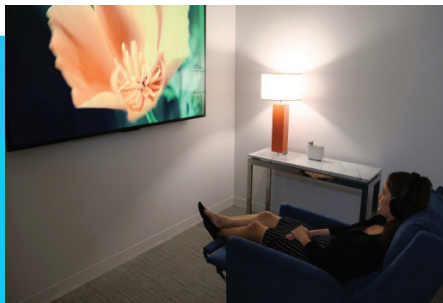


## SAMMONS BRAINHEALTH IMAGING CENTER

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)

## EQUIPMENT AVAILIABLE

- Two 3T Prisma scanners
  - Running Syngo MR E11C software with 60 cm bore
  - Multiple coil configurations (32- and 64-channel)
  - iPAT<sup>2</sup> (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

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Professor, Behavioral and Brain Sciences, UT Dallas  
Meadows Foundation Endowed Chair in Behavioral  
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### SERGEY CHESHKOV, PhD

Research Scientist

### ANDREW WOLFSON

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### ANGELA PLATA

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