POSITION DESCRIPTION

Position Title: Research Assistant in Bioprocessing
Organisation Unit: Australian Institute for Bioengineering and Nanotechnology
Position Number: 3042376
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 (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 $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.

**Organisational Environment**

The University of Queensland’s Australian Institute for Bioengineering and Nanotechnology (AIBN) is a dynamic multi-disciplinary research institute dedicated to developing technology to alleviate societal problems in the areas of health, energy, manufacturing and environmental sustainability. AIBN brings together the skills of more than 450 world-class researchers complimented by an extensive suite of integrated facilities, working at the intersection of biology, chemistry, engineering and computer modelling. With a reputation for delivering translational science, AIBN conducts research at the forefront of emerging technologies, and has developed strong collaborations with leading members of industry, academia and government. AIBN goes beyond basic research to develop the growth of innovative industries for the benefit of the Queensland and Australian economies. Information about the Institute can be accessed on the Institute’s web site at http://www.aibn.uq.edu.au/.

This position will be a joint appointment between the ARC Training Centre for Biopharmaceutical Innovation (CBI) and the National Biologics Facility (NBF), both based at the AIBN.

The CBI is enhancing Australia’s biopharmaceutical capabilities through dedicated research and development programs with leading industrial partners. The Centre provides research in three thematic areas: new biopharmaceutical and diagnostic agent discovery; development of mammalian cells as factories for recombinant protein production; and advanced manufacturing of biopharmaceuticals. The CBI is supported by industry partners CSL Limited, GE Healthcare, the Australian Red Cross Blood Service and Patheon Biologics Australia Pty Ltd.

The National Biologics Facility provides high-quality, custom discovery and manufacturing solutions for the development and production of recombinant biopharmaceuticals in mammalian cells. The facility works with academic and industrial researchers to help drive their research from early discovery through to pre-clinical development, and receives funding from the Commonwealth Government’s National Collaborative Research Infrastructure Strategy.

AIBN 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 AIBN Women in Science web site at http://www.aibn.uq.edu.au/women.

**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 provide technical support to the postdoctoral researchers and research higher degree students of the Centre for Biopharmaceutical Innovation, and to the Queensland node of the National Biologics Facility.

Duties

Duties and responsibilities include, but are not limited to:

• Molecular biology – cloning of recombinant DNA and preparation of expression vectors, protein engineering
• Recombinant protein expression with a focus on advanced mammalian expression systems:
  o Transient expression technology for the expression of novel proteins
  o Operation of stirred-tank and WAVE bioreactors up to 50L scale
  o Mammalian cell line development comprising the generation of stable pools, clonal selection and isolation of high-expressing mammalian cell lines
• Assist with downstream bioprocessing
• Assist with protein analytics
• Review and generate Standard Operating Procedures, Batch Records and Client Reports
• Generate detailed reports
• Assist in the maintenance and daily operation of the laboratory, clean room facilities and equipment
• Assist students with cell culture and bioprocessing
• 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 Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or Institute
• 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 Director of the Centre for Biopharmaceutical Innovation, Professor Stephen Mahler

SELECTION CRITERIA

**Essential**

- Qualifications and training equivalent to a Bachelor of Science (Hons) in a relevant area (Bioengineering, Bioprocessing, Chemical Engineering, Molecular Biology)
- Demonstrated proficiency in mammalian cell culture
- Experience in recombinant protein expression and purification
- Responsible approach to equipment use and maintenance
- Computer literacy including experience with standard office software (word-processing, spreadsheet, graphics etc.)
- Demonstrated ability in record keeping and presentation of research results.

**Desirable**

- Experience in clonal cell line development
- Experience working with mammalian stirred-tank and WAVE bioreactors
- Knowledge of the biologics manufacturing industry in GMP environments
- Experience in preparing Standard Operating Procedures and Batch Reports

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.

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

Accessibility requirements and/or adjustments can be directed to the contact person listed in the job advertisement.