POSITION DESCRIPTION

Position Title: Senior Research Technician
Organisation Unit: University of Queensland Diamantina Institute
Position Number: NEW
Type of Employment: Full Time, 1.0 FTE, Fixed Term for 1 year
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.

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 Spinafex 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.

The University of Queensland Diamantina Institute

The University of Queensland Diamantina Institute was established in 2007 as the sixth research institute of The University of Queensland. The aim of the Institute is to develop a better understanding of the molecular and cellular basis of disease, and to translate that understanding into practical outcomes for patients. Based at the Translational Research Institute (TRI) at the Princess Alexandra Hospital teaching campus in Brisbane, the Institute has more than 300 researchers and students who work closely with clinicians in the areas of cancer, immunology and genomic medicine.
UQDI is the largest partner in TRI, and is building major programs in Immunology, Cancer and Genomic Medicine research, with a particular focus on research aimed at development of new treatments. TRI is an Australian first and will see Australia play a leading role in international efforts to address a wide range of health issues. UQDI itself is an extremely well-equipped translational biomedical research institute, with outstanding facilities for research in animal models of disease including cutting-edge imaging technologies, human cell and molecular biology research in cancer and immunology, microbiology, and genomics research. Its close affiliation with clinical units at Princess Alexandra Hospital provides it with a significant strategic advantage in near-patient, translational research. UQDI is part of The University of Queensland, one of the top Australasian universities, and internationally is ranked in the top 100 universities in all major independent rankings. UQDI academics are part of a vibrant and highly successful academic institution optimising their chances of research success. Details of the research interests of academic staff may be accessed on the Institute’s web site at http://www.di.uq.edu.au/research.

DUTY STATEMENT

Primary Purpose of Position

A research assistant experienced in the field of pharmaceutical development is required to assist in development of highly novel nanotherapeutics for immunotherapy of cancer and autoimmune diseases. The appointee will work on the delivery of small molecules, proteins, peptides using liposomes, nanoemulsions and polymeric systems to advance nanoparticle formulations from bench to bedside. The job will involve significant hands-on lab work in the set-up, execution, documentation and analysis of experiments under the mentorship of senior members of the team. In collaboration with team members, the appointee will also carry out in vitro and in vivo experiments studying the immune response in human cells and mice. The appointee will collaborate and interact with immunologists, pharmaceutical scientists, clinicians and colleagues in industry to use a number of core technologies including flow cytometry, mass spectrometry and in vivo imaging.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Support formulation development and small-scale manufacture of nanotherapies in support of discovery biology, lead optimization and preclinical pharmacology
- Bioanalytical assays
- Maintain personal laboratory records.
- Provide technical assistance to other related research projects as directed by the laboratory head.
- Obtain any required training to carry out the tasks required.
- Contribute to a safe and efficient laboratory working environment.
- Contribute to supervision or training of junior members of laboratory.
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 Professor Ranjeny Thomas, Professor of Rheumatology
SELECTION CRITERIA

Essential

- Completion of a degree in life sciences, pharmacy or related discipline and strong technical ability for development of pharmaceutical agents.
- Laboratory experience in nanoparticle development, optimization and characterization.
- Experience in bioanalytical assay characterization, stability testing and toxicity studies.
- Ability to work collaboratively with colleagues, interface with the clinical environment and dry lab researchers.
- Laboratory skills: Handling biological specimens and infectious agents, understanding of basic laboratory safety (such as radiation and chemical toxicity).
- Excellent record keeping and attention to detail.
- Good interpersonal and communication skills.
- Computer literacy and some spreadsheet or database experience as well as some basics in statistical analysis and experimental design.
- Ability to work relatively independently, but as part of a team, with excellent organisational skills that allow for meeting deadlines, have a high level of professionalism and accuracy in record keeping.

Desirable

- Experience with in vivo mouse experiments
- Experience in working to standard operating procedures and to good laboratory practice standards

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.
This role is a full time position; flexible working arrangements may be negotiated.