POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: ARC Training Centre for Innovation in Biomedical Imaging Technology (CIBIT) Centre for Advanced Imaging
Position Number:
Type of Employment: Full Time, Fixed Term for 3 years, extendable by 2 years
Classification: Academic Level A

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+ (see http://uniquest.com.au/our-track-record).

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 Australian Research Council Training Centre for Innovation in Biomedical Imaging Technology (CIBIT) is a multidisciplinary collaboration between researchers at The University of Queensland’s Centre for Advanced Imaging and partners in the Medical Technologies and Pharmaceutical industry. The purpose of this national centre is to provide research training for 20 early career and postgraduate students to fill critical skills gaps in the Medical Technologies and Pharmaceutical industry. Trainees will undertake industry-driven research to overcome bottlenecks in the development and application of novel diagnostics, therapeutics and theranostics and to inform changes in regulatory policy that support industry growth. CIBIT is supported by industry partners Siemens Healthcare Pty Ltd, BGI International Pty Ltd, Inter-K Peptide Therapeutics, Clarity Pharmaceuticals Pty Ltd, Minomic International Ltd, Theranostics (Australia) Pty Ltd, Brisbane Veterinary Specialist Centre, Uniting Care Medical Imaging Pty Ltd and Red Radiology Pty Ltd.

The Centre for Advanced Imaging is a strategic initiative of The University of Queensland, reflecting the growth in biotechnology, biomedical and materials research requiring advanced imaging capabilities. As a leading imaging research facility in Australia, and one of a handful in the world, CAI brings together the skills of a critical mass of researchers and ‘state-of-the-art’, world- or Australian-first research imaging instruments. NMR, EPR, MRI, PET, CT and optical imaging are now key platform research technologies for studying the structure and function of biomolecules and living organisms, from proteins to the human.

CAI conducts research across the spectrum from development of new imaging technologies, analysis of molecular structure, synthesis of MRI and PET biomarkers targeting fundamental biological processes to studies of major diseases, such as neurodegenerative disorders, cancer and cardiovascular disease affecting a range of organ systems, through to imaging economically significant agricultural animals and plant material, minerals and construction materials.

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

CAI is committed to supporting the career growth of female researchers and have a number of initiatives to support females in developing and achieving a fulfilling research career at the institute. For more information, please visit our CAI Women in Imaging website at https://cai.centre.uq.edu.au/women-imaging.
Information for Prospective Staff
Information about life at UQ including staff benefits, relocation and UQ campuses is available at - http://www.uq.edu.au/current-staff/working-at-uq

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

DUTY STATEMENT

Primary Purpose of Position

To engage, as a Postdoctoral Research Fellow in the ARC CIBIT in MR imaging research and supervision of CIBIT HDR students.

Duties

Duties and responsibilities include, but are not limited to:

Research
- Develop a research program in Magnetic Resonance Imaging (MRI) and MR image reconstruction and analysis
- Conduct research and participate in publication of scholarly papers
- Support colleagues on joint research projects in advanced imaging relevant to area of expertise

Teaching and Learning
- Teach and supervise at honours and postgraduate level
- Supervise Masters and PhD research projects in MRI methods and MR image reconstruction
- Consult with students at all levels, including vacation and visiting scholars where required

Service and Engagement
- Complete a range of Centre administrative duties as required.
- Contribute to the processes that enable the academic team to manage the work of the Centre, including participate in Centre decision-making and serve on Centre committees.
- Foster the Centre’s relations with industry, government departments, professional bodies and the wider community.

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 Group Leader and Head, Ultra-High Field MRI Research, A/Prof. Markus Barth, The Centre for Advanced Imaging.

SELECTION CRITERIA

Essential

• PhD in the area of physics, mathematics, biomedical engineering, electrical engineering or an equivalent combination of relevant experiences, training or education.

• Demonstrated expert knowledge relevant to MRI, in particular MRI methods, and/or MR image reconstruction, as well as programming skills (C++, Matlab)

• Demonstrated teaching skills at undergraduate and postgraduate levels

• An ability to establish effective relationships and to represent and promote advanced imaging techniques at a university and wider community level, including industry, government and professional bodies.

• Evidence of a contribution to research, including peer reviewed publications and applications for external grant funding.

• Evidence of solving research problems, particularly in the area of MRI methods and/or MR image reconstruction

• Ability to work collaboratively with colleagues, and derive direction from multiple supervisors

• Personal drive to succeed and a positive, can-do attitude towards busy workloads

Desirable

• Knowledge of the ICE/IDEA framework

• Experience with (ultra-)high field human MR scanners (≥ 7 Tesla)

• Developed industry liaisons and professional contacts

• Confidence and ability to teach at undergraduate and postgraduate levels

• Experience in liaising and collaborating with external agencies to develop co-operative research initiatives

• Experience in medical imaging and its wider application to a broad range of research topics
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.