

## Entry requirements

Bachelor degree in applied science, medical imaging, chemistry, pharmacy, physics, computer science or electrical and biomedical engineering or an approved discipline.

## English proficiency

Non-native English speakers must meet UQ's English Language Proficiency. View the policy at [future-students.uq.edu.au/english-requirements](http://future-students.uq.edu.au/english-requirements)

## Location

The University of Queensland, St Lucia campus or via remote online study.

## Delivery mode

Internal or External

## Teaching method

Our programs are delivered online and on campus. You need a computer with reliable internet and word processing software such as Microsoft Word or Apple Pages.

## When to apply

With one intake per year, students are encouraged to apply in November for admission to the program in the following year. See UQ's Future Students website for admission and enrolment dates for both domestic and international candidates. [future-students.uq.edu.au/apply](http://future-students.uq.edu.au/apply)

## Further information

**W:** [cai.centre.uq.edu.au/study](http://cai.centre.uq.edu.au/study)

**T:** +61 7 3365 8263

**E:** [education@cai.uq.edu.au](mailto:education@cai.uq.edu.au)

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Centre for Advanced Imaging

[cai.centre.uq.edu.au/study](http://cai.centre.uq.edu.au/study)

# Master of Molecular Imaging Technology



Read about our students' experiences and find detailed course information by visiting [cai.centre.uq.edu.au/study](http://cai.centre.uq.edu.au/study)

The University of Queensland's (UQ) 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's vision is to be a world leader in the development and application of cutting-edge imaging science and technology, through innovation, translation, education and collaboration. The Centre is an integrated, multimodal research facility, encompassing a rich collaborative environment to enhance the student experience.

### Learn from leading experts in the field

Led by industry experts and a multidisciplinary team of researchers, our education programs offer students a unique learning experience involving industry skill development and clinical practice.

### Premier learning facilities

Study at CAI and receive a competitive edge learning with the latest technology. CAI offers state-of-the-art facilities including \$50 million of imaging technology dedicated to advanced imaging education and research.

## Our graduates

Joshua Simpson

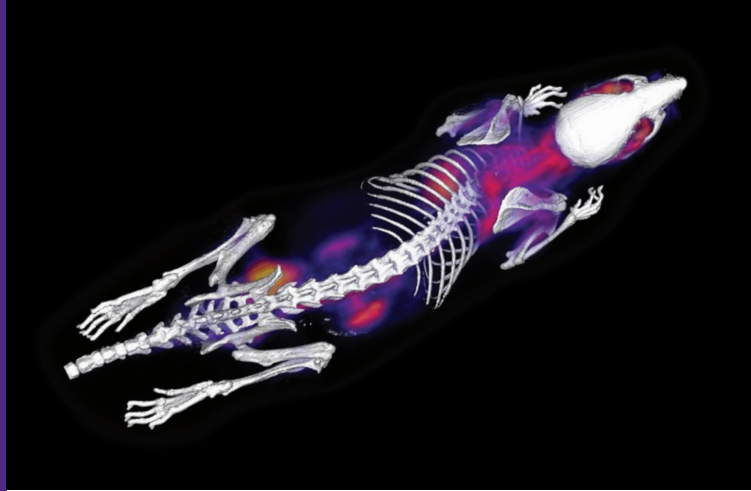


"Having trained as a cell biologist focused on fluorescence bio-imaging, I chose the **Master of Molecular Imaging** to expand on my existing skill-set and explore more of the pre-clinical space, to better understand techniques, modalities and processes that contribute to drug development and foundational research

in medical science. I enjoyed the diversity of material taught and its relevance from pre-clinical through to point-of-care.

The inclusion of contemporary research from around the globe made for excellent discussion and the opportunities of hands-on experience have helped me develop as a scientist. Having access to a wide range of academics with diverse interests and focuses and different laboratories has improved my understanding of techniques and modalities, and shaped my future career direction and personal research interests.

From generating molecular imaging probes to drug development and pre-clinical imaging, this course really offers an interesting insight into the molecular imaging field and community."



PET-CT image of a mouse after intravenous injection of F18 radiolabelled fluorodeoxyglucose (F18-FDG)

## Why study molecular imaging at CAI?

Molecular imaging is a form of biomedical imaging rapidly growing in importance in the applied life sciences and for the advancement of biomedicines.

The Master of Molecular Imaging Technology aims to develop international leaders in molecular imaging. Bringing together our expertise and advanced technology, this unique program is taught by experts in the field and supported by the Centre's state-of-the-art facilities, which offers a comprehensive suite of molecular imaging technologies.

Students will have the opportunity to undertake coursework as well as a molecular imaging research project.

Expertise and facilities are available for the development and imaging of radioactive tracers for Positron Emission Tomography (PET); and non-radioactive tracers for computed tomography (CT), optical and Magnetic Resonance Imaging (MRI) applications.



Did you know most MRI scanners in the world use technology invented at The University of Queensland?

## Program offered

### Master of Molecular Imaging Technology

Code 5692, CRICOS Code 096018G

24 units (1.5 years full-time or part-time equivalent)

## Who is the program designed for?

The Master of Molecular Imaging Technology is designed for nuclear medicine technologists, radiographers, chemists, biologists, physicists, and computer scientists. This program will

give you an in-depth knowledge of new biomedical imaging approaches to help you become a leader in this evolving field.

Learn within a multidisciplinary environment. All CAI programs reflect the teaching teams' experience as chemists, radiochemists, medical physicists, radio pharmacologists, radio-physicists, biologists and engineers.

## Program of study

### Core courses

MRES7100 Fundamentals of MRI

MOLI7101 Molecular Targets and Imaging Probes

MOLI7102 Clinical and Molecular Imaging

MOLI7109 Radiotracer Based Molecular Imaging

### Elective courses

MOLI7103 Advanced molecular imaging

MOLI7104 Cell targeting and tracking in vivo

MOLI7105 Minor research project

MOLI7107 MR-PET hardware and software integration

MOLI7108 Clinical magnetic resonance imaging

MOLI7110 Pathological correlates of molecular imaging

MRES7009 MRI spectroscopy and applications

STAT7120 Analysis of scientific data

### Research courses

MOLI7106 Research project

MOLI7200 Advanced research project