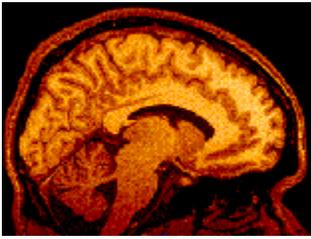


Memory and Aging Clinic Opens at UA



An MRI taken at the cognition and neuro-imaging lab of UA professor Lee Ryan.

Patients and clinical research participants can now be evaluated in a welcoming and centralized campus location.

By Rebecca Ruiz-McGill, University Communications
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The University of Arizona's Evelyn F. McKnight Memory and Cognitive Assessment Clinic has opened its doors, adding another key component in advancing what is known about memory and memory loss.

The newly established clinic located at the ground level of the UA Psychology Building brings together UA researchers studying memory loss, patients, and community members interested in participating in research studies under one roof for clinical assessment.

At the clinic, researchers will test and document cognitive abilities including memory function, reasoning process, complex task function, judgment, language comprehension, motor skills and overall medical histories.

"Before the clinic was established, we never had a centralized area to screen and test study participants. Testing was conducted in various labs around campus. We have now pooled together the various researchers' resources and can operate more efficiently and give the study participants a more comfortable and welcoming environment," said Lee Ryan, UA associate professor of psychology and director of the cognition and neuro-imaging lab.

Ryan's lab and its magnetic resonance images have become an epicenter for understanding age-related changes in memory and how these changes relate to brain functioning. The lab takes images of the brains of patients or clinical study participants for cognition researchers on campus. The images help the researchers study and understand the neural basis of memory on both healthy people and those showing signs of impairment.

“By knowing how normal aging affects the brain, researchers can find ways to identify people who may be at risk before severe impairment sets in,” Ryan said. “For instance, we may see the signs of a disorder such as Alzheimer’s in a patient but unfortunately researchers are not able to diagnose the disorder until the disorder affects cognitive ability – by then the damage is irreversible. We want to be able to identify signs of the disorder early on, either genetically, cognitively or through subtle changes in the brain found through neuro-imaging or a combination of all three tools – and do it before severe cognitive impairment sets in,” Ryan added.

The number of Americans surviving into their 80s and 90s is expected to grow because of advances in medicine, medical technology and social and environmental conditions. According to the 2008 Alzheimer’s disease Facts and Figures Report published by the Alzheimer’s Association, the incidence and prevalence of Alzheimer’s disease and dementia increase with age. This means it’s likely the future will bring more people suffering from these conditions.

The Alzheimer’s Association report states that in Arizona in the year 2000, there were a recorded 78,000 cases of Alzheimer’s cases. By 2010, researchers predict an expected 97,000 cases.

Ryan describes the very real fear of a recent study participant whose husband was recently diagnosed with Alzheimer’s.

“The woman was concerned that she might be developing the disease. She was reporting memory loss – primarily forgetting people’s names. Her concern was also founded on her having a family history of Alzheimer’s.” He said. “The images taken of her brain revealed normal aging. Her new role as a caregiver had added the stress of taking care of someone 24/7 and her husband’s diagnosis had caused an onset of depression. We know through these clinical studies that lack of sleep and stress has a huge impact on memory.”

Ryan and her colleagues also are part of the Arizona Alzheimer’s Consortium, which pulls together the resources and brain power of many Arizona organizations throughout the state, including the Banner Alzheimer’s Institute, T-Gen, the Mayo Clinic, Sun Health Research Institute and researchers from Northern Arizona University, Arizona State University and the UA.

The program, which has become a national model, works to advance what is known about Alzheimer’s while providing resources and information to those affected by the illness.

Ryan believes the future may lie in greater advances in early detection and other therapies. Promising research in memory loss has been seen the development of drugs that slow or clear damage caused by illnesses such as Alzheimer’s. Researchers are also investigating the benefits of preventive daily memory/reasoning exercises as well as combinations of drug therapy, exercises and dietary changes or vitamins.