POSITION DESCRIPTION

Position Title: Software Developer
Organisation Unit: School of Chemistry and Molecular Biosciences
Position Number: TBA
Type of Employment: Full Time Fixed Term for 12 months
Classification: Hwe 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 (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 (60). 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 School of Chemistry and Molecular Biosciences (SCMB) combines the disciplines of Chemistry, Biochemistry & Molecular Biology, Microbiology and Parasitology into a single academic unit. The School has modern research laboratories with state-of-the-art equipment and research infrastructure. The School includes over fifty academic staff who are published internationally and have extensive research backgrounds.

The Australian Centre for Ecogenomics (ACE) is a strategic research initiative established at University of Queensland in 2010 under the direction of Professor Phil Hugenholtz and Professor Gene Tyson. It has since become a globally recognised hub of culture-independent microbiology, providing a focal point for sequence-based analysis of microbial communities. ACE is located on Level 5 of the Molecular Biosciences Building (#76) in the School of Chemistry and Molecular Biosciences (SCMB). More information about ACE and SCMB may be found on the web sites ACE Website and SCMB Website respectively.

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

The successful applicant will provide support to the bioinformatics team at ACE, comprised of >5 post-doctoral bioinformaticians including ARC DECRA and Future fellows researching human and animal-associated microbiomes as well as a diverse range of microbiology found in natural and artificial environments. The developer will be responsible for the production of informatic tools and analysis techniques that leverage large scale DNA and RNA sequencing data. Alongside a dedicated system administrator, they will also be involved in maintaining and improving the ACE server infrastructure that supports the research at ACE, currently ~1000 CPUs including 4 nodes with 1TB RAM.

Duties

Duties and responsibilities include, but are not limited to:

- Implementation of new bioinformatics programs in collaboration with other bioinformaticians
- Aiding the systems administrator in maintaining efficient server infrastructure
• Writing documentation of software where appropriate
• Maintaining helper scripts for the curation of the Genome Taxonomy Database (http://gtdb.ecogenomic.org/)

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 Professor Phil Hugenholtz ARC Laureate Fellow and Professor Gene Tyson ARC Future Fellow.

SELECTION CRITERIA
• Bachelor's Degree and Postgraduate Degree in Bioinformatics or equivalent experience
• Experience in project coordination
• Proficiency in at least one programming language, preferably Python
• Sufficient understanding of computational techniques to allow developed programs to operate with large input data
• Demonstrated analytical and problem resolution skills
• Proven ability to manage multiple projects while meeting challenging deadlines
• Ability to multitask and work collaboratively within a team
• Sound organisational and problem solving skills
• Excellent written and verbal communication skills
• Ability to work independently on set tasks

Desirable
• Post-degree experience in Bioinformatics
• Proficient in writing software under specifications evolving with scientific understanding
• Excellent working knowledge of Linux, particularly in a multi-user scenario
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

Applications are also encouraged from women.

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