



Oxford Autumn School in Neuroscience 2026

Blakemore Lecture Theatre, Sherrington Building, Sherrington Rd, Oxford OX1 3PT

Thursday 8th October

09.15 Welcome: Associate Professor Miriam Klein-Flügge, Chair Autumn School in Neuroscience

The predictive cortex: From sensation to strategy

Chair: Professor Abhishek Banerjee, Department of Pharmacology, QMUL & University of Oxford

09.30 - 10.10 Professor Randy Bruno, Department of Physiology Anatomy and Genetics, University of Oxford

Cellular mechanisms for (re)shaping perception

10.10 - 10.50 Dr Zilu Liang, Department of Experimental Psychology, University of Oxford

Distinct roles of hippocampus and neocortex in symbolic compositional generalisation

10.50 - 11.30 Professor Sonja Hofer, The Sainsbury Wellcome Centre, University College London

Neural circuit mechanisms of visual predictive processing

11.30 - 12.10 Professor Mriganka Sur, The Picower Institute, Massachusetts Institute of Technology

The computation and expression of reward prediction error

12.10 - 13.30 Break

The dynamics of spatial attention

Chair: Professor Ole Jensen, Departments of Psychiatry and Experimental Psychology, University of Oxford

13.30 - 14.10 Dr Marieke Schölvink, Ernst Strüngmann Institute, Frankfurt

Catching cognition in the act - new ways to track attentional dynamics across species

14.10 - 14.50 Professor Ayelet Landau, University College London, Department of Cognitive and Brain Sciences, The Hebrew University of Jerusalem

Rhythmic attention along the visual hierarchy and beyond

14.50 - 15.30 Professor Nilli Lavie, Faculty of Brain Sciences, University College London

Attention, perception, and cognitive control: Testing the limits

15.30 - 16.10 Professor Ole Jensen, Departments of Psychiatry and Experimental Psychology, University of Oxford

Covert attention and parafoveal processing in reading and visual search



Friday 9th October

Causal manipulation of brain states for understanding behaviour and mental health

Chair: Assoc Prof Miriam Klein Flügge, Department of Experimental Psychology, University of Oxford

09.30 - 10.10 Dr Rosemary Bagot, Ludmer Centre, McGill University

Neural circuit mechanisms of affective processing

10.10 - 10.50 Oxford ECR tbc

tbc

10.50 - 11.30 Dr Laith Alexander, Institute of Psychiatry, Psychology, and Neuroscience, King's College London

Determining the effects of non-invasive deep brain stimulation of the limbic system using multimodal functional MRI

11.30 - 12.10 Professor Charlotte Stagg, Nuffield Department of Clinical Neurosciences, University of Oxford

Using transcranial ultrasound stimulation for high-precision neuromodulation in humans

12.10 - 13.20 Break

Sex and Gender as a Research Variable in Neuroscience

Chair: Dr Kamila Szulc-Lerch, Nuffield Department of Clinical Neurosciences, University of Oxford

13.20 - 14.00 Professor Arthur Arnold, Brain Research Institute, University of California, Los Angeles

A general theory of sexual differentiation

14.00 - 14.40 Dr José Prius Mengual, Department of Physiology Anatomy and Genetics, University of Oxford

Sex differences in a genetic mouse model of epilepsy

14.40 - 15.20 Professor Armin Raznahan, Department of Psychiatry, University of Oxford

Multiscale Mapping of Sex Differences in Brain Organization

15.20 - 16.00 Dr Kamila Szulc-Lerch, Nuffield Department of Clinical Neurosciences, University of Oxford

Sex Differences in Stroke Recovery: Insights from Sry-Modified Rat Model

16.00 - 16.15 Closing remarks