



SFB 1315

Mechanisms and Disturbances in Memory Consolidation:
From synapses to systems

Tuesday

DEC 10, 2024

4:00 pm

BCCN Lecture Hall

Philipstraße 13/Haus 6

10115 Berlin

Meeting-ID: 775 491 0236

SFB1315.ifb@hu-berlin.de

SFB 1315 LECTURE SERIES 2024

BRAIN NETWORK DYNAMICS IN MALADAPTIVE MEMORIES

DAVID DUPRET

MRC Investigator, MRC Brain Network Dynamics Unit

Tutorial Fellow at St Edmund Hall

Department of Physiology, Anatomy & Genetics

Division of Medical Sciences

University of Oxford

Oxford, UK



Funded by

DFG Deutsche
Forschungsgemeinschaft
German Research Foundation



SFB 1315

Mechanisms and Disturbances in Memory Consolidation:
From synapses to systems

Tuesday

DEC 10, 2024
4:00 pm

BCCN Lecture Hall

Philipstraße 13/Haus 6

ZOOM ID: 7754910236

SFB1315.ifb@hu-berlin.de

BRAIN NETWORK DYNAMICS IN MALADAPTIVE MEMORIES

Memories shape everyday behaviour, typically informing effective responses but sometimes driving maladaptive ones. This process engages complex patterns of neuronal activity across distributed brain networks, including the hippocampus.

What features of neural activity underlie memory-guided behaviour? By considering spatio-temporally organised neuronal spiking and rhythmic fluctuations of the local field potentials, I will discuss in this talk recent findings that describe population-level patterns of activity supporting internal processing of mnemonic information. Notably, I will present cell type-selective and network pattern-informed interventions that allow drawing causal involvement of neural dynamics at the nexus of brain and behaviour, which can be used to prevent the expression of unwanted memories.

Altogether, these data will highlight how fine-grained neural dynamics distributed across the hippocampus and partner circuits promote memory-guided behaviour, for better or worse

About the Speaker

David Dupret's Ph.D. in Neuroscience at the Institute François Magendie (INSERM, University of Bordeaux, France) was awarded with the French Neuroscience Association's 2007 Ph.D. Year Prize. David has also held an 'Agrégation ès' Biological and Earth Sciences (Ministry of Education, France) since 2000. He joined the group of Prof Jozsef Csicsvari at the MRC Anatomical Neuropharmacology Unit in September 2007 as a Visiting fellow. In 2009, David was appointed as a MRC postdoctoral scientist, and in 2011, was promoted to tenured MRC Programme Leader in 2014. In 2016, David was named a Scholar of the FENS-Kavli Network of Excellence and, in 2018, received the Boehringer Ingelheim-FENS 2018 Research Award for his work on dynamics of neuronal assemblies in memory processes. In 2020, David was awarded the title of Professor of Neuroscience by the University of Oxford, and appointed a Tutorial Fellow in Biomedical Sciences at St Edmund Hall in conjunction with the Department of Physiology, Anatomy and Genetics.

Source, www.dpag.ox.ac.uk/team/david-dupret

This invited talk is hosted by SFB1315 Assoc PI Silvia Viana da Silva.

Certificate of attendance:

Please contact team assistant serenella.brinati.1(at)hu-berlin.de



Funded by



Deutsche
Forschungsgemeinschaft
German Research Foundation