

GAME CHANGERS

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UQ Dentistry

braces for a new era

10

Innovative techniques

to tackle environmental health issues

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Targeted treatment

gives new hope on breast cancer

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Professor Kevin Thomas at the Queensland Alliance for Environmental Health Sciences.
Photography by Anjanette Webb.

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Welcome to the second edition of Game Changers

*It has been another
outstanding year
in the Faculty
of Health and
Behavioural Sciences
at The University of
Queensland.*

Through a growing number of meaningful partnerships both internally between the six schools and five research centres that make up the Faculty and externally with major public and private health care providers, NGOs and industry partners of all kinds it has been possible over the past 12 months to advance the kind of inter-professional education and interdisciplinary research that will ultimately result in improved health care and health outcomes.

Our academic staff continue to lead the way in reshaping the training of future healthcare professionals and the interdisciplinary and translational nature of their research is poised to deliver real health, social, and cost benefits for patients and for the community, as well as the state and national economies.

Given that it is our devoted staff, our talented alumni, our enthusiastic students, and our valued partnerships that drive our success, I am delighted that we are able to highlight some of their stories here in *Game Changers*.

In this issue, we examine the innovative techniques researchers in the Queensland Alliance for Environmental Health Sciences are using to tackle potential threats to the environment and human health, and the mindfulness processes used by one of our eminent psychologists to improve the quality of life of those suffering Multiple Sclerosis.

The first female dental Head of School in Australasia outlines the many changes in the UQ School of Dentistry that are providing additional dental services to those that need them most, and our inaugural industry-funded Professor of Alcohol, Drugs and Mental Health details her work to build the evidence base for models of service delivery and treatments of substance use and mental health issues.

We find out how the UQ School of Pharmacy is preparing students for the changing landscape of health care systems, and about the major boost in health education, training and research that is coming to rural southern Queensland.

The Director of Allied Health & Workforce Development at the Institute for Urban Indigenous Health, who is also a UQ alumnus, shares her inspiring dedication to grow interdisciplinary student placements.

I hope you enjoy these, and other stories about the Faculty's activities, in this second issue of *Game Changers*.

Regards,



Professor Bruce Abernethy

Executive Dean
Faculty of Health and Behavioural Sciences
The University of Queensland





WRITTEN BY EMMA MACKENZIE

Over the course of the last few years, UQ's School of Dentistry has undergone many changes.

The largest of these has been the relocation of the School and its clinics from Turbot Street in the city to the newly built Oral Health Centre at Herston. This relocation has occurred at the same time as major alterations to the teaching curriculum and to the structure of clinical operations. That all of these changes have been able to be implemented relatively smoothly owes to the careful guidance and vision of the Head of School, Professor Pauline Ford.

Professor Ford set the bar high from day one when she became the first female dental Head of School in Australasia. She has a clear direction for the future, and is dedicated to making the school a leader in all areas of teaching and research.

"The past 12 months have been a rollercoaster, with some of the most exciting and gratifying moments in my career to date," Professor Ford said.

"I wouldn't swap it for anything, I have developed some new-found skills and strengths and also grown to understand the University and the ways that it operates in order to provide the most favourable outcomes."

Professor Ford spent the majority of last year planning for a new partnership with the public sector, forming an alliance between UQ and Metro North Hospital and Health Services (MNHHS). UQ is responsible for the academic function of the alliance, providing evidence-based teaching and clinically focused research, while MNHHS provides clinical service delivery and clinical supervision of students.

This mutually beneficial agreement combines the strengths of both organisations and alleviates the inefficiencies associated with operations which are not core activities.

"The alliance is not just about bringing together two parties, it has created a catalyst in which has developed a new way of thinking around academic teaching, service delivery, research and public health," Professor Ford said.

MNHHS bring with them an outstanding history of delivering high quality clinical care and many talented professionals that enable UQ students to learn from the best. The enlarged number of clinical staff will also improve community access to services, benefiting the students' learning experience.

"The alliance will ensure that a student's time in clinics will be more efficient so they can actually see more patients and learn from a greater diversity of patients," Professor Ford said.

"Additionally, the range of learning opportunities for students will increase with our general anaesthetic theatres and other specialist observations becoming operational shortly."

Professor Ford has spent much of her professional life researching and enhancing dental care for the disadvantaged, and sees the alliance as another opportunity for dental students to improve the quality of life of those in need.

"Almost all oral disease is preventable, so rather than investing time into finding solutions for already occurring issues, I am more interested in what we can do to proactively create health for people, which is particularly pertinent to those who may have a social disadvantage," Professor Ford said.

"Our students are committed to providing healthcare to those who require it most. Research assistant and oral health therapist Nicole Cockburn won an award for her Dental Rescue Week for youth experiencing homelessness, and our existing partnership with Ozcare gives free dental care to men in South Brisbane hostels."

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School of Dentistry
dentistry.uq.edu.au

WRITTEN BY KIRSTEN O'LEARY

St George clinic to fill gap in dental services

The launch of a new dental clinic in St George in south-west Queensland will ease the shortage of dental services available to the community.

The UQ St George Dental Clinic, a partnership between UQ's School of Dentistry and Goondir Health Services, will provide dental training for students and comprehensive dental treatment to the community.

Australian Dental Association Queensland Branch past President and UQ alumnus Dr Derek Lewis and his team will supervise fifth-year UQ Bachelor of Dental Science (Honours) students on clinical placements at the clinic.

"Practice in a rural community, especially one with a high Indigenous population, arms students with invaluable experience that will increase their employability when they graduate and inspire them to think outside of the city when they apply for jobs," Dr Lewis said.

"Having a local clinic dedicated to treatment for those at disadvantage is a great benefit to the community."

Dr Lewis has had more than 35 years' experience as a dentist in public and private practice in cities and rural areas.

"As one who has experienced the joys of rural practice, I will encourage students to consider similar positions when they are seeking employment," he said.

"Encouraging more dentists to the bush is a very important health service I can assist with, as well as providing students with a successful career choice."

UQ School of Dentistry Head of School Professor Pauline Ford said the St George Clinic was an exciting step to making dental services more accessible to rural Queenslanders while providing rural placements for students.

