Mission to Mars
Our Alumnus of the Year leading the voyage to the Red Planet
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Andrew Gourley has turned a humble lolly into an iconic brand known for helping young people during alcohol-fuelled events.

As founder and visionary leader of Red Frogs Australia, Mr Gourley’s positive impact in fighting the culture of binge drinking among young people has been recognised in this year’s Outstanding Alumni Awards.

Graduating in 1992 with a Bachelor of Business (Accounting), Mr Gourley has used his nous with numbers to support his passion for helping others.

“Understanding budgets and costings is essential when working in non-profit organisations,” the skateboarding community outreach pastor said.

“My accounting degree has given me the knowledge I need to ensure Red Frogs Australia is financially sustainable over the long term.”

Red Frogs is the largest chaplaincy service for young people in Australia and has established a comprehensive drug and alcohol harm prevention program, that has seen its introduction across the world in Poland, New Zealand, Canada, Germany, South Africa, the United Kingdom, Fiji and Indonesia.

“I started Red Frogs in 1997 after seeing a need to help young people during Schoolies celebrations,” he said.

“The idea of using Red Frogs was just to be an icebreaker but it really took off. We have gone from handing out about 80kg of Red Frogs to over 20 tonnes per year.”

In addition to attending Schoolies Week, the Red Frogs program has expanded to include educating high school and university students on responsible drinking and substance awareness.

“Looking back over the past 18 years there has been a huge cultural shift in the way Year 12 students celebrate. We are seeing a lot more students acting responsibly and not drinking as hard as they used to,” Mr Gourley said.
QUT-trained astrobiologist Dr Abigail Allwood has led missions for NASA – but her biggest journey is still to come.

**Alumnus of the Year**  
**Science and Engineering Faculty**

If anyone can answer one of humanity’s most burning questions – are we alone? – it is probably Dr Abigail Allwood.

She is a co-leader for NASA’s Mars 2020 rover mission and the first Australian and first female to lead a Mars mission.

The next rover robot to visit the Red Planet will search for signs of past life – and Dr Allwood will play a key role in any discovery.

She is the mission’s principal investigator for her Planetary Instrument for X-ray Lithochemistry (PIXL), one of seven sophisticated scientific instruments to be packed on the rover.

“If there ever was life on Mars, it’s likely that it was microbial... and very early in Martian history.”
Operated remotely by her team back on Earth, it will analyse the chemistry of Martian rocks in finer detail than ever before.

“We will be able to map rock chemistry at the scale of sand grains, giving us a better understanding of the processes by which the rocks formed,” said Dr Allwood, who graduated from QUT with a first-class honours degree in geoscience in 2002.

“This detailed analysis will help us figure out whether the environments in which the rocks were formed could – or did – support life.

“If there ever was life on Mars, it’s likely that it was microbial, because favourable conditions for life were short lived, and very early in Martian history.”

The Mars 2020 mission is the culmination of Dr Allwood’s life-long dream to explore the Solar System.

Her passion was ignited as a young girl in Rochedale, in Brisbane’s south, watching Voyager mission scientist Dr Carolyn Porco on television describe the moment she became the first person to see Voyager’s stunning close-up images of Saturn.

As a pathway to space exploration, Dr Allwood first studied physics at QUT. But she soon discovered her second great love, geology, and switched to study geoscience.

“I’d never been exposed to geology in high school so I never considered it as a career – but I was soon hooked,” Dr Allwood said.

“I knew it would be relevant for studying other rocky planets, especially Mars.”

Dr Allwood said her time at QUT had introduced her to the scientific method and changed her way of thinking.

“I learned this process of making an observation and developing multiple alternate hypotheses so you remain objective and making more observations and tests until you eventually decide which hypothesis is right,” she said.

“What a way to think about the world. That for me is what science is – it’s not the lab coat, it’s not the text books, it’s not the facts you’re taught – it’s the process, and the process we should apply to everything we do or think.”

A Mars selfie from NASA’s Curiosity Rover.

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**Mars 2020 Mission**

**Mission:** Mars 2020 rover to search for evidence of past life on Mars

**Launches:** July/August 2020

**Travel time:** 8-9 months

**Arrival:** January/March 2021

**Surface mission length:** 1 Mars year (669 days)

**Rover:** 950 kg, loaded with 7 scientific instruments. Capacity to store key samples for later recovery.

**Estimated cost:** US$1.9 billion

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**Outstanding Alumni Awards**

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After graduating, Dr Allwood undertook a PhD at Macquarie University, studying 3.5 billion-year-old rocks in the Pilbara region to see if features within those rocks constituted evidence of life.

