

Our aim is to shape the future of imaging
Director, Centre for Advanced Biomedical Imaging, Prof Mark Lythgoe

LONDON'S GLOBAL UNIVERSITY



UCL

MSc in Advanced Biomedical Imaging

One of the world's most
advanced experimental
imaging centres

State-of-the-art imaging for
biological & medical research.
Cross-disciplinary subjects,
approach and training

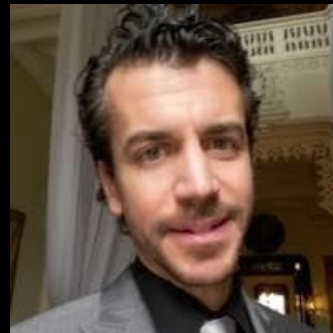
One year taught course with
research project.

Bursaries available!

Contact med.abi@ucl.ac.uk

- Interactive teaching
- Hands-on research projects
- Leading science communication
- Excellent career options

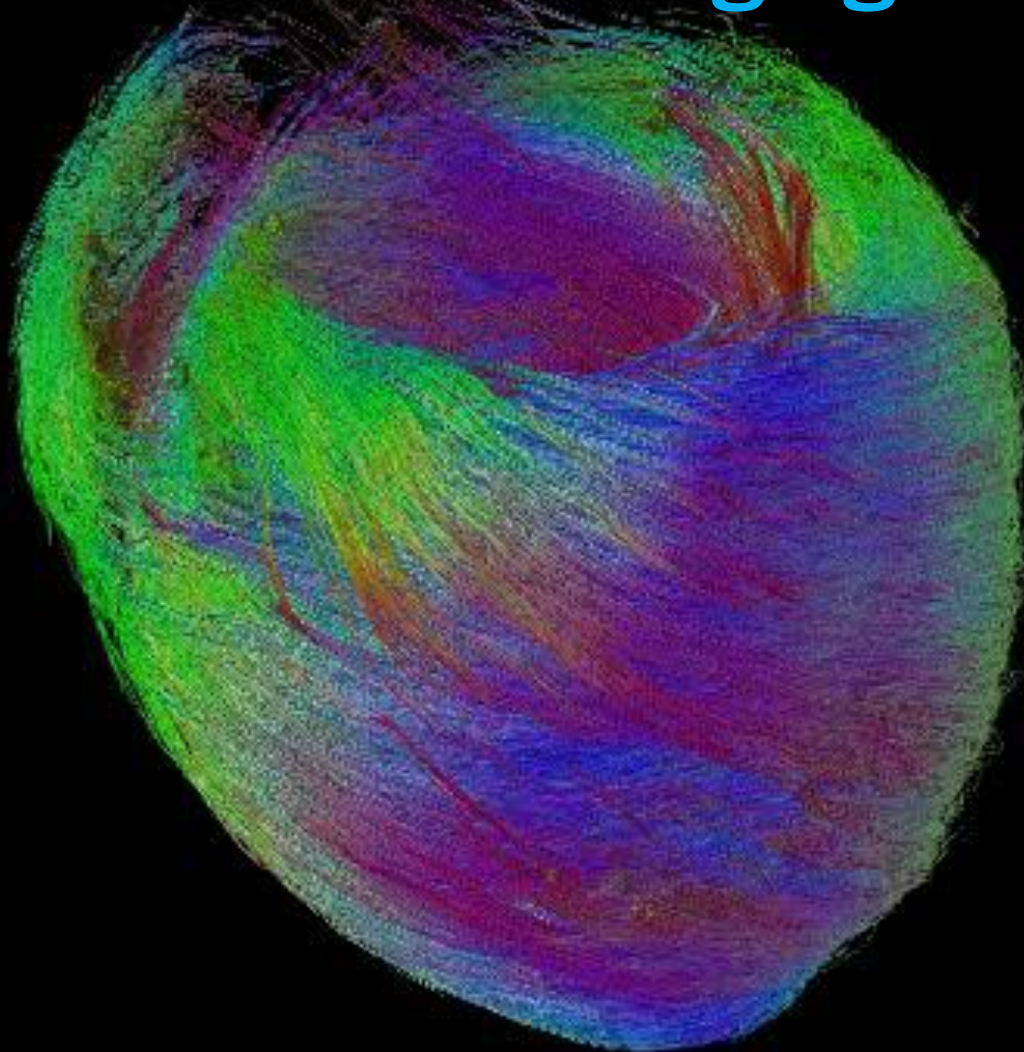
Course leads



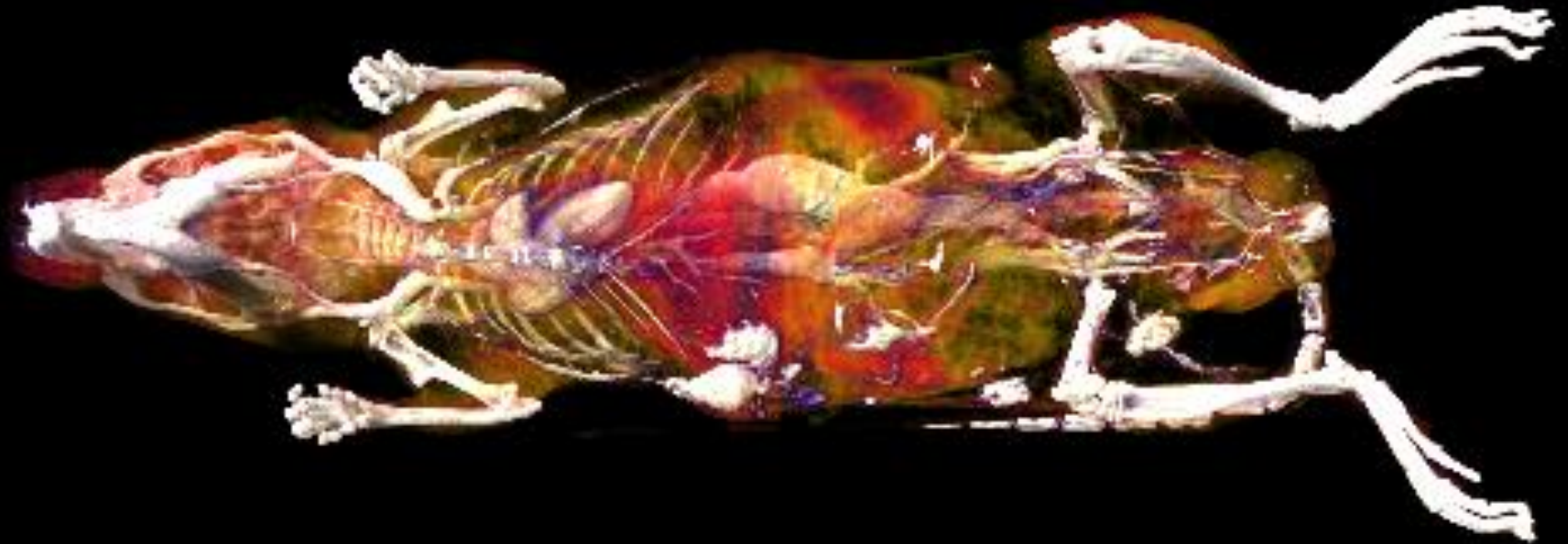
Imaging has revolutionised medicine



MRI – diffusion tensor imaging of heart



Gold contrast computer tomography (CT)



