Dementia Epidemiology Research Group

The dementia epidemiology research group conducts research relating to cognitive function and dementia in aging populations throughout the United States. A primary focus is determining predictors and outcomes of cognitive decline and dementia in older adults. This is particularly important in a population where the lifetime risk of dementia ranges from 20% for men to 33% for women, with even higher lifetime risks for milder forms of cognitive impairment.

With primary research goals of understanding the mechanisms that cause cognitive decline, identifying novel risk factors for cognitive impairment, and looking for strategies to prevent and treat cognitive disorders, the group works to improve the outlook of cognitive aging. An additional focus of our group is conceptualization and characterization of Healthy Brain Aging.

Some of our current funded research projects include:

- Identifying comprehensive risk factors for mild cognitive impairment and dementia among community-dwelling elderly women in their 9th and 10th decades of life.
- Identifying cognitive trajectories, their predictors and outcomes among elderly men and women in their 9th and 10th decades of life, and determining factors associated with maintaining optimal cognitive function.
- Investigating the association between sleep dysfunction and cognitive impairment in a large prospective study.
- Determining how PTSD and traumatic brain injury contribute to the risk of developing dementia in old age.
- Determining the association between chronic renal insufficiency and cognitive impairment in a large multi-site prospective study.
- Determining the association between behavioral disturbances such as hallucinations, agitation and depression and cognitive decline. We are studying ways to treat these symptoms (both pharmacologically and behaviorally) and trying to understand why they often lead to poor outcomes.
- Assessing whether staying active, either physically or mentally, is a strategy to prevent cognitive decline.
- Investigating how diabetes and other cardiovascular risk factors may contribute to accelerated cognitive aging.

**Principal investigator**

- Kristine Yaffe, MD [1]

**Funding sources**
• Alzheimer’s Association [2]
• BrightFocus Foundation [3]
• U.S. Department of Defense [4]
• National Institute on Aging [5]
• National Institute of Diabetes and Digestive Kidney Diseases [6]
• National Institute of Mental Health [7]