The research led to her appointment to NASA’s Jet Propulsion Laboratory (JPL) and underpinned her six-year development of PIXL.

Her future goals for exploring the Red Planet, however, do not include volunteering for a manned mission to Mars.

“I’d go mad at being stuck in a tin can for eight months each way!” Dr Allwood said.

“I used to want to go when I was young because it seemed so much more amazing than boring old Earth.

“But being an astrobiologist and planetary scientist has given me a different perspective. Earth is a mind-bogglingly complex system of interactions between biosphere-atmosphere-hydrosphere-lithosphere - a delicate, beautiful web that enables life as we know it.

“We have not found anything quite like it in the universe. From that perspective, it is actually Mars that is mundane in the universe, while Earth is indescribably special.”

While Dr Allwood’s eyes are set squarely on Mars, her heart remains in Topaz, far north Queensland, where she, her husband and their toddler are revegetating a farm on the edge of the rainforest.

She is planning a future for her family that incorporates both barren Mars and fertile Earth.

“I’m looking forward to helping choose an awesome suite of samples on Mars and collecting the best possible compendium of field observations to help the future scientists analysing them make some amazing discoveries,” she said.

“Then I want to go to our farm in Topaz and dial in to the 2020 extended mission rover ops room from the back patio.”

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**Winners in their field**

**Karni Liddell**
Faculty of Health  
Master of Social Work 2012

Karni Liddell is a counsellor, media presenter, professional speaker and a champion for people with a disability. At 14, Ms Liddell set her first world swimming record and later captained the Australian swimming team at the 2000 Sydney Paralympic Games.

**Leigh Sales**
Creative Industries Faculty  
Bachelor of Business (Journalism) 1993

Two-time Walkley Award-winner Leigh Sales covered historic events including Hurricane Katrina and the aftermath of September 11 as ABC’s North American correspondent. Since 2011 Ms Sales has hosted ABC's news and current affairs program 7.30.

**Carolyn Dawkins**
QUT Business School  
Bachelor of Business 2000

Carolyn Dawkins is at the forefront of transitioning iconic brands including Kelloggs, L’Oreal and Colgate into the digital marketplace. Today she heads up Google’s BrandLab in New York City, supporting Google’s Top 100 worldwide clients.

**Dominic McGann**
Faculty of Law  
Bachelor of Laws 1983

A native title expert, Dominic McGann leads the largest independent law firm in Queensland as Chairman of Partners for McCullough Robertson. He is one of the top-ranked lawyers in Chambers Asia Pacific 2015 and listed in Best Lawyers Australia 2014–15.
Special Excellence Award for Achievement in Education
Faculty of Education

Carmee Lim is a leading educator in Singapore.

Dedicated to preparing children for life and not just exams, Ms Lim has been committed to making education a joyful experience for students for more than 50 years.

A respected and visionary educator, Ms Lim was an early advocate of computer-based learning and has influenced generations of young learners and their teachers, entrepreneurs and civic leaders across Singapore since the 1960s.

As principal of Raffles Girls’ School (1988-1999), one of Singapore’s top secondary schools, she introduced the study of Philosophy, Sciences, Humanities and Aesthetics to update a curriculum that was designed to prepare girls to become educated wives.

Ms Lim completed her Masters of Education (Early Childhood) in 2004, at the age of 64.

Our outstanding young alumni

An entrepreneur who built a leading labour hire organisation and an international policy advisor have been named the 2015 joint Young Alumni of the Year.

Andrew Northcott is the founder and CEO of Labour Solutions Australia (LSA), a blue-collar online hire organisation with a $100M annual turnover.

LSA has made the Business Review Weekly top 10 fastest-growing companies for three consecutive years.

Andrew Blackman’s career in economic development and as a public policy advisor has contributed significantly to the quality of life of people in developing countries.

He currently works for the Government of Ecuador.

Andrew Blackman
Young Alumnus of the Year
Bachelor of Business (Economics) (Honours) 2005

Andrew Northcott
Young Alumnus of the Year
Bachelor of Applied Science (Property Economics) 2009

Education visionary
News roundup

...New appointments, university successes, achievements of staff and students, corporate events...

Students Step Up to STEM

Some of Australia’s top scientists are joining forces with current and future teachers at QUT to explore different teaching approaches for inspiring more students to study science and mathematics.

The Step Up program, led by Professor Les Dawes, is developing high-quality secondary school teachers who can impart their passion for science, technology, engineering and maths (STEM) to the next generation.

The program utilises the STEM Studio, where scientists and teachers work together with school students to develop learning activities that will engage children.

