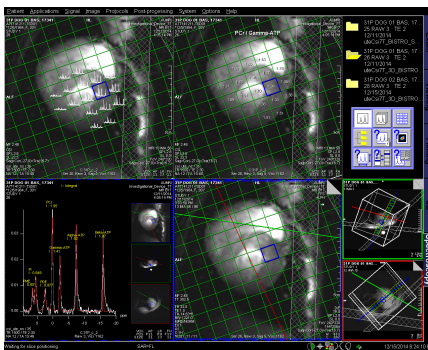
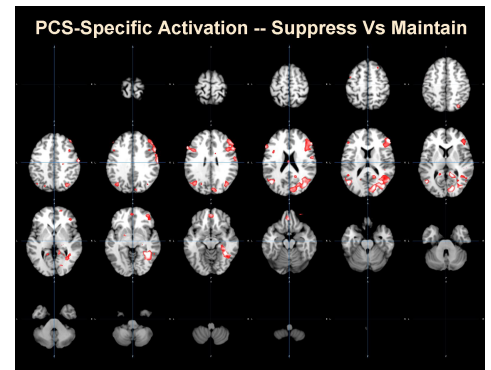


MRI Research Focus Areas



- **State-of-the-art ultra-high field MRI**
 - Human subjects
 - Animals
- **Brain imaging**
 - Functional MRI (fMRI)
 - Functional connectivity
 - Diffusion tensor imaging (DTI)
- **Magnetic Resonance Spectroscopy (MRS)**
- **Cardiovascular imaging**
- **Spinal cord imaging**
- **Eye imaging**
- **Orthopedic imaging**
 - Knee



COLLABORATIONS

Auburn University

- Samuel Ginn College of Engineering
- Department of Psychology
- College of Veterinary Medicine
- College of Human Sciences

University of Alabama Birmingham

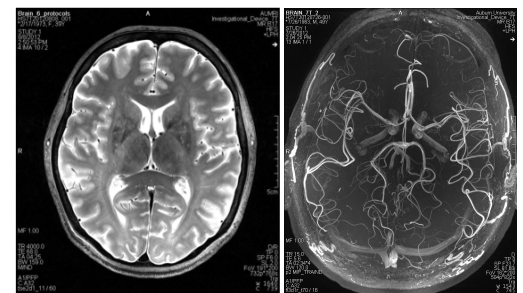
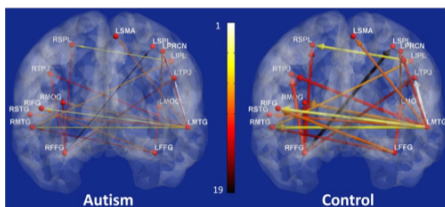
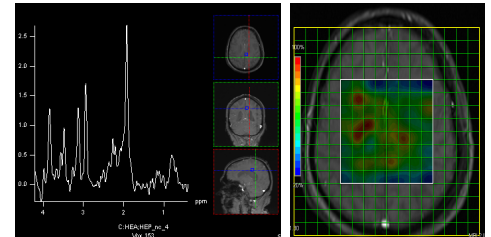
- Brain imaging
- Cardiovascular imaging
- Spinal Cord Imaging
- CCTS Partner Network

Alabama Advanced Imaging Consortium

- Patient transport
- Training

U.S. Army

Siemens Healthcare



INTERNATIONAL IMPACT

- Brain connectivity in autism spectrum disorder
- Investigating effects of concussions and post-traumatic stress disorder (PTSD) in active-duty soldiers
- Awake dog fMRI with olfactory stimulus – first in the world
- Evaluating gene-vector therapy for Tay-Sachs Disease
- Detecting early stages of schizophrenia with MR spectroscopy
- Improved diagnosis and management of patients with epilepsy
- Investigating sleep disorders in adolescents with fMRI

