

Latest News from The University of Queensland October 2021

Top Stories

Partnership ignites new medical R&D Lab

A specialised medical research facility that will transform ground-breaking research into new medical equipment and technology is set to be established in Queensland, at the Herston Health Precinct. Global medical technology group Stryker will establish its first Australian research and development facility in Queensland, thanks to support from the Queensland Government, The University of Queensland and Queensland University of Technology.

Alumni community shines

A philanthropist, world-leading orchestra conductor and an acclaimed author are among University of Queensland 2021 Alumni Awards recipients.

Pandemic linked to rising rates of depressive and anxiety disorders

Cases of major depressive and anxiety disorders have <u>increased by more than 25 per cent worldwide</u>, according to a world-first study of the impact of COVID-19 on mental health.

Landmark study links post-natal depression and low income

A longitudinal study of Queensland families has found women on lower incomes are more likely to suffer with pre and post-natal depression.

Plant proteins to 'meat' changing consumer demands

UQ engineers and food scientists are on a <u>mission to make plant-based food more nutritious and taste better</u> as part of a three-year Australian Research Council project in partnership with US-based Motif FoodWorks, Inc., a food technology company.

\$1.2m to fuel brain development in under fives

A digital toolkit designed by UQ researchers has been <u>awarded \$1.2 million over three years</u> from the Australian Government Department of Health, under the Public Health and Chronic Disease Grant Program.

Student Achievements and Teaching and Learning

- UQ medical student, Zhen-Yi Andy Ouhas, been awarded a prestigious fellowship to <u>research the</u> debilitating nervous system disorder, Parkinson's Disease.
- MD-PhD candidate Rosie Stoke has won The University of Queensland's 2021 <u>Three Minute Thesis</u> (3MT) Competition and will go on to represent UQ in the Asia-Pacific 3MT Competition in October.
- The Australian Brain Bee Challenge Queensland Finals winner Caitlin Wadley and runner-up Marcus Paice have enjoyed an internship at QBI following their success in the neuroscience competition.
- The School of Economics launched their <u>Economics Undergraduate Indigenous Scholarship</u>, a fee waiver scholarship open to students of Aboriginal and Torres Strait Islander background who are experiencing financial hardship and are interested in studying economics.

Research, Discover and Partnered Innovation

Grants and Funding

• Dr Kirsty Short has been awarded \$1.37 million from the National Health and Medical Research Council (NHRMC) to use her understanding of the immune response in COVID-19 and influenza to <u>investigate a future pandemic response</u>.



- The Australian Research Council (ARC) has <u>awarded seven Future Fellowships</u> to UQ researchers.
- Important UQ research projects addressing challenges from skin cancer to traffic injuries have been awarded more than \$50 million from the <u>National Health and Medical Research Council (NHMRC)</u> grants.
- Increasing access to <u>cost effective</u>, <u>evidence-based treatment for alcohol and drug use</u> is the focus of a UQ-led Centre of Research Excellence (CRE) funded by the National Health and Medical Research Council.
- UQP author Ellen van Neerven, whose book of collective poems, *Throat*, won the 2021 Book of the Year in the NSW Premier's Literary Awards, has been <u>awarded a prestigious Sidney Myer Creative Fellowship</u> worth \$160,000 over two years.

Discoveries

- Using the world's most powerful radio antenna, scientists have discovered stars unexpectedly blasting out radio waves, possibly indicating the <u>existence of hidden planets</u>.
- According to a UQ study, women with <u>undiagnosed endometriosis</u> will have difficulty falling pregnant without IVF.
- A new generation of cheap, <u>sustainable and efficient solar cells</u> is a step closer after AIBN researchers successfully modified a nanomaterial to make solar cells as efficient as silicon-based cells, but without their high cost and complex manufacturing.
- UQ researchers are optimistic the value and versatility of one of the world's top crops will be improved following the discovery of genes which could <u>increase the grain size of sorghum</u>.
- A national plan to <u>restore habitat on marginal farming land</u> would fight climate change, prevent species loss and put money in farmers' pockets.
- Researchers have identified key molecules within the immune system that may <u>help fight the</u> <u>inflammation that drives chronic diseases</u> including cancers, sepsis and brain disease.
- Lava samples have revealed a new truth about the geological make-up of the Earth's crust and could have <u>implications for volcanic eruption early warning systems</u>.
- Increasing reforestation efforts in coastal regions could substantially <u>reduce the amount of sediment run</u>off reaching coral reefs and improve their resilience.
- Empowering families with skills, resources and knowledge to improve their lifestyle is the focus of a UQ study into reducing childhood obesity.
- UQ research is investigating the <u>impact of COVID-19 on Queensland's tourism workforce</u> and is developing a crisis resilience and recovery plan with the support of the state government.
- Professor Trent Munro is leading a team to <u>develop</u>, <u>test and manufacture specific therapeutics</u> in Australia, including for use against COVID-19.
- Researchers studying <u>ageing in tiny 'live' models of the human brain</u> have found a key to potential treatments for Alzheimer's and other neurodegenerative diseases.
- The first <u>comprehensive list of the threats to Australia's most endangered plants and animals</u> reveals blunt news about the future for some of the country's favourite species.
- <u>Improving a 'trial-and-error approach' to epilepsy treatment</u> is the aim of research that encompasses stem cells, artificial intelligence, brain organoids and drug screening.