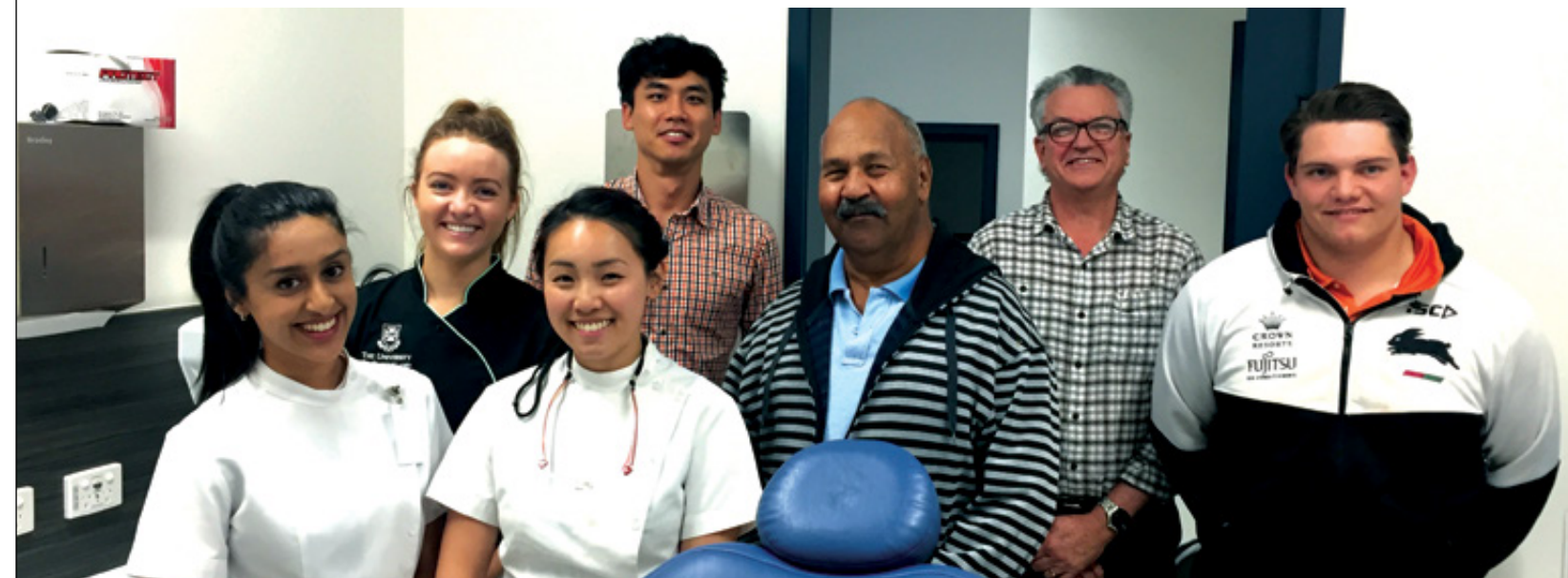
She said students had reported that their involvement with the Goondir Health Service in Dalby had encouraged them to consider working in regional Queensland.

"Having a presence in St George, 550km west of Brisbane, is of great benefit for rural health and for the breadth of experience we can offer our graduates," Professor Ford said.

Goondir Health Services Executive Officer Louise Sanderson said a survey of clients had identified dental health and access to dental services as a major issue.

She said the service would provide valuable cultural training.

"Every semester Floyd Leedie, the CEO of Goondir, takes the dental students to Cherbourg and provides them with the history of Aboriginal communities and how that history has impacted on today's health," Ms Sanderson said.





PHOTOGRAPHY BY ANJANETTE WEBB

WRITTEN BY DANI NASH

Early interventions for substance misuse key to lives being lived well

Alcohol and other drug use are the leading cause of disability and death in young people.



Unfortunately, very few young people with alcohol and drug problems seek help, with an average 18-year gap between problem identification and receiving treatment.

Increasing knowledge about what treatments are most effective for addiction and mental health is the focus of an appointment made by The University of Queensland and collaborators [Lives Lived Well](#).

Professor Leanne Hides joined the Faculty of Health and Behavioural Sciences in January 2017 as Professor of Alcohol, Drugs and Mental Health.

A leading researcher in the field, Professor Hides holds an NHMRC Senior Research Fellowship and has over 17 years of clinical and research experience in the mental health and substance use sectors.

Her main areas of research interest include the efficacy of early interventions for primary and comorbid substance misuse, including the creation of web- and mobile phone-based interventions.

Developing and testing innovative treatments is a key aim of Professor Hides and the clinical staff she works alongside.

"Lives Lived Well, a not-for-profit organisation providing addiction prevention and treatment services across Queensland, is our ideal clinical and research partner," Professor Hides said.

"Together we are able to build the evidence base for models of service delivery and treatments of substance use and mental health issues.

"We will also be able to translate our research into clinical practice to help bridge the cavern between what we know works and what gets used in clinical practice.

"This will ensure young alcohol and other drug users have access to timely and effective treatment."

Prior to joining UQ's School of Psychology, Professor Hides was Deputy Director of the Centre for Youth Substance Abuse Research (CYSAR), based at the Queensland University of Technology's Institute of Health and Biomedical Innovation.

CYSAR is the only youth-focused substance use research centre in Australia. Established with philanthropic funding, this UQ and QUT partnership seeks to understand, prevent and enhance evidence based strategies, programs and policies for youth substance use.

During her tenure as Deputy Director of CYSAR, Professor Hides' team developed a mobile app – 'Ray's Night Out' – to assist teenagers in learning safe drinking behaviours in a fun and interactive way.

'Ray's Night Out' was part of the eTools for Wellbeing project delivered through the Young and Well Cooperative Research Centre. The six eTools included mobile apps and websites that were distributed freely online. Two of the apps were listed in BuzzFeed's 2015 top 11 mental health apps, and in 2016 the eTools for Wellbeing project was awarded the Best Promotion or Prevention Project at the Mental Health Services Conference of Australia and New Zealand. The award recognised the work by Professor Hides and her team in engaging with young people to design effective and useful tools to prevent harms associated with alcohol and other drug use.

This included the 'Keep It Real' web-based program targeting psychotic experiences in cannabis users.

"There is strong evidence linking cannabis use with the risk of psychosis, and with 'Keep It Real' we're trying to help young cannabis users identify if they're at risk," Professor Hides said.

"The program provides cannabis users with age and gender specific feedback on how many other young people experienced psychotic experiences after ingesting cannabis, to help them figure out if their experiences are consistent with others.

"The program helps normalise these reactions, provides strategies for reducing both cannabis use and psychotic experiences, and facilitates professional help seeking when necessary."

Since starting in the Lives Lived Well Chair, Professor Hides has continued to translate research into effective strategies. Her team has delivered brief interventions to 400 young people with alcohol-related injuries and illnesses accessing hospital emergency departments and crisis support services in the Brisbane Safe Night Out Precinct.

