

May 2021

#### LATEST NEWS FROM THE UNIVERSITY OF QUEENSLAND

#### **TOP STORIES**

#### National investment to produce revolutionary mRNA therapies at UQ

A pilot facility at UQ could be <u>producing</u> mRNA vaccines and cancer therapies for research and development within months after receiving backing from the Australian Government.

#### Australian-first clinical trial shows brain stimulation can treat severe OCD

Deep brain stimulation has been <u>found</u> to help people with severe obsessive compulsive disorder (OCD) that has not responded to other treatment, in a clinical trial led by UQ researchers.

### UQ and Technical University of Munich embark on flagship partnership

UQ and Technical University of Munich have entered a <u>flagship partnership</u>, securing a further five years of strategic engagement focused on high impact learning, discovery and engagement initiatives. The TUM-UQ partnership is intended to foster innovation and encourage entrepreneurial thinking, meeting the future-focused needs of students, peers, industry and government collaborators.

**UQ** technology powers up greener alternative to lithium ion in Brisbane manufacturing deal Faster-charging and more sustainable batteries with a life up to three times greater than lithium ion are being built with UQ technology.

#### Study shows clamp technology promising for future vaccine development

UQ scientists have published the clinical trial data <u>confirming</u> their molecular clamp-stabilised vaccine technology was safe and potentially effective.

# STUDENTS' ACHIEVEMENTS AND TEACHING & LEARNING

- Amritesh Kumar Maurya, a student studying from India, will have <u>access</u> to an international education thanks to UQ's partnership with Asha – an Indian non-profit organisation which improves the lives of slum dwellers.
- UQ's <u>Law and the Future of War team</u> presented and were panellists on the <u>ethics of trusted</u> autonomous systems at the Accelerating Trusted Autonomous Systems (TAS) Symposium.
- The School of Economics launched the <a href="PhD Economics Top-Up scholarship for Aboriginal and Torres Strait Islander students">PhD Economics Top-Up scholarship for Aboriginal and Torres Strait Islander students</a>. The scholarship will award the successful recipient \$14,000 per annum during the duration of their studies, in addition to a base stipend of \$38,000 per annum.
- Ninety-seven per cent of UQ-Ochsner graduates who <u>participated</u> in the 2021 National Residency Match Program, secured a residency and are now heading to some of the United States' most prestigious residency programs, including: Ochsner Health, Duke University, Washington University, University of Chicago, Brown University, Dartmouth, Yale University, Stanford University, and University of Southern California.
- The University was ranked first in Australia and second globally for Sports-Related Subjects, and second in Australia and third globally for Engineering Mineral and Mining in the 2021 QS World University Rankings by Subject. Other subjects ranked in the top 50 worldwide were: Environmental Sciences (17), Psychology (26), Veterinary Science (26), Agriculture and Forestry (=26), Anatomy and Physiology (29), Education (30), Engineering Civil and Structural (30), Pharmacy and Pharmacology (31), Hospitality and Leisure Management (=31), Life Sciences and medicine (=38), Nursing (=38), Law (43), Engineering Chemical (45), Geography (45), Sociology (=56), Accounting and Finance (48), Biological Sciences (50), English Language and Literature (50) and Medicine (=50).



- The UQ Pro Bono Centre welcomed two new members to its <u>Climate Justice Initiative</u>, showing students' ongoing commitment to environmental issues. The Initiative has commenced work on two activities this semester: a new project for the Environmental Defenders Office, and the drafting of a Guide for Climate Conscious Lawyering.
- Dr David Jefferson taught in an online course run by the Universidad del Desarrollo of Chile. The course was titled 'New Trends in Agro-Biotech: Insights from Intellectual Property and Technology Transfer'.

#### RESEARCH, DISCOVERY AND PARTNERED INNOVATION

#### **Grants and Funding**

- UQ received nearly 1.3 million in New Colombo Plan (NCP) mobility grants to support 367 students across 22 projects in 13 host countries.
- Mr Cameron Turner and Associate Professor Tim Kastelle have received a grant from the Australian Centre for International Agricultural Research for a project called "Building a business case for investment in a coconut industry in the Pacific".
- Dr Scott N Lieske, Dr Dorina Pojani and Dr Richard Buning have received a grant from the Australian Urban Research Infrastructure Network (AURIN) for a project called "Bikeability for Transportation: Tools and Data for Research and Practice".
- Professor Peter Popkowski-Leszczyc, Hejun Zhuang (Brandon University) and Ernan Haruvy (McGill University) have received a grant from the 2021 Social Sciences and Humanities Research Council of Canada for a project called "Online versus Offline Price Dispersion: Do Store Familiarity and Consumer Search Cost Matter?".

