POSITION DESCRIPTION

Position Title: NHMRC Research Officer
Organisation Unit: UQ Centre for Clinical Research (UQCCR)
Position Number: 3045603
Type of Employment: Part time, Fixed Term
Classification: Academic Research 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 (45), QS World University Rankings (48), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (69). UQ again topped the nation in the prestigious Nature Index, and our Academic Ranking of World Universities result in the field of Life and Agricultural Sciences is 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 $11 billion+ (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.
Faculty of Medicine

The University of Queensland’s Faculty of Medicine is an internationally recognised provider of world-class education and research. The research-intensive Faculty has a gross budget of almost $300 million, employs approximately 1000 continuing and fixed-term staff (headcount), has a community of more than 4000 non-salaried academic appointees and around 3200 students (headcount).

The Faculty of Medicine offers Australia’s largest medical degree program for graduates and school-leavers. Undergraduate and postgraduate programs are available in the disciplines of Medicine, Health Sciences, E-Health, Mental Health, Biomedical Sciences and Public Health.

The Faculty possesses enormous strengths spanning research, teaching, industry engagement and clinical practice in disciplines ranging from the basic sciences, biomedical research and development, to clinical trials and public health. Research projects within the Faculty have already led to discoveries with far-reaching social and economic impacts, including the revolutionary Gardasil (TM) vaccine for cervical cancer (Professor Ian Frazer) and a drug discovery EMA401 (Professor Maree Smith), a first-in-class oral treatment for chronic pain which through Spinifex Pharmaceuticals led to Australia’s largest biotechnology commercialisation deal. Faculty staff include three highly cited authors, one Fellow of the Royal Society (FRS), three Fellows of the Australian Academy of Science (FAA) and 12 Fellows of the Academy of Health and Medical Sciences (AAHMS). The Faculty is a core member of Brisbane Diamantina Health Partners, the Brisbane-wide academic health science system.

Educational offerings in biomedical sciences, medicine and public health are informed and supported by research activity across a range of fundamental and clinical areas of importance including recognised strengths in cancer, skin diseases, brain and mental health, maternal and child health and genomics. Cutting-edge facilities such as the Herston Imaging Research Facility (HIRF), the UQ Centre for Clinical Research (UQCCR), our laboratories in the Translational Research Institute (TRI) and the new Centre for Children’s Health Research (CCHR) enable outstanding research outcomes and sharpen our understanding of cancer, autoimmunity, mental disorders, infectious diseases and neurological disease. Further details are available at www.medicine.uq.edu.au.

UQ Centre for Clinical Research

The University of Queensland Centre for Clinical Research (UQCCR) is a $70 million purpose-built facility sponsored by Atlantic Philanthropies, the Queensland Government (Smart State funding) and UQ. The building, completed in early 2008, is located at the Royal Brisbane and Women’s Hospital site at Herston, Brisbane. The RBWH is the largest teaching hospital in Australia and the site also houses a basic medical research institute (QIMR), and a significant Faculty of Medicine presence, including the Schools of Public Health. The UQCCR has capacity for 320 staff with affiliation guided by research strengths, assessed by defined research quality indicators.

UQCCR’s mission is to improve health outcomes for individuals and populations based on rigorous, high quality clinical research. This is achieved by facilitating research and training, influencing patient care, and providing the translational linkages between basic and applied scientific research, the patient, and health outcomes. The current research themes include Infectious Diseases, with an emphasis on research into Antimicrobial Resistance. UQCCR is a University-level research Centre reporting to the Research Dean of the Faculty of Medicine. The centre’s postgraduate students are enrolled through partnering Schools.

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
To perform research and related administrative work related to NHMRC project grant, “Nanomedicine strategies for early detection and treatment of brain metastases” (APP1162560). The position will be carried out mostly at UQCCR (RBWH campus), with collaborative activities to be undertaken at the Centre for Advanced Imaging (CAI) and Australian Institute for Bioengineering and Nanotechnology (AIBN) at the St Lucia campus.

Duties

Research
- Contribute knowledge and expertise in molecular pathology, molecular biology and animal modelling to the brain metastasis research program.
- Contribute to the publication of scholarly papers and preparation of grant applications by undertaking laboratory, analytical and literature-based work.
- Design and execute experiments in consultation with senior staff.
- Undertake laboratory and analytical work to a high standard as directed, in particular:
  - Mouse modelling experiments, including xenografting, bioluminescence imaging, tumour measurements, surgical procedures and ex vivo tissue analysis.
  - Molecular pathology analyses, including standard histological techniques, immunohistochemistry and immunofluorescence analyses.
- Analysis of experimental and public datasets using appropriate statistical tests.
- Monitor the welfare of experimental mice in accordance with relevant ethics approval.
- Be responsible for training new staff and students in laboratory practices.
- Conduct laboratory work ethically, conscientiously and to a high standard, with full responsibility for experiment execution and quality control.
- Maintain careful records of experiments and good laboratory practice, including laboratory notebooks and digitally on an institutional data drive.
- Present data and relevant literature at laboratory meetings.
- Regularly liaise with key collaborators through email and face-to-face meetings.
- Demonstrate willingness to learn new procedures and techniques as needed, and independently seek the appropriate support required to achieve research goals;
- Promote teamwork and cooperation through constructive, tolerant, courteous, and positive interactions with colleagues.
- Read and adhere to laboratory policies and procedures.

Teaching and Learning
- Assist honours, MSc/PhD students and clinical trainees as directed.

Service and Engagement
- Foster UQCCR’s relationship with industry, government departments, professional bodies and the wider community.
- Help to foster the team’s interactions with scientific, clinical and community groups.
- 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 Qld occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute/School
- 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 will report to Brain Metastasis Research Program Leader Dr Jodi Saunus, and Head of the Molecular Breast Pathology Group Professor Sunil Lakhani.

SELECTION CRITERIA

- Honours degree in biomedical science or a similar field.
- An understanding of research into breast cancer brain metastases.
- Direct experience with the following techniques:
  - intracarotid xenografting and mouse necropsy
  - histological preparation and data acquisition (tissue processing, IHC, IF)
  - mammalian cell culture and associated molecular analyses (e.g. proliferation/apoptosis assays, Western analysis, real-time RT-qPCR).
- Experience with software packages used in molecular pathology research (e.g. image segmentation and densitometry, Microsoft excel, GraphPad Prism)
- Excellent organisational, oral and written presentation skills
- Ability to work independently and meet deadlines.
- Attention to quality control, with particular regard for the importance of resource maintenance and record keeping.
- Demonstrated ability to work productively and respectfully in diverse teams.

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