

February 2021

LATEST NEWS FROM THE UNIVERSITY OF QUEENSLAND

TOP STORIES

Research establishes antibiotic potential for cannabis molecule

A [research collaboration](#) between UQ and Botanix Pharmaceuticals Limited has found cannabidiol, better known as CBD, can kill the bacteria responsible for gonorrhoea, meningitis and legionnaires disease. This research could lead to the first new class of antibiotics for resistant bacteria in 60 years.

Global MOOC Ranking

UQ has ranked 10th globally on [MooLab's World University Rankings by MOOC Performance](#). The ranking covers MOOCs on edX, Coursera and Future Learn and scores for multi-MOOC programmes, for-credit and degree and a mean, averaged from QS, ARWU and Times Higher rankings.

Winner and runner-up of inaugural UQ Ally Award

The [UQ Ally Award](#) – which recognises LGBTIQ+ Allies' contributions to the university and wider community by creating a safe, welcoming and inclusive space for sex, gender, and sexuality diverse people – has been awarded to Dr Rebecca Olive from the School of Human Movement and Nutrition Sciences. The award runner-up was Dr Nicole Warrington of the Diamantina Institute.

Kakadu food scraps provide ancient rainfall clues

Archaeologists are generating a [65,000-year-old rainfall record from ancient food scraps](#) found at Australia's earliest-known site of human occupation.

STUDENTS' ACHIEVEMENTS AND TEACHING & LEARNING

- A short story for a UQ project that evolved into the draft of a novel has [helped secure](#) Indigenous Arts student Sharlene Allsopp the Wheeler Centre Next Chapter 2020 award.
- A PhD student and 'beer scientist' has inadvertently [discovered](#) a way to conduct extremely small-scale brewing experiments, potentially leading to better beer.
- Indigenous medical graduate Dr Sherice Ansell is about to [achieve](#) her goal of working at Alice Springs Hospital, which serves her Arrernte and Anmatyerre homelands.
- UQ's first-ever cohort of Bachelor of Politics, Philosophy and Economics (Honours) students [graduated](#) after four years of study – they are also Queensland's first PPE (Hons) graduates.
- During the summer semester, the Faculty of Business, Economics and Law welcomed 26 students into the inaugural delivery of the BEL Employability Capstone course "[PBEL3000 Learning by Doing in a Disruptive World](#)". Developed in partnership with students, staff and industry at the BEL [CreateAthon](#) in 2019, this course brought together students from across the Faculty.
- In February 2021, the BEL Education Community of Practice hosted four BEL Teaching Conversation events in collaboration with colleagues in the HASS Faculty. These events complemented UQ's Ready to Teach Week and were designed to help new and current BEL and HASS academic staff prepare for 2021. The events explored topics such as making active learning lockdown-proof, promoting staff and student wellness, and fostering student connection and belonging.

- The UQ Master of Business Administration (MBA) program has ranked number one for the fifth year in a row for its quality of students according to [The Economist MBA global ranking](#). It also ranked number three in the Asia Pacific region, and number one in Queensland for the ninth consecutive year.
- The School of Economics [recognised](#) 28 outstanding economics students who were awarded scholarships, prizes and bursaries in 2020.
- Advertising students from the Business School [celebrated the first successful year](#) of operating Newish Communications – Australia's first completely student-led communications agency. Founded at UQ in 2019, the agency takes teaching to a new level, enabling students to step outside of the classroom and straight into the industry through an innovative approach to experiential learning.
- The Business School hosted a [research students' colloquium](#) on 3 December 2020 showcasing the research ideas of the School's Higher Degree Research students. One of the main purposes of the Colloquium is to provide support and constructive feedback for our early career researchers. The colloquium hosted 23 presentations.
- Law students who participated in mooting and legal skills competitions were celebrated at the annual [David Jackson Mooting Dinner](#). Three prestigious prizes were awarded at the dinner: The Bar Association of Queensland Best Oralist in a Moot Competition Award, The Queensland Law Society Best Moot Team Award and The David Jackson Trophy for Outstanding Advocacy.
- Two UQ students have [joined forces](#) with the Australian Federal Police (AFP) to contribute to the prevention of child sexual exploitation.
- Leading academic Dr Tom Aechtner uses his research to improve vaccination rates across the country, [launching](#) the world's first Massive Open Online Course (MOOC), AVAXX101, dedicated to anti-vaccination and vaccine hesitancy.
- 2020 New Colombo Plan (NCP) Scholar and UQ philosophy and economics student Adele Greedy-Vogel wants to make her mark in [disability inclusion](#).

