



I ILLINOIS

Cognitive Control in Aging
Cognitive Neuroimaging Lab at the Beckman Institute



If you are 25-75 years old, we would like to invite you to participate in a study we are conducting at the University of Illinois. **The purpose of this research is to investigate the relationship between arterial health and aging, and how this relates to changes in cognitive control (e.g., multi-tasking) throughout the lifespan.**

We are asking participants to come in for 4 sessions. The sessions will last between 2 to 4 hours.

Session 1 will include several measures of cognitive and motor function. We also have a mock-up of the real MRI (Magnetic Resonance Imaging) scanner which you will try out so that you will be familiar with what will happen at a later session.

Session 2 will be the MRI session. While lying in the scanner, we will collect several types of images designed to measure brain structure and function. At the end there will be a brief training on the computerized cognitive tasks you will be doing during the EEG and optical imaging sessions.

Session 3 will be the EEG session. There will be a refresher training session for the cognitive tasks followed by setting up the EEG cap. We will record the brain's electrical activity both at rest and while completing cognitive tasks.

Session 4 will be the optical imaging session. This is a safe brain imaging technique that uses light to measure the elasticity and reactivity of the arteries in the brain. We will collect images while sitting quietly and during a cognitive task.

Contact information

We very much hope that you will be able to help us explore the relationship between brain/arterial health and cognitive changes with age. If you would like to participate in this study, please contact us at **(217) 300-3171** or by e-mail at **brain-research@illinois.edu**. The first step will be a preliminary phone screening which should take about 15-20 minutes.

Appointments can be made to suit your schedule (mornings, afternoons, or evenings). Parking will be provided, and we offer **\$15/hour** to compensate you for your time.

We look forward to talking with you more about this exciting study.

This research is approved by the Institutional Review Board of the University of Illinois.