## Early Cognitive Decline and the Aging Brain - Overview

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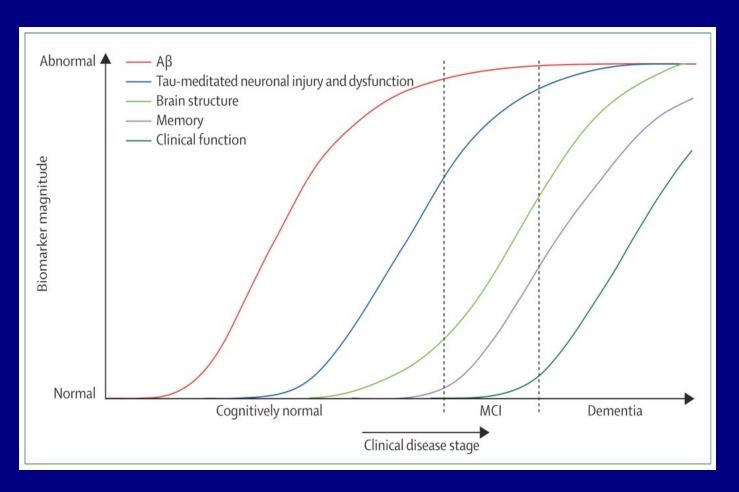
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# Brain diseases of aging progress gradually and over many years

- Alzheimer's has long been described as having an insidious onset with gradual progression over years
- Long term slowly progressive effects of cerebrovascular risk factors on the brain and cognition are now well known
  - Framingham Heart Study

### Model of AD progression



### Neuropsychology in age of imaging and biomarkers

- Important for identifying the earliest clinical changes of diseases of aging
  - Especially important when preventative treatments become available
  - Early diagnosis and treatment will prevent irreversible brain injury and associated disability

# Unanswered questions about early cognitive decline

- How can cognitive tests be used to measure and characterize disease progression
- Are there different patterns of decline in normal cognitive aging and different diseases of aging
- Which cognitive abilities are most sensitive to cognitive decline associated with which diseases
- How do different ways of measuring cognitive abilities affect sensitivity to disease