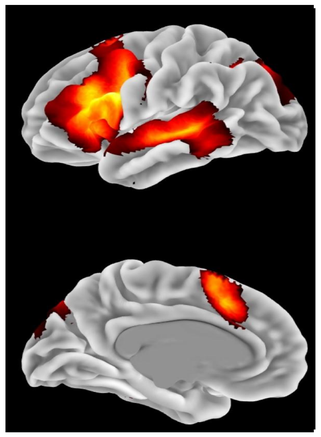
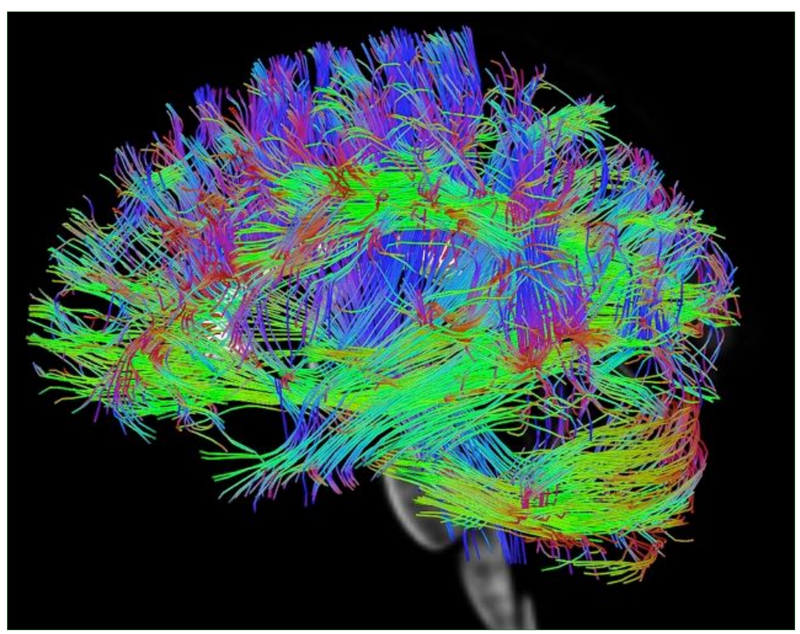
Research MRI Core and Civitan International Neuroimaging Laboratory

UAB HEERSINK SCHOOL OF MEDICINE
The University of Alabama at Birmingham



The Civitan International Neuroimaging Laboratory (CINL) is located on the first floor of UAB Highlands Hospital. It houses a research dedicated Siemens Prisma 3T whole body scanner for structural and functional brain imaging, MRI preparation rooms and interview rooms for pre- and post-scan patient monitoring and testing, and a fully-equipped experimental suite for behavioral and physiological recording. Research equipment is housed in a dedicated room adjacent to the scanner room with a dedicated research penetration panel.

The Siemens MAGNETOM Prisma MRI Scanner offers a 3T whole body MRI platform for the highest quality MRI research. Its design delivers maximum performance under prolonged high-strain conditions. Unmatched 3T full body magnet homogeneity, XR 80/200 gradient coil, parallel transmit architecture for shaped excitation and B0 shimming, and at-the-scanner 64 channel receiver architecture. UAB's Prisma is configured for neuroimaging with a 64 channel neuro coil and Spectroshim spectroscopy shimming hardware.



Your Research MRI Fleet

Siemens Prisma

GE Premier

Siemens Free.Max

	Siemens Prisma	GE Premier	Siemens Free.Max
Nominal field strength (B_0)	3 T	3 T	0.55 T
Bore diameter	60 cm	70 cm	80 cm
Max. gradient slew rate (absolute)	200 mT/m/ms	200 mT/m/ms	40 mT/m/ms
Max. gradient amplitude (absolute)	80 mT/m	80 mT/m	25 mT/m
RF chain	TIM 4G 64 independent channels	TDI 146 independent channels	TIM 4G 51x24 independent channels

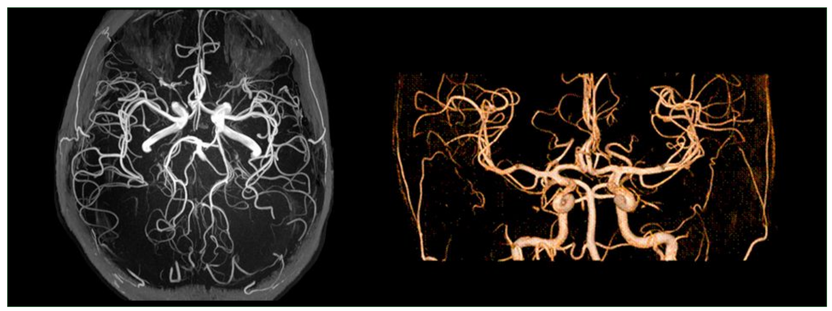
Service	Cost/hour
Imaging, UAB	$600
Imaging, External	$750
Red eye rate (9pm to 5am)	$150
Animal tech, UAB	$35
Animal tech, External	$55
Physicist time, UAB	$150
Physicist time, External	$250

Changes on the horizon:
- Multi-nuclear capability adds capacity for 31P MRI/MRS
- Mock MRI helping participants prepare for imaging
- Polarean HPX Xenon-129 hyperpolarizer bringing new MR lung imaging capabilities to the region
- MRI compatible fNIRS

The facility has a large selection of coils to ensure optimal image quality for your particular application:
- 64 channel neuro
- 20 channel head and neck
- Head CP T/R
- Spine
- Anterior Array / Cardiac
- A variety of smaller special purpose coils including coils for human eye imaging and small animal imaging

We can also provide:
- Stimulus delivery (audio, visual, and tactile)
- Response hardware
- Vital signs monitoring and recording
- MRI compatible anesthesia and ventilation

We will work with you to build specialized equipment for your particular needs!



Directors:
Virendra Mishra PhD
Jane Allendorfer, PhD
Associate Director:
Kristina Visscher PhD
Physicists:
Ryan Willoughby, PhD
Mark Bolding, PhD
Lab Manager:
Damon Carter
Administrator:
Ingia B. Gentry

cinl@uab.edu
https://www.uab.edu/cores/ircp/rmric