POSITION DESCRIPTION

Position Title: Research Assistant - Dementia Research

Organisation Unit: The Clem Jones Centre for Ageing Dementia Research

Position Number: 3027715

Type of Employment: Full Time, Fixed Term for 12 months

Classification: HEW Level 5

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 (60). 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 Queensland Brain Institute (QBI) works to understand the development, organisation and function of the brain. We aim to understand the neural circuits in the brain, how their function results in behavioural outcomes, and how dysfunction of these circuits leads to disorders such as dementia, Parkinson’s disease and schizophrenia. We aim to (1) Develop novel therapeutic approaches to treat disorders of neural function and (2) Use our understanding of brain function to improve learning in classrooms and in the workplace.

Established in 2003, QBI is housed on the St Lucia campus of UQ. It is home to more than 450 staff and students, including 41 group leaders.

Over the past decade QBI has become known as one of the world’s leading neuroscience research institutes. It played a key role in contributing to UQ attaining the highest possible score of 5 for neuroscience, in both the 2010, 2012, and 2015 Excellence in Research for Australia (ERA) reviews, one of only two universities in Australia to achieve this.

Information about the Institute may be accessed on the Institute’s web site at www.qbi.uq.edu.au

Clem Jones Centre for Ageing and Dementia Research (CJCADR)

In 2011 the Queensland Brain Institute (QBI) established the Clem Jones Centre for Ageing Dementia Research (CJCADR), focusing on understanding pathogenic mechanisms at a molecular and cellular level and using this insight to develop therapeutic strategies for the prevention and treatment of ageing dementia as well as better diagnostic tools.

Working with Animals

Working with laboratory animals is an inherent requirement of some positions. Appointment to these positions may therefore be subject to, and conditional upon, satisfactory medical clearance(s) (including disclosure of relevant medical history) to undertake such work without unreasonable risk to your health and to fully comply with necessary ongoing health monitoring procedures and control measures associated with the position.

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

DUTY STATEMENT

Primary Purpose of Position

The appointee will work in close collaboration with the research team on projects relating to building delivery systems for ultrasound therapies.
Duties

In close collaboration with, and under the direction of, Professor Jürgen Götz and the team, duties and responsibilities include, but are not limited to:

- Work towards designing and building delivery systems for ultrasound therapies for neurological experiments in humans and animals.
- Modelling and analysing ultrasound exposure levels.
- Assisting with the programming and development of algorithms for visualisation of ultrasound exposure levels.
- Assisting with designing and conducting research into the effects of therapeutic, focused ultrasound on neurodegenerative diseases.
- Communicating effectively with our research collaborators, both international and hospital based.

Other

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

- 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 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 Director, Clem Jones Centre for Ageing Dementia Research, and is supervised by the Ultrasound Product Development Manager

SELECTION CRITERIA

**Essential**

- A Bachelor of in Electrical Engineering, biomedical engineering, medical physics related disciplines.
- Proven experience in research and development of biomedical devices and/or instrumentation.
- Proven programming skills for biomedical applications.
- Capabilities with hand tools and materials for basic fabrication.
- Experience working on research projects.
- Capability to undertake risk management and actively support and participate in the risk management processes adopted by the University which include identifying, analysing and evaluating risk.
Desirable

- Experience in design and implementation of ultrasound transducer based systems for either imaging or therapeutic purposes.
- Developed industry liaisons and professional contacts
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives

Personal Qualities

Essential

- Demonstrated interpersonal skills including the ability to consult and negotiate with other stakeholders to ensure project objectives are met and on time.
- Demonstrated written and oral communication skills including the ability to write technical reports.
- Ability to work effectively both independently and as a member of a team.
- Demonstrated initiative and problem solving abilities

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. Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. For further information please contact our Australian Indigenous Employment Coordinator at: atsi_recruitment@uq.edu.au
Applications are also encouraged from women.