The studio’s specialist equipment enables pre-service teachers and children from Brisbane schools to conduct experimental learning activities – not usually done at school – in a safe environment. These range from experimenting with biofuels and gases to creating noise-reducing ear muffs.

Migraine relief

A collaboration between QUT and Indian life science company Avesthagen is helping translate migraine genetics research into a new vitamin B-based preventative therapy.

The DNA-based diagnostic and therapeutic product will be based on work by the Genomics Research Centre at the Institute of Health and Biomedical Innovation.

Researchers have identified the gene involved in migraine with aura and found that a specific combination of vitamin B could reduce the frequency and severity of migraine.

Global ranking success

QUT has been ranked in the top 500 universities globally by the Academic Ranking of World Universities (ARWU). It is the first time QUT has made this list, which comes out of Shanghai Jiao Tong University in China.

Johnson & Johnson Innovation partnership

The Queensland Government, through its $46 million Advance Queensland program, will support the establishment of a Johnson & Johnson Innovation Partnering Office to be located at QUT. This will advance shared goals of fostering startup formation and also facilitate access for entrepreneurs and researchers to expertise from Johnson & Johnson’s pharmaceuticals, medical devices and consumer sectors.

6
A former Silicon Valley executive will help shape the digital transformation in Queensland as the new QUT-based PwC Chair in Digital Economy.

Dr Marek Kowalkiewicz (pictured above) will hold the Australian-first chair, a partnership between QUT Business School, the Science and Engineering Faculty, PwC, the Queensland Government and Brisbane Marketing.

Dr Kowalkiewicz, who spent the past two years as a senior executive with SAP, will explore opportunities for the remodelling of key industries, research and learning in the face of unprecedented digital disruption.

“It is our mission to help Australian businesses, governments and communities make sense of the massive changes happening now as a result of the digital economy,” he said.

“I don’t think I’ll ever regret leaving Silicon Valley. I think the next big thing could be in Brisbane.”

Other researchers to receive prestigious awards in 2015 included Professor Peter Bartlett who was named a Fellow of the Australian Academy of Science for his pioneering work on statistical machine learning.

Professor Joanne Wood has become the third QUT researcher to be awarded the “Nobel Prize” of international optometry, the Glenn A Fry Award, by the American Academy of Optometry. She also received The Arthur Bennett Prize from The College of Optometrists in London.

Professor Kerrie Mengersen’s project to help Australia thrive in the big data era earned her an Australian Research Council Australian Laureate Fellowship, one of only 15 in the country.

Distinguished Professor James Dale was named a ‘Queensland Great’. The honour recognised more than two decades of work at the forefront of specialist plant and medical biotechnology research.

Research focus rewarded

Achievements of our leading researchers reflect the ambitious agenda which has seen QUT become the nation’s fastest-growing research university.

Distinguished Professor Judith Clements and Professor Nathan Efron were each awarded a Companion of the Order of Australia, the country’s highest individual honour, for their respective research into prostate cancer and optical health.

Professor Nathan Efron AC and Distinguished Professor Judith Clements AC.
Imagine if police investigators could transport a victim back to the crime scene to prompt memory recall of vital clues.

Or consider a classroom where a teacher takes children back in time to bring a history lesson to life.

This is the “unlimited potential” of virtual reality (VR), according to creative industries academic and interactive design specialist Dr Deb Polson (pictured right).

Dr Polson is pioneering applications of the rapidly accessible immersive technology and believes VR has the power to transform the way we live.

With an increasing number of tech companies offering affordable personal virtual reality headsets, Dr Polson said virtual worlds to play and work in would be commonplace within five years.

“It will revolutionise the way we approach technology, learning and teaching, and countless other areas,” she said.

“I liken it to the release of the internet for the level of impact VR can have. It is a new technology platform that will have a profound effect on the way we engage with digital information and with each other.”

Dr Polson said QUT students were exploring the potential of VR for a range of applications – from memory recall and remote business collaboration to more immersive gaming and storytelling.

“The most significant thing about VR is it can take you into a safe, controlled, custom-built environment to better empathise, explore and experiment,” she said.

“This could be helping people overcome phobias, teaching technical skills, or assisting an injured person to walk again while encouraged by game-like motivation with immediate feedback in risk-free, rich virtual environments.”
QUT became the first university in Australia to offer prospective students and their families an individual VR experience at Open Day in July.

The QUT Global Goggles app combined real filmed vision, overlaid with CGI animation, to offer a 360-degree view of famous landmarks appearing across Brisbane.

Dr Polson said we were only seeing glimpses of the potential of VR.

“Not only is VR going to expand and extend existing industries and applications, but I think new industries will also emerge from it, things we haven’t even imagined yet.”