RESEARCH, DISCOVERY AND PARTNERED INNOVATION

Grants and Funding

- Dr Ya-Yen Sun and Dr Jie Wang received a grant from the Partnership for Australia-Indonesia Research (PAIR) – Small and Rapid Research (SRR) Grants for "Assessing job risk and the impact on women, youth and low-income groups in the tourism industry due to COVID-19 in Indonesia".
- Dr Vicky Comino will be a collaborator on a UNSW-administered project that was recently awarded \$539,000 in ARC Linkage Infrastructure, Equipment and Facilities funding. The project, "The Australian Royal Commissions and Public Inquiries Library" aims to provide comprehensive free access online to the reports of all royal commissions and other public inquiries held in Australia since Federation.
- Dr Enshen Li will work with researcher Xupeng Jiao on a project funded by the Academy of Social Sciences in Australia-Chinese Academy of Social Sciences Joint Action Program. Their project is entitled "Australia-China Security Cooperation Against Cross-Border Crime: Examining the Past, Looking to the Future".
- Infectious diseases are in the firing line of UQ researchers, thanks to significant new [funding](#) from the National Health and Medical Research Council (NHMRC).

- The Business School had confirmation of [five successful ARC Discovery Projects](#) in late 2020 – one of the highest success rates the Business School has had and above the national level.
- UQ's 2021 Ventures ilab Accelerator program has [awarded](#) 12 startups \$10,000 in equity-free funding to help launch their early-stage ventures.
- UQ imaging scientist Dr Nicholas Condon has [secured](#) more than \$800,000 (US\$595,000) to help unlock scientific discoveries by improving the use of big data from Australia's most advanced microscopes.
- Through Dr Ahmed Mehdi, Professor Kiarash Khosrotehrani, Dr Moe Thuzar and Professor Peter Soyer, the UQ Diamantina Institute was [awarded](#) multiple Metro South Health and PA Research Foundation supported [grants](#) for projects relating to tumour biomarkers, skin cancer prevention clinical trial, metabolic effects of steroids and establishment of a familial melanoma clinic.

Discoveries

- YouTube videos showing cannabis vaping as fun and joyful are widely available and easily accessible to young people, a [study](#) led by UQ researchers has found.
- New [research](#) shows that to see – and survive – at night, some coral fish have developed visual adaptations that are similar to those of their cousins living in the ocean's darkest depths.
- Marsupials low-methane footprint could help [fight](#) climate change.
- UQ researchers have [discovered](#) a new 'seeding' process in brain cells that could be a cause of dementia and Alzheimer's disease.
- Regular cannabis use has harmful [effects](#) regardless of the age a person starts using, a UQ-led study has found.
- Indigenous peoples' lands may harbour a significant proportion of threatened and endangered species globally, [according](#) to UQ-led research.
- Venom from spitting cobras has evolved to cause predators' extreme pain as a form of self-defence, rather than for capturing prey, [according](#) to new research.
- Certain snakes have evolved a unique genetic trick to avoid being eaten by venomous snakes, [according](#) to UQ research.
- Institute for Molecular Bioscience researchers are carrying out genome sequencing to [provide clues](#) as to why jellyfish venoms are so deadly.
- Researchers at UQ's Queensland Brain Institute have found a way to [track](#) the formation of protein clusters in live cells.
- Borrowing a visual technique from neuroscience, biologists have [shown](#) for the first time how milk is transported through the mammary network.
- New treatments to cut the global death rate from dengue, Zika and West Nile viruses could [result](#) from UQ-led research.
- A [joint study](#) on the vulnerable white shark has shown that approximately 206 to 252 sharks breed on Australia's east coast each year.