### **Discoveries**

- Researchers hope to save significant time, money and resources in Australian hospital wards, with findings from a new UQ-led study.
- Employees and journalists who expose organisational corruption are in <u>danger</u> of criminal charges under severe and complex national security laws.
- The motivations of a rebellious class of car-free citizens in the sprawling, low-density city of Brisbane have been investigated by UQ researchers.
- Doctors need more <u>evidence</u> to help patients stop taking antidepressants safely and effectively.
- Researchers are a step closer to <u>unravelling</u> the role of small nucleic acid fragments found in each of our cells.
- Nearly three-quarters of Earth's land had been transformed by humans by 10,000BC, but <u>new research</u> shows it largely wasn't at the expense of the natural world.
- UQ research has <u>found</u> the decision to stop prescribing long-term anti-depressants should be made only after careful preparation by GPs and their patients.
- Increased physical activity could reduce the chance of heavy menstrual periods in women who are overweight or obese, a UQ-led study has found.
- A single footprint left by a cat-sized dinosaur around 100 million years ago has been <u>discovered</u> in China by an international team of palaeontologists.
- A living fossil is helping researchers challenge our scientific understanding of brain evolution.
- COVID-19 patients who are overweight or obese have more severe symptoms and are highly likely to require invasive respiratory support, according to a new international study.



- Researchers are calling for greater support for young mothers to reduce the incidence of child abuse after a study found children of mothers under 20 and their subsequent siblings were most at risk.
- A study by UQ researchers has <u>highlighted</u> the need to improve mental health assessments and pathways to care for childbearing women who experience suicidality.
- E-cigarettes may be more <u>effective</u> in helping smokers quit than nicotine replacement therapies such as patches and gum.
- For the first time in Australia, researchers can accurately <u>predict</u> if babies are at risk of childhood obesity by the age of eight to nine years of age.
- The <u>discovery</u> of unexpected artefacts in Africa's Kalahari Basin has challenged conventional knowledge about the beginnings of human culture and innovation.

### **Partnered Innovation**

- Dr Harry Parekh has signed a contract with atai Life Sciences, a biotechnology company focused on addressing unmet needs in mental health. UniQuest along with atai Life Sciences have formed a new company InnarisBio, a drug formulation company established to commercialise the sol-gel formulation technology invented by Dr Parekh. InnarisBio will collaborate initially over 24 months with Dr Parekh and his team on the development, optimisation and evaluation of sol-gel formulations for nose-to-brain delivery of select active pharmaceutical ingredients of interest to ATAI and InnarisBio. This deal is worth \$3 million to UQ over the lifetime of the agreement.
- Three UQ researchers/Al experts, Professor Scott Chapman, Professor Janet Wiles, and Dr Sally Shrapnel, have paired with up-and-coming street artists ahead of the Brisbane Street Art Festival (a collaboration between UQ and Queensland Al Hub).
- Professor Deborah Terry AO, Vice-Chancellor, UQ and Professor Santa J. Ono, President, the
  University of British Colombia (UBC) met virtually to sign a Statement of Cooperation (SoC) on 5 March
  2021. The SoC outlines both institutions' commitment to deepening the partnership in the areas of
  student and staff exchange, academic and research projects, joint conferences, seminars, workshops,
  and exhibitions, sharing of entrepreneurship program knowledge and joint organisation of
  entrepreneurial activities. A series of public webinars are also being coordinated.
- The Global Strategy and Partnerships (GSP) team at Global Engagement and Entrepreneurship coordinated communication and partnership meetings with 45 identified EPS partners. Since 1 March 2021, three EPS partners have confirmed new articulation programs. The team is in the process of establishing new articulation agreements with FPT University Vietnam, University of Petroleum and Energy Studies (UPES) India and Narsee Monjee Institute of Management Studies (NMIMS) India. EAIT and BEL Faculty will offer 25% Global Connect Scholarship to eligible students articulated through identified pathway programs.

### **ACHIEVEMENTS AND AWARDS**

- The Deputy Vice-Chancellor (Research and Innovation) led a consultative effort to respond to the
  Department of Education, Skills and Employment's University Research Commercialisation Consultation
  Paper. The UQ submission emphasised our leadership in translational research and welcomed a
  potential new scheme to support industry-university collaboration. Our submission also argued for stable,
  ongoing resourcing for basic research. The UQ Submission can be accessed from the Research
  Performance website.
- A parliamentary inquiry has <u>endorsed</u> Professor Patrick Parkinson's proposal for a multidisciplinary tribunal to manage parenting disputes for those unable to afford legal representation.



### **ENTREPRENEURSHIP AND ENGAGEMENT**

- A UQ startup ready to help 1.7 million Australian diabetics has won UQ's top entrepreneurship program,
   Ventures ilab Accelerator, Pitch Night.
- UQ alumna Dr Jo'Anne Langham identified the need for a new kind of brainstorming tool <u>created</u> for the digital world
- ilab Alum Valiant Space <u>commenced</u> testing of its "non-toxic" space based thruster for use in small satellites.
- UQ alumni Tim Hall and Peter Condoleon have raised over \$1 million in funding for their startup GreaseBoss.
- Ensuring children who were born prematurely are ready for school when the time comes is the <u>focus</u> of UQ research.