SPECT – single photon emission CT

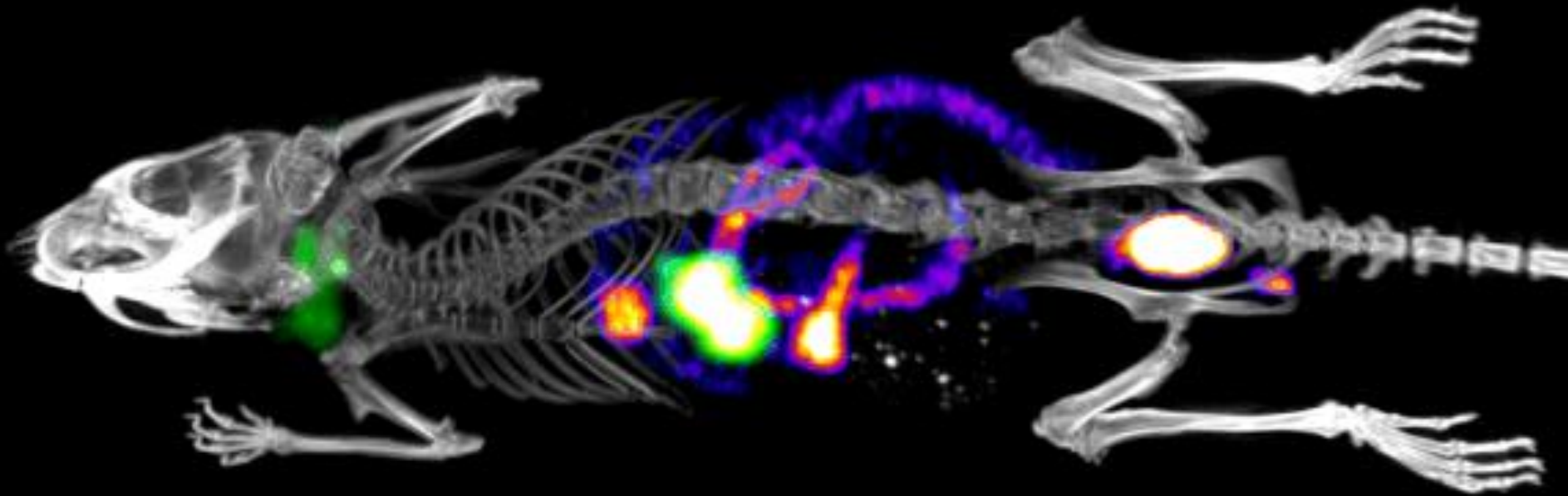
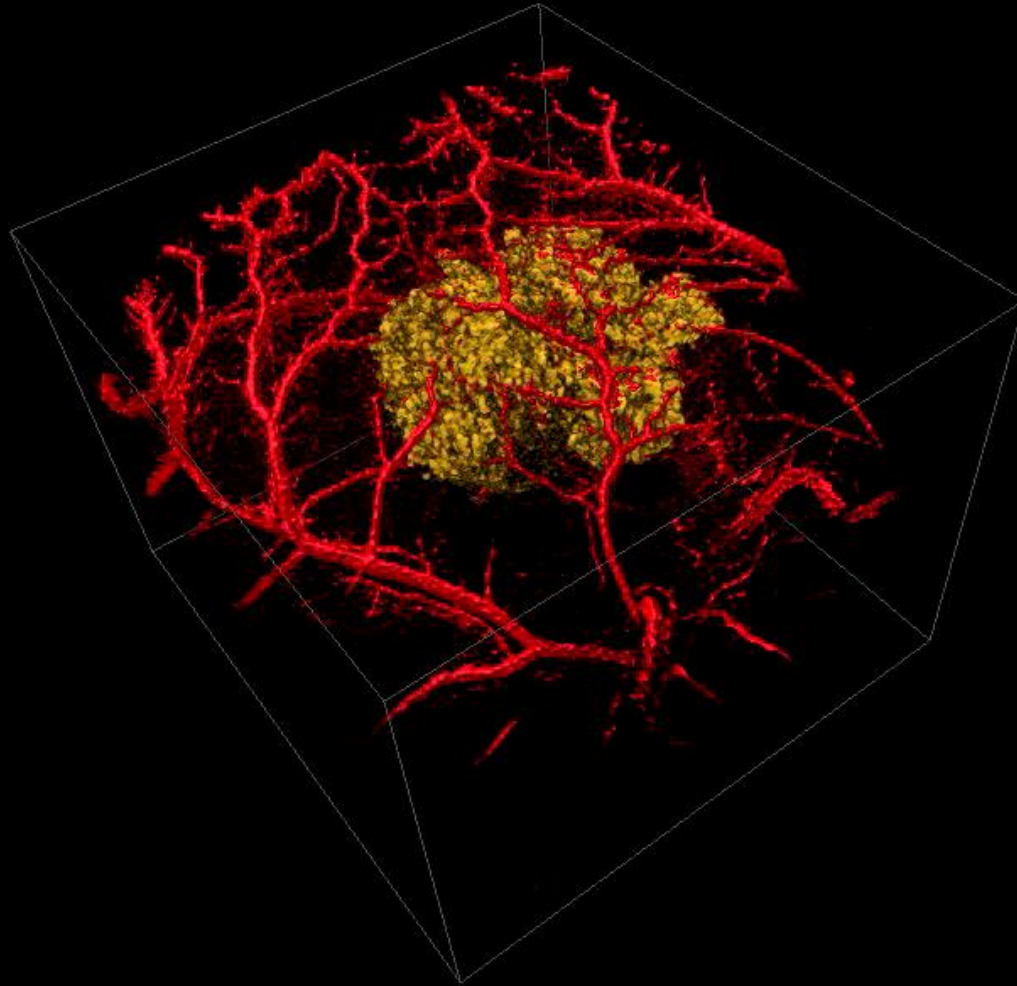
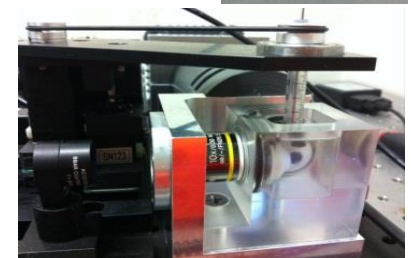
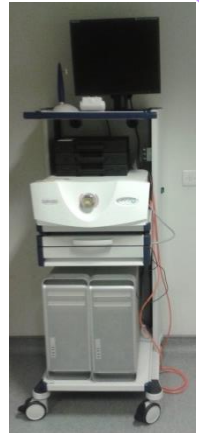


