act upon the retrieval of an appetitive memory

10.20 - 10.50 Break

10.50 - 11.30 Dr Huiling Tan, Nuffield Department of Clinical Neurosciences and MRC Brain Network Dynamics Unit, University of Oxford

Subcortical local field potentials for brain-machine interfacing

11.30 - 12.10 Professor Pascal Fries, Ernst Strüngmann Institute for Neuroscience, Frankfurt, Germany

Rhythms for cognition: Communication through coherence

12.10 - 13.10 Lunch and Poster session

Neurology | From molecules to synapses: dissecting the pathogenesis of neurological disease

Chair: Professor Kevin Talbot, Nuffield Department of Clinical Neurosciences, University of Oxford

13.10 - 13.50 Dr Gareth Miles, School of Psychology and Neuroscience, University of St Andrew's (TBC)

Gliotransmission in the spinal cord in health and disease

13.50 - 14.30 Dr Guillaume Hautbergue, Department of Neuroscience, University of Sheffield

RNA homeostasis in motor neuron diseases

14.30 - 15.00 Break

15.00 - 15.40 Dr Helena Radbruch, Department of Neurology, Charité - University Medicine, Berlin, Germany

Cellular consequences of neuroinflammation

15.40 - 16.20 Professor Andrea Nemeth, Nuffield Department of Clinical Neurosciences, University of Oxford

The molecular pathogenesis of inherited ataxia

16.20 - 16.35 Closing remarks