- UQ researchers [identified](#) a new species of prehistoric croc that ruled south eastern Queensland waterways only a few million years ago, from fossils first unearthed in the 1980s.
- Eating too much junk food has been linked with poor sleep quality in teens, a UQ-led [study](#) has found.
- The ‘chain of command’ inside human cells is similar to the way a factory is run, [according](#) to Dr Nathan Palpant and Associate Professor Mikael Boden.
- UQ Professor Darryl Eyles and Dr Asad Ali [say](#) a deficiency in vitamin D on the mother’s side could explain why autism spectrum disorder (ASD) is three times more common in boys.
- Researchers [investigate](#) whether a device giving feedback on body position can improve balance and stability in older adults with hearing loss.
- [Research](#) has shown how physical exercise can revitalise your brain.
- The ability to study sleep and attention in fruit flies could lead to a greater [understanding](#) of these potentially related phenomena in humans.
- Researchers have found a way to [track](#) the formation of protein clusters in live cells.
- More frequently sheared pregnant sheep are more active, have lower stress levels and produce lambs with finer wool, [according](#) to UQ research.
- Demystifying traditional Chinese medicine for conservationists could be the key to better protecting endangered species such as pangolins, tigers and rhino, [according](#) to UQ-led researchers.
- Physical activity can [reduce](#) the severity of early menopausal symptoms in women who have had cancer treatment.
- The high rate of adolescent motherhood across developing countries isn’t shifting, with reductions either modest or absent in some regions and rising in others, [according](#) to University of Queensland-led research.
- Researchers are using tiny fluorescent probes to [investigate](#) how and why bacteria are becoming resistant to antibiotics.
- [Developed](#) at UQ, a new medication which can be applied to the skin could help prevent organ transplant recipients from developing harmful skin cancers.

Partnered Innovation

- In [collaboration](#) with UQ, Osaka University and National University of Singapore, scientists have used tiny diamonds to measure heat transfer inside living cells, potentially leading to new diagnostic tools and therapies for cancer.
- More than 690 million celestial objects have been catalogued, photographed and are now available online for exploration by the public, thanks to an [international research collaboration](#).
- PhD scholar Natalie Smith has [found](#) that adapting research ‘at the coalface’ with practitioners is a key approach in helping unroll digital health projects faster. Funded by the Digital Health CRC, Natalie is working with Queensland Health doctors, nurses and staff who help shape her research as it is conducted to action agile results quicker for digital health transformations.

- In partnership with a researcher from Deakin University, Associate Professor Begona Dominguez has received an [ARC Discovery Project grant](#) to develop frameworks that can be used to prevent a prolonged recession. The project will be led by Deakin University.
- UQ researchers [work](#) with a team of 50 social workers across south east Queensland to create a uniform, national approach to identifying abuse in elderly people who present to hospitals.
- Optics researchers from UQ and Nokia Bell Labs in the US have [developed](#) a new technique to demonstrate the time reversal of optical waves, which could transform the fields of advanced biomedical imaging and telecommunications.
- [Researchers](#) from UQ, The University of Melbourne and Griffith University find an experimental Alzheimer's disease treatment that proves effective at treating some of the most persistent, life-threatening antibiotic-resistant bacteria.
- The new Southern Queensland Rural Health (SQRH) Clinical Training Facility – designed to boost nursing, midwifery and allied health skills in some of Queensland's most remote areas – is a [collaboration](#) between UQ, University of Southern Queensland, Darling Downs Health and South West Hospital and Health Service.