Photo acoustic imaging – cell tracking





Hands-on imaging experience





Translational Imaging Applications

Neurology

Oncology

Cardiology

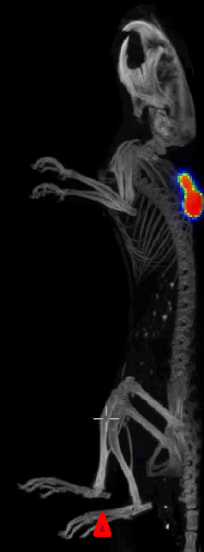
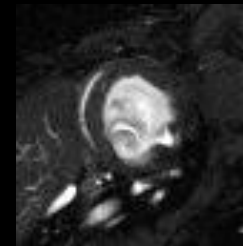
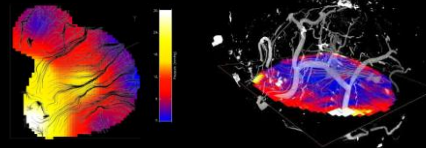
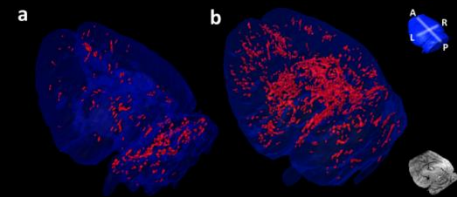
Cell tracking

Iron oxide labelled VCAM antibodies

extra-vascular convection (EVAC) MRI

Cine-MRI

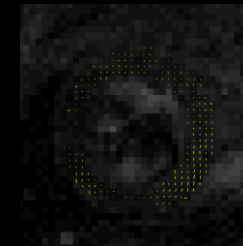
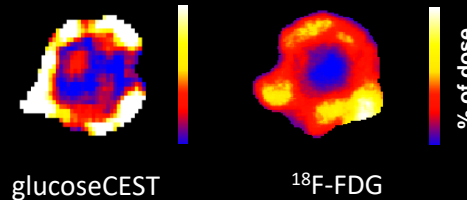
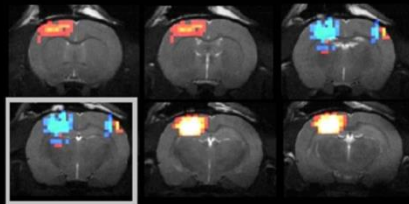
PET - CT



