9.01 - Neuroscience & Behavior Fall 2003

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9.01 Study Questions Lecture 26

- 1. What is the difference between habituation and adaptation?
- 2. What allows you to sit in a chair for long periods of time without feeling constant pressure on the backs of your legs? (What system is responsible for this ability?)
- 3. Describe examples of habituation in different sensory modalities: vision, audition, somatic sensation, olfaction. Do you think the process in these different modalities can be explained the same way?
- 4. A novel stimulus, in any modality, causes a transient arousal in what system?
- 5. What are some of the multiple components of the orienting response to novel stimulation?
- 6. Give a specific example of an orienting response and why it is important.
- 7. What does the lie detector measure? What system is the response caused by? Is such a machine infallible? In what sense? How is a lie similar to detection of stimulus novelty?
- 8. What is "stimulus generalization" in studies of the phenomena of habituation?