The Limbic System and Functions of the Hippocampus

1. What are the principal structures of the limbic system, and how are they connected together?

2. What is the pathway that relays subcortical information to and from the hippocampus? How about the pathway for cortical information?

3. What kinds of cognitive functions are impaired in humans and animals when the hippocampus and surrounding cortex are lesioned? What functions are not impaired?

4. Describe two hypotheses about the role of the hippocampus in animal (non-human) cognition. What empirical evidence is there to support each of these hypotheses?

5. What is Eichenbaum’s hypothesis about the role of the hippocampus in animal and human cognition? Briefly describe two experiments he has done to test his hypothesis. What were the findings in those experiments? (Note: these are the Wood et al and Dusek & Eichenbaum articles, which he discussed at length in class.)