POSITION DESCRIPTION

Position Title: Senior Research Fellow in Wastewater-based Epidemiology
Organisation Unit: Queensland Alliance for Environmental Health Sciences
Position Number: 3041555
Type of Employment: Full time, fixed term (12 months)
Classification: Academic Research Level C

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.

**Faculty of Health and Behavioural Sciences**

The Faculty of Health and Behavioural Sciences is a strong faculty that has a coherent focus on health and well-being underpinned by a clear integrative theme related to preventative health and behaviour change. Furthermore, the Faculty provides the opportunity for the non-medical health sciences to have a stronger voice and greater visibility within the University.

The Faculty currently includes six schools and five research centres:

- School of Dentistry
- School of Health and Rehabilitation Sciences
- School of Human Movement and Nutrition Sciences
- School of Nursing and Midwifery and Social Work
- School of Pharmacy
- School of Psychology
- Centre for the Business and Economics of Health
- Centre for Youth Substance Abuse Research
- Recover Injury Research Centre
- Queensland Alliance for Environmental Health Sciences
- Poche Centre for Indigenous Health

More information about the Faculty is available at: [http://habs.uq.edu.au/](http://habs.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](http://www.uq.edu.au/current-staff/working-at-uq)

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

**Queensland Alliance for Environmental Health Sciences**

The Queensland Alliance for Environmental Health Sciences (QAEHS) is a new research Centre, funded by Queensland Health and The University of Queensland that is committed to establishing and maintaining multidisciplinary research expertise across a range of environment health sciences. These include environmental aspects of toxicology, human health epidemiology, microbiology, health risk assessment, health risk communication, identification and analysis of emerging environmental health risks, and state-of-the art monitoring and analytical techniques, methodologies and technologies for environmental hazards and exposures. The Faculty is strongly committed to the advancement of quality inter-professional education and genuine inter-disciplinary research in the health sciences. Further information is available at [www.health.uq.edu.au/habs](http://www.health.uq.edu.au/habs).
QAEHS will work closely with Queensland Health to develop its research directions, and to provide expert opinion and advice, as well as relevant training for Queensland Health staff. In addition, staff will pursue research excellence through competitively funded research and government or private consultancies. Supervision of research students and some coursework teaching are other core components of QAEHS’ activities.

**DUTY STATEMENT**

**Primary Purpose of Position**

The role of the Senior Research Fellow is to conduct independent research to strengthen QAEHS’s leading position in the field of wastewater-based epidemiology (WBE). The scope of research could include evaluation and application of different wastewater sampling schemes/techniques, evaluation of chemical transformation in sewer systems using laboratory and/or field experiments in combination with trace analytical methods such as LC-MSMS, evaluation and refining of other uncertainty factors contributing to the estimates of WBE, and the development and validation of new applications for WBE.

This position will supervise students engaged in these activities and will also be expected to apply for both independent and collaborative funding to support the research focus.

**Duties**

Duties and responsibilities include, but are not limited to:

**Research**

- Develop research proposals in the area of wastewater-based epidemiology and related environmental monitoring with a focus on the transformation of chemicals in sewer and wastewater treatment systems.
- Work with colleagues and demonstrate leadership in the development of joint research projects, resource management and monitoring programs.
- Conduct research of the highest international standard and publish scholarly papers in high quality outlets, and present findings at relevant seminars and conferences.
- Contribute as a chief investigator to collaborations which yield new insights and opportunities, and obtain and successfully manage external competitive research funds.
- Manage research and consultancy projects to deliver timely outcomes.
- Contribute to the effective supervision of professional research staff undertaking duties relevant to the research process and management of the research projects.
- Contribute to supervision and training of Honours and HDR students undertaking studies in related research fields, as required.
- Support QAEHS in collaboration with existing academics and support staff.
- Enhance the international reputation of UQ and QAEHS in wastewater-based epidemiology.
Service and Engagement

- Contribute to the processes that enable the academic team to manage the work of QAEHS, including serving on QAEHS committees.
- Foster QAEHS' relations with industry, government departments, professional bodies and the wider community.
- Provide expert advice to UQ staff and students to advance their research and funding opportunities.
- Any other duties as reasonably directed by your supervisor.
- Perform a range of administrative functions necessary to support project work.

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 Theme Leader, Emerging Environmental Health Risks group, QAEHS.
SELECTION CRITERIA

**Essential**
- A PhD in Environmental Science with an established record of achievement in independent research.
- Demonstrated high level of independent research capability and research leadership in WBE.
- Evidence of a contribution to research, including external grant applications and publication in high quality peer-reviewed outlets (e.g. ES&T, Environment International, Water Research).
- Evidence of national recognition and have a developing international profile for research in the field.
- Demonstrated experience in leading collaborative projects with external agencies, including Government and/or Industry.
- A high level of communication and inter-personal skills to work both independently and collaboratively as part of a team.
- Demonstrated supervisory skills, including post graduate student supervision.
- An ability to establish effective relationships and to represent and promote your research at a university and wider community level, including industry, government and professional bodies.

**Desirable**
- Developed industry liaisons and professional contacts.
- Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.

**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.