### **Neuropsychology Division**

The Neuropsychology Division is part of the Department of Clinical and Health Psychology, one of six academic departments within the College of Public Health and Health Professions at the University of Florida. Our Division consists of 12 academic faculty, including 10 clinical neuropsychologists and experts in cognitive aging and cognitive neuroscience. Our faculty are participant scientists of the McKnight Brain Institute, the Center for Neuropsychological Studies, the Brooks Rehabilitation Center, and the VA RR&D Brain Rehabilitation and Research Center. We seek to understand the complexities of the human brain so that this knowledge can be applied to the diagnosis and treatment of neurocognitive and emotional disorders that affect the citizens of our world. We value both basic research and the application of basic research to real world problems.

### Cognitive Aging Laboratory

(a) older adults' everyday problem solving abilities and their relationship to basic cognitive and intellectual performance

(b) modifiability of older adults' cognitive performance due to training interventions and practice; (c) understanding short-term variability and fluctuation in elders' cognition, and its relationship to cognitive status and other time-varying predictors; and (d) understanding the inter-relationship of sensorimotor and cognitive function in later life, with a particular focus on balance and locomotion.

### Memory & Dementia Laboratory

Clinical and theoretical issues in acquired and age-related memory and perceptual disorders dominate the relational memory laboratory. Current studies focus on the role of the hippocampus and other memory-related structures in relational and spatial memory, and on preclinical detection of individuals at risk for developing Alzheimer's Disease and other forms of dementia.

### Cognitive Neuroscience Emotion Laboratory

A major emphasis within the Cognitive Neuroscience is the neuropsychology of emotion, with specific focus on limbic, basal ganglia, and cortical systems. We use a variety of contemporary methodologies (face digitizing, TMS, imaging, psychophysiology) to address theoretically driven questions about the neural basis of cognitive and emotional behavior in patients with specific neurologic diseases (Parkinson's, Temporal Lobe epilepsy, MCI).

# Language, Neuroimaging & Rehabilitation Laboratory

# POCD, Neuroimaging, and Intervention Laboratory

Research focuses on the biobehavioral, neuroanatomical, and cognitive changes associated with pathological aging, with special emphasis on subcortical vascular dementia and Alzheimer's disease.

### Pediatric Neuropsychology Laboratory

Clinical Neuroscience Laboratory

Research focuses on understanding the cognitive and neural mechanisms of normal (including aging) and abnormal (schizophrenia, anxiety and affective disorders, traumatic brain injury) information processing using theoretically-motivated cognitive tasks and indices of brain activity (functional magnetic resonance imaging, high-density electroencephalography/event-related potentials)

### Child Attention & Memory Laboratory