A recent \$2.31 million Alcohol and Other Drug Research grant from the Federal Government will support the continuation of this work.

"We now aim to identify at-risk young people in South East Queensland's Safe Night Out Precincts and provide them with an effective early intervention to reduce their risk of future alcohol-related harm," Professor Hides said. ☺

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Centre for Youth Substance
Abuse Research
cysar.health.uq.edu.au
School of Psychology
psychology.uq.edu.au

COVER STORY

WRITTEN BY KIRSTEN O'LEARY

Innovative techniques used to tackle environmental health issues

The Queensland Alliance for Environmental Health Sciences (QAEHS) brings together experts who dedicate their careers to quantifying and combatting potential threats to the environment and human health.

From screening drinking water for chemicals that might threaten water security to investigating the impact man-made chemicals have on coastal airport environments, QAEHS researchers are tackling environmental health issues to create a healthier nation.

Launched earlier this year, the centre has made headlines with several projects of public interest including the [chemicals found in the Great Barrier Reef turtles](#) and producing two of the nine [National Wastewater Drug Monitoring Program reports](#), released by the Australian Criminal Intelligence Commission.



QAEHS Centre director Professor Kevin Thomas said to address the complex environmental health challenges facing society it is necessary researchers and policymakers work together to develop partnerships and collaborations across different sectors.

"In recent years our understanding of the effects chemicals can have on humans and wildlife has rapidly evolved. In everyday life we are exposed to thousands of chemicals, whether it be in the natural or built environment. At QAEHS we recognise the only way to tackle this complexity is through collaborative interdisciplinary research using innovative techniques."

QAEHS researchers span across several areas at UQ including the [Faculty of Health and Behavioural Sciences](#), the [Advanced Water Management Centre](#), the [School of Public Health](#), the [Institute for Social Science Research \(ISSR\)](#) and the [School of Communication and Arts](#).

Professor Thomas said it is this vast knowledge and expertise that allow the centre to focus on key environmental health areas requiring attention.

"We are currently working on a number of exciting projects including increasing our understanding of environmental pollutants in water resources and analysing health risk exposures, and the threat to water security. Innovative methods developed by QAEHS researchers were used during the G20 summit of world leaders in Brisbane in 2014, to ensure the safety of local drinking water, ongoing monitoring of South East Queensland water catchments and also in preparation towards the Commonwealth Games in 2018.

"We are working with the Department of the Environment and Energy and the Australian Government on air pollution to analyse trends among forty-four representative sites with different land-use in Australia. The project will contribute to Australia fulfilling its international obligations under the Stockholm Convention on persistent organic pollutants."



Other projects the team are working on include the work early career researcher Dr Xianyu Wang is doing on assessing early-life human exposure to selected pesticides using urinary biomarkers, and research from Professor Peter Sly on the impact of environmentally persistent free radicals on the respiratory health of children, just to name a few.

Each of the projects QAEHS focuses on are aligned under seven themes led by an expert in their field from UQ. Professor Thomas manages the environmental toxicology stream as well as research across four of the streams, mainly in collaboration with Professor Jochen Mueller.

"One project we are really excited about is the research we are doing with wastewater to reveal valuable information about the health of the community. So far we have focused on determining the level of drug use but some of our work on oxidative stress shows that there is also potential to develop a range of innovative techniques as a solution to quantitatively assess patterns of other factors within populations, such as chemical exposure, nutrition and disease."

Professor Thomas moved to Australia from Norway in January to begin his role as QAEHS director with over 150 papers and book chapters under his belt. He is also Associate Editor for the journal *Science of the Total Environment*.

"Coming from where it is freezing cold most of the time I laugh when friends and colleagues here in Australia comment on the weather during the cooler months. I certainly haven't missed shovelling snow nearly every day during winter and the short dark days, however there are a few things I miss. I miss the autumn colours, the changing of the seasons and going away with my wife Katherine and dog, Wurzel, to stay in our mountain log cabin.

"At this stage, I am very happy to call Australia home as I am thoroughly enjoying my role to lead QAEHS to become a recognised expert centre and first point of call for environmental health science in Australia. We have a lot of excellent research starting and I hope to see this develop to a level where a number of our existing flagship programs are directly influencing environmental health policy in Australia and further afield.

"We are very lucky to have the wealth of expert knowledge and experience among the QAEHS research groups, so I have no doubt the team will continue to produce research that meets the needs of Australia and the wider community globally."

QAEHS is jointly funded by Queensland Health and UQ. ☺

"I am thoroughly enjoying my role to lead QAEHS to become a recognised expert centre and first point of call for environmental health science in Australia."

PHOTOGRAPHY BY ANJANETTE WEBB



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Queensland Alliance for
Environmental Health Sciences
qaehs.centre.uq.edu.au

Being mindful

WRITTEN BY ALICE GRAHAM

Professor Kenneth Pakenham's research is inspired by the ongoing resilience of those with debilitating illnesses. A leading researcher and clinical psychologist in UQ's School of Psychology, his work with mindfulness techniques is targeted at bettering the quality of life of those suffering Multiple Sclerosis (MS).

PHOTOGRAPHY BY ANJANETTE WEBB

Professor Pakenham's initial motivations to investigate and improve the quality of life of those suffering chronic illness were personal.

In 1993 he was diagnosed with suspected MS – a condition of the central nervous system, interfering with nerve impulses within the brain, spinal cord and optic nerves. It affects more than 23,000 people in Australia, with more than two million diagnoses worldwide.

"I had lots of severe neurological symptoms: I couldn't use a keyboard, I had altered sensation in terms of touch. It was unclear where that uncertain diagnosis would lead," he explains.

As a career academic, Professor Pakenham's first reaction was to turn to research.

"Researching the literature on the psychosocial aspects of MS at that time, I found the predominant focus was on associations between psychopathology and the illness. There was very little by way of a positive approach to understanding the psychological aspects of MS."

To meet Professor Pakenham is to see his unwaveringly positive approach to life – be that his research, his clients, his research volunteers or his students. For him, it stems from documented principles of psychology coupled with the inspiration drawn from significant personal experiences.

"I committed to a value of vigorously extracting every drop of life from adversity that came my way. My initial MS research was conducted around the time of my suspected MS diagnosis, and I have continued it for the past 25 years, despite resolution of my initial neurological symptoms and not receiving an MS diagnosis."

Rather than shying away from momentarily negative experiences, such as the potential of a life-changing diagnosis, Professor Pakenham's personal methodology and professional outlook became informed by a growing area of psychology: mindfulness.

"Mindfulness involves bringing your attention to the present, including internal experiences such as thoughts and sensations, and the external environment."

