POSITION DESCRIPTION

Position Title: Bioinformatician
Organisation Unit: Queensland Brain Institute
Position Number: 3037283
Type of Employment: Fixed Term (up to 6 months initially)
Classification: Hw 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 (65). 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 $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 Queensland Brain Institute works to understand the development, organisation and function of the brain. We aim to understand the neural circuits in the brain, how their function results in behavioural outcomes, and how dysfunction of these circuits leads to disorders such as dementia, Parkinson’s disease and schizophrenia. We aim to (1) Develop novel therapeutic approaches to treat disorders of neural function and (2) Use our understanding of brain function to improve learning in classrooms and in the workplace.

Established in 2003, QBI is housed on the St Lucia campus of UQ. It is home to more than 450 staff and students, including 41 group leaders.

Over the past decade QBI has become known as one of the world's leading neuroscience research institutes. It played a key role in contributing to UQ attaining the highest possible score of 5 for neuroscience, in both the 2010, 2012, and 2015 Excellence in Research for Australia (ERA) reviews, one of only two universities in Australia to achieve this.

Information about the Institute may be accessed on the Institute’s web site at www.qbi.uq.edu.au

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

To develop novel methods of analysing health related data, with a focus on the assessment of comorbidity between multiple health disorders. In particular, the successful applicant will develop data visualization tools to explore comorbidity, with software packages such as Shiny Apps and related software. The role will also provide general bioinformatics support related to database management of health related datasets (some publicly available). The person would liaise with staff at UQ and with staff at Aarhus University.

Duties

Duties and responsibilities include, but are not limited to:

- Develop new software applications or customize existing applications to meet specific scientific project needs.
- Consult with researchers to analyse problems, recommend technology-based solutions or determine computational strategies.
- Analyse large data sets involving health related data and/or genetic and genomic data.
- Improve user interfaces to bioinformatics software and databases.
- Create or modify web-based bioinformatics tools.

Other
Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:
- 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 Professor John McGrath, or his delegate, at the Queensland Brain Institute.

SELECTION CRITERIA

Essential
- Qualifications and training equivalent to at least masters-level degree in bioinformatics or related disciplines or an equivalent combination of relevant experience and/or education/training.
- Sound knowledge and understanding of data management and data visualization software.
- Ability to handle large health-related datasets.
- Ability to develop data visualization tools to display health related variables.
- Experience in using R or related statistical software.
- Experience in the use of Python and Linux environments.
- Experience in the use of a wide range of computer applications in a network environment.
- Excellent interpersonal skills including the ability to communicate effectively with clients by telephone, email and in person.
- Ability to prioritise own workload, work independently and meet deadlines.

Desirable
- Development of websites for the display of health-related figures and software.
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 the contact person listed in the job advertisement.