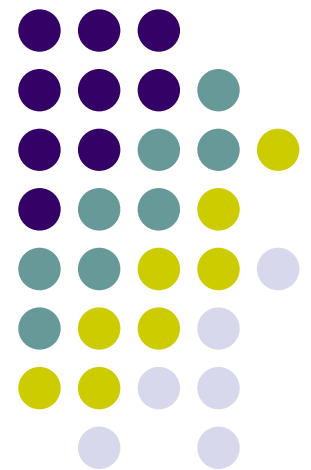


“Presymptomatic” Alzheimer’s Disease

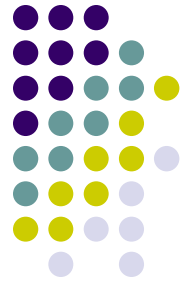
Robert S. Wilson, PhD

Rush Alzheimer’s Disease Center

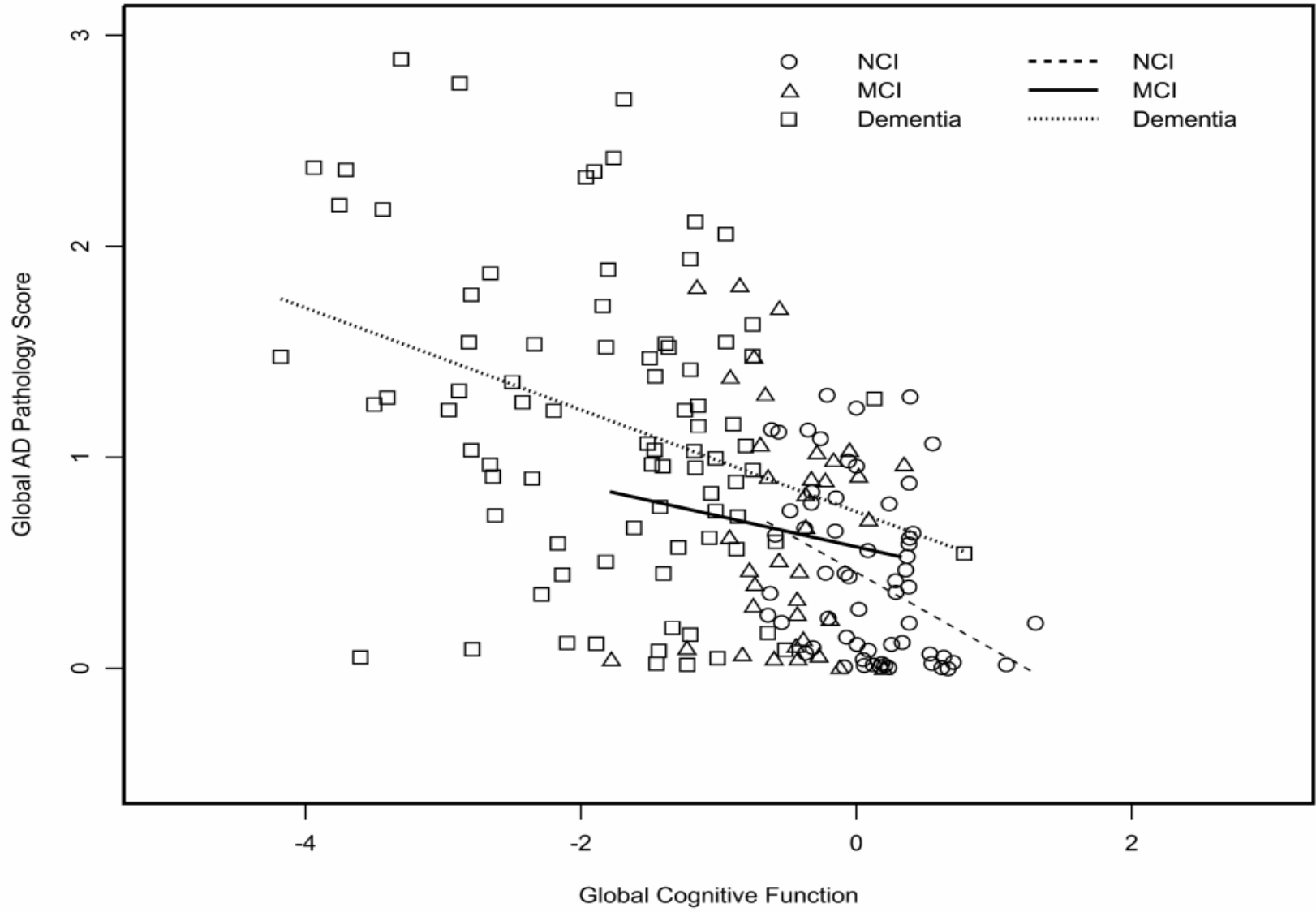
Rush University Medical Center



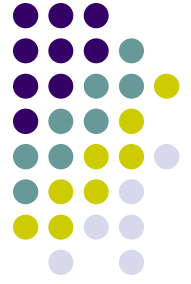
Presymptomatic AD



- Data are from two ongoing longitudinal clinical-pathologic studies that began data collection in the mid 1990s (Religious Orders Study, Memory and Aging Project)
- Both studies involve annual clinical evaluations (cognitive testing, diagnostic classification) and brain autopsy at death
- We identified 134 people from these studies who died without evidence of cognitive impairment proximate to death (mean age at death of 83)
- On postmortem examination, about 40% met pathologic criteria for AD (44% [59/134] probable or definite AD by CERAD criteria; 37% [50/134] intermediate or high likelihood by NIA-Reagan criteria)
- The correlation of pathology with cognition in this subgroup was similar to that seen in people who died with MCI or dementia



• Implications



- AD is not confined to those with dementia or MCI, it affects cognition even in successful aging
- We need to understand the factors that contributed to the relative preservation of cognition in this subgroup (i.e., factors that contribute to neural reserve)
 - Clinical-pathologic research
- We need to be able to identify AD at this “presymptomatic” stage before memory and cognition are manifestly impaired
 - Clinical and pathologic heterogeneity