POSITION DESCRIPTION

Job Title: Postdoctoral Research Fellow in Sorghum Genetics
Organisation Unit: Queensland Alliance for Agriculture and Food Innovation
Position Number: 3027416
Type of Employment: Full-time, fixed term for 2 years, with the possibility of extension subject to funding and performance
Classification: Academic Level A

BACKGROUND

Organisational Environment

The Federal Government’s 2012 Excellence in Research for Australia exercise confirmed The University of Queensland as one of the nation’s top three universities, measured by the quality of its comprehensive range of specialised research fields. ERA reported that research at UQ is well above world standard in more specialised fields than at any other Australian university: this reflects UQ’s leading global role in many areas of discovery. UQ’s outstanding critical mass offers researchers significant interdisciplinary capability.

UQ integrates its research strengths with excellent teaching and learning and has won more national teaching awards than any other Australian university. International university rankings highlight UQ’s excellence: Academic Ranking of World Universities (Shanghai Jiao Tong), Times Higher Education, QS and National Taiwan University Ranking all rank UQ in the top 100. 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’s 45,500-strong student community includes more than 10,000 postgraduate scholars and more than 11,000 international students from 162 countries. 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, Ipswich, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six faculties and eight institutes. The institutes — funded by government and industry grants, philanthropy and commercialisation activities — have built scale and focus in research areas that UQ regards as strategically important.

The Queensland Alliance for Agriculture and Food Innovation (QAAFI) is a unique research institute in Australia as it is a jointly funded initiative of UQ and Agri-Science Queensland and Biosecurity Queensland, part of the Department of Agriculture, Fisheries and Forestry (DAFF). QAAFI conducts research and development to benefit the food and fibre sector both nationally and internationally.

The Institute’s strengths are reflected in its three research centres – the Centre for Plant Science, the Centre for Animal Science and the Centre for Nutrition and Food Sciences. QAAFI brings together scientists from UQ and DAFF to conduct high-end science that delivers higher impact outcomes for industry and the community.

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 can be found at http://www.uq.edu.au/uqjobs/

Schedule 10 of The University of Queensland Enterprise Agreement 2010 – 2013 outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

This position will be part of a team of people investigating the genetic control of photosynthetic and male fertility traits in grasses using sorghum as a model.

The successful applicant will have a strong background in the genetic dissection of complex traits and will use these skills to design and analyse experiments to map factors controlling photosynthetic and male fertility traits using a range of pre-existing genetic and genomic resources including a nested association mapping population, a diversity panel, multiple bi-parental populations and an EMS mutant population. A critical aspect of the position will be to engage with team members across disciplines including physiologists, geneticists, molecular biologists and plant breeders.

In addition the successful applicant will contribute their expertise to other projects within the broader sorghum improvement program.

Duties

Duties and responsibilities include, but are not limited to:

- Plan, conduct, analyse and interpret experiments designed to dissect the genetic control of photosynthetic and male fertility traits in sorghum in collaboration with other team members
- Contribute to the management of project budgets
- Assist with the supervision of staff and students in the areas defined above
- Assist in the preparation project reports to funding agencies
- Publish research results from the project in international peer-reviewed journals
- Assist with continuing applications for research funding in the areas defined above
- Contribute to the design, analysis and interpretation of experiments in other projects within the broader sorghum improvement program.

Other

- Comply with the University’s Code of Conduct (see the University’s web site at http://www.uq.edu.au/hupp/?page=24987
- Comply with requirements of Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or School. (see the University’s web site at http://www.uq.edu.au/ohs/index.html?page=133956)
- Adopt sustainable practices in all work activities and comply with associated legislation and related sustainability responsibilities and procedures developed by the University (see the University’s web site at http://www.uq.edu.au/sustainability/responsibilities
**Reporting Relationships**

The position reports to Dr David Jordan Principal Research Fellow, QAAFI (CPS).

**SELECTION CRITERIA**

**Qualifications**

*Essential*
- To possess, or have submitted, a PhD in the area of genetic mapping in plants.

**Knowledge and Skills**

*Essential*
- Sound conceptual, investigative and analytical skills in genetics
- Demonstrated capacity to manage and analyse large data sets
- Demonstrated capacity to write and publish in international peer-reviewed journals
- Well-developed oral and written communication skills

*Desirable*
- Knowledge and skills in plant physiology, reproductive biology and photosynthesis
- Knowledge and skills in high throughput phenotyping or remote sensing
- Ability to explain complex ideas to both technical and non-technical audiences.

**Experience**

*Essential*
- Demonstrated experience in either genetics or genomics or plant breeding, particularly in cereals
- Demonstrated experience in undertaking genetic research projects with a strong statistical element.
- Demonstrated experience in organising tasks, work effectively in multi-disciplinary teams or individually and meet deadlines.

*Desirable*
- Experience with preparation of research project funding applications
- Experience with preparation and monitoring of budgets
- Experience with supervision of staff and students

**Personal Qualities**

*Essential*
- A strong commitment to develop a high impact research career
- Good interpersonal skills, including the initiative, drive and flexibility to achieve results.

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**The University of Queensland is an equal opportunity employer.**

Smoking is prohibited in all University buildings.