# **APPOINTMENTS**

- Professor David Craik has been <u>elected</u> as a Fellow of the oldest learned society in the world, the Royal Society, for his outstanding contribution to science.
- Professor Peter Liesch has been inducted into the Academy of International Business Fellows in 2021.
   The AIB Fellows are a select group of distinguished scholars who have significantly contributed to AIB and international business.
- <u>Dr Maria Itati Dolhare</u> was appointed a Fellow of Advance HE (formerly the Higher Education Academy).
- <u>Professor Stephen Gray</u> has been appointed as the <u>Malcolm Broomhead Chair in Finance</u>. The position is sponsored by businessman, philanthropist and UQ MBA alumnus Malcolm Broomhead, and was established to help develop executive leaders of the future by providing training and research opportunities with a strong industry focus.

### **OTHER ITEMS OF INTEREST**

- The German-Australian Chamber of Industry and Commerce spoke with <u>Dr Jessica Gallagher</u>, Pro-Vice-Chancellor (Global Engagement and Entrepreneurship) about the University's sustainability projects and more.
- Over the past two years, significant progress has been made against UQ's Entrepreneurship Strategy
  (2018 2022) with increased collective efforts across UQ to equip graduates to chart their own path and
  drive innovation across industries and sectors. Progress in supporting the Strategy's objectives has
  included the following: Objective 1: Inspire a Venturing Spirit, Objective 2: Build an Entrepreneurial
  Mindset, Objective 3: Empower Ventures Creators, Objective 4: Fostering Enterprising Partnerships.
- Dr Rebecca Ananian-Welsh and her UQ colleagues launched their '<u>whistleblowing to the media</u>' policy paper, the third paper in their <u>Press Freedom Policy Papers</u> series.
- Dr Vicky Comino presented at the Sustainable Minerals Institute <u>High Reliability Organisations Forum</u> at Customs House. Her topic was 'Regulating For A Culture Of High Reliability'.
- Professor Tamara Walsh and ANU colleagues published a <u>report</u> titled '30 years on: Royal Commission into Aboriginal Deaths in Custody recommendations remain unimplemented' for the Centre for Aboriginal Economic Policy Research.
- Dr Rebecca Ananian-Welsh spoke at an <u>Australian Association of Constitutional Law event</u> on 'Minister for Home Affairs vs Benbrika', a case in which the High Court upheld preventive detention for terrorism offences.



- Female students and alumni attended the School's annual <u>Women in Law event</u>, supported by law firm Clayton Utz. Attendees heard from a panel of vibrant women who have successfully navigated their own pathways in law, including a current Justice of the Supreme Court of Queensland.
- UQ Chief Student Entrepreneur's words of advice to incoming Rachel Huang
- The UQ Vice-Chancellor's Concert will be held on Sunday 23 May at QPAC, welcoming Maestro Dane Lam in his debut performance as Conductor and Director of the UQ Symphony Orchestra (UQSO), performing Beethoven's Ninth Symphony Ode to Joy.
- UQ's <u>Alumni Book Fair and Rare Book Auction</u> was held, with proceeds going towards student scholarships and bursaries.