"Attending to what is in the present means you have to face life honestly without pretence or avoidance – it involves a naked vulnerability."

"If discomfort, such as fear or sadness, shows up in the present, then opening up to it can be challenging; but that's what mindfulness requires – to show up, be open and be honest to whatever is in the present."

Expanding on existing research within the MS field – and the chronic illness field more generally – it was Professor Pakenham's aim to show that a brief, accessible mindfulness program could be flexibly delivered via a community organisation and offer its members benefits with respect to quality of life and enhanced living.

Most mindfulness programs had previously been offered through hospitals and clinics, generally hosted over an eight-week period. As Professor Pakenham is quick to point out, MS is associated with severe fatigue and fluctuations in disability, making attendance at such programs taxing. The aim was therefore to develop a program that was brief, easily accessible and provided through an established organisation with existing delivery channels, such as MS Queensland.

Two standardised mindfulness programs were integrated and adjusted to meet these needs, offering a simple approach with impressive outcomes.

Professor Pakenham and Master of Clinical Psychology student Elizabeth Spitzer initially delivered the program to two groups of 23 people with MS, evaluating at the beginning and end of the program, with a follow-up evaluation taking place eight weeks after the program had concluded.

The results of the pilot study showed that significant improvements were maintained at the follow-up stage with regards to mental health, quality of life, depression, symptoms of stress (including perceived stress), mindfulness skills, self-compassion and acceptance (psychological flexibility).

In addition to this, qualitative data were gathered on participants' perceptions of the program – unanimously the participants found it helpful, and feedback indicated they were able to better manage their difficult thoughts and emotions after having undergone the program.

Successful engagement in the program was reflected in retention rates, with no participants dropping out of the study, and all reporting that they would recommend mindfulness to others with MS.

The team, including clinical psychology students in training, continue to work alongside MS Queensland to deliver the program in the south-east corner of the state, with delivery to regional and remote areas facilitated by psychologists in private practice within their respective communities. Professor Pakenham's team provides the manualised program and workbooks, and in return the psychologists assist to evaluate the program.

Clinical neuropsychology doctoral student Maddison Campbell is evaluating the Mindfulness for MS Program longitudinally, studying the effects on quality of life, distress and fatigue, and cognitive function.

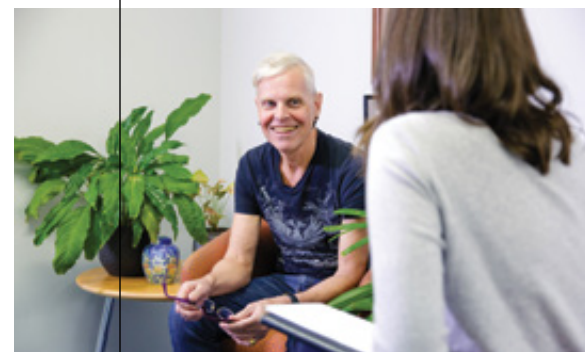
To date more than 200 people with MS have attend over 15 programs throughout Queensland.

The program is now being considered in other regions (ACT, NSW, Victoria and Tasmania), and has been translated into Italian with evaluation in Italy to commence shortly.

Professor Pakenham remains optimistic when considering the future of the study. He hopes carers can be trained in the mindfulness techniques, and that the program can be tailored to groups with varying neurological disorders, such as Parkinson's disease.

"My ultimate goal is to see greater access across the board with the research outcomes propelling wider dissemination of mindfulness programs, including those on an international stage."

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School of Psychology
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Award winning

Professor Kenneth Pakenham's dedication and devotion was recognised in the 2016 Australian Awards for University Teaching. Professor Pakenham received a Citation for Outstanding Contributions to Student Learning for 'Caring for Self to Care for Others: scholarly leadership in integrating self-care into a psychotherapy curriculum that builds resilient clinicians able to relieve human suffering'.

The Mindfulness for MS Program received a UQ Partners in Research Excellence Award (2016) for the productive partnership with MS Queensland in the development, implementation and evaluation of the program.

WRITTEN BY CAROLINE DAY

There's no medicine like exercise

8 Dr Tina Skinner believes exercise should be the new drug of choice for people with cancer and cancer survivors.

And, if her research discoveries are anything to go by, the evidence stacks up.

"Exercise is medicine for people with cancer and for cancer survivors, and it should be prescribed just like any other medicine," she says.

8 Dr Skinner's exercise oncology team – UQ's Associate Professors [David Jenkins](#) and [Michelle Hill](#), and PhD student James Devin, Griffith University's Professor Suzanne Chambers, Cancer Council Queensland's Professors Jeff Dunn and Joanne Aitken, and collaborators from Canada and Sweden – were the first to show that high-intensity exercise can reduce tumour growth while providing significant physical and psychological benefits for cancer survivors.

The team took a group of bowel cancer survivors and prescribed half of the group 4 x 4 minutes of high intensity interval training (HIIT) three times per week, while the other half undertook the current physical activity guidelines of 150 minutes of moderate intensity exercise per week.

"The results were extraordinary. After just eight weeks, the people in the HIIT group showed superior and accelerated improvements in cardiorespiratory fitness compared to the group meeting current physical activity guidelines, as well as reductions in fat mass. This amount of improvement has been shown to relate to a 10 per cent reduction in mortality.

"Furthermore, the improvements in cardiorespiratory fitness were maintained even with a reduced frequency of training and after four weeks of complete withdrawal of exercise training."

For Dr Skinner's team, the next step is to examine the anti-carcinogenic effects of high-intensity exercise on tumour growth and cancer re-occurrence.

"Our latest research has demonstrated that just a single session of high-intensity exercise can reduce colon cancer cell numbers, while moderate intensity exercise had no effect.

"We will now explore whether repeated exposure to high-intensity exercise may have anti-cancer benefits and subsequently improve the prognosis for people with cancer.

"If the results are positive, it will suggest that high-intensity exercise could potentially help reduce the risk of cancer reoccurrence, improving survival rates, and adding years to someone's life."

The current physical activity guidelines for people with cancer and cancer survivors is the same as the Federal Government's recommendations for all adults, involving moderate to vigorous intensity exercise, but not high intensity exercise.

Dr Skinner says that the study results suggest high intensity exercise may actually give superior and more sustained benefits than the current guidelines, in less time.

This is not her only study that shines the spotlight on high-intensity exercise, having recently demonstrated that HIIT can radically reduce post-cancer fatigue.

The finding contradicts traditional advice that cancer survivors should take things easy in recovery, and stick to gentle exercise like walking or yoga, and even current recommendations suggesting moderate intensity exercise.