See page 17 for more on QUT’s virtual reality research.
The new six-storey $80 million stage two of the Creative Industries Precinct will open in 2016. A creative zone for students and artists to collaborate, learn and thrive, the cultural landmark will feature Australia’s most digitally sophisticated studio space for drama, dance, music and the visual arts.

Epicentre of CREATIVITY

Australia’s iconic place for creative learning and exploration is coming to life at Kelvin Grove campus and high-profile alumni are leading our call for support of this extraordinary facility.

Do you wish to give?
Visit bit.do/qut-creative-industries

Gyton Grantley – actor
“At QUT, I’d entered a fantastic world. Surrounded by like-minded, divergent, colourful and inspiring souls I was given the chance. I took it and leaped. It feels so good to fly.”

Rod Sheard – architect
“I see quite clearly that I may not be running the largest sports and entertainment design firm in the world if not for the creative and open-minded approach QUT offered.”

Kate Miller-Heidke – singer, songwriter and composer
“Doing my masters in music helped me gain the focus that would take my career to the next level and expose me to a new world of hugely talented people.”

Yolande Brown – dancer
“My time at QUT helped me see the power of movement as a communicative art.”
The memory of his late mother and a desire to provide opportunity to students are behind one man’s commitment to giving.

Ray Weekes grew up in public housing in Sydney but never felt deprived. “My mother always said there was nothing more important than the right education because it gave you a foundation for the rest of your life,” said Dr Ray Weekes, an Australian business leader.

As a tribute to his mother, Dr Weekes and his wife Penny have established the Joy Forrester Learning Potential Fund Scholarship at QUT.

A role model to her son, and despite struggling financially as a single parent in the 1960s, Joy Forrester rose above her circumstances to become an executive with one of Australia’s largest food companies, Petersville.

“Financial disadvantage limits your options and I was lucky to have such a remarkable and inspiring mother,” said Dr Weekes.

“I received a Commonwealth Scholarship to study commerce at the University of New South Wales and that scholarship gave me my career and my life.

“Scholarships provide a critical financial boost when educational aspirations often hang in the balance.

“That’s why I am now proud to be Chair of the QUT Learning Potential Fund, as I know from my personal experience that every dollar counts.”

Dr Weekes is also Chair of the CEO Institute in Queensland, established the highly successful QUT Business Leaders’ Forum in 1997 and is CEO-in-Residence at the QUT Business School.

For more information on donating to the QUT Learning Potential Fund check out the insert enclosed in this edition of Links or email LearningPotentialFund@qut.edu.au
The hunt for renewables could see crop waste powering a new bio-economy.

Growing up surrounded by cane fields in north Queensland has left a lasting legacy on QUT’s newest Fulbright scholar, Dylan Cronin (pictured). The research chemist, who is investigating the potential of sugarcane waste as a renewable energy source, is currently applying his knowledge to forestry at Washington State University.

He has made it his mission to find sustainable solutions to meet world fuel demand. And the cane he grew up with is the driving force.

The PhD researcher is part of the QUT team spearheading pioneering research to transform crop waste, like leftover sugarcane fibres, into advanced biofuels capable of powering helicopters and planes.

“Plant waste products have the potential to make a significant and immediate contribution to alleviating society’s dependence on fossil fuels,” Mr Cronin said.

“Renewables can be financially challenging to produce but science can provide solutions.”

Unlocking the potential of biorefinery manufacturing in Australia – an industry predicted to be worth US$160 billion globally by 2020 – would be a game-changer for the country’s manufacturing and agricultural sectors, a blueprint prepared for QUT found.

And the prospect of producing greener, high-performing fuel from agricultural waste is attracting interest from the world’s heaviest hitters.

Associate Professor Ian O’Hara, from QUT’s Centre for Tropical Crops and Biocommodities, has met with the US Navy, as it aims to power its fleet with a biofuel blend within five years.
“I’ve been over to the Pentagon to talk about how we could make some fuels in Australia to help their missions,” he said.

“Our challenge now is how do we find Australian sources of feed stocks to turn into fuels that meet some of their demands?”

“Renewables can be financially challenging to produce but science can provide solutions.”

Professor O’Hara said there were already two Queensland facilities capable of converting cane and sorghum into ethanol, but the challenge was finding a method for turning sugarcane fibres into higher-performing fuels.

Professor O’Hara, who has received $6.2 million in funding* to investigate producing other products from green waste including more eco-friendly chemicals and plastics, said the main aim of the research was finding a way for farmers to profit from waste products.

“Creating biorefineries which generate higher value bioproducts from waste products is one of the keys to creating a profitable future for Australian agriculture,” he said.

