SAMMONS BRAINHEALTH IMAGING CENTER

Conduct your research at a one-of-a-kind facility focused on human brain imaging to measure brain health and function.

RESEARCH CENTERED SERVICE
• Experienced MRI personnel
• Assistance with implementation of your protocol
• Standard functional and anatomical sequences
• State-of-the-art pulse sequences
  - pCASL (arterial spin labeling) from USC
  - Multiband EPI from U of Minnesota
  - Spectroscopy Package from U of Minnesota
  - ABCD Package from Massachusetts General Hospital
  - Dual Echo pCASL from McGill University
  - TRUST sequence from John Hopkins University
  - MR-Encephalography sequence from Univ. Medical Center Freiburg
• Phlebotomy/Collection Room
• Meeting & Consent Room

PARTICIPANT FRIENDLY FACILITY
• New, non-medical building is centrally located, inviting and non-intimidating
• Mock scanner to familiarize participants with the scanning environment
• Multi-sensory Brain “Reset” Room featuring gentle music, aroma therapy, and award-winning MovingArt™ calming visual scenes
• Evening hours
• Weekend hours (coming soon)

https://centerforbrainhealth.org/science/imaging
EQUIPMENT AVAILABLE

- Two 3T Prisma scanners
  - Running Syngo MR E11C software with 60 cm bore
  - Multiple coil configurations (32- and 64-channel)
  - iPAT² (integrated Parallel Acquisition Techniques) for simultaneous parallel imaging in 3D sequences
- Stimulus presentation system with mounted screen inside bore
- Non-magnetic, non-electronic response switches to capture participant responses
- Eyelink 1000+ eyetracker equipped with 2000Hz high-speed fiber-optic cameras
- BIOPAC MP160 data acquisition and analysis system includes MR-safe amplifier modules for collection of electrical activity generated by the heart, skin conductance level (SCL) and skin conductance response (SCR), and subject respiration
- Auditory stimuli through in-ear headset (passive noise reduction)
- RespirAct sequential gas delivery (SGD) system to render end-tidal (i.e., end exhaled) partial pressures (i.e., what is measured) very close to partial pressures in arterial blood parallel imaging in 3D sequences
- Framewise Integrated Real-time MRI Monitoring (FIRMM) to provide data quality metrics in real time

OUR TEAM

DR. BART RYPMA, PhD
Director, Sammons BrainHealth Imaging Center
Professor, Behavioral and Brain Sciences, UT Dallas
Meadows Foundation Endowed Chair in Behavioral and Brain Sciences

SERGEY CHERSHKOV, PhD
Research Scientist

ANDREW WOLFSON
MRI Technologist

ANGELA PLATA
Administrative Coordinator