

# Chapter 13: Learning and Memory

The Nature of Learning

Four Principal Types of Learning

Two Principal Types of Memory

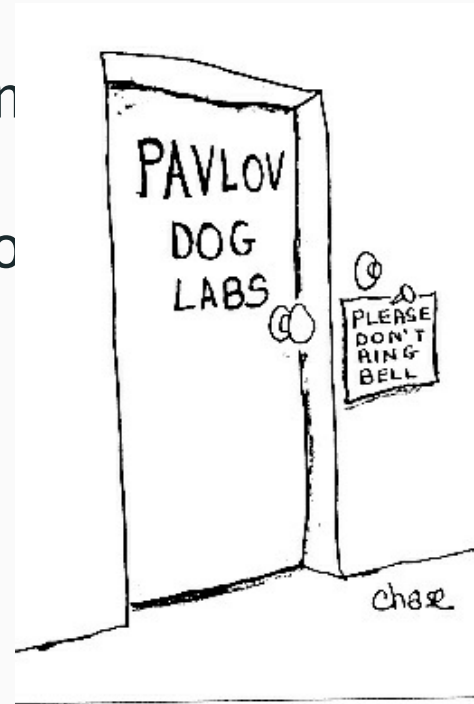
Memory Consolidation

Synaptic Plasticity

- electrophysiological mechanisms
- biochemical mechanisms

Neurobiological Mechanisms

Disorders



# The Nature of Learning

## Toward a Definition of Learning and Memory.

- primary function is to acquire behaviors
  - find food, water, shelter, companions
  - avoid physical threats / injuries



# The Nature of Learning

## Toward a Definition of Learning and Memory.

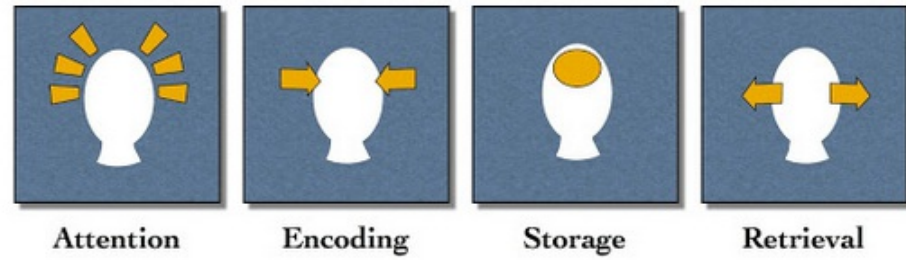
- modification of behavior, knowledge, or
  - lasting change, distinguishing it from tr
  - does not include injury, fatigue, poisoni
- nce
- changes.



# The Nature of Learning

## Toward a Definition of Learning and Memory.

- Learning: experience-dependent generation of
- neurally-encoded structures and functions
- Memory: retention of experience-dependent information
- Retrieval: use of memory in neuronal activity



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# Image Credits

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