POSITION DESCRIPTION

Position Title: Research Fellow
Organisation Unit: School of Agriculture and Food Sciences
Position Number: New
Type of Employment: Full Time, Fixed Term for 1 year
Classification: Research Academic Level B

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 CWTS Leiden Ranking (32), the Performance Ranking of Scientific Papers for World Universities (43), the US News Best Global Universities Rankings (42), QS World University Rankings (48), Academic Ranking of World Universities (55), and the Times Higher Education World University Rankings (69). Excluding the award component, UQ is now ranked 45th in the world in the ARWU, and is one of the only two Australian universities to be included in the global top 50.

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 52,000-plus strong student community includes more than 16,400 postgraduate scholars and more than 15,400 international students from 135 countries, adding to its proud 250,000-plus alumni. The University has more than 6,600 academic and professional staff (full-time equivalent) and a $1.75 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 School of Agriculture and Food Sciences is part of the Faculty of Science and is located at UQ’s St Lucia and Gatton campuses. It is one of the largest schools of its type in Australia, comprising research and teaching experts in agribusiness and rural development; animal, equine and wildlife science; plant and soil sciences; and food science and technology. The School contributes to UQ’s high standing as one of the world’s top 20 universities for agricultural sciences and Australia’s leading agriculture institution.

The School is a dynamic multidisciplinary hub, maintaining strong partnerships with industry, government and community, and integrating fundamental and applied research to find innovative and technology-focused solutions to global challenges. It teaches into a high number of undergraduate, postgraduate coursework and higher degree by research degree programs that encompass agriculture and related disciplines.

Staff and students have access to UQ’s world-class facilities, including the Food Science Innovation Precinct, which comprises laboratories for food grading and chemical and microbiological analysis, as well as the Queensland Animal Science Precinct and equine and poultry research units.

The School’s diverse research expertise covers:

- **Agribusiness and rural development**: researchers investigate issues and emerging opportunities in industry and market development, agricultural development and food security, natural resource management, and rural community development. Focus areas include agribusiness, agricultural economics, resource economics, community development and systems analysis;
- **Animal, equine and wildlife science**: working with production animals (livestock and poultry), horses and wildlife, experts seek to address major contemporary issues such as sustainability, animal welfare, biodiversity, climate change and food/feed security;
- **Food science and technology**: colleagues aim to improve the taste, quality, appearance, nutritional value and safety of food, and ultimately to help enhance global health outcomes and economic benefits. They are affiliated with the UQ Queensland Alliance for Agriculture and Food Innovation’s Centre for Nutrition and Food Sciences and focus on food materials science and engineering, food microbiology, genomics, food sensory science, food chemistry and physical properties, and nutrition;
- **Plant and soil sciences**: aiming to develop cross-disciplinary solutions to the challenge of increasing food production while improving environmental outcomes, research activities span fundamental science that underpins innovation through to pragmatic field-based research that directly informs end-users and policy-makers.

For more information, visit the School of Agriculture and Food Sciences website: agriculture.uq.edu.au.
DUTY STATEMENT

Primary Purpose of Position

To develop new molecular diagnostic technologies, as well as lead and co-ordinate the research team, to ensure projects meet their objectives.

Duties

Duties and responsibilities include, but are not limited to:

Research

• Develop a research program focused on the development of diagnostic tools for resource limited environments

• Develop research focusing on the design and application of both isothermal and thermocycling DNA amplification technologies for diagnostic detection of pathogens including rigorous testing to ensure their robustness and reliability

• Maintaining detailed records of experiments and results

• Actively protect new intellectual property arising from the project

• Conduct independent, innovative research and publish scholarly papers in leading research journals

• Prepare research reports as required by the project

Teaching and learning

• Supervise Honours, Masters and PhD research projects

• Perform limited undergraduate teaching as part of the career advancement plan

• Consult with students at all levels, including vacation and visiting scholars where required.

Service and Engagement

• Engage with academic and industry partners to evolve and grow existing and future collaborations.

• Assistance with maintenance of finance records and obligations.

• 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 Professor Jimmy Botella, School of Agriculture and Food Sciences.
SELECTION CRITERIA

- PhD in the area of molecular biology, biotechnology, plant pathology or a relevant related discipline.
- Knowledge and experience in developing and maintaining electronic circuits and devices including the ability to program associated microprocessors
- A track record of innovative and independent research
- Evidence of a contribution to research, including publication of high impact peer reviewed journal articles and successful external grant applications that support independent and collaborative research
- Demonstrated national recognition in the fields of diagnostics or molecular biology
- An ability to establish relationships and to represent and promote academic discipline at a university and wider community level, including industry, government and professional bodies
- Evidence of effective supervision of Honours and Higher Degree by Research students.
- Commitment to upholding the University’s values, and with the outstanding personal qualities of openness, respectfulness and integrity

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.