

BIOMEDICAL
RESEARCH
IMAGING CENTER



Human Imaging



- Siemens Prisma 3T – Whole body 3T Magnetic Resonance Imaging, available for human and animal research.
- Siemens 7T – Whole body 7T Magnetic Resonance Imaging, available for human and animal research.
- Siemens Biograph mMR – Whole body PETMR, available for human and animal research, and clinical imaging done in conjunction with UNC Healthcare.
- Siemens Biograph mCT – Whole body PETCT, available for human and animal research.
- For questions contact Amber Leinwand, BRIC Human Imaging Supervisor at aabernet@med.unc.edu

Additional Services for Human Studies

- Mock Scanner available for training and acclimating patients that are not familiar or uncomfortable with MRI
- Consultation rooms
- Behavioral Assessment Room
- Patient rooms available 30 minutes pre and post imaging
- Patient/Subject parking close to the building
- Staff is familiar with a variety of studies, including, but not limited to, pediatric, fMRI, and clinical trials



Small Animal Imaging

- Animal imaging study design and consultation
- Imaging protocol development on various animal models
- Conducting preclinical imaging study using MRI, PET/CT, SPECT/CT, high resolution CT, ultrasound, and optical imaging
- Imaging probe validation and evaluation on animal models
- For questions contact Hong Yuan, BRIC Small Animal Imaging Director at yuanh@med.unc.edu.

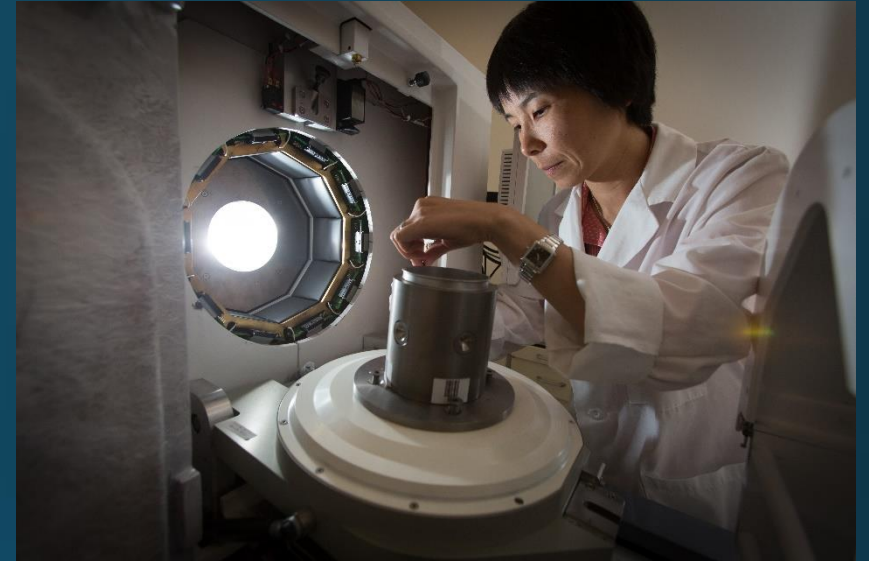
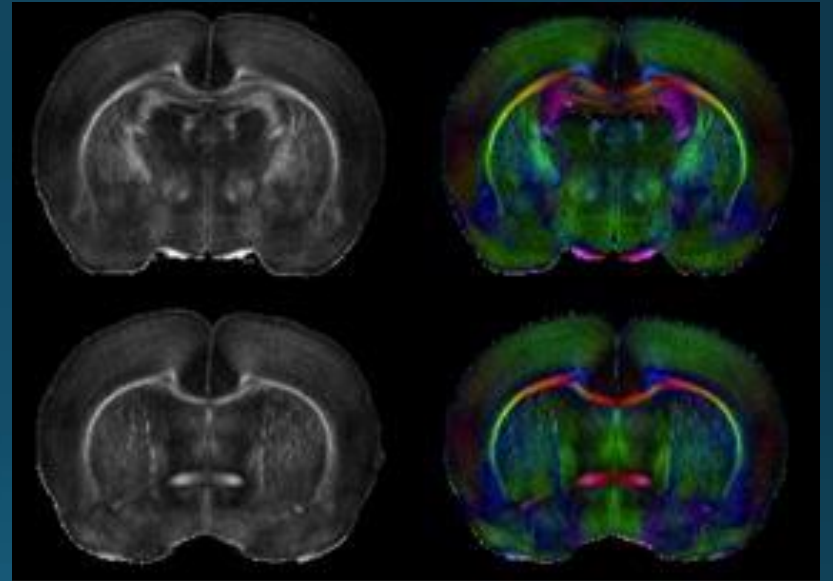


Image Storage and Analysis

- Image segmentation and registration
- Atlas construction
- Quantification of cortical thickness and gyrification
- Image reconstruction and super-resolution
- Fiber tractography and brain connectomics
- High-dimensional multivariate analysis
- Computer-aided neurodiagnosis
- Cross-sectional and longitudinal analyses
- Analysis of brain structure and function
- Cancer detection



- For questions contact Dinggang Shen at dinggang_shen@med.unc.edu.

Study Coordinator Core

- Set Up and Management of Regulatory Applications
- Neurocognitive Assessments
- Translation Services
- Clinical Management Services
- Recruitment Services

- For questions contact Kristine Baluyot at Kristine_baluyot@med.unc.edu.



Radiochemistry Core

- Multimodality Molecular Imaging Probe design and synthesis
- Established PET imaging probe for preclinical and clinical applications
- New PET agent labeled with ^{18}F -, ^{11}C -, and ^{64}Cu etc.
- Regulatory related consulting on performing PET research in human subjects

- For radiochemistry related issue, please contact ziboli@med.unc.edu
- For regulatory related issue, please contact eric_smith@med.unc.edu



Steps to Starting a Study

- Initiate study review with appropriate BRIC personnel to discuss study design and any protocol assistance before budget has been approved
- Include a 3-5% annual increase in the budget for all rates at BRIC due to our annual rate review with OSR Cost Analysis
- Available for consulting on IRB, IACUC, PRC, and Radiation Safety Committee submissions
- Available for assistance with IND, cost depends on depth of assistance needed to complete the application
- Meet with BRIC staff prior to study initiation

