POSITION DESCRIPTION

Position Title: Postdoctoral Research Fellow
Organisation Unit: School of Veterinary Science
Type of Employment: Part Time (0.80FTE) Fixed Term (3 years)
Classification: Research Academic Level A
Location: Gatton

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 School of Veterinary Science has a rich history, having been founded in 1936, and with a reputation for graduating highly capable veterinarians. The Veterinary Science program at UQ has full accreditation with the Australasian Veterinary Boards Council, the Royal College of Veterinary Surgeons and the American Veterinary Medical Association. The School also contributes to programs in veterinary technology and animal & veterinary bioscience. The respected QS World Rankings recently ranked UQ as 22nd in the world in the field of Veterinary Science.

The School of Veterinary Science has high quality facilities at the UQ Gatton Campus, providing the teaching, research and clinical infrastructure and resources to further develop its strong reputation as a leading provider of veterinary training, research and clinical care.

The Veterinary Teaching Hospital is an organisational unit within the School that includes all of the School’s outstanding clinical facilities. UQ VETS Equine Hospital is largely referral based hospital with advanced facilities and offers a 24 hour emergency medical and surgical service. UQ VETS Small Animal Hospital boasts the latest in veterinary medical and surgical diagnostic and treatment options and a 24 hour Emergency and Critical Care service for small animals including wildlife/exotics. UQ VETS Dayboro is a mixed practice 45 minutes north of Brisbane servicing both commercial and hobby farmers offering a balanced mix of small and large animals. The UQ VETS Clinical Studies Centre facilitates and provides support to pre-clinical and clinical training in companion animals as well as a renowned research hub for clinical and behavioural research. The Centre includes a 16 – table surgical teaching facility, and is also used for veterinary continuing education events. The Clinical Studies Centre is also home to the School's Pets-for-Life Adoption Program. UQ staff also supervise clinical placements at the RSPCA's Brisbane Animal Care Campus, Wacol.

The UQ Veterinary Laboratory Services provides an efficient pathology service to the hospitals and other clients through our core disciplines of clinical pathology, anatomical pathology, microbiology and parasitology. It also provides laboratory support for veterinary teaching and research.

The school opened the Student Clinical Skills Hub in May 2016. This facility houses a range of low and high fidelity models to reduce use of live animals and cadavers in teaching, and to enhance veterinary clinical skills training. With 24/7 swipe-card access, individual students can practice their clinical skills until they are confident and competent. The facility also has a simulated client communications laboratory with both static, online, and interactive simulations, and access to a range of training models to facilitate development of fine motor skills (e.g. suturing), procedural techniques, and cognitive/diagnostic competences.

Information about the Faculty and the School may be accessed on the Faculty’s web site at http://www.uq.edu.au/vetschool/.
DUTY STATEMENT

Primary Purpose of Position

To engage in full time research, as a postdoctoral research associate, on developing novel spatial epidemiological methods for integrating within farm Q fever transmission and environmental Q fever recovery data.

The primary purpose of this work is to work with Dr. Ricardo Soares Magalhaes (primary supervisor) and Prof Mark Stevensen (University of Melbourne) on developing novel spatial epidemiological methods for integrating within farm Q fever transmission and environmental Q fever recovery data, to answer major questions in a) Q fever transmission management at the farm level and b) uncover mechanisms that underpin geographical dispersion of C. burnetti in the surrounding environment including wildlife and invertebrates.

This research is associated with the Rural Industries Research Development Corporation Grant, “Taking the Q out of Q fever”. We are particularly interested in adapting recently developed spatial modelling technics that allow the use of environmental variables and incorporate empirical observations of spatiotemporal variation in environmental contamination, with the view to better inform Q fever farm management protocols. The research focuses on goat dairy farms but has the goal of measuring environmental sources of infection including marsupial mammals.

It is expected that the candidate will also engage in undergraduate and postgraduate teaching, postgraduate supervision, and further development of the School’s One Health program, as well as performing research, administrative and other activities associated with the School and its UQ Spatial Epidemiology Laboratory (www.spataleplab.com). The position will also support the group’s broader research interests in infectious disease spatial epidemiology and provides opportunities to travel to study sites in Victoria, New South Wales and Queensland and collaborate internationally. This position allows some flexibility in project development to suit the appointees’ strengths.

Duties

Duties and responsibilities include, but are not limited to:

Research
- Developing spatial epidemiological methods that integrate statistical models of disease risk with mathematical models of disease transmission.
- The research involves field-based data collection on environmental indicators of Q fever contamination, including marsupial mammals and invertebrates around goat dairy farms but has the goal of making the methods developed applicable for inform Q fever management plans across all types of animal holdings. This may include the development of a relevant Q fever management plan package for livestock industries.
• Assisting with writing project reports as required and undertaking associated administrative functions.
• Preparing and publishing research outcomes in leading refereed journals and presenting research outcomes at national and international meetings.
• Initiating and undertaking independent research that advances the goals of the research group.
• Co-supervising postgraduate students in areas relevant to the research.
• Contributing to writing research funding grants.
• Maintaining research confidentiality and conforming to all requirements for the protection of intellectual property.
• Being accountable for complying with health and safety policies, procedures, hazard reports and safe work practices.

Teaching and Learning
• Teach undergraduate subjects in the VETS1030: One health program and other programs as required.
• Teach and supervise at honours and postgraduate level
• Where appropriate teach subjects in flexible delivery mode
• Consult with students
• Provide support for other positions during absences.

Service and Engagement
• Develop and maintain the communication platforms for the project including social media and organise stakeholder research dissemination workshops.
• Participate in School decision-making and serve on School committees
• Foster the School’s relations with industry, government departments, professional bodies and the wider community in the context of the project.
• 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:
  • 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 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

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Organisational Relationships
The position reports to the Dr. Ricardo Soares Magalhaes.

SELECTION CRITERIA

Essential
- PhD qualification and postdoctoral experience in either epidemiology or ecology of zoonotic diseases or spatial epidemiology.
- A proven research track record in the development of models of zoonotic disease ecology and/or spatial and ecological factors associated with the geographical variation of zoonotic pathogen populations, and their dissemination in the environment.
- Demonstrated experience with field work involving environmental sampling of reservoirs of zoonotic diseases.
- Well-developed interpersonal skills with a demonstrated ability to work collaboratively as part of a team.
- Proven ability to work effectively with minimal supervision to initiate, execute and report research within prescribed timelines.
- Well-developed written and oral communication skills with a demonstrated track record in publishing in high quality journals and presenting at conferences.
- Ability to actively participate in and contribute to establishing and maintaining an effective safe and healthy workplace.

Desirable
- Evidence of a contribution to research, including successful external grant applications.
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.
- Demonstrated teaching skills at undergraduate and/or postgraduate levels in the area of One Health.

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.

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