

Biology of Memory: Systems and Diseases

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The course will focus on fundamental literature about the molecular, cellular, and circuit mechanisms that underlie how memories are formed, stored, retrieved, and lost. Moreover it will review and discuss the most relevant and contemporary publications in the field.

Jan 28 th	Course goals and structure. Overview of memory systems. Introduction to memory consolidation and reconsolidation mechanisms
Feb 4 th	Memory Consolidation: Molecular and system mechanisms in the hippocampus and cortex; Recent and remote memories
Feb 11 th	Memory enhancement: mechanisms and systems- Alzheimer's disease, ageing
Feb 18 th	President day-no class
Feb 25 th	Memory reconsolidation and emotional regulation: mechanisms in the amygdala, hippocampus and cortex- stress-related disorders including PTSD
March 4 th	Mechanisms of long-term memory in infancy
March 11 th	Student-led discussions of original papers
March 18 th	No class. Spring recess
March 25 th	Student-led discussion of original paper
April 1 st	Student-led discussions of original papers

Cycle 1: Memory Consolidation and relative diseases

April 8 th	Group sessions for project proposals
April 15 th	Team presentations of project proposals

Cycle 2. Memory reconsolidation and relative diseases

April 22 th	Group sessions for project proposals
April 29 th	Team presentations of project proposals

Cycle 3. Memory enhancement and relative diseases

May 6 st	Group sessions for project proposals
May 13 th	Team presentations of project proposals
May 15 th -19 th	Exam