# POSITION DESCRIPTION

**Position Title:** Postdoctoral Research Fellow  
**Organisation Unit:** Institute for Molecular Bioscience  
**Position Number:** NEW  
**Type of Employment:** Fixed term Full time for 24 months with the possibility of renewal  
**Classification:** Academic Level A

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## 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. UQstrives 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 Institute for Molecular Bioscience (IMB) is a leading global life sciences research institute committed to improving quality of life through research. IMB was established in 2000 as UQ’s first research institute and is the cornerstone of one of the largest bioscience research precincts in Australia.

The Institute is home to more than 450 researchers, postgraduate students and support staff from more than 40 countries who work in partnership with their academic, industry and clinical colleagues around the world to advance knowledge in areas including pain, rare diseases, inflammation, superbug infection, cardiovascular disease, environmental research, drug discovery and development, cancer, diabetes and obesity, and reproductive health. Our mission is to drive the bioeconomy and create better health; our vision is to be a life sciences institute with global impact.

By investigating how we grow and develop at the genetic, molecular, cellular and organ levels, IMB researchers can better understand the development processes and pathways involved in human and animal health and disease. The institute also has the technical capacity to translate its new knowledge into drugs, diagnostics and technologies to more effectively prevent, detect and treat disease; and pursue opportunities in a range of biotechnology applications for health, industry and the environment.

IMB’s research outcomes are protected and commercialised by UQ-owned technology transfer group UniQuest.

Details of the research interests of the Institute may be accessed on the Institute’s website at: https://imb.uq.edu.au/

Information for Prospective Staff

The Institute recognises and values equity and diversity, and encourages applications from any individual who meets the requirements of this position irrespective of gender, sexuality, race, ethnicity, religion, disability, age or other protected attributes.

IMB strives to provide an inclusive working environment, and along with the University is committed to supporting staff with family and caring responsibilities by providing policies, programs and initiatives to help balance work and family responsibilities.

Specific initiatives at IMB can be found at (https://imb.uq.edu.au/about/equity-and-diversity-imb)

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

A Postdoctoral Research Officer is required to join a team working under Doctor Anne Karine Lagendijk. Research in the lab is focused on mechanical pathways that regulate vascular growth and blood vessel maintenance using zebrafish as a model organism. The team is aiming to implement a novel human 3D culture system at the IMB to complement analysis in zebrafish. The research officer will use these two model systems to investigate mechanical changes in endothelial cells during embryonic development and in vascular pathologies.

Duties

Duties and responsibilities include, but are not limited to:

Research
- Conduct independent research and publish scholarly papers under the guidance of the team leader.
- Liaising with other members of the laboratory, the IMB and the broader research community.
- Assist team leader in establishing a 3D bioengineering platform for human vessels. This includes overseas training.
- Phenotypic analysis using a suite of high resolution imaging techniques.
- Analysis and compilation of data for publication in high quality international journals.
- Supervise students at honours and postgraduate level.

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 the lab head Dr. Anne Karine Lagendijk.
SELECTION CRITERIA

Essential

- PhD in a relevant research area (i.e. Developmental biology, Cell Biology, Vascular biology, Bioengineering)
- Ability to achieve and maintain international benchmark standards of excellence in research.
- Demonstrable enthusiasm for developmental biology research.
- Ability to work independently but in the context of a communal laboratory.
- Excellent written and verbal communication skills.
- Strong commitment to publication productivity as a means to successful career progression.
- Sound organizational and problem-solving skills.

Desirable

- Working with model organisms, preferably zebrafish.
- 3D cell culture techniques, cell transfection.
- Bioinformatics, preferably RNAseq expression analysis.
- Molecular biology.
- Image analysis software; ImageJ, Matlab.

Qualification Verification

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

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

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