POSITION DESCRIPTION

Position Title: Senior Research Assistant
Organisation Unit: Queensland Alliance for Agriculture and Food Innovation
Position Number: 3049649
Type of Employment: Full time, Fixed term
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 well within the top 100 universities worldwide, measured through a number of major independent university rankings: the Academic Ranking of World Universities, Times Higher Education World University Rankings, US News Best Global Universities Rankings, QS World University Rankings and Performance Ranking of Scientific Papers for World Universities, and is indeed in the top 50 in some of these rankings.

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 Australian Teaching and Learning Council Awards for Teaching Excellence 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, and a founding member of Universitas 21, an international consortium of leading research-intensive universities. UQ is also the largest university in Queensland.

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 215,000-plus alumni. The University has more than 7,000 academic and professional staff and a $1.6 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 Alliance for Agriculture and Food Innovation (QAAFI) is a research institute of the University of Queensland (UQ) which was established in 2010 and comprises of four research centres – the Centre for Crop Science, the Centre for Horticultural Science, the Centre for Animal Science and the Centre for Nutrition and Food Sciences.

QAAFI’s team of 450 researchers, postgraduate students and support staff undertake high impact science for agriculture and food industries. The institute’s strong partnership with the Queensland Government provides our researchers with a direct link to the agriculture industry in Queensland, and world class field research facilities throughout Queensland. Agriculture is one of UQ’s highest ranked research fields nationally and internationally and QAAFI is a global leader in agricultural research in subtropical and tropical production systems.

QAAFI scientists are driven to make a difference to the agriculture and food industries and have over 150 collaborators worldwide.

The Hy-Gain project (Hy-Gain), funded by the Bill and Melinda Gates Foundation is a multi-party international research project comprising seven world leading teams aiming to develop a novel technology to increase seed yield and productivity in sorghum and cowpea crops for smallholder farmers in sub-Saharan Africa. This exciting 5-year project, is led by QAAFI with the project director, Prof Anna Koltunow, based in the Centre for Crop Science. The project director's location is split between Brisbane and Adelaide. Hy-Gain aims to ensure the technology is compatible with plant breeding to support the future, rapid delivery of new high yielding sorghum and cowpea hybrids and improved varieties. Hy-Gain involves research work at multiple sites in Queensland (Hermitage at Warwick; Gatton and St. Lucia) and collaboration with five international research organisations and a multinational seed company. The project has some fundamental discovery work, however its key aim is building and testing the utility of the technology in plants under controlled glasshouse and field conditions with evaluations involving input from African sorghum and cowpea breeders. The research objectives span molecular work in the laboratory to field work involving genetic, genomic and transgenic technologies and testing reproductive productivity of plants in glasshouse and in the field. Communication and collaboration between the parties to efficiently achieve goals, protection of discoveries, dissemination of data to the public via scientific publications and web-based media are important outcomes of the project.

Details of the research interests of the Institute may be accessed on the Institute’s web site at http://www.qaafi.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 support research in the area of sorghum and cowpea transformation to develop new plant prototypes with altered reproductive development. Support analysis of reproductive modes and seed yield in prototypes and genetic analyses of sorghum and cowpea plants.

Duties and responsibilities include, but are not limited to:

Research
- Participate in the planning, development and conduct of plant research in laboratory, glasshouse and field environments at St Lucia and Gatton. Help to maintain overall strategic direction of the project.
- Excellent research management skills including accurate records of project activities and an ability to communicate them effectively to the project leader.
- Contribute to the preparation of scholarly papers for high quality refereed journals, conference presentations, and reports for funding bodies.
- Maintain absolute confidentiality regarding the results of the project where appropriate and when requested and comply with the project processes/schedules in the Hy-Gain collaborative agreement.
- Implement Laboratory Information Management System (LIMS) to ensure stewardship and traceability of all research components.
- Supervise and assist other projects, staff and students with laboratory, glasshouse and field experimentations as required.
- Proactively work with colleagues and students in the crop science group to grow effective research capabilities.
- Work with colleagues and postgraduates in the development of joint research projects.

Administration
- Provide general laboratory support, including procurement of equipment, ordering and maintaining consumables;
- Assist with monitoring of research project budgeting;
- Detailed documentation of experiments and results;
- Induct new lab members to ensure material and IP stewardship and biosecurity regulations (eg Biosecurity Australia and OGTR) are adhered to in all dealings
- Maintain accurate and up to date laboratory book records;
- Day-to-day supervision of two project Research Assistants;
- Any other duties as reasonably directed by your supervisor.
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 Associate Professor Brett Ferguson.

SELECTION CRITERIA

**Essential**

- A degree in a relevant field with at least four years subsequent relevant experience; or an equivalent combination of relevant experience and/or education/training. A postgraduate research degree (PhD or Masters) would be highly regarded.
- Expert knowledge in the area of gene discovery, cloning, genetic transformation and plant biology, ideally with a strong knowledge of crop plants and plant experimental systems in glasshouse and field experiments.
- Strong research experience in plant molecular genetics with recognised contributions in bioinformatics and using plant genomes and associated databases with appropriate statistical skills.
- High level of professional integrity, with excellent organisational and problem-solving skills and the ability to maintain efficient functioning of laboratory equipment.
- Excellent interpersonal skills including the ability to communicate effectively and work collaboratively within a team.
- Time management skills and demonstrated ability to work within deadlines with limited supervision.
- Experience with supervision of staff and students.

**Desirable**

- Experience with analyses of plant reproductive development.

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.

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