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