Opto-MRI

GlucoseCEST MRI

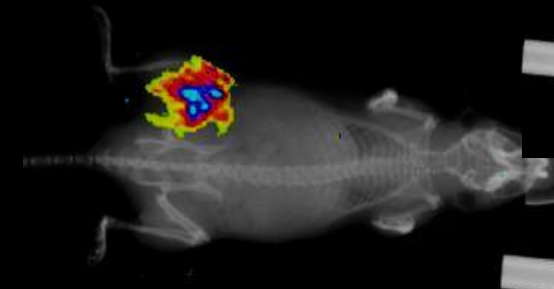
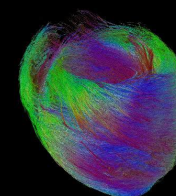
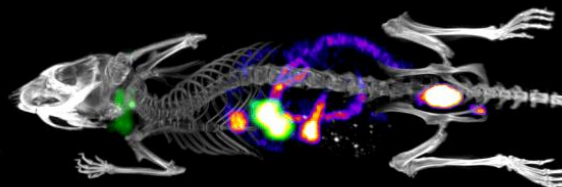
DENSE-MRI



PET/SPECT/CT

Diffusion tensor MRI

Bioluminescence - Xray



Nature 474:640-644 (2011)
Nature 484:367-70 (2012)
Lancet 374:467-475 (2009)
NeuroImage 56:974-983 (2011)
Nature Medicine 19:1067-72 (2013)
Nature Communications In Press (2013)
Cancer Research 69:8862-7 (2009)



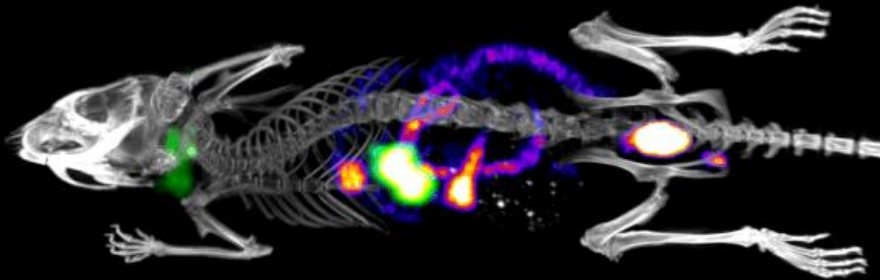
Course structure

- Advanced Biomedical Imaging Techniques I & II
- Practical Preclinical Research (includes home Office licence)
- Statistical Methods in Research
- Translational Biomedical Imaging of Disease & Therapy I & II
- Precision Diagnosis for Precision Medicine
- Science Communication for Biomedicine
- Research Project



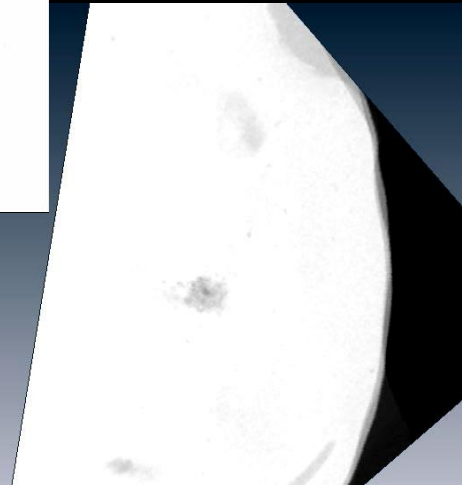
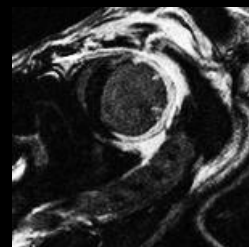
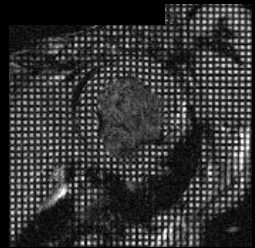
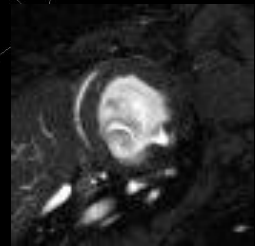
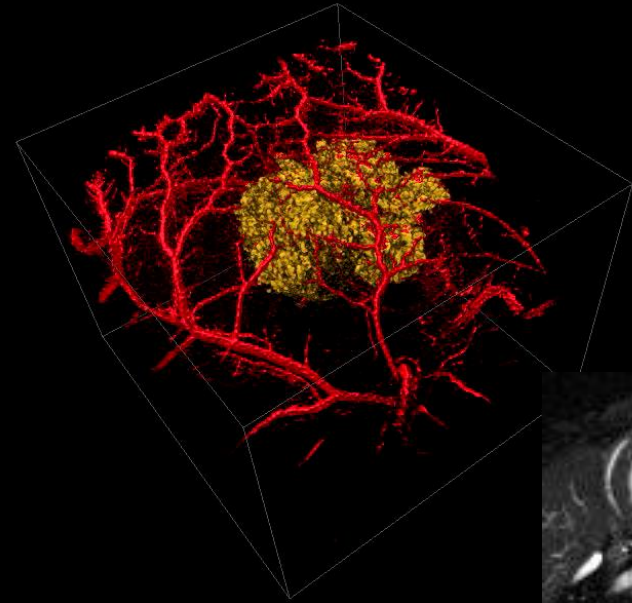
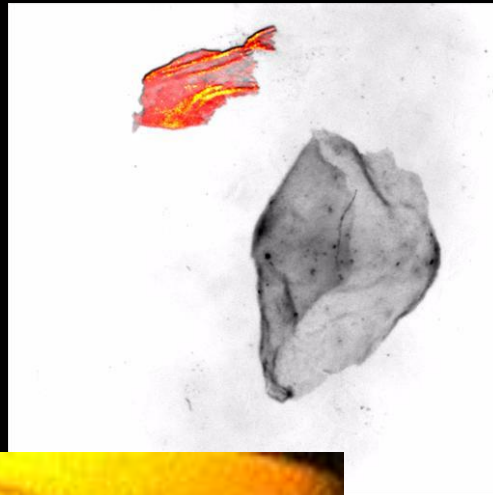


