

UQ Centre for Advanced Imaging Facilities

Facilities and Services

The University of Queensland's Centre for Advanced Imaging (CAI) is at the forefront of imaging science and is the only centre of its kind in Australia. The Centre is also a research platform for UQ Neurosciences – one of UQ's research strengths.

CAI is an integrated, multimodal research facility with a rich collaborative environment. The Centre brings together the skills of a large multidisciplinary team of researchers, industry experts, and state-of-the-art research facilities.

Providing a comprehensive 'end-to-end' biomedical imaging capability and driving research through an integrated progression from a laboratory to a clinical setting, the Centre undertakes research in a variety of areas.

Key areas of research include

- molecular and biomedical imaging including magnetic resonance
- imaging (MRI) and positron emission tomography (PET) in humans and animal models (including comparative oncology)
- nuclear magnetic resonance (NMR)
- electronic paramagnetic resonance spectroscopy (EPR)
- materials science
- development and engineering of imaging technology
- data analysis and applications of novel computational methods
- structural biology and chemistry



“The Centre houses the most comprehensive range of advanced magnetic resonance instrumentation in the southern hemisphere, including Australia’s first 7T whole body human scanner and the only 900 MHz NMR magnet in Australia.”

Our Facilities and Services:

- Human and Companion Animal Magnetic Resonance and CT Imaging
- High-Resolution NMR Spectroscopy including Solid State NMR
- NMR-based Metabolomics
- Pre-clinical Animal Imaging: PET/CT and PET/MR
- MR Microimaging
- Molecular Imaging
- Optical Imaging
- EPR Spectroscopy
- Radiochemistry and cyclotron
- Biomedical Image Analysis and Informatics

CAI Facility Managers:

Facility	Manager(s)	Contact	More information
Human Imaging	Aiman Al-Najjar	humanMRI@cai.uq.edu.au	cai.uq.edu.au/facilities/human-imaging
High-Resolution NMR Spectroscopy, Solid State NMR	Dr Greg Pierens, Dr Ekaterina Strounina	NMR@cai.uq.edu.au	cai.uq.edu.au/facilities/high-resolution-nmr-spectroscopy
Animal Imaging	Dr Gary Cowin	preclinical_imag@cai.uq.edu.au	cai.uq.edu.au/facilities/animal-imaging
Molecular Imaging	Dr Karine Mardon	molecular_imag@cai.uq.edu.au	cai.uq.edu.au/facilities/molecular-imaging
MR Microimaging	Dr Nyoman Kurniawan	microMRI@cai.uq.edu.au	cai.uq.edu.au/facilities/microimaging
Optical Imaging	Mary-Anne Migotto	m.migotto@uq.edu.au	cai.uq.edu.au/facilities/molecular-imaging/optical
Radiochemistry and cyclotron	Associate Professor Rajiv Bhalla, Damion Stimson	radiochemistry@cai.uq.edu.au	cai.uq.edu.au/facilities/radiochemistry
NMR-based Metabolomics	Dr Horst Schirra	metabolomics@cai.uq.edu.au	cai.uq.edu.au/metabolomics
EPR Spectroscopy	Associate Professor Jeff Harmer	EPR@cai.uq.edu.au	cai.uq.edu.au/facilities/epr
Biomedical Image Analysis and Informatics	Associate Professor Viktor Vegh	viktor.vegh@cai.uq.edu.au	cai.uq.edu.au/facilities/image-analysis

For further details, please contact:

The University of Queensland
enquiries@cai.uq.edu.au
cai.uq.edu.au