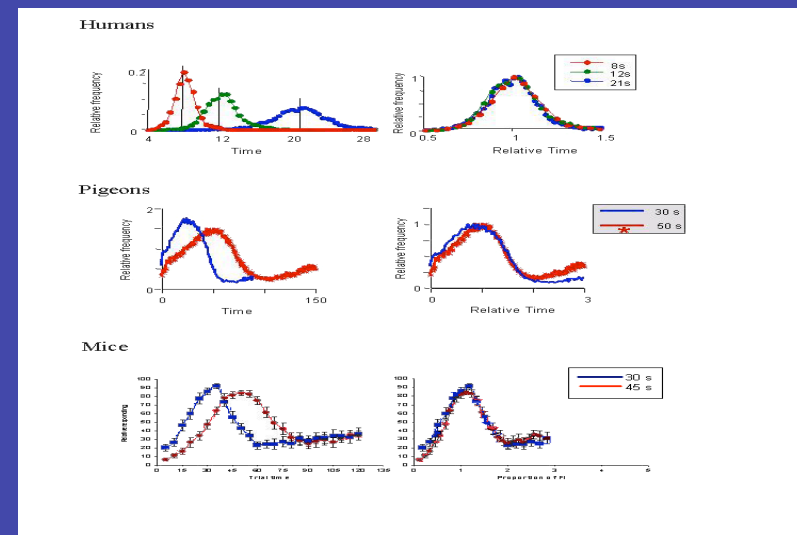
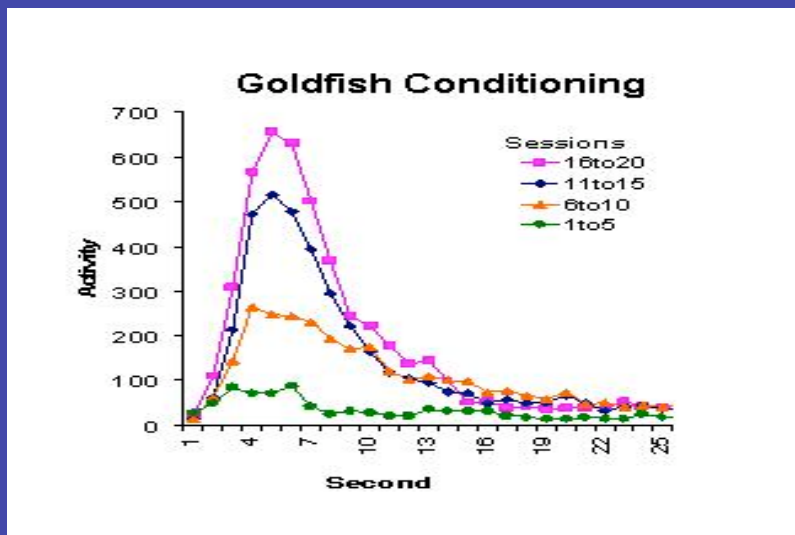


# Interval Timing

Episodic Memory

Decision Making

Anticipation (Associative learning)



Mechanism conserved across species?

How is time encoded in the nervous system?

Neurons or Networks?

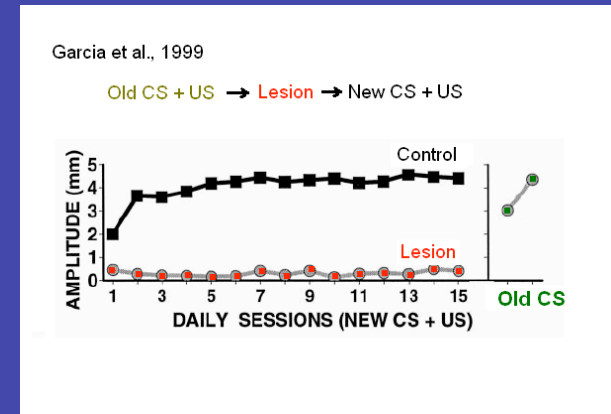
Traces, Oscillators or Accumulators?

# Distributed Learning

Different structures learn at different times

*Detection* -> *Initial Plasticity* -> *Long-term Change*

|               | <i>Initial plasticity</i> | ----> | <i>Long term</i> |
|---------------|---------------------------|-------|------------------|
| Eyeblink      | Cerebellar Cortex         | ----> | Deep nuclei      |
| Context Fear  | Hippocampus               | ----> | Cortex           |
| CS Fear       | dorsal LAd                | ----> | ventral Lad      |
| Song Learning | NCM                       | ----> | Song Control     |



How do detection systems enable learning?

Does the initial plasticity enable or instruct long-term change?

How is learning in different locations reassembled for output?