POSITION DESCRIPTION

Position Title: Senior Microscopist
Organisation Unit: Institute for Molecular Bioscience
Position Number: 3037573
Type of Employment: Full time, continuing
Classification: HEW Level 7

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 (45), the US News Best Global Universities Rankings (52), QS World University Rankings (51), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (60). UQ again topped the nation in the prestigious Nature Index; and secured a greater share of Australian Research Council grants in 2016 ($24.5 million) than any other university nationally.

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 230,000-plus alumni. The University has about 7,000 academic and professional staff and a $1.7 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 will have further success in this area as an important strategic aim 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: http://www.imb.uq.edu.au.

Information for Prospective Staff

The IMB 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.

The 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 (http://www.imb.uq.edu.au/equity-and-diversity)

Further 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 Senior Microscopist is responsible for the management of advanced optical, fluorescence and confocal microscopes, for ensuring the instrumentation is maintained and operating to factory specifications, and to provide microscopy research support and training. The incumbent will use a variety of techniques available to support researchers from within the Institute, University and external clients to design, conduct, analyse and report on experiments. Additional responsibilities will include IT-related administration such as data management and maintaining the Facility booking system.

Duties

Duties and responsibilities include, but are not limited to:

1. Draw on experience, knowledge and expertise in optical microscopy or related fields to provide specialist maintenance and research support for optical, fluorescence and confocal systems to ensure instrument performance is optimised.
2. Apply technical knowledge and expertise to manage the smooth, safe and efficient operation and maintenance of the facility including key IT infrastructure.
3. Coordinate and provide individual user training and group training in the use of advanced microscopes, image acquisition, visualisation software and analysis for biological research, as well as running workshops to build experimental and technological capability and capacity in researchers.
4. Conduct microscopy application support, including working with or advising users to optimize sample preparation, labelling or staining, and image acquisition both general and specialised optical and fluorescence techniques.
5. Draw upon prior experience to advise and train researchers on the best methods to image their samples for quantification.
6. Support experimental design and the interpretation of experimental results in all aspects of image visualisation, processing and analysis.
7. Build and sustain professional networks and relationships with a network of relevant University staff, external clients, and engage with the software vendors to identify and negotiate for future analysis software capabilities and use these to disseminate information through image analysis workshops to meet research needs.
8. Present data and novel microscope techniques at national and international conferences to network with leading scientists and facility staff in the microscopy field, with the view to implement applicable new technologies at IMB.
9. General maintenance of microscope equipment and day-to-day running of the imaging facility, including undertaking or overseeing instrument repairs.
10. Any other duties as reasonably directed by your supervisor. It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.
OTHER JOB RELATED INFORMATION:

Due to the nature of biomedical research as well as the training component (e.g., workshops), it might be necessary to work outside of regular work hours on occasions.

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 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 Manager of the Imaging Facility who provides broad supervision. The role has no supervisory responsibilities.

SELECTION CRITERIA

Essential

1. The appointee will have a degree in a biological or biomedical field or related discipline with at least four (4) years subsequent extensive relevant experience in biological optical microscopy/imaging, or an equivalent combination of extensive relevant experience and/or education/training.

2. Demonstrated experience and high level skills in operating and maintaining optical microscopes, including fluorescence and confocal microscopes, to support the day-to-day running of the imaging facility, with knowledge of theory and application of a range of scientific imaging and analysis techniques.

3. Proven experience in conducting biomedical/life science experiments for the analysis of structure, morphology and function.

4. Ability to solve complex problems, including through the application/use of sophisticated analytical and diagnostic skills, discretion, initiative, innovation and specialised expertise to research projects at hand and develop new methodologies.

5. High level of organisational, interpersonal and communication skills, including the ability to work individually and as part of a team, and to prepare professional reports.
and non-routine correspondence on complex matters and to interact, influence and negotiate with a range of clients on complex issues.

6. Experience in teaching and training users in operation of lab equipment and in running workshops to build capacity and capability in microscopy users.

7. Demonstrated ability to communicate, publish and engage the research community in microscopy techniques, application, methodologies or research findings as a result of innovation in microscopy utilization, with experience in assisting in the preparation of manuscripts and funding applications.

**Desirable**

1. A postgraduate qualification, preferably at PhD level, would be advantageous.

The University of Queensland values diversity and inclusion.

Applications are particularly encouraged from Aboriginal and Torres Strait Islander peoples. For further information please contact our Australian Indigenous Employment Coordinator at: atsi_recruitment@uq.edu.au

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