- An expert panel of UQ researchers is examining the issue of sexual consent and will make recommendations to governments and schools about how to better teach young Australians about sexual violence.
- Invisible lines marked on maps are <u>hindering current efforts to conserve the world's marine species</u> such as sea turtles, according to UQ research.
- <u>Stigma and discrimination linked to a positive COVID-19 diagnosis</u> are the subjects of research being conducted by a multidisciplinary UQ team.
- An international team has been conducting research to understand why bird species across the globe are suffering and dying from a <u>type of malaria</u> and why the disease has been spreading so rapidly.
- Business School researcher Associate Professor Richard Robinson released a <u>report</u> on his Queensland Tourism Workforce Crisis Resilience and Recovery project in partnership with the Queensland Tourism Industry Council. The report revealed findings from 15 consultation workshops with <u>tourism industry</u> operators across five Queensland regions.

Partnered Innovation

- A digital program enhancing physical and mental wellbeing for young people adjusting to life after cancer, will be developed by UQ in partnership with cancer support organisation Canteen.
- In partnership with Rio Tinto and Queensland Alumina Limited (QAL), researchers at UQ's Sustainable Minerals Institute (SMI) developed the bio-engineering technology that <u>could rehabilitate mine waste</u> back to useful soil.
- Queenslanders could have <u>skin cancer diagnosed earlier using world-first 3D scanning technology</u> with the launch of the Australian Cancer Research Foundation Australian Centre of Excellence in Melanoma Imaging and Diagnosis.

Achievements and Awards

- A UQ-led expert panel of researchers has drawn up new International Clinical Practice guidelines for the treatment of children with cerebral palsy (CP).
- University of Queensland projects <u>investigating net-zero emissions in wastewater and contributing to sustainable wastewater treatment</u> have won prestigious industry awards.
- UQ developed <u>antiviral surface coating technology</u> sprayed on face masks could provide an extra layer of protection against COVID-19 and the flu.
- UQ researchers are among finalists in the <u>2021 Australian Museum Eureka Prizes</u>.
- A training program to <u>build Indigenous Australians' skills in preventing suicides</u> has brought national acclaim for UQ researcher Associate Professor Maree Toombs.
- All of the world's shallow coral reefs have been digitally mapped, thanks to a three-year project combining two million satellite images, enormous amounts of field data and UQ-developed mapping techniques.

Entrepreneurship and Engagement

- A landmark research project is aiming to <u>improve the cardiovascular health of young children with cerebral palsy (CP)</u> by trialling a new running program.
- <u>UQ Healthy Living is helping over 50s in the fight against Alzheimer's disease and dementia</u>, with a new digital game designed to train both the body and the brain.



- A smartphone app to track and <u>improve communication recovery for stroke survivors with aphasia</u> is under development by UQ researchers.
- UQ held a celebration for the <u>inaugural Deadly Noize concert</u>, featuring a line up of emerging Aboriginal and Torres Strait Islander stars.
- Australia may soon have the jump on cane toads after a Gold Coast not-for-profit was granted an
 exclusive licence to market a UQ-designed bait for the invasive pests.
- Food systems and the bioeconomy: QAAFI Director Professor Matthew Morell's opinion piece on revitalising agriculture for the 21st century.
- The Law School hosted an online panel discussion on the topic 'Out of Our Depth? Operational, Political
 and Legal Implications of AUKUS'. Moderated by Associate Professor Rain Liivoja, the panel of crossdisciplinary experts examined Australia's decision to build a fleet of nuclear submarines from an
 operational, political and legal perspective.
- The Law School's Associate Professor Paul Harpur presented on the topic 'Aligning academic
 researchers with libraries to craft strategic responses to digital inclusion' at the Roundtable on Advancing
 Disability Inclusion and Accessibility Elsevier, hosted at UQ. Dr Harpur also presented at the UQ
 Health, Safety and Wellness Forum on 'Work health and safety laws as a tool to realise university
 disability strategy'.
- The Business School's Trust, Ethics and Governance Alliance held part two of its annual summit a
 webinar on 'Risky Business: Harnessing culture to combat corporate crime'. Speakers from industry,
 academia, government and civil society discussed the role of organisational culture in preventing crime
 and promoting responsible business conduct.

Appointments

- Chief Gail Jukes has been appointed as the University of Queensland's new Chief Financial Officer.
- Mr Rowan Salt has been appointed to the position of Chief Information Officer following a very competitive external recruitment process.
- Professor Trent Munro joined the Advisory Board of Macrobiome Therapeutics.