### **UQ SPORT**

- UQ Sporting Scholarship recipients Shemaiah James (1<sup>st</sup> Men's Open Triple Jump) and Cara Feain-Ryan (2<sup>nd</sup> Women's Open 3,000m Steeplechase) won medals at the <u>2021 Australian Track & Field Championships</u> in Sydney.
- UQ's Callum Davies (1<sup>st</sup> Men's Open 1,500m; 1<sup>st</sup> Men's Open 5,000m) and Josephine Auer (1<sup>st</sup> Women's Open 5,000m; 1<sup>st</sup> Women's Open 10,000m) won gold medals at the <u>UniSport Nationals Athletics</u> event in Sydney.
- UQ Sports Achievement Scholarship holder Jacinta Carroll was named the International <u>Waterski & Wakeboard Foundation's (IWWF) Female Waterskier of the Decade (2010-2019).</u>
- UQ Sports Achievement Scholarship recipients Gabi Simpson and Tara Hinchliffe were named Queensland Firebirds' Club Captains for the 2021 Super Netball season.
- Bachelors of Business Management / Arts student Mia O'Leary won six medals including five gold at the <u>2021 Australian Swimming Championships</u>.
- UQ Sports Achievement Scholarship and Clem Jones Sporting Scholarship recipient Lakeisha Patterson (1st – 100m Freestyle S9; 1st – 400m Freestyle S9) won two gold medals at the Australian Swimming Multi-Class Championship.
- UQ AFL Club members Dakota Davidson (Most Competitive Player) and Breanna Koenen (Best Finals Player) were honoured at the Brisbane Lions' <u>AFLW Best & Fairest Awards</u>.
- UQ AFL Club's Natalie Grider (UQ Sport Achievement Scholarship) and Dakota Davidson were named in the <u>AFL Players Association's AFLW '22 Under 22' side</u>.
- Bachelor of Advanced Finance & Economics student Ethan Bullemor scored his <u>first career NRL try</u> for the Brisbane Broncos against the Penrith Panthers (Round 6)
- UQ students <u>Daniel Miller</u> and <u>Callum Breetzke</u> each won two gold medals at the <u>2021 Australian Surf</u> Life Saving Championships.
- UQ Judo Club members Charisma Taylor, Ashley Atkins and Casey Lee combined to win four medals –
  including two gold at the <u>2021 Canberra International Open</u>.
- UQ Judo Club's Dave Atkins won two gold medals (1st Senior Men Under 73kg; 1st Veteran Men Under 73kg) at the 2021 Judo Queensland State Championships.
- Natalie Grider (Australian Rules Football) and Callum Davies (Athletics) were named UQ Sportspeople
  of the Year at the 2021 UQ Sport Club and Sports Awards.
- 53 UQ Sporting Scholarships were awarded to 51 student-athletes, including Olympic and Paralympic, hopefuls and representatives for Australian and Queensland sporting teams.



- UQ AFL Club members Natalie Grider, Breanna Koenen, Greta Bodey, and Dakota Davidson, as well as Jordan Zanchetta (UQ student) and Emily Bates (UQ Alumna and UQ Sport Elite Athlete Program Officer), played in the Brisbane Lions' AFLW Grand Final win over Adelaide Crows.
- Race Walker Dane Bird-Smith (2016 & 2017 UQ Sportsman of the Year; 2015 UQ Blue recipient) was selected in Australia's Athletics Team for the Tokyo Olympics.
- UQ Boat Club finished fourth overall at the 2021 Australian Rowing Championships in Tasmania, winning a total 17 medals.
- UQ Boat Club's Caitlin Cronin and Ria Thompson were named in Australia's Women's Quad Scull Team, who will contest qualification for the Tokyo Olympics.
- UQ Boat Club members Max Taylor and Fergus Cummins were selected in Australia's Under 19 Rowing Team. Alex Rooney was named in Australia's Under 21 Team, while Wallis Russell, Madeleine Williams, Darcy McClusky, and Agustin Radero (Coach) will represent Australia's Under 23 Team.
- UQ Boat Club's Sarah Tisdall Sarah Tisdall competed for Cambridge University against Oxford University in the 75th Women's Boat Race.
- UQ Cricket Club won the Queensland Premier Cricket's First Grade Two-Day Premiership (Cam Battersby Cup), beating Northern Suburbs at UQ's WEP Harris Oval.
- UQ Swim Club member Georgia Powell won three medals including gold in the Women's Under 17s / 18s 200m Breaststroke – at the 2021 Australian Swimming Championships.
- UQ Swim Club members combined to win 13 medals including two gold medals at the 2021 Australian Age Swimming Championships. The results saw UQ ranked 41st overall out of 157 Clubs.
- UQ Swim Club's Paige Leonhardt won six medals including five gold at the Para World Series event in Lewisville, Texas.
- Grant (Bachelor of Biomedical Science) and Blake Reinbott (Bachelor of Physiotherapy) were selected in an honorary Australian Team for the Junior World Orienteering Championships.
- UQ Touch Football Club will run a six-week All Abilities Touch Football program at The University of Queensland, beginning on 16 May.

# VALE

- Professor Stephen Harrison, passed away 4 April 2021. Professor Harrison was a long-standing staff
  member who taught Statistical Methods, Microeconomics, Operations Research, Natural Resource
  Economics, Ecological and Environmental Economics, Development Economics, Business Forecasting,
  and Business Logistics.
- Emeritus Professor Michael (Mike) Humphreys, passed away 13 April 2021. Emeritus Professor Humphreys was a former Head of School of Psychology (1994–97) and former Director of the ARC Key Centre for Human Factors & Applied Cognitive Psychology (1999–2004).
- **Ms Wenjie Luo**, passed away 24 April 2021. Ms Luo was a current Young Achievers Program student enrolled in a Bachelor of Arts Program.
- **Mr Zachariah Bradfield**, passed away April 2021. Mr Bradfield was a current student studying externally for a Bachelor of Arts.
- Associate Professor Chi-Kong Lai, passed away 22 April 2021. Associate Professor Lai was a respected scholar of Chinese history who taught into many areas of the History curriculum.