"Fatigue is one of the most common and debilitating side effects of cancer, and can persist for up to 10 years beyond treatment.

"We were encouraged to find that under the supervision of Accredited Exercise Physiologists, bowel cancer survivors were capable of high intensity exercise, reported high levels of enjoyment, and experienced no serious adverse effects."

After the study was complete, they found those who endured the tougher workouts actually reported more energy and less fatigue overall, while those who performed the moderate intensity routine experienced consistently high levels of fatigue.

"When you have just beaten a bout of cancer it seems counterintuitive to push yourself hard in a gym, but it appears to be the quickest and most effective way to get patients feeling like their old selves."



Given the success of these recent studies, Dr Skinner is now collaborating with community-based exercise physiology services to introduce new protocols in their practices.

She is hopeful that her research will inform cancer guidelines by the inclusion of an exercise prescription into a cancer survivor's care plan, and for cancer rehabilitation services to refer people diagnosed with cancer to an Accredited Exercise Physiologist.

Translation of research into practice is vital for meaningful improvements in health care services. However, as Dr Skinner points out, people with cancer and cancer survivors will only benefit from this research if they actually do the exercise.

"While the benefits of exercise for people with cancer and survivors is unquestionable, research shows that most cancer survivors are inactive. A recent Edith Cowan University study found that only 12 per cent of Australian men with prostate cancer were meeting physical activity guidelines.

"Even in healthy populations exercise adherence is a challenge. It's not easy to keep people exercising. We think peer-support may be the key. That's why one of our current projects is exploring peer support for exercise engagement and maintenance."

This randomised control trial will extend Cancer Council Queensland's structured peer-support program from psychological support to include exercise support.

Combined with a HIIT program, the trial aims to test whether peers can help cancer survivors maintain exercise participation, and subsequently improve their fatigue, sleep, physical function and psychosocial wellbeing.

If successful, the goal is to roll out the peer-support program into the Cancer Council Queensland exercise clinics for cancer survivors, and hopefully expand the program across Australia.

Along with clinical research, Dr Skinner lectures to clinical exercise physiology students and supervises Masters and PhD students. She is particularly enthusiastic about the [Exercise Clinic for People with Cancer](#) at UQ.

"This clinic is fantastic. It invites people with cancer and survivors to participate in exercise under the close supervision of Accredited Exercise Physiologists and fourth year Clinical Exercise Physiology students.

"We have been running the clinic for over seven years and it has helped hundreds of people improve their physical and psychological health, and meet their health and exercise goals.

"Exercise really is medicine for people with cancer."

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School of Human Movement
and Nutrition Sciences
hmns.uq.edu.au

"Exercise is medicine for people with cancer and for cancer survivors, and it should be prescribed just like any other medicine."



PHOTOGRAPHY BY ANJANETTE WEBB

WRITTEN BY KIRSTEN O'LEARY

Companion animals delay women leaving domestic violence

Women in domestic violence relationships delay leaving due to concern their abusive partner might hurt or neglect their animals left at home.

A research team from The University of Queensland examined the impact domestic violence had on companion animals and how this affected the victim's decisions.

Dr Catherine Tiplady from the [School of Veterinary Science](#) said the 13 participants in the study all reported their companion animals were abused or threatened by abusive male partners and they delayed leaving due to concerns their partner would hurt their animals.

"The types of physical animal abuse included kicking, hitting, and throwing, as well as 'forced intimacy' by forcing a cat to lay with the abusive male 'until she gave up'," Dr Tiplady said.

"One of the participants in the study said she delayed leaving for just over nine years, at which stage she elected to euthanise all three dogs because she couldn't take them with her, and to leave them with her partner would have led to them being harmed as punishment for her leaving."

Dr Deborah Walsh from UQ's School of Nursing, Midwifery and Social Work said a consistent theme across animal abuse cases connected to domestic violence was the violent partner exploiting the close relationship between the woman and her companion animal in an attempt to gain power and control over her.

"In some cases animals act protectively toward the woman and pay the ultimate price for that act," Dr Walsh said.

"One of the most concerning results we found was some animals developed a generalised fear toward all men after they had been harmed.

"Most of the animals went on to have high levels of anxiety and fear-based behaviours long after the woman and the animals had left the violent partner."

The study highlighted the need for more education to be provided through domestic violence organisations about where they can go to seek help for their animals.

"Many women used animal fostering, however they found the duration was insufficient and expressed anxiety about the need to find safe, animal-friendly accommodation within the 28 fostering days available for women in refuge," Dr Walsh said.

"We also found very few women were willing to confide in veterinarians about the domestic violence and animal abuse.

"Veterinarians need to be educated on issues regarding animal guardianship during domestic violence to enhance their ability to provide knowledgeable and compassionate support when confronted with these cases in practice."

The team of researchers included Dr Walsh, Dr Tiplady and [Professor Clive Phillips](#) from UQ's [Centre of Animal Welfare and Ethics](#).

The study was published in [Society and Animals](#).

Flood study highlights impact of pre-birth stress

Research into the impact of the 2011 Queensland floods on pregnant women and their babies has found stress from natural disasters affects infant development and temperament.

Pregnant women who had the most significant emotional response to the disaster had infants with the most difficult temperaments.

The study was led by [Professor of Midwifery Sue Kildea](#), who holds a joint appointment with Mater Research and UQ's School of Nursing, Midwifery and Social Work.

How the built environment impacts healthy ageing

Streetscapes, cafes, buses and planes weren't necessarily designed to deal with the ageing population explosion, however older people can advocate change to their environment by voicing concerns.

A study led by [Dr Anthony Tuckett](#) from The University of Queensland's School of Nursing, Midwifery and Social Work said the built environment had a powerful impact on the health of older people and on their ability to age well.

"We live in a moment in history where there are greater numbers of older people than younger people and, consequently, there are now increased numbers of wheelie-walkers, motorised scooters and slower-paced older people," Dr Tuckett said.

"With this demographic shift, policy makers haven't been able to adapt quickly enough to cater for the changes required among our built environments.

"A promising strategy to deal with this issue is encouraging citizen science, where older adults take an active role in documenting features of their environment that help or hinder healthy living and then voice them to policy makers to promote change."

The literature review examines how the ['Our Voice' framework](#) developed by Abby King and colleagues at Stanford University is a proven successful strategy adopted by communities worldwide that improves both individual and community health.

The study recommends ways gerontological nurses, clinicians and scholars could encourage citizen science and support policies and programs that promote healthy environments for older people.



