POSITION DESCRIPTION

Position Title: Group Leader – Image Analysis / Methodology
Organisation Unit: Centre for Advanced Imaging
Position Number: 1260154
Type of Employment: Full time, Fixed Term
Classification: Academic Level C or D dependent on 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 Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (52), QS World University Rankings (47), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (65). UQ again topped the nation in the prestigious Nature Index and our Life Sciences subject field ranking in the Academic Ranking of World Universities was the highest in Australia at 20.

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 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 240,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.8 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 $11billion+

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

Organisational Environment

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.

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 details on the Centre for Advanced imaging and the research interests of its staff can
be found on CAI’s website http://www.cai.uq.edu.au/

Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is

The University of Queensland Enterprise Agreement outlines the position classification
standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

The incumbent will contribute to and expand the capabilities of the Centre for Advanced
Imaging in image analysis (MRI, PET/CT, MR/PET), through research collaboration and the
development of an independent research program including securing both competitive grant
and industry funding. The appointee will maintain and establish research collaborations with
CAI researchers and contribute to the provision of advice and expertise in image analysis to users of CAI's facilities.

**Duties**

Duties and responsibilities include, but are not limited to:

**Research**
- Develop a research program at the Centre for Advanced relating to MRI and/or PET image analysis.
- Conduct research and publish scholarly papers.
- Facilitate collaborative research including promoting access to the facilities within the Centre for Advanced Imaging and provision of research support in the form of advice and guidance on image analysis.
- Develop a research profile of national and international standing that is funded by external granting agencies.
- Work with internal and external colleagues and postgraduates in the development of joint research projects.

**Teaching and Learning**
- To teach and supervise researchhonours and postgraduate students.
- Contribute to teaching of the flexible-delivery postgraduate and short course programs at CAI as required.
- Provide input into and development of course materials for MRI and/or PET courses where appropriate.

**Service and Engagement**
- Foster the Centre’s relations with industry, government departments, professional bodies, the national imaging community and the wider community at large.
- Perform a range of administrative functions relevant to the position.
- Contribute to the processes that enable the academic team to manage the work of the Centre, including participation in Centre decision-making and serve on Centre committees.
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 of the Centre for Advanced Imaging (CAI).

**SELECTION CRITERIA**

**Essential**

- PhD in a relevant discipline such as biomedical engineering, applied mathematics, applied physics, computer science or biomedical science
- Demonstrated expert knowledge in the area of MRI and/or PET image analysis
- Demonstrated teaching skills at postgraduate levels
- An ability to establish effective 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.

**Desirable**

- Developed industry liaisons and professional contacts.
- Experience in liaising and collaborating with external agencies to develop cooperative research initiatives.
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.

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 (http://www.uq.edu.au/equity) for further information and points of contact if you require additional support.

Accessibility requirements and/or adjustments can be directed to the contact person listed in the job advertisement.