ACHIEVEMENTS AND AWARDS

- UQ achievers [recognised](#) in Australia Day honours.
- Professor Lianzhou Wang and Professor Yusuke Yamauchi have been [named](#) among the world's most influential minds for 2020's Highly Cited Research list.
- Queensland Brain Institute researcher Dr Adekunle Bademosi has been [awarded](#) a fellowship from Formula One legend Sir Jackie Stewart.
- At the annual [Australian Water Association Queensland Awards Night](#), Professor Zhiguo Yuan won the Australian Water Association QLD Water Professional of the Year Award and PhD student Zhiyao Wang won QLD Student Water Prize.
- The Advanced Water management Centre was [awarded](#) the Australian Water Association QLD Research and Development Award.
- Emeritus Professor Iris Vessey's paper "Cognitive Fit – A Theory-Based Analysis of the Graphs versus Tables Literature" has been ranked in the top 15 most-cited papers (based on Journal Citation Reports™) in the 50-year history of the Decision Sciences Journal.
- Dr Dylan Lino received a 2020 [Paul Bourke Award for Early Career Research](#) from the Academy of the Social Sciences in Australia. He was one of four recipients of the prestigious award in 2020.
- Emeritus Professor Jennifer Corrin contributed to UQ's submission to the parliamentary enquiry into Australia's relationship with the Pacific region.
- Australian Institute for Business and Economics researchers contributed to a [new CSIRO report](#) that establishes a strong link between bold risk taking and the financial success of top performing ASX companies. *Thriving through innovation: Lessons from the top* is based on a survey conducted by AIBE and CSIRO, which can help businesses navigate the uncertainty caused by the economic impacts from COVID-19.

- AIBN’s Professor Yusuke Yamauchi has been [named](#) Research Project Director by the Exploratory Research for Advanced Technology (ERATO) funding program, an initiative of the Japan Science and Technology Agency.
- Taylor Chair and CBEH Director Professor Stephen Birch led an [international expert panel](#) on improving workforce planning for dentists and other oral health workers.
- Dr Sonia Shah, who is investigating the link between heart disease and neurological disease, has been named one of Australia’s official [Superstars of STEM](#).

ENTREPRENEURSHIP AND ENGAGEMENT

- Macadamia researchers are [breeding](#) thinner shells for bigger kernels and tougher husks for resisting pests – combined attributes that could boost Australia’s \$270 million industry, which earns \$190 million in export income annually.
- A startup founded by two Sustainable Minerals Institute research students could make monitoring the progress of mine site rehabilitation easier and cheaper. The startup, [Enviometrics.io](#), is one of twelve UQ startups recently awarded \$10,000 equity-free funding through the University’s 2021 Ventures ilab Accelerator program.
- MBA alumnus, Chris Evans has raised \$500,000 in a pre-seed round for his startup [Quipmo](#) – a peer-to-peer gear rental marketplace for like-minded travellers and locals who share a passion for adventure. In 2019, Quipmo was selected among 10 teams to be part of the three-month intensive HYPE UQ SPIN Global Sportstech Accelerator program and took out the Australian Trade and Investment Commission's (Austrade) Going Global Award.
- The School’s Behavioural and Economic Science Cluster (BESC) and the Centre for the Business and Economics of Health (CBEH) collaborated on an [online symposium](#) on ‘changing behaviour for health and health care’. The symposium engaged researchers and partners in health care across public and private sectors.
- The [2020 AIBN Science Image Contest](#) has highlighted the role imagination and creativity play in scientific research.
- UQ staff will have greater access to training on a detailed exploration of Aboriginal and Torres Strait Islander peoples, cultures and contemporary issues, thanks to an [innovative online education foundation course](#).

APPOINTMENTS

- Chancellor Peter Varghese AO has been [appointed](#) chair of the Advisory Council for Asialink.
- Professor Yusuke Yamauchi has been [named](#) as a Research Project Director by the Exploratory Research for Advanced Technology (ERATO) funding program, an initiative of the Japan Science and Technology Agency.
- Professor Darren Martin has been [appointed](#) as a new Fellow of the Australian Academy of Technology and Engineering (ATSE).
- Associate Professor Rain Liivoja was appointed Senior Fellow of the Lieber Institute for Law and Land Warfare, US Military Academy at West Point.

- Associate Professor Paul Harpur was named Ambassador for Disability Employment for the Australian Human Rights Commission.