WRITTEN BY KIRSTEN O'LEARY

"Research on the built environment, physical activity and the associated health benefits for older people is well documented, however isn't broadly used by gerontological nurses," Dr Tuckett said.

"We hope the review will motivate and encourage gerontological nurses, whether they are community nurses or residential aged care nurses, to take a fresh look at the communities in which they work, and broaden their approach to promoting health and providing care for older people.

"A two-pronged approach is required where gerontological nurses need to be educated about the benefits of citizen science and how they can encourage it among the groups they work in; and older people themselves need to be educated, so they are armed with the necessary information and tools to take action.

"For example we need to design streetscapes that are safe and wide enough for older people to walk in.

"These are 'age-friendly environments' which will ultimately soften the impact of disability onset and poor health associated with ageing.

"It is vitally as important that public policies are reviewed so they support healthy ageing and take into account the perspectives and experiences of the older people themselves."

"By adopting the 'Our Voice' approach it will simply be better in the long run for older people and society."

The study was published online in the [International Journal of Older People Nursing](#).

The 2011 Queensland Floods study team found varying effects from fetal stress on infant development at six months of age.

"Higher levels of hardship in pregnancy resulted in boys receiving more irritable temperament ratings than girls," Professor Kildea said.

"Difficult temperament traits early in life are related to later mental health and childhood behaviour problems.

"Improving support to women stressed during pregnancy could benefit their unborn child, as the womb environment is one of the earliest influences on infant temperament."

Researcher [Dr Gabrielle Simcock](#) said high levels of maternal stress affected girls' problem-solving abilities more than boys, and girls also demonstrated poorer cognitive and motor development skills.

"Prenatal stress was further linked to lower scores in two-year-olds' abilities to understand and predict another person's emotions and behaviours – which could cause later problems with their ability to engage socially with others," Dr Simcock said.

"These results demonstrate how stress in pregnancy can negatively shape child development, and provide foundations

for developing interventions aimed at pregnant women affected by a natural disaster."

Co-author [Dr Vanessa Cobham](#) said it was important to identify risk factors of poor mental health early.

"We can then target those women for interventions to reduce their stress in pregnancy to optimise their infants' long-term development," she said.

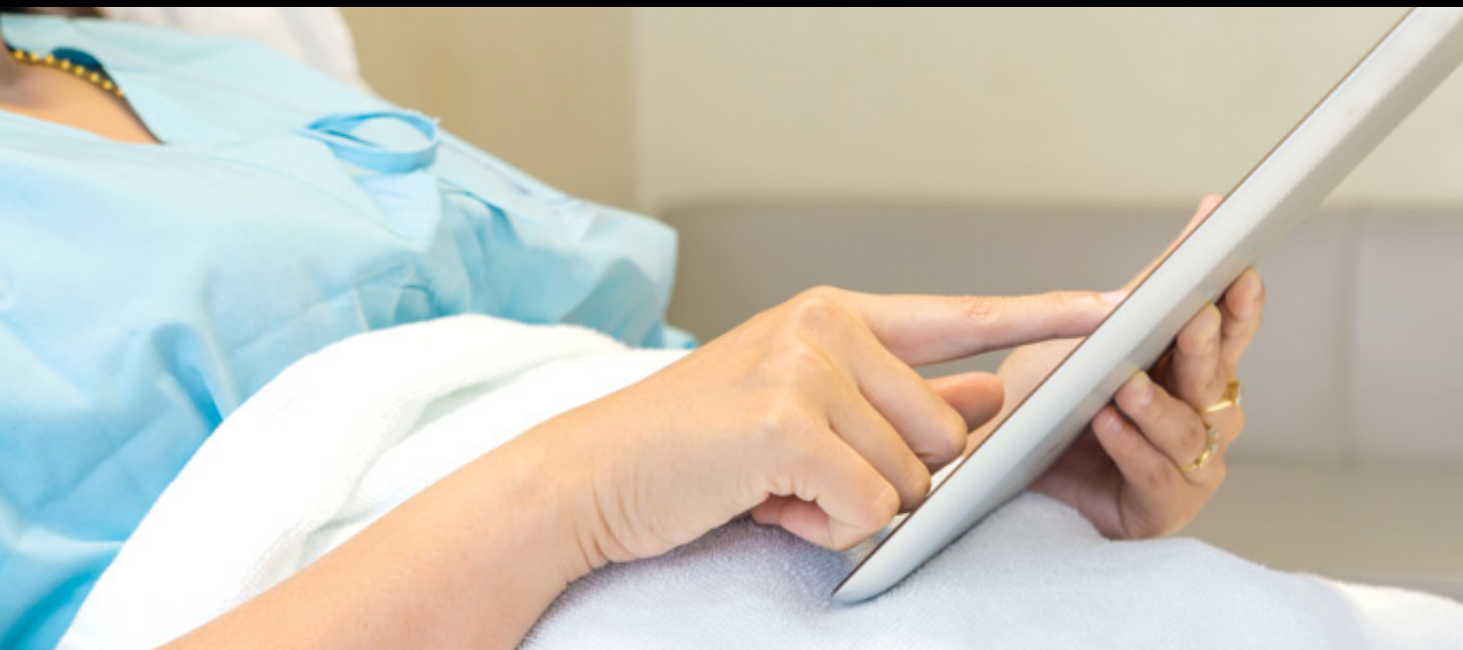
The studies also found that higher emotional reaction to the flood was related to better fine motor development at two months of age and improved problem-solving among boys at six months of age.

Research from the 2011 Queensland Flood study has been published in the [Journal of Behavioural and Developmental Paediatrics, Developmental Psychobiology, the Journal of the Developmental Origins of Health and Disease, and Developmental Psychology](#).

WRITTEN BY KIRSTEN O'LEARY

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and Social Work
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WRITTEN BY KIRSTEN O'LEARY

Stroke recovery linked to stimulating environment

A Queensland hospital has become the first to trial how increased activity in an acute stroke unit impacts on patients.

Physiotherapist Ingrid Rosbergen from The University of Queensland's School of Health and Rehabilitation Sciences said the study at Nambour General Hospital compared a sample of patients rehabilitated in an 'enriched' environment with patients rehabilitated in a 'usual' environment.

"Within the 'enrichment' model patients were encouraged to get out of their rooms and participate in group and communal activities as well as use stimulating resources such as iPads, music, newspapers, books and puzzles," Ms Rosbergen said.

"The 'enrichment' model implemented in the acute stroke unit resulted in a significant increase in physical, social and cognitive activity.

"Results were sustained six months post implementation and patients showed a significant reduction in adverse events."