Other Items of Interest

- Limelight Magazine nominated The School of Music's conductor Dane Lam Artist of the Year.
- School of Music technology and composition specialist Dr Eve Klein has been selected as a finalist for the <u>Award for Excellence in the Australian Women in Music Awards</u>. She is in direct competition with Katie Noonan and Elena Kats-Chernin.
- QBI's <u>A Grey Matter podcast sat down with Professor Jürgen Götz</u> to find out more about his ultrasound research and what drives him to push forward with his cutting-edge dementia research.
- On 12 October, BEL Faculty Alumni Ambassadors in San Francisco hosted an informal <u>networking event</u> for all UQ alumni in the area.
- Business School researchers Dr Ken Tann and Dr Kate Power co-hosted the 2021 <u>Australian Systemic Functional Linguistics Association (ASFLA) conference</u>, held at UQ in hybrid mode from 29 September 1 October. The conference theme was 'Impact: Research, Education, Industry'.
- School of Economics Honorary Associate Professor Mohammad Alauddin co-chaired the <u>international</u> <u>webinar conference</u>, 'Bangladesh at 50: From the test case to a role model for development'. The conference brought together academics from around the world to showcase Bangladesh's achievements and to identify challenges and assess the prospects of sustaining its growth.



• The Centre for the Business and Economics of Health's (CBEH) Associate Professor Haitham Tuffaha was a keynote speaker at two Australian Clinical Trials Alliance (ACTA) research prioritisation workshops. The workshops were held to support clinicians, researchers and funders who were interested in learning more about research prioritisation.

- Associate Professor Paul Harpur and co-author Peter Black <u>contributed</u> to the United Nations Special Rapporteur's <u>report</u> on Artificial Intelligence and the rights of persons with disabilities. The report will be presented to the Human Rights Council in March 2022.
- Associate Professor Paul Harpur and his colleagues, Dr Kathy Ellem and Dr Fotina Hardy, made a
 <u>submission</u> on "Transitioning to adulthood: experiences of violence, abuse, neglect and exploitation" to
 the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability.
- Dr Joseph Lelliott and Rebecca Wallis made a submission to the Queensland Women's Safety and Justice Taskforce around "options for legislating against coercive control and the creation of a standalone domestic violence offence".

UQ Sport

- The University of Queensland finished third overall at 2021 UniSport Nationals Queensland on the Gold Coast, with 99 students representing UQ in six sports.
- 165 UQ students competed at the third-annual <u>3x3 UQ Slam</u> basketball event a joint collaboration between UQLife and UQ Sport on Thursday 7 October.
- Bachelor of Advanced Finance and Economics (Honours) student <u>Ethan Bullemor</u> has signed with Manly-Warringah Sea Eagles for the 2022-2023 NRL seasons.
- UQ Rugby Club players Lukas Ripley and Sam Wallis (Melbourne Rebels), as well as Lona Halaholo and Connor Vest (NSW Waratahs) will compete in the <u>2022 Super Rugby competition</u>.
- UQ Rugby Club's Premier Grade Coach, Mick Heenan, was awarded <u>Westside News' 2021 Coach of the Year</u>.
- UQ Sport Aquatic Coaches David Heyden and Sean Williams were selected as 'Team Coaches' for the Brisbane Swimming Association (BSA) representative team at the <u>2021 Inter-Region Challenge</u> event on the Gold Coast.
- UQ students Claire Colwill, Dayle Dolkens and Ruby Harris were selected in the <u>Brisbane Blaze squad</u> for the 2021 Hockey One season.
- UQ Sports Achievement Scholarship recipient Natalie Grider was named in the <u>2021 QAFL Team of the Year</u>.
- UQ Rugby League Club won the <u>2021 Universities Rugby League Queensland title</u>, defeating Griffith Dragons 24-10 in the Grand Final.
- UQ Hockey Club finished runners-up in the <u>2021 Brisbane Women's Hockey Association Premier League 1 Grand Final</u>, losing 3-2 in a shootout to Ascot. UQ won a third-straight <u>Premier League 2 Women's premiership</u>s after beating Easts 5-3.
- UQ Sports Achievement Scholarship holder <u>Tara Hinchliffe signed with Sunshine Coast Lightning</u> for the 2022 Super Netball season.

Vale

 Emeritus Professor Dr Mary Mahoney AO, passed away September 2021. Emeritus Professor Dr Mary Mahoney was a long-serving UQ Senator and first woman to hold the position of Deputy



Chancellor from 1996-98, and again from 2010-13. An advocate for women in medicine, Dr Mahoney graduated in 1963 and gave a lifetime of service to the University.

- <u>Emeritus Professor Alban Lynch, passed away 17 September 2021.</u> Professor Lynch was the driving force behind UQ's Julius Kruttschnitt Mineral Research Centre (JKMRC), and was a mentor to many students who have gone on to senior roles in the mining industry around the world.
- **Mr Jay Montague, passed away 30 September 2021.** Mr Montague was an enrolled undergraduate student in the Faculty of Engineering, Architecture and information Technology.
- Mr Nicholas Pennington, passed away September 2021. Mr Pennington graduated from UQ College in 2018, and was enrolled in the Bachelor of Arts program in 2020.
- Professor David Russell, passed away 8 September 2021. Professor Russell was a former Head of School in the Department of Human Movement Studies before moving to the University of Otago in New Zealand.