OTHER ITEMS OF INTEREST

- 326 solar panels were installed on the roof of the UQ Sport Aquatic Centre at St Lucia, offsetting up to 100 per cent of the heating cost for the venue's three swimming pools.
- Following a review of the BEL Student Employability Team, two new teams were established – the [BEL Career Services Team](#) and the BEL WIL Advisor team. From 2021 onwards, all BEL students will have the opportunity to participate in work integrated learning as part of their program.
- Despite a pandemic and lockdown in 2020, Queensland Brain Institute researchers remained [dedicated](#) to using fundamental research to understand brain function and tackle major health problems challenging the modern world.
- UQ Press and the School of Communications and Arts announce Martine Kropkoswki as [the inaugural recipient](#) of the UQP Writing Mentorship.
- UQ Press author Omar Sakr's *The Lost Arabs* won the [2020 Prime Minister's Literary Award for Poetry](#).
- UQ Hockey Club member [Meg Pearce](#) was selected in the [Australian Hockeyroos' 2021 squad](#).
- UQ Rugby Club member Mac Grealy was signed by the Queensland Reds for the [2021 Super Rugby AU season](#).
- Bachelor of Exercise and Nutrition Sciences student Jamie Howell has been selected as the [2021 AFLW Premiership Cup Ambassador](#).
- The UQ Boat Club was the top-ranked club at the [2021 Queensland State Rowing Regatta](#), winning 37 medals – including 14 gold.
- The [UQ Swim Club](#) won 25 medals – including 12 gold – at the [2021 Brisbane Sprint Championships](#).
- UQ researchers say people with serious mental illness should be given [priority access](#) to a COVID-19 vaccine when one becomes available.
- Australia's leading urban Aboriginal art collective, proppaNOW, presents its first exhibition [OCCURRENT AFFAIR](#) at the [UQ Art Museum](#).
- Only 40 per cent of forests are considered to have high ecological integrity, according to the new Forest Landscape Integrity Index, [created](#) by 47 forest and conservation experts from across the world, including Wildlife Conservation Society and UQ Professor James Watson.
- An Australian stinging tree that causes extreme pain to its victims has been transformed into an [award-winning artwork](#) for this year's IMB Jo Underhill Art Award.
- A UQ study is [examining](#) the effect of the COVID-19 pandemic on young people's learning to put forward evidence-based solutions for improving the education system.

VALE

- **Dr Kennedy (Ken) Shortridge**, passed away 8 November 2020. Dr Shortridge was a Bachelor of Science alumnus, Honorary Doctorate Recipient (2004) and member of the Alumni Association. He donated \$11,200 to the University between 1991-2008 to scholarships, the Department of Microbiology and the University's Greatest Need Fund.
- **Emeritus Professor Malcolm West AM**, passed away 6 January 2021. Professor West was the Chair of the Marfan Foundation Australia. He contributed \$20,000 to Marfan research at the Prince Charles Hospital. Professor West received a Queen's Birthday Honour in 2012 for his service to cardiovascular medicine as a clinician, researcher, academic and mentor and to the community through contributions to medical foundations and charities.
- **Mr Henry Jennings, passed away 1 January 2021**. Mr Jennings was a well-respected student in the Business Management program and former resident of King's College.
- **Dr Michael Bryce AM, passed away 16 January 2021**. Dr Bryce was a UQ Bachelor of Architecture Graduate (1962), Alumni Association Member since 2006, Honorary Doctorate Recipient 2008, and Former Chair of the UQ School of Architecture Advisory Board 2014. Dr Bryce was a Life Fellow of the Australian Institute of Architects and of the Design Institute of Australia, a former Fellow of the Royal Society of Arts, former federal president of the Design Institute of Australia and former member of the Design Board of the Australia Council. He was inducted into the Australian Design Hall of Fame in 2006.
- **Dr Neil Bower, passed away 20 January 2021**. Dr Bower was a UQ science graduate and current Research Fellow in the Institute for Molecular Bioscience.