

POSITION DESCRIPTION

Position Title:	Radiochemist
Organisation Unit:	Centre for Advanced Imaging
Position Number:	1221234
Type of Employment:	Full-time, fixed term for 5 years
Classification:	Level C or D (Dependent on qualifications and experience)

THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver **knowledge leadership for a better world**.

UQ ranks in the world's top universities, as measured by several key independent ranking, including the CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (40), the US News Best Global Universities Rankings (42), QS World University Rankings (47), Academic Ranking of World Universities (54), and the Times Higher Education World University Rankings (66). Excluding the award component, UQ is now ranked 45th in the world in the ARWU, and is one of the only two Australian universities to be included in the global top 50.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience – the UQ Advantage – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland's highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia's Group of Eight, a charter member of edX and a founding member of Universitas 21, an international consortium of leading research-intensive universities.

Our 53,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 17,000 international students from 135 countries, adding to its proud 260,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a \$2.15 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and

biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.

UQ has an [outstanding track-record](#) in commercialisation of our innovation with major technologies employed across the globe and integral to gross product sales of \$1.1 billion+.

UQ has a rapidly growing record of attracting philanthropic support for its activities and this will be a strategic focus going forward.

Centre for Advanced Imaging

The Centre for Advanced Imaging (CAI) brings together the skills of a critical mass of researchers and 'state-of-the-art' research imaging instruments. It is the only facility of its type in Australia, one of only a handful in the world.

The CAI was created in 2009 as a strategic initiative of The University of Queensland (UQ) and reflects the growing role of imaging in cutting-edge biotechnology and biomedical research at UQ. The CAI building, including dedicated cyclotron and radiochemistry facilities, was opened in 2014. Information on the radiochemistry facilities are provided in <https://cai.centre.uq.edu.au/facilities/radiochemistry>. The Australian Cancer Research Foundation (ACRF) Facility for Molecular Imaging Agents in Cancer and the Australian Research Council Training Centre for Innovation in Biomedical Imaging Technology are also located within CAI and in 2020, funding was obtained to establish the ACRF Facility for Targeted Radiometals in Cancer.

Imaging techniques are now key platform research technologies for studying the structure and function, in health and disease, of living organisms from the laboratory mouse to the human. The ability of ultra high-field MRI to characterize the blood flow and structure of living systems, together with developments in MRI biomarkers, allows CAI researchers to better phenotype animal models of disease and to map the cognitive function of the brain. PET measures the distribution and fate of molecular markers using radiolabelled ligands providing CAI researchers with the capacity to perform in vivo studies of metabolism, receptor-ligand binding and gene expression. The ability to study the living organism enables longitudinal studies of normal development, of the natural history of disease and of responses to novel therapies.

Imaging is a platform technology for drug discovery and validation, providing surrogate end points to test new drugs. It speeds translation of scientific discoveries to clinical realization. MRI and PET are now core investigative modalities in virtually all clinical specialties. Imaging facilitates the goal of personalized medicine by better characterizing disease and response to treatment in the individual patient.

Further information on the Centre may be accessed on its web site at www.cai.uq.edu.au/

Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is [available online](#).

The University of Queensland [Enterprise Agreement](#) outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

To undertake research and development of new radiochemistry syntheses and novel radioligands. To engage in collaborative research utilising existing radioligands, as well as teaching, course development and postgraduate supervision. To lead the development of Radiochemistry and Molecular Imaging at CAI and perform administrative and other activities associated with the Centre as directed.

Duties

Duties and responsibilities include, but are not limited to:

Teaching and Learning

- Teach and supervise at an undergraduate, honours and postgraduate level.
- Provide leadership in developing programs and course material in radiochemistry.
- Where appropriate, teach subjects in flexible delivery mode.
- Consult with students.

Research

- Develop a research program leveraging external funding.
- Work with colleagues and postgraduates, supporting the radiochemistry requirements of joint research projects.
- Conduct research and publish scholarly papers, making a significant contribution to the discipline at a national and international level.
- Support programs of applied research in radiochemistry.
- Develop a program of contract research in radiochemistry with external partners.
- Make original and innovative contributions to research in the area of radiochemistry.

Service and Engagement

- Perform a range of administrative functions to oversee the operation of the Radiochemistry facility.
- Work with facility users to ensure that research activities within the facility are at “world’s best practice” for handling of radioisotopes, and comply with all regulatory requirements.
- Develop and maintain standard operating procedures and process guidelines for facility users, including preparation of GMP documentation where required.
- Contribute to Centre life as part of the academic team by serving on Centre and University committees and participating in Centre decision-making.
- Co-ordinate award programs of the Centre as required.
- Foster the CAI’s relations with industry, government departments, professional bodies and the wider community.
- Any other duties as reasonably directed by your supervisor

Other

- Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including but not exclusive to:
 - the [University's Code of Conduct](#)
 - requirements of the Queensland occupational health and safety (OH&S) legislation and related [OH&S responsibilities and procedures](#) developed by the University or Institute/School
 - the adoption of sustainable practices in all work activities and compliance with associated legislation and related University [sustainability responsibilities and procedures](#)
 - requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related [responsibilities and procedures](#) developed by the University

Organisational Relationships

The position reports to the Director, Centre for Advanced Imaging.

SELECTION CRITERIA

- A PhD in the area of synthetic organic, medicinal or radiochemistry.
- Demonstrated expert knowledge in the development of new radio ligands for use in nuclear medicine, including applications for use in animal and human research.
- Demonstrated teaching skills at undergraduate and postgraduate levels.
- An ability to establish effect relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies.
- Evidence of a contribution to research, including successful external grant applications.
- Ability to work collaboratively with colleagues.
- Commitment to upholding the University's values, and with the outstanding personal qualities of openness, respectfulness and integrity
- Developed industry liaisons and professional contacts.
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.
- Experience with requirements of GMP

Seminar

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

Vaccinations and Immunisation

It is a condition of employment for this role that if you are required now or in the future, to work or interact in Queensland Health clinical facility; or in an equivalent clinical health facility; or health care role; or will be required to perform work tasks that put you at risk of exposure to vaccine-preventable disease you are required to be immunised against, and

remain immunised against, certain vaccine preventable diseases (VPDs) in accordance with the University's Vaccinations and Immunisation Guidelines (PPL 2.60.08). The employee is required to provide evidence of immunisation against VPDs.

The University of Queensland values diversity and inclusion and actively encourages applications from those who bring diversity to the University. Please refer to the [University's Diversity and Inclusion webpage](#) for further information and points of contact if you require additional support.

Accessibility requirements and/or adjustments can be directed to recruitment@uq.edu.au.