POSITION DESCRIPTION

Position Title: Research Technician – Cancer Therapeutics
Organisation Unit: School of Biomedical Sciences
Position Number: NEW
Type of Employment: Fixed-term, part-time
Classification: Hew Level 4

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.

**School of Biomedical Sciences**

The University of Queensland School of Biomedical Sciences is a distinguished centre for teaching and research in the academic disciplines of Anatomy, Developmental Biology, Physiology, Pharmacology and Pathology. The School has more than 40 full-time research and teaching staff and is one of the largest Schools of its type in Australia. It has links to other prestigious research centres on the St Lucia campus including the Queensland Brain Institute (QBI), the Institute of Molecular Bioscience (IMB) and the Australian Institute for Bioengineering and Nanotechnology (AIBN). Our diverse research provides an exciting environment for national and international research fellows and higher degree students. It is concerned with advancing the understanding of how cellular mechanisms contribute to the function of the human body in health and disease. Details of the research interests of
academic staff may be accessed on the school’s web site at https://biomedical-sciences.uq.edu.au/

In addition to its graduate research programs, the School teaches undergraduate students in Science, Medicine, and Health Sciences.

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 Cancer Therapeutics Lab headed by Dr. Sherry Wu is interested in developing novel nano-therapeutic methods to overcome immune suppression in ovarian cancer. The primary purpose of this Professional Research Staff position is to provide technical assistance in carrying out projects related to cancer immunology, nanotechnology, and imaging.

The individual will be required to understand the goals of the research projects and receive detailed verbal and/or written instructions on how to conduct an experiment to achieve these goals. Perform experiments as directed. The individual should have the ability to resolve (in consultation with the CI) various technical problems as they emerge.

Duties

Duties and responsibilities include, but are not limited to:

- Assist in both in vitro and in vivo experiments for development of new therapeutic approaches for cancer treatment (e.g., investigating tumor cell and immune cell interactions, transfection, flow cytometry, imaging, injections, tissue/organ isolation).
- Assist in analyzing cells, mouse tumors, and human tumors (e.g., qPCR, gel electrophoresis, and Western blot analyses).
- Maintain and establish tissue culture cell lines which require good sterile techniques. Need to have the ability to observe and identify cell changes under the microscope, determine cell counts on the hemocytometer, performs colony counts or determine cell viability. Prepare sterile media and solutions.
- Assist in immunofluorescence and immunohistochemistry staining of animal or human tissues.
- Assist in formulating nanoparticles suitable for cancer therapeutics and imaging.
- Assist in nanoparticle characterization.
- Assist in animal experiments in accordance with institutional guidelines.
- Assist in ordering research supplies. Track orders and follow-up on delayed or backordered supplies.
- Assist in manuscript and grant preparation.
- Record and evaluate data in accordance with methods requested. Maintain accurate, detailed records and experimental data and protocols. Provide progress reports in an organized, consistent manner.
• Must be able to communicate results to and understand instructions from the supervisor and principal investigator.

• Must be able to acquire and develop new techniques efficiently. Must be able to learn and use software related to data acquisition, image analysis and presentation.

• Demonstrate and practice laboratory safety precautions.

• Contribute to a supportive and intellectually vibrant lab culture.

**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 Dr Sherry Wu
SELECTION CRITERIA

**Essential**

- Qualifications and training equivalent to a Diploma in biological or health related discipline, with relevant work related experience, or an equivalent combination of relevant experience and/or education/training.
- Ability to acquire knowledge and experience in a research environment, including data collection and reporting, specimen collection and storage and organization of research meetings
- Ability to acquire knowledge and experience within scientific laboratory environment
- Ability to acquire knowledge and experience in the use of a wide range of computer applications in a network environment for research data collection (particularly Microsoft Excel, Word, and Outlook)
- Demonstrated ability to work effectively in a multi-disciplinary team, including ability to prioritise own workload, work independently and meet deadlines.
- Demonstrated ability to follow instructions, communicate results, work in a safe manner according to provided instructions and maintain accurate records.
- Excellent interpersonal skills including the ability to communicate effectively by telephone, email and in person

**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.

Accessibility requirements and/or adjustments can be directed to Kimberly Pullen k.pullen@uq.edu.au