

We seek a highly motivated Postdoctoral Research Fellow who is an experienced researcher to join the Bone research group. Women, Indigenous Australians and Torres Strait Islander people are strongly encouraged to apply.

Position Title: Postdoctoral Research Fellow

Reference: 13298

Closes: 17 July 2013

Organisational Area: School of Chemistry, Physics and Mechanical Engineering

Science and Engineering Faculty

Campus: Kelvin Grove

Salary Range/Classification: \$AUD57 187 to \$AUD77 598 (Level A)

Plus Superannuation:17% employer contributionStatus:Fixed-term for 3 yearsContact:Professor Yin Xiao

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HR Contact: Anya Levina

HR Advisor +61 7 3138 4134

Open to: Australian and International applicants

When applying for this position we encourage you to upload your response to the selection criteria.

BACKGROUND INFORMATION

Science, technology, engineering and mathematics (STEM) are the engines of growth that underpin modern society and have a wide-reaching impact on our everyday lives. As Australia moves towards a knowledge-based economy, investing in research and education in these fields prepares both our students to have numerous graduate opportunities, and our economy to consistently innovate in the face of global competition.

The Science and Engineering Faculty at QUT was established in 2012 and has created a new era in STEM education with a repositioning of courses and research in these areas. Through the delivery of world class teaching and research combined with productive and sustainable partnerships the Faculty's vision is to be a national and international leader in advancing the frontiers of science and engineering to shape our future environments. The Faculty comprises six schools being:

- Chemistry, Physics and Mechanical Engineering
- Civil Engineering and Built Environment
- Earth, Environmental and Biological Sciences
- Electrical Engineering and Computer Science
- Information Systems
- Mathematical Sciences

Within these schools 21 discipline areas are working together to transform our research, learning and teaching programs. Nearly 10,000 students and 950 dedicated Higher Degree Researchers are embracing the Faculty's wide range of courses including an innovative new science degree introduced in 2013. Underpinning the transformation is the \$230 million new Science and Engineering Centre at the Gardens Point campus - a world leading model and dynamic community hub providing exciting new learning and research spaces to put QUT at the forefront of STEM education.

The Faculty is engaged in significant partnerships with leading national and international companies including Schlumberger, Boeing, BAC, SAP, Shell and Woolworths as well as associations such as the Qld Resources Council, major industry bodies and many national and state government departments.

The Faculty's strength will continue to grow with its partnership with QUT's new Institute for Future Environments (IFE). Working together the Faculty and Institute will engage researchers in large scale programmatic activities, allowing coordinated research to be undertaken at scale to address the global





challenges of the future. In addition, the Faculty will continue its strong commitment to the Institute of Health and Biomedical Innovation (IHBI) with many researchers spanning both areas.

To guide achievement of QUT and Faculty aspirations a five year integrated set of strategies and stretch targets has been developed around major goals in:

- Transforming People and Place
- World Class Learning and Teaching
- World Class Research
- Productive and Sustainable Partnerships

The period 2013-2015 will be a critical development and growth window for the Faculty with a strong focus on building Capability, growing Capacity, repositioning our Courses and how we teach them, making stronger and more effective Connections and transforming our Culture to deliver outstanding achievements.

DUTY STATEMENT

Purpose of Position

The Postdoctoral Research Fellow will be required to engage in laboratory work in two principal research areas. The first is defining new cell signaling pathway related to bone biology, tissue-specific targeting of bone tissue, and testing therapeutic strategies designed to ameliorate bone disorders. The second is to synthesise osteoconductive and mechanically compatible materials for bone repair and regeneration. Projects utilise animal models, retroviral and adenoviral-mediated gene transfer, in vitro cell culture and transcription assays. The position requires strong laboratory skills and the capacity to coordinate the research activities in research team, which includes assisting with Higher Degree Students (HDR) student supervision.

Organisational Relationships

This position holds membership with QUT's largest interdisciplinary research institute, the Institute of Health and Biomedical Innovation (IHBI).

This position reports to the Professor, Biomedical Engineering and Medical Physics. The Postdoctoral Research Fellow will collaborate with other researchers and liaise with research, administrative and academic staff of the University.

Duties include:

- Coordinating the research activities of the research team.
- Undertaking research that advances the goal of the research project.
- Contributing to the research culture of the School and assist in the supervision of students and support staff (eg Research Assistants) within the research project.
- Providing mentorship for support research staff.
- Preparing and publishing research outcomes in relevant refereed journals and presenting research outcomes at conferences, workshops and seminars.
- Providing written and verbal reports as required by the project and undertaking associated administrative functions.
- Assisting with the preparation of grant applications.
- Maintaining research confidentiality and conform to all requirements for the protection of intellectual property.
- Ensuring staff and students work and study in an inclusive environment free from all forms of discrimination and harassment.
- Health and Safety responsibilities:
 - o Be responsible for the health and safety of students under their supervision if applicable;
 - Observe all safety procedures and protocols within the operating environment;
 - Willingly cooperate in the objectives of making the Faculty a safe and healthy workplace; and
 - o Report any hazard or unsafe condition that is observed.

SELECTION CRITERIA

Essential:

- 1. Completion of a PhD qualification, or an equivalent combination of qualifications and experience, in Natural Sciences (biology, biotechnology or medicine) or a similar field.
- 2. Experience in cell and molecular biology, and the handling of small animals.
- 3. Demonstrated written communication skills for scholarly publications, technical reports and project documentation and the ability to prepare research funding proposals.
- 4. Demonstrated publication record in bone and mineral research.
- 5. Demonstrated ability to work effectively within a team environment, as well as independently with minimal supervision in the completion of work tasks with a high degree of accuracy and attention to detail.
- 6. Well developed oral and interpersonal communication skills with a demonstrated ability to liaise with industry partners and present research findings to internal and external audiences.
- 7. Knowledge of workplace health and safety principles which will enable the appointee to implement these principles at an appropriate level.

Desirable:

- 1. Knowledge of broad molecular biology (eg. cloning, expression systems).
- 2. Experience in supervising research degree students.