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 investigating functional food components in Australian native plants and other horticultural produce using state-of-the-art UHPLC-MS/MS technique as well as stable isotope dilution assays. The research component will involve assessing antimicrobial and antioxidant properties of native Australian plant foods using a diverse range of techniques validated for industrial applications.

Duties

- Plan, conduct, analyse and interpret experiments designed to isolate and identify different phytochemicals present in food matrices. Assess the efficacy of blends of plant bioactive compounds using validated anti-microbial and antioxidant assays.
- Operating complex analytical instruments such as semi-prep. LC and UHPLC-MS/MS to separate, purify, identify and quantify phytochemicals, derived degradation products, vitamins and sugars.
- Ability to develop and optimise methods published in scientific journals/literature.
- Writing of project reports to clients, discussing results and further trials.
• Publish research results from the project in international peer-reviewed journals.
• Applications for research funding in the areas defined above.
• 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 A/Professor Yasmina Sultanbawa and Dr Michael Netzel.

SELECTION CRITERIA

Essential
• PhD in the area of Food Chemistry.
• Demonstrated expert knowledge in isolation, identification, quantification, characterisation and chemistry of phytochemicals in different plant matrices relevant for food, including nutrition and health properties.
• Experience in operating analytical instruments (e.g. UHPLC-MS/MS).
• Experience in sample preparation procedures for plant material such as accelerated solvent extraction (ASE) and separation techniques.
• Evidence of a contribution to research, including successful external grant applications.
• Demonstrated previous experience in a leadership role, including taking ownership of projects, liaising and reporting to clients and the chief investigator and coordinating lab and scale up trials.
• Experience in writing proposals for targeted funding bodies as well as manuscripts for high-impact scientific journals.
• Ability to work collaboratively with colleagues.
• A strong commitment to develop a high impact research career.
• Good interpersonal skills, including the initiative, drive and flexibility to achieve results.

Desirable
• Developed industry liaisons and professional contacts.
• Knowledge in bioaccessibility, in vitro digestion systems and bioactivity assays such as a-amylase activity are desirable.
• Experience in liaising and collaborating with external agencies to develop co-operative research initiatives.

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.