



**SFB 1315**

Mechanisms and Disturbances in Memory Consolidation:  
From synapses to systems

Tuesday

**NOV 8, 2022**  
**4:00 pm CET**

**ZOOM ID: 7754910236**  
**Questions/contact:**  
**SFB1315.ifb@hu-berlin.de**

**SFB 1315 LECTURE SERIES 2022-2023**

# MAKING MEMORIES IN MICE

**SHEENA JOSSELYN**

Senior Scientist, SickKids | The Hospital for Sick Children  
Professor, Departments of Psychology & Physiology  
University of Toronto  
Fellow, Royal Society of Canada



Funded by

**DFG** Deutsche  
Forschungsgemeinschaft  
German Research Foundation



**SFB 1315**

Mechanisms and Disturbances in Memory Consolidation:  
From synapses to systems

Tuesday

**NOV 8, 2022**  
**4:00 pm CET**

**ZOOM ID: 7754910236**  
**Questions/contact:**  
**SFB1315.ifb@hu-berlin.de**

## MAKING MEMORIES IN MICE

**Understanding how the brain uses information is a fundamental goal of neuroscience. Several human disorders (ranging from autism spectrum disorder to PTSD to Alzheimer's disease) may stem from disrupted information processing. Therefore, this basic knowledge is not only critical for understanding normal brain function, but also vital for the development of new treatment strategies for these disorders.**

Memory may be defined as the retention over time of internal representations gained through experience, and the capacity to reconstruct these representations at later times. Long-lasting physical brain changes ('engrams') are thought to encode these internal representations. The concept of a physical memory trace likely originated in ancient Greece, although it wasn't until 1904 that Richard Semon first coined the term 'engram'. Despite its long history, finding a specific engram has been challenging, likely because an engram is encoded at multiple levels (epigenetic, synaptic, cell assembly).

**My lab is interested in understanding how specific neurons are recruited or allocated to an engram, and how neuronal membership in an engram may change over time or with new experience. Here I will describe data**

**in our efforts to understand memories in mice.**

### About the Speaker

Sheena Josselyn is a Senior Scientist at SickKids and a Professor in the Departments of Psychology and Physiology at the University of Toronto in Canada. She holds a Canada Research Chair in Brain Mechanisms Underlying Memory, is a Senior Fellow in the Canadian Institute for Advanced Research (CIFAR), and is a Fellow of the Royal Society of Canada.

This talk is hosted by SFB1315 project A04, Speaker Matthew Larkum.

### Certificate of attendance:

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



Funded by



Deutsche  
Forschungsgemeinschaft  
German Research Foundation