Research Project



Institution
Project Name
Researcher Name
Frequency

UCL
Embryo Imaging
Mouse 1
40 MHz

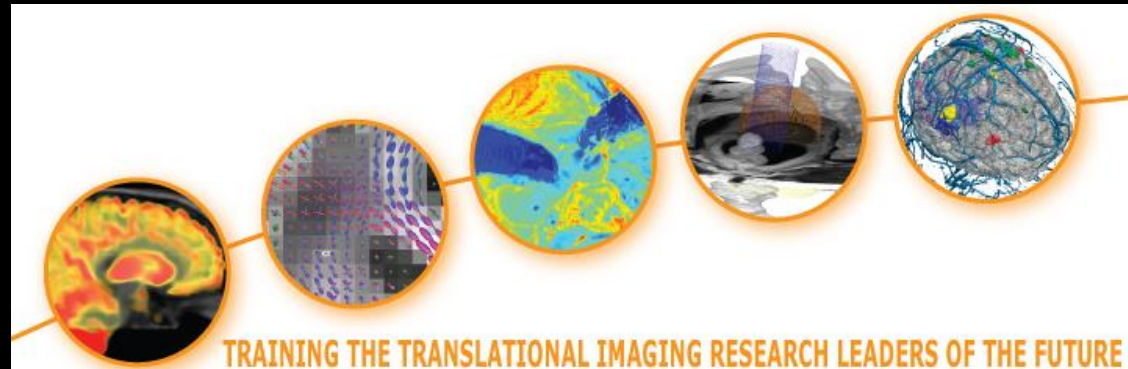




Employability

➤ PhD Programmes

EPSRC Centre for Doctoral Training in Medical Imaging





Employability

- PhD Programmes
- Research positions in academia



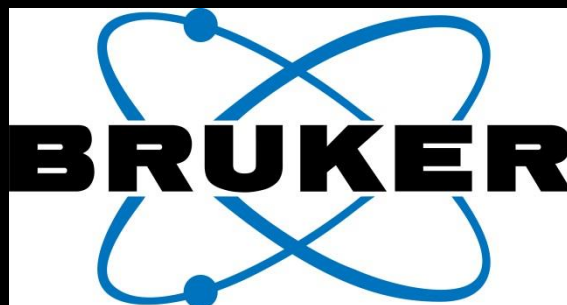


Employability

- PhD Programmes
- Research positions in academia
- Research positions in industry



SIEMENS



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