POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: Centre for Animal Science - Queensland Alliance for Agriculture and Food Innovation
Position Number: 3043996
Type of Employment: Part Time, fixed term
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-ug

The University of Queensland Enterprise Agreement outlines the position classification standards for Levels A to E.

DUTY STATEMENT

Primary Purpose of Position

To engage, as a Researcher, in postgraduate research, postgraduate supervision, and further development in the Institute’s Centre for Animal Science, as well as performing research, administrative and other activities associated with the Institute and its Integrated Parasite Management Research Unit.

The Postdoctoral Scientist (PDS) will play a key role in a project entitled ‘Nanotechnology for prolonged flystrike and lice control’. This project is funded through Australian Wool Innovation and will be conducted in collaboration with the researchers from Australian institute of Bioengineering and Nanotechnology and an industry partner. The position will involve the iterative design and testing of nanoparticles with purpose-designed adherence and release characteristics that are suitable for application to sheep and can give prolonged periods of protection against sheep ectoparasites. Duties of this position include the design
and conduct of research to define the effect of formulation parameters on the uptake and toxicity of nanoparticles by sheep ectoparasites and to determine the dynamics of different formulations in the sheep wool-skin ecosystem. The Postdoctoral Fellow will also assist in the supervision of postgraduate and undergraduate students associated with the project, and will link with researchers in AIBN and an industry partner towards the design of optimal nano-particle formulations for sheep flystrike and lice control.

The PDS will be situated in the Centre for Animal Science, Queensland Alliance for Agriculture and Food Innovation in Brisbane.

Duties

Duties and responsibilities include, but are not limited to:

**Teaching and Learning**
- Assist the supervision of undergraduate, honours and postgraduate students associated with the project

**Research**
- Play a lead role in the design and conduct of the entomological component of research toward the development and testing of nanoparticle formulations
- Publish scholarly papers
- Contribute to the preparation of milestone reports, budget management for the project and other project administration as applicable
- Interact regularly with colleagues and postgraduates at AIBN and industry collaborators toward the design of optimal and functional nanoparticle formulations

**Service and Engagement**
- Perform administrative functions in the Institute as appropriate, such as OH&S committees, biosafety committees, event organising committees etc
- Contribute to the processes that enable the academic team to manage the work of the Institute, including participate in Institute decision-making and serve on Institute committees
- Foster the Institute’s relations with industry, government departments, professional bodies and the wider community.
- 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 the Group Leader and supervises students and casual staff.
SELECTION CRITERIA

Essential

- PhD in the area of entomology, parasitology or an associated biological discipline
- Demonstrated computer skills for data analysis and project management
- Sound background in experimental methodology and the design, conduct and analysis of entomological experiments
- Demonstrated expert knowledge in the area of insect biology
- Ability to support Honours and/or postgraduate students
- An ability to establish effective relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies.
- Evidence of a contribution to research, including successful external grant applications.
- Ability to work collaboratively with colleagues.

Desirable

- Experience with insect rearing and the design and analysis of insecticide assays
- Good knowledge of insect structure and function, insect physiology and insecticide toxicology
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.

Please refer to the Criteria for Academic Performance policy PPL 5.70.17 when developing the duties and selection criteria for academic roles

Qualification Verification

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

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.