POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow – Biopharmaceutical Downstream Bioprocessing
Organisation Unit: Australian Institute for Bioengineering and Nanotechnology
Position Number: 3036361
Type of Employment: Full time, Fixed-term
Classification: Research Academic 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 $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 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.

Our people are our greatest asset. We offer collaborative, inclusive work and study places, which are enriched by the significant diversity of our staff, students and community. We genuinely believe that creativity and innovation flourishes in an environment where people feel supported, valued and empowered. Mutual respect, inclusivity and accountability are at the cornerstone of UQ’s culture.

AIBN is committed to supporting the career growth of women researchers and have a number of initiatives to support women 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.

The ARC Training Centre for Biopharmaceutical Innovation (CBI), located within the AIBN is enhancing Australia’s pharmaceutical capabilities through dedicated research and development programs with leading industrial partners. The Centre conducts 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.

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

The University of Queensland Enterprise Agreement outlines the position classification standards for Levels A to E.
DUTY STATEMENT

Primary Purpose of Position

To perform top quality high impact research in bioprocess engineering for the production of protein biopharmaceuticals. This involves several aspects of downstream bioprocessing and includes enhancing primary recovery from bioreactors, developing and evaluating membrane-based separation processes for biopharmaceutical purification and the development of continuous downstream processing strategies. The research will be performed in collaboration with industry partners of Centre for Biopharmaceutical Innovation.

Duties

Duties and responsibilities include, but are not limited to:

Research

- Explore and develop new innovative downstream bioprocessing technologies;
- Investigate membrane-based separations for biopharmaceutical purification;
- Optimise novel continuous chromatography for biopharmaceutical purification;
- Investigate integration of new technologies into biopharmaceutical manufacturing processes;
- Conduct outstanding research and publish in high impact scholarly papers;
- Apply for funding for further expansion of research portfolio;
- Actively undertake supervision and training of research higher degree students.

Service and Engagement

- Promote and grow the activities of the Centre and participate in the development of the Centre’s identity;
- Foster the Institute’s relations with industry, government departments, professional bodies and the wider community.
- 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 Professor Stephen Mahler and Professor Linda Lua.

SELECTION CRITERIA

Essential

- PhD in the area of biotechnology, protein biochemistry, bioengineering or bioprocessing.
- Extensive knowledge and skills in the area of biopharmaceutical downstream bioprocessing and its applications, including mammalian cell culture for production of therapeutics and vaccines, chromatography and membrane-based separation technologies, and protein analytics.
- In-depth knowledge and understanding of cGMP, regulatory requirements for biopharmaceutical industry, single-use technology and process modelling.
- Evidence of contributions to research such as publications, international scientific presentations and successful external grant applications.
- Demonstrated ability to independently design bioprocessing projects, and work collaboratively with colleagues and develop joint projects
- An ability to establish effective relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies

Seminar

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

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

Accessibility requirements and/or adjustments can be directed to aibnhr@uq.edu.au