**Primary Research Questions**

1. What brain networks and regions support different types of cognitive control (such as, working memory, task-switching, focusing attention)?
2. How is cognitive control and related brain networks and regions affected by *aging, cardiovascular health, Developmental Language Disorder (DLD)*, and *expertise*?
3. Do these brain networks and regions adapt with *cognitive training* (such as, tablet/computer games)?

**Recent Findings: Aging and Cardiovascular Risks**

- **Functional MRI**
  - FMRI Task of Cognitive Control
  - Results

- **Fitness vs. Pulse Pressure**
  - Fitness: strong and weak
  - Pulse Pressure: high and low

- **LIFG**
  - No Risk Factor
  - 1 Risk Factor
  - 2 Risk Factors
  - Single vs. Dual

**Research Tools and Techniques**

- Lab-developed computer tasks and games
- Functional Connectivity
- White Matter Integrity
- FNIRS
- HD tDCS

**Current and Recent Funding**

- National Institute on Aging AWARE
- Posit Science Corporation
- Friends of BrainHealth
- UT Dallas