The 'usual' environment in the acute stroke unit consisted of diverse therapists providing rehabilitation mainly within patients' rooms.

The 'enrichment' model included additional education and encouragement for patients, their families and hospital staff.

Patients, families and staff were provided with education about the benefits of increased activity on functional recovery after stroke and how they could contribute to recovery.

Families were requested to bring in the patient's clothes, hobby activities and photos and take patients out of the room and off the ward, when medically stable.

Patients in the 'enriched' acute stroke unit were significantly more active in a variety of areas.

Of patients in the 'enriched' environment group, 33 per cent were physically active, compared to 22 per cent from the 'usual' care group.

Forty per cent of the 'enriched' group were more socially active, compared to 29 per cent, and 59 per cent were involved in cognitive activity, compared to 45 per cent for the 'usual' environment.

According to the Stroke Foundation, by the end of 2017 more than 470,000 people will be living with the effects of stroke, and this is predicted to increase to 709,000 by 2032.

"With the rising number of people affected by stroke, it is vital we improve the current model of rehabilitation to reduce the burden of stroke and find a cost-effective intervention possible within our current staffing," Ms Rosbergen said.

"The next step for our research is to expand on current evidence to shape the 'enriched' environment so it can be used in multiple acute stroke units across other hospitals."

The study was published in the *Clinical Rehabilitation journal*.

find out
more about →

School of Health and
Rehabilitation Sciences
shrs.uq.edu.au

WRITTEN BY KIRSTEN O'LEARY

Last call for parents who supply teens with booze

Parents supplying their teens with alcohol are not only fuelling underage drinking but are increasing the risk that their children and their children's friends will drink heavily.



Australia-first research led by Dr Gary Chan from The University of Queensland's Centre for Youth Substance Abuse Research has found parents who supply alcohol to their children create a flow-on effect.

"We found adolescents living in regions where parental supply of alcohol was high were more likely to engage in heavy drinking, regardless if they obtained alcohol from their own parent," Dr Chan said.

"Parents need to be aware that by providing alcohol to their children, they are not only encouraging their son or daughter's heavy drinking, but their children's peer group as well.

"Teens are likely to share alcohol they receive from their parents with their friends.

"In communities where parental supply is common, adolescents may also have a heightened perception that alcohol is easily available and underage drinking is socially endorsed."

The researchers found parental supply of alcohol in general was higher in regional and rural areas than in cities.

The health risks outlined by the NHMRC alcohol guidelines include that heavy drinking can increase risky sexual behaviour, adversely affect brain development, and elevate the risk of poor mental health and death from unintentional injuries, homicide and suicide.

"Our results strengthen the evidence for communities with a high level of adolescent alcohol use to form a local coalition of key stakeholders, such as parents and school groups, to educate parents about the harmful consequences of supplying alcohol to young people," Dr Chan said.

"Previous studies found parents believed that, by supplying their children with alcohol, they could teach them to drink responsibly and provide a safe place to drink, thereby reducing alcohol-related harm in the long term.

"However, a review of 22 studies has found parental supply of alcohol was associated with more adolescent alcohol use, heavy episodic drinking and alcohol-related problems."

The positive news is overall the percentage of parents who supplied alcohol to their children has decreased since 2004.

In Queensland, prevalence of parental supply of alcohol was 18 per cent in 2004 and this decreased in 2013 to eight per cent.

The study is published in *BMC Public Health journal*.

find out
more about →

Centre for Youth Substance
Abuse Research
cysar.health.uq.edu.au



WRITTEN BY DANI NASH

Making connections: an inter-disciplinary success story



When Dr Alison Nelson graduated from UQ with her Bachelor of Occupational Therapy she knew she wanted to work in Indigenous health services.

After a stint working in country Queensland and NSW she moved back to Brisbane and started looking at Queensland Health jobs in locations where she expected there would be large Aboriginal and Torres Strait Islander populations.

“I was told ‘They don’t really access our services’, and I wondered why that was; is it because people don’t know what an occupational therapist is or does, or is there some other reason?” she explains.

“Then I thought ‘What if I took the services to people rather than expecting people to come to Queensland Health?’, so that’s what I did as part of my master’s degree. I set up a visiting occupational therapy (OT) service to two schools and two pre-schools that had large numbers of Aboriginal and Torres Strait Islander kids, and then evaluated the program looking at what worked and what didn’t work.”

One of those places was The Murri School, The Aboriginal and Torres Strait Islander Independent Community School, where UQ’s visiting student clinic continues to this day.

Now in its twentieth year, the visiting clinic has grown to include speech pathology students along with the OT students on practical placement.

Dr Nelson also collaborated with The Murri School during her PhD studies where she looked at the place and meaning of health and physical activity in the lives of urban Indigenous young people. She tracked a cohort of pre-teens as they transitioned from late primary school to early high school, exploring the ways in which they perceived public health messages and how that corresponded to their own health and lifestyle choices.

Finishing up her PhD coincided with the establishment of the Institute for Urban Indigenous Health (IUIH).

The IUIH was formed in 2009 by the four Aboriginal and Torres Strait Islander Community Controlled Health Services in South East Queensland to lead the planning, development and delivery of comprehensive primary health care services to the Indigenous population of SEQ.

PHOTOGRAPHY BY JACKSON CANUTO



The IUIH collaborates with health care providers, research bodies and academia, government departments and other community-based agencies, to improve the health of the urban Aboriginal and Torres Strait Islander population.

UQ’s relationship with the IUIH involves, among other things, student placements and research support. IUIH is a key partner in the UQ Poche Centre for Indigenous Health, a University-level centre located within the Faculty of Health and Behavioural Sciences.

By utilising data and an evidence-based approach, the IUIH has successfully grown SEQ health services from six to 19 clinics over the past seven years, responding to the rapidly growing urban population of 65,000 Aboriginal and Torres Strait Islander people.

As Director of Allied Health & Workforce Development at IUIH, Dr Nelson has been able to grow the student placements model she developed at The Murri School.

“When we started we had about 30 students, mostly from medicine, nursing and OT. Last year we had 388 students across 19 different disciplines. It’s given us an opportunity to provide a lot more exposure for students but also value adding to our service.

“Student placements are now much more sector driven than when we started, and we have a huge list of projects that we want students to do each year. We even place students from disciplines such as political science to tackle governance projects, but by far the majority of our students come from UQ’s health disciplines.

“I’m proud to say that every 4th year occupational therapy student at UQ participates in a meaningful opportunity working with Aboriginal and Torres Strait Islander people. These kinds of initiatives can only happen with strong partnerships with staff in the School of Health and Rehabilitation Sciences and with places like The Murri School.

