

## 9.10/9.100 REVIEW QUESTIONS

### Alzheimer's Disease

1. What are the neuropathological features of Alzheimer's Disease (AD)?
2. What is the regional/laminar distribution of pathological changes in AD, and how does this pattern evolve as the disease progresses?
3. What neurotransmitter systems are disrupted in AD (and how are they disrupted)?
4. What is the amyloid cascade hypothesis? How is cell death thought to occur?
5. How is A-beta produced from APP? Which form of A-beta is most associated with neurofibrillary tangles and plaques?
6. What is the first cognitive symptom that usually appears in AD? What additional cognitive symptoms appear as the disease progresses?
7. How do these cognitive symptoms correlate with the progressive neural degeneration of AD? How much damage usually occurs before cognitive impairments are detectable?
8. Do the presence of neurofibrillary tangles (NFT) and senile plaques (SP) always predict cognitive impairment?
9. What are the risk factors for developing AD? How might each risk factor exacerbate the neural damage seen in AD?
10. What factors appear to protect against developing AD? How might each one protect against neural damage?
11. Describe current and possible future treatments for AD. How do (would) these treatments slow the progression of the disease or alleviate its symptoms?
12. Does AD reflect an acceleration of processes that normally accompany aging? Why or why not?