



RESEARCH AREAS

CAI researchers currently supervise RHD students across a wide range of disciplines, including:

- Biology
- Biomedical Imaging
- Chemistry
- Computer Science
- Developmental Biology
- Engineering
- EPR
- fMRI
- Imaging Technology
- Materials Science
- Mathematics
- Medicine
- MicroImaging
- Molecular Imaging
- MRI
- Nanotechnology
- Neurosciences
- NMR
- Physics
- Psychology
- Radiography
- Radiology

CAI RESEARCH HIGHER DEGREE (RHD) SCHOLARSHIP

Are you a high-achieving student? Then you may be eligible to apply for a Centre for Advanced Imaging RHD Scholarship or Top-Up.

For more information contact hdr@cai.uq.edu.au

WHEN TO APPLY?

Admission and enrolment for both domestic and international candidates can be processed at any time of the year.

HOW TO APPLY?

1. Browse through our research projects
cai.centre.uq.edu.au/research
2. Find your potential supervisors
cai.centre.uq.edu.au/team/academic
3. Contact hdr@cai.uq.edu.au

FURTHER INFORMATION

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Brisbane QLD 4072
AUSTRALIA

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Email: hdr@cai.uq.edu.au

Web: cai.centre.uq.edu.au/study/higher-degree-research

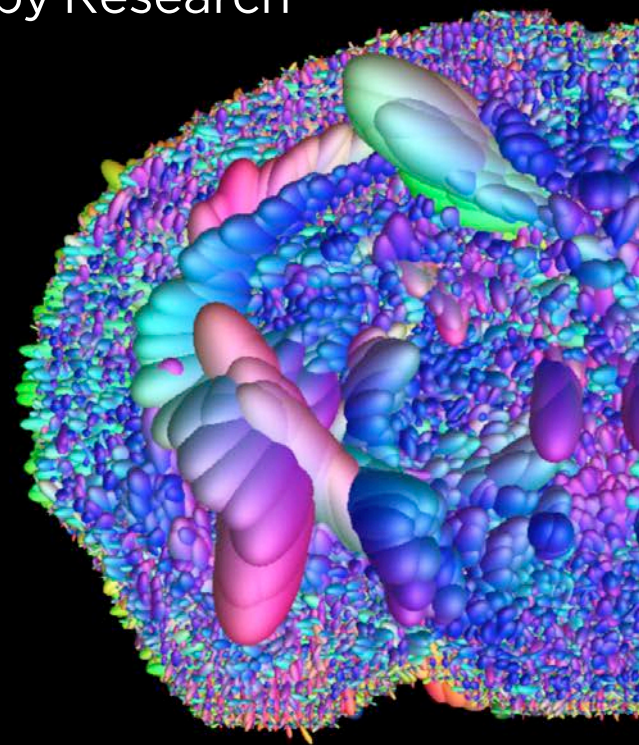
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Create change

CENTRE FOR ADVANCED IMAGING

Higher Degree by Research



108343 Sept 2017 CRICOS Provider No. 00025B

cai.centre.uq.edu.au/study/

ABOUT THE CENTRE FOR ADVANCED IMAGING

The Centre for Advanced Imaging (CAI) is an integrated research facility harnessing the spatial resolution of ultra-high-field magnetic resonance imaging (MRI), and the sensitivity of positron emission tomography (PET) in detecting molecular targets and the geometrical and electronic structural characterisation of molecules, using high-resolution nuclear magnetic resonance (NMR) and electron paramagnetic resonance (EPR) spectroscopy.

The Centre houses the most comprehensive and advanced range of magnetic resonance instrumentation in the southern hemisphere, including a multimodality PET/CT; Australia's first 7T wholebody scanner; and the only 900 MHz NMR magnet in Australia.

CAI researchers work on innovations in spectroscopic and imaging technology, imaging biomarker development and in biomedical research disciplines. They often work in collaboration with clinical research sites and other local, national, and international research institutes and companies.



WHY IMAGING?

Imaging and spectroscopy are key platform research technologies for studying structure and function at the molecular, cellular and whole organism levels.

Research at CAI is diverse, encompassing areas such as epilepsy and alzheimers disease, understanding the neurobiology of language, learning and memory, genetic and environmental influences on brain structure and function, cancer imaging agents and therapeutics, and cardiovascular disease. Our researchers play an active role in the development of novel imaging and spectroscopy technologies. For example, technology developed at UQ is incorporated into most clinical MRI scanners in use today.

WHY APPLY FOR A HIGHER DEGREE BY RESEARCH WITH CAI?

A UQ research strength

Imaging Science has been identified as one of UQ's research strengths. CAI is at the forefront of this exciting field.

International reputation

Our researchers are at the cutting edge of imaging and spectroscopy research, working to:

- develop new imaging agents and technologies
- analyse molecular structure and function
- study major diseases such as cancer, cardiovascular and neurodegenerative diseases.

Multidisciplinary Environment

Researchers and students at the Centre come from a wide range of disciplines including engineering, chemistry, physics, mathematics and computer science to biology, medicine and psychology.

CAI's researchers collaborate with clinical research sites, maximizing the impact of spectroscopy and imaging on translational research. This provides a comprehensive 'end-to-end' biomedical imaging capability, driving research through an integrated progression from the lab to the clinic.



Industry Engagement

A unique aspect of CAI is the extent of industry involvement in the Centre in the application of medical imaging, pharmaceutical discovery, and the development of radiotracers and biomarkers, providing the possibility of internships throughout your HDR.

Student Support

The CAI has a multidisciplinary, cohesive student community who have come together from all over the globe to continue their research training. The Centre has an active student association (STAC) that provides many opportunities for networking and professional development, a supportive mentoring structure that will enhance personal and professional growth, an annual symposium and a weekly seminar program that attracts high profile National and International speakers.