“We love students! Our students are a hugely integral part of the story of Aboriginal and Torres Strait Islander health across SEQ.”

Dr Nelson’s love of students, and the contributions they make to IUIH, is evident as she describes some of the successful outcomes of projects they’ve worked on.

“The Work It Out program is our chronic disease and rehabilitation self-management program. At the time, we had no allied health team but we had a couple of students on

placement with us. The students researched other programs and came up with a template for what a chronic disease and rehabilitation self-management program might look like for urban Aboriginal and Torres Strait Islander people.

“The following semester we partnered with a local gym who had physiotherapy and exercise physiology students on placement and they helped us run the program. Then we had OT students evaluate the program.

“This inter-disciplinary approach enabled us to produce a report to table to the federal government and get funding to roll the program out across SEQ. Today, we self-fund the program across 10 SEQ locations and Queensland Health funds the program in Central Queensland.

“It’s a great example of our workforce development strategy in action. We started with five staff members and we now have over 500.”

Deadly Choices is another example. It began with support from a student project and is now a successful school and community based education program targeting chronic disease, nutrition, physical activity and tobacco education, while encouraging Indigenous people to be healthy role models. Evaluation of the Deadly Choices school program showed that 100 per cent of participants ate breakfast more often, 57 per cent increased their physical daily exercise, and smoking decreased by 14 per cent.

Dr Nelson believes the success of the programs is due to strong leadership from the IUIH management team, staff commitment, and the inter-disciplinary approach taken both in education and in practice.

“We spend considerable time and effort on integration. Allied health service delivery only works because it is embedded in, and integrated with, our primary health clinics and aged care services. It requires an ongoing vigilance to work out the systems and the structures, while also continuing to encourage individual staff to do the same.

“A lot of our placements are inter-professional placements. For example, all our speech and OT students do joint appointments, they work together, plan together, write notes together. It works incredibly well.

“In both the teaching that I do back into UQ and when students come here, it’s about getting them to think in terms of how they connect with clients, with their colleagues, with staff, and on a broader community level.”



PROFESSOR PETER LITTLE AM, HEAD OF THE SCHOOL OF PHARMACY

First-of-its-kind pharmacy arms itself for future practices

The University of Queensland's School of Pharmacy is celebrating the opening of a new community pharmacy within its Pharmacy Australia Centre of Excellence (PACE) precinct.

WRITTEN BY ALICE GRAHAM

Located within Cornwall St Medical Centre, the facility, which operates as a commercial, working pharmacy independent of the School, is Australia's first "teaching pharmacy".

The first batch of pharmacy students on placement were welcomed in January 2017.

Chief Executive Officer of UQ Health Care Darryl Grundy said the establishment of the pharmacy was the result of extensive planning over a number of years, assisted by the expertise and industry partnerships of his team.

"Ever since the medical centre opened in 2011, we've been working towards incorporating a pharmacy," said Mr Grundy.

A UQ School of Pharmacy alum himself, Mr Grundy is excited for the teaching prospects brought forward by the new facility.

"There are many regulations and restrictions surrounding a new pharmacy, so to see it in operation is a great achievement for us."

Upon entering, the Amcal+ pharmacy feels familiar, offering the high standards expected of a modern commercial pharmacy. The interior design was well considered by assessing the needs of patients, and financially assisted by Health Workforce Australia.

Collaborating within the Sigma brand of pharmacies, the joint approach has allowed for a fully functioning community-minded pharmacy to be added to the precinct of health providers.

A main point of difference, however, is the screen in front of the dispensary showing the movements of a robotic arm, finding and dispensing medications on command.

While a talking point, this arm points to the future of pharmacy practice.

The technology lends itself not only to future-proofing the facility, but to new and improving pharmacy practices, illustrating a shift in community health care.

Director of the Amcal+ pharmacy at PACE, Sanam Souzani, said the focus was no longer on the traditional "sticking labels on boxes" approach, but rather a 21st century level of service.

"By employing the assistance of German robotic technology, pharmacists will be brought forward to engage with patients and hold a greater presence within community health care," Ms Souzani said.

As health care providers are becoming increasingly collaborative across disciplines, pharmacy finds its piece of the health care puzzle fitting within the community by means of education, providing a greater and active outward-facing presence.

Professor Peter Little AM, Head of the UQ School of Pharmacy, said the new facility will prepare students for the changing landscape of health care systems, highlighting the need for balanced roles of practice, teaching and research.

"This pharmacy, through its own activities and interactions with the UQ School of Pharmacy, has a role in each of these essential facets of modern health care, and so it is the ideal model of a future community pharmacy," Professor Little said. ☺



WRITTEN BY KIM LYELL

US Defense supports UQ breast cancer research

The US Department of Defense (DoD) has committed more than A\$1.3 million from its Breast Cancer Research Program to a Queensland study tackling the spread of tumours to the brain.

The University of Queensland will conduct the three-year project, the only project outside North America awarded funding under the DoD's Breast Cancer Breakthrough Scheme (Award #W81XWH-17-1-0064 & 17-1-0065).

The study builds on previous findings from Professors [Greg Monteith](#) (UQ School of Pharmacy and Mater Research Institute-UQ) and [Sarah Roberts-Thomson](#) (UQ School of Pharmacy) and [Professor Sunil Lakhani](#) and [Dr Jodi Saunus](#) from the [UQ Centre for Clinical Research](#) (UQCCR).

This research suggests the movement of calcium in cells goes awry in both primary breast cancers and in metastatic tumours in the brain.

"Breast cancer metastasis to the brain is inevitably fatal with patients typically surviving four to 18 months from diagnosis," Professor Lakhani said.

"It is clear we need to be more innovative in our approach to treating these brain tumours, because they resist multiple lines of therapy.

"An idea gaining support in the biomedical community is to simultaneously target tumour cells and the features of the normal tissues surrounding them - the 'tumour microenvironment'."

Professor Monteith said cells use calcium to control a variety of processes.

"Understanding how these processes are altered in breast cancer could lead to new ways to reduce the chance of the disease spreading, and arrest the growth of tumours once they are detected in the brain," Professor Monteith said.

"The project will utilise safe, existing drugs targeting calcium channels already in clinical use for cardiovascular disease and chronic pain.

"Our study has been designed to provide preclinical data needed for patient trials or drug development programs after 2019."

Dr Saunus said, as research has traditionally focused on developing drugs that target tumours, far less is known about which aspects of the microenvironment could be safely targeted at the same time.

"Looking further ahead, this approach could also be adapted for treatment of lethal brain metastases originating from other cancer types, such as lung