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9.01 Introduction to Neuroscience
Fall 2007

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Memory

Types of memory

Declarative

Procedural

Sensory information

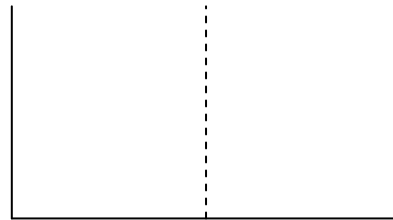
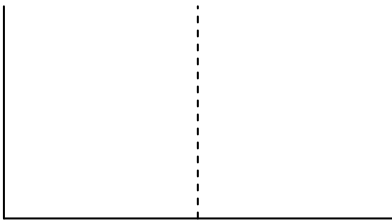
Short Term

Long Term

Amnesia

Anterograde

Retrograde



Memory storage

- Temporal lobe

- Medial temporal lobe:

- IT cortex:

* Patient HM:

- Diencephalon

- Lesions:

- Korsakoff's syndrome:

Conclusion:

Memory Mechanisms

Synapses:

LTP

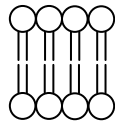
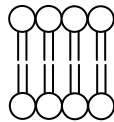
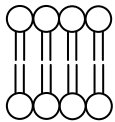
LTD

BCM Theory



Cellular Basis of LTP/LTD

AMPA



NMDA

LTP

LTD

Genetic Basis of LTP/LTD

Consolidation requires synthesis of _____

- Fruit fly experiment:

- Role of fornix: