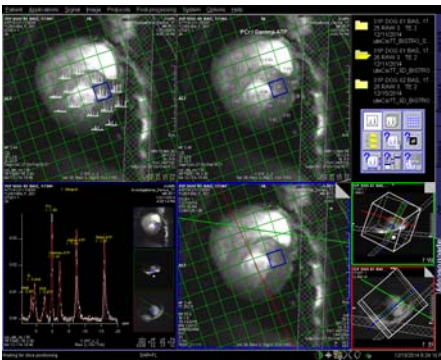
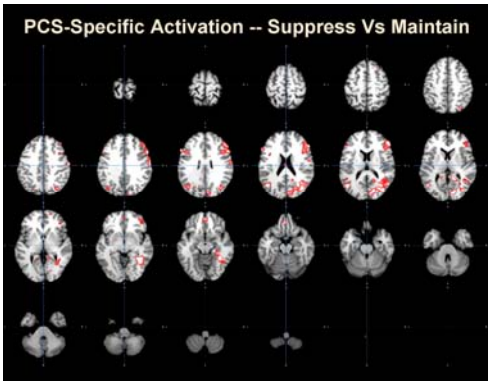


## MRI Research Focus Areas



- **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

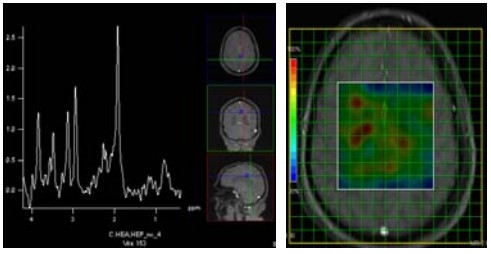
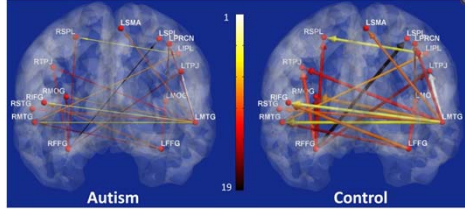


## COLLABORATIONS

- 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

