POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: Queensland Alliance for Agriculture and Food Innovation
Position Number: 3042104
Type of Employment: Fixed term for 24 months, full time.
Classification: Research Academic Level A

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 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.

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

This position will be part of a team developing an integrated disease management plan for couch smut (*Ustilago cynodontis*), a pathogen of green couch (*Cynodon dactylon*). The research will involve five major components: a literature review, surveys for couch smut in three states (QLD, NSW and WA), fungicide trials, disease resistance screening, and elucidation of the disease cycle, particularly the potential role of mowing in fungal transmission.

Duties

- Plan, conduct, analyse and interpret experiments aimed at addressing the milestones of the project.
- Undertake couch smut disease surveys in Queensland, New South Wales and Western Australia.
- Design and undertake glasshouse and small plot field trials to investigate the efficacy of fungicides at controlling couch smut.
• Present project updates and final integrated disease management plan to turf industry scientific advisory panel.

• Assist project leader with preparation of milestone and final reports for the funding body.

• Publish research results from the project in international peer-reviewed journals.

• Work with colleagues and other collaborators in the development of joint research projects.

• Supervision of honours and postgraduate students, in defined areas.

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 the Senior Research Fellow, Dr Andrew Geering and Professorial Senior Research Fellow, Professor André Drenth.

SELECTION CRITERIA

Essential

• PhD in the area of Plant Pathology or Microbiology.

• Demonstrated expert knowledge and experience in mycological techniques, including light microscopy, aseptic techniques, culturing fungi on artificial growth media, and inoculation of plants with spore suspensions.

• Demonstrated expert knowledge and experience in use of PCR for pathogen detection.

• Demonstrated expert knowledge and experience with running glasshouse or field trials.

• Knowledge of plant disease survey techniques.

• Ability to work collaboratively with colleagues.

• A strong commitment to develop a high impact research career.

• Strong oral and written communication skills, including the ability to tailor messages for different audiences (e.g. scientists, farmers).
• Good interpersonal skills, including the initiative, drive and flexibility to achieve results.

**Desirable**

• Developed industry liaisons and professional contacts.
  • Knowledge and experience working with basidiomycetes.

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.