“QUT is a leader in this process and, with infrastructure including our Renewable Biocommodities Pilot Plant in Mackay (pictured right), we are uniquely placed to be at the forefront of this significant industry in Australia.”

* The project is supported by Sugar Research Australia, through funding from the Australian Government Department of Agriculture as part of its Rural R&D for Profit programme and Cotton Research and Development Corporation, Forest & Wood Products Australia, and Australian Pork Limited.
If your pre-schooler has watched Sesame Street lately, chances are they’re among the 780 million children worldwide who’ve seen Jessica Mauboy sing the number ‘5’ with the help of Indigenous children and cartoon kangaroos.

The delightful segment was the first time the iconic US kids’ show had used Australian-made content.

The big birds at Sesame Street liked it so much that the number ‘3’, the letter ‘T’ and a segment called ‘Shipwreck Discovery’ quickly followed.

Australia’s big break into one of the most popular children’s shows in the world is thanks to the vision and tenacity of QUT MBA alumnus Wayne Denning (pictured with Ms Mauboy).

Mr Denning visited Sesame Street’s New York headquarters to personally pitch the work of Carbon Media, the thriving Brisbane-based Indigenous media production company he founded.

“We’ve just finished another four Sesame clips - B for Bugs, N for Nature and two for Elmo’s World for season 47 next year,” Mr Denning said.

But Sesame Street is not the only thing on Carbon’s plate. The powerhouse production company is in the final stages of financing three television projects, one of which has been developed with Essential Media, makers of Rake, and Jack Irish.

“The big ticket item is a series called The Time Shifters which has 26 half-hour shows shot in Cape York. It’s a teenage drama comedy so it has natural comedic elements. Funny things just happen,” Mr Denning said.

“Also on the way is Cheeky Dogs, 65 three-minute animations and 32 episodes of a sports entertainment show for SBS’s NITV Channel.”

Carbon Media emerged from Mr Denning’s idea for an MBA team assignment to create Carbon, a small media company which would produce video content for mobile phones.
Recognised for bringing the outdoors inside

Pioneer of the inviting garden-like architecture that now softens many of our public buildings and institutes, Beth Wilson, has been recognised with an Honorary Fellowship from the Australian Institute of Architects (AIA), Queensland Chapter.

Mrs Wilson (pictured with Hamilton Wilson, Wilson Architects and Richard Kirk, AIA Queensland Chapter) was in the QIT (now QUT) cohort of Queensland’s first landscape architecture course commencing in 1966.

She is the first landscape architect to be awarded an honorary fellowship from the institute.

Landmark projects benefiting from Mrs Wilson’s knowledge of vegetation and sense of history and place include Cathedral Square, the Brisbane City Botanic Gardens, Translational Research Institute (pictured) and QUT’s new Education Precinct Building.

Living the dream where life never stops

Education graduate Penny Hosking-Potts is the face of QUT’s latest marketing campaign.

Living her dream, Ms Hosking-Potts is teaching physical education at the Australian International School in Singapore, where she secured an overseas placement for her practical assessment while still at QUT.

She describes Singapore as “20 countries rolled into one” where “life never stops” and where her school excursions involve taking classes to places like Vietnam.

Tax isn’t taxing for young gun Stuart

At 27, Stuart Landsberg is the youngest partner in any of the big four accounting firms in Australia – but age is just another number to a man who deals with them daily.

In July the QUT graduate, who completed a Bachelor of Business (Accounting/Finance) in 2009, became a partner, Tax and Legal, in the Brisbane office of leading professional services firm PwC.

Mr Landsberg joined the PwC traineeship program straight from high school and now is one of eight Brisbane partners leading a team of 70 staff.

“Getting that industry experience while studying at QUT was helpful for employability and practice and it also helps for your degree, to know why you are studying what you are studying,” Mr Landsberg said.

“The thing about tax is it is a combination of language and law and it is about problem-solving. I am lucky to have found an area I enjoy.”
Gadgets and games to reduce dodgy driving

With young male drivers prone to boredom behind the wheel, road safety researcher Dr Ronald Schroeter (pictured) is investigating whether gadgets and games will make risky drivers safer on the roads. Technologies including Google Glass and head-up displays like those used by jet pilots to display images on plane windscreens will be used to see if gaming stimulation replaces the urge for risky driving. “For example, imagine an angry birds-type scenario where you have birds on your windscreen hitting or missing a bulls-eye dependent on your driving performance when braking at a red traffic light. This basically turns every red light into a playful driving game,” Dr Schroeter said.

Walk this way: fossil forces rethink on our ancestors’ emergence

A 333-million-year-old broken bone could mean the first vertebrate animals to walk on land were from Australia and emerged two million years earlier than previously thought.

A team of palaeontologists, including QUT evolutionary biologist Dr Matthew Phillips (pictured), and colleagues at Monash University and Queensland Museum, analysed a fractured and partially healed radius (front-leg bone) from *Ossinodus pueri*, a large, primitive, four-legged (tetrapod), salamander-like animal, found in Queensland.

Dr Phillips said the results pushed back the date for the origin of demonstrably terrestrial vertebrates by two million years.

Research update
Rush to crush risks medicine effectiveness

People who take more than four doses of medicine a day are more likely to crush tablets or open capsules – potentially reducing their effectiveness and risking adverse effects, health researcher Dr Esther Lau (pictured) has found. Of 369 survey respondents almost half did not think there would be issues with crushing or modifying tablets or capsules and many participants said they would not seek advice about this, nor tell a health professional if they experienced difficulty swallowing. Dr Lau said health professionals needed to be more assertive in providing consumer education to ensure the general public is aware of the potential issues.

Pouring cold water on ice bath recovery

If the thought of a post workout ice bath is enough to make you shiver, joint research findings from QUT and The University of Queensland will warm your heart.

The study found cold water immersion after strength training hindered muscle adaptation – dismissing the long-held theory that an ice bath helps speed up recovery. Dr Jonathan Peake said the findings suggested an active warm down after a workout would provide more long-term muscle gains.

Sights set on tracking threatened species

Wildlife experts and QUT researchers have combined to create an “immersive environment” to locate and track at-risk species across the world through virtual reality.

Professor Kerrie Mengersen (pictured) said information gathered from field trips would enable a virtual platform to monitor critically endangered animals like rock wallabies, cheetahs and Sumatran orangutans, without physically being in their environments.

The team uses high-resolution, 360-degree cameras to capture real-time panoramic displays of the habitats, which include the Queensland and New South Wales border ranges and Borneo rainforest.
More than 18,000 people poured into QUT’s Gardens Point campus to be inspired, amused and amazed by a unique festival of robotics.

QUT’s second Robotronica event, held in August, gave the crowds a glimpse of the future featuring a variety of robots and performers, from dancing Naos to a robot that plays jazz.

The free technology spectacular offered a chance to engage the community in QUT’s nation-leading robotics research and encourage them to ‘meet the future’.

With a range of workshops and displays showcasing the latest innovations in robotics, engineering and interactive art, the event helps to fulfil QUT’s mission to inspire young people into STEM education and careers.

Kids get an introduction to sound programming at the Buildacode music-building interactive workshop.

Human orchestra DeepBlue and more than 40 robots closed Robotronica with a breath-taking performance blending art and science.
Visitors flocked to QUT’s Gardens Point campus for the free robotics extravaganza.

Autonomous aquabots designed for search and rescue missions on display in the pool.

A young visitor takes a closer look at agricultural fertilising and weed-collecting robot Ag Bot II.

Performance artist Stelarc shows off his third ear to colour-blind cyborg Neil Harbisson, who ‘hears colour’ through an antennae implanted in his skull.

Professor Gil Weinberg and his jazz improvising Shimon Robot from Georgia Tech’s Centre for Music Technology in Atlanta.
What’s more interesting than your answer* is how you arrived at it. Was it instinct, knowledge or a complete guess?

Behavioural economists are using the insights gained from seeing how people answer questions like these to help Australia’s corporate regulator protect investors.

QUT’s Queensland Behavioural Economics Group (QuBE) investigated what our approach to such questions says about how we invest, particularly when it comes to highly complex financial products.

The Australian Securities and Investment Commission (ASIC) is using QUT’s research to identify and communicate with investors who may suffer from overconfidence or ‘the illusion of control’.

Being able to identify risk-takers and tailor warnings could avoid catastrophic losses, not just for individuals, but entire economies.

Associate Professor Anup Basu, who led the research for QuBE, said there was a “highly significant relationship” between participants with an “illusion of control bias” and their allocation to complex hybrid security financial products.

“Illusion of control bias describes the tendency of individuals to believe that they can control or at least influence the outcome of an uncertain event, when they actually cannot,” he said.

“For example when buying Lotto tickets, some individuals believe choosing their own numbers, as opposed to being assigned random numbers, increases their odds of winning.

“Investment decisions are influenced heavily by a range of cognitive biases rather than solely rational consideration of all options.

“An understanding of the biases that influence investing in hybrid securities could assist ASIC in communicating risk to the public and informing conversations with industry.”

*An adult male sperm whale weighs approximately 40 tonnes.
When an Indonesian PhD researcher became the first international student to win QUT’s Student Leader of the Year award, it was fitting for the news to spread around the world.

Tri Mulyani Sunaharum, originally from Malang, Indonesia, is completing higher degree research in Urban and Regional Planning at QUT and is also the first PhD student to receive the award.

She was recognised for her outstanding leadership efforts since commencing at QUT as a Masters student in 2012.

The honour was covered by media including the ABC’s Australia Plus network, the UK-based PIE News and the Jakarta Post. The Australian Embassy in Jakarta also shared the announcement on its Facebook page, with the news reaching a total Facebook audience of around 250,000.

“Studying at QUT has been an amazing experience. I have been able to develop my academic and personal skills as well as contribute to QUT and the wider community,” said Ms Sunaharum, who is a lecturer candidate for Indonesia’s University of Brawijaya, where she completed her Bachelor of Engineering.

“I am especially proud of fostering and maintaining good relations between young people of Australia and Indonesia.”

An enthusiastic contributor to the QUT, local and international communities, Ms Sunaharum has run the ‘New to Brisbane’ student program and co-facilitated international student information sessions.

Known as ‘Yani’, she is vice president of the QUT Indonesia Students Association and helped facilitate the visit to QUT by Indonesian President Joko Widodo during the G20 Leaders’ Summit in Brisbane.

QUT’s Student Leadership Awards are an initiative of the QUT Alumni Board and recognise QUT students for outstanding leadership and engagement with the university and wider community.
Octogenarians’ 70-year teaching reunion

A group of tireless teachers dedicated to educating generations of Australian schoolchildren have celebrated a milestone 70th anniversary reunion at QUT.

More than 30 former teachers, who graduated from Queensland Teachers Training College (QUT’s predecessor) in 1945, returned to QUT’s Kelvin Grove campus for an extra special catch up with their classmates.

“Golden Graduate” Phil Cullen AM, a former Director of Primary Education in Queensland, said he had been planning the reunions for 40 years.

The graduating class, all aged over 85, try to meet every year in West End, Brisbane.

“We decided that we should keep going to the same venue on the same day for as long as we could… until only one person turns up,” he said.

BDO partnership to spur on students

The Brisbane office of global accounting firm BDO has become the first business organisation to partner with QUT in creating scholarships for disadvantaged students.

Two new BDO Learning Potential Fund Scholarships, beginning next year, will be awarded for three years to highly motivated but financially struggling students.

The scholarships will be funded by staff through the BDO Workplace Giving Program, with the company matching donations – a philanthropic model based on QUT’s Learning Potential Fund.

The new scholarships will support students to undertake a Bachelor of Business (Accountancy) or Bachelor of Business/Bachelor of Laws (Honours).

Bernard Curran, BDO Partner and QUT alumnus, said more than 180 BDO staff were QUT alumni and there was “a lot of enthusiasm” about the philanthropic initiative.

Relive the stories that shaped an institution

A new resource will allow alumni to delve into the rich history of QUT and relive major events and milestones through a digital collection managed by the QUT Library.

QUT Stories features photographs, books and videos highlighting the social and academic history of QUT and its predecessor institutions.

With resources from 1849 to present, the collection includes everything from class photos (the Kelvin Grove Teachers College Group from 1965 pictured) to recent events like the 25th Anniversary Gala Dinner.

Browse the collection at http://bit.do/qut-stories
To contribute to the collection, email digitalcollections@qut.edu.au
It is with great sadness that we mourn the passing of our colleague and friend Leesa Watkin. For more than 19 years Leesa was a valued staff member of the Alumni and Development Office. She has made a significant contribution to QUT and our alumni relations program. Our thoughts are with her family and colleagues.

Wesley to take centre stage for Sydney Festival from 2016

QUT alumnus and Council member Wesley Enoch has been appointed the next festival director of the Sydney Festival. Mr Enoch, who graduated with a Bachelor of Arts (Drama) with Honours in 1990, will take on the appointment from 2016, overseeing the 2017-2019 festivals. Having directed individual projects at the festival over the past 15 years, his new role follows a previous position as artistic director of the Queensland Theatre Company.

A passionate promoter of community arts and culture, Mr Enoch said the new role would see him play a major part in a festival he has long loved. “Excited is too inadequate a word for how I’m feeling,” he said. “I have had a long love affair with the Sydney Festival and its audiences. I’m totally thrilled to return in the role of festival director.”

“The festival is a huge family of people who give their time, resources, money and talent; and I want to meet every single one of them. Festivals provide a huge cultural canvas and help reimagine a city, helping it think creatively and see things differently. “I’m looking forward to rolling up my sleeves and getting started.”

Stay in touch

You can easily update your details and change your communication preferences (including signing up for our enewsletter) online.

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Vale

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Chapter news

Big Lift

The QUT Big Lift, a student collective and alumni chapter that aims to pay it forward by uplifting communities, took its annual end-of-year road trip in November. QUT Big Lift travelled to regional Queensland communities (including Moura, Eidsvold and Cherbourg) for a nine-day road trip.

For more information, visit: www.qutbiglift.org

Community of Former Staff

The Community of Former Staff (CoFS) will be holding their pre-Christmas lunch and AGM at Southbank TAFE on Wednesday November 25 from 11:45am to 1:30pm.

For more information and to RSVP, please contact the QUT Alumni team on alumni@qut.edu.au

Legal eagles fly in for annual catch-up

The QUT Art Museum was filled with some of Brisbane’s best legal minds at the annual get-together of law alumni in June.

More than 55 members of the Law Alumni QUT chapter gathered to mingle with old and new friends over a selection of drinks and canapés.

“It was great to see another wonderful roll up for our winter drinks,” Judge Paul Howard, President of the Law Alumni QUT chapter, said.

The chapter, now in its second year, delivers social events for members and provides opportunities for involvement with the university, such as mentoring students and hosting educational activities.

Pictured from left: John Toigo, Partner at ClarkeKann Lawyers, Fiona Toigo, Senior Legal Counsel at Arup Pty Ltd, Judge Paul Howard, Law Alumni QUT President, and Tim Balaam, Partner at Jensen McConaghy.

To join the Law Alumni QUT chapter, contact the QUT Alumni team on alumni@qut.edu.au

Feeling good

QUT campuses were filled with warmth in the last week of winter, as QUT Feelgood Week united the QUT community in the joy of giving, celebrating acts of care, generosity and kindness. Students, staff and alumni took part in activities and events with more than $8,000 raised for the QUT Learning Potential Fund at the QUT Trivia night and more than $10,000 raised in total.

Students wrote “Love notes to QUT” sharing what they love about our university.

The “My School Rules” Barbeque Cook-off sold more than 200 meals and raised $1050.

Students and staff participated in a free Feelgood Zumba class.

Rich rewards for joining online community

Alumni who joined our online community between February 2 and May 15 went in the running to win a $1,000 Visa Gift Card or one of 25 $100 Visa Gift Cards.

Congratulations to our $1,000 Visa Gift Card winner, Patrick O’Shaughnessy, and to our 25 lucky $100 Visa Gift Card winners.
Those of us concerned with the career prospects of future generations, and even our own, are well aware of the impact of technology.

The term “digital disruption” is already suffering from overuse, but there is no denying the impact the internet has had on bookshops, travel agencies, banks, newspapers and a host of other industries that rely on information in one form or another.

In recent years there has been a surge of interest in the potential impact of new uses of technology. Some have pointed to growing capacities in machine learning, use of big data to draw on complex and real-time information from a range of sources, as well as developments in robotic technologies to predict a wave of new areas where technology might replace current jobs.

In 2013 two Oxford academics, Carl Frey and Michael Osborne, calculated that some 47 per cent of total US employment is at high risk of being transformed by computers over the next couple of decades and, more recently, the Committee for Economic Development of Australia (CEDA) has released a report highlighting a similar-level impact of automation on Australia’s future employment pattern.

However, before we panic about robots coming for our jobs, or those of our children, we should take a reality check. It is much easier to contemplate tasks which might be undertaken by robots, but somewhat more difficult to imagine which new tasks will be needed to complement the work of technology or which jobs might become available as we free human labour from routine activities.

History has repeatedly shown that technology can make us much more productive and new jobs will emerge from unexpected quarters. If anything, we need the robotics revolution to move faster, and we have a great deal of work to do before the speculation about what can be done matches reality.

At QUT our scientists are at the forefront of developing robotic vision, unmanned vehicles, remote sensing, medical devices, big data and a host of other technological areas which promise to greatly benefit future generations by improving productivity and well-being.

Our recent Robotronica event showcased this work to more than 18,000 visitors, combining it with innovative creative performances. We have also delivered two Robotics MOOCs which this year attracted more than 20,000 registrations.

At QUT we know that the jobs of the future will come from unlocking our creativity and working with technology, and that is where we are guiding our students and focusing our research. We understand that it is far better to help create the future than to fear it.

Professor Peter Coaldrake AO
Vice-Chancellor
William Robinson, *Poinciana and fern garden* (detail) 2015, oil on linen, private collection, Brisbane

**Inspirations**

WILLIAM ROBINSON

30 July 2015 to 17 July 2016

Curated by special guest: The Honourable Quentin Bryce AD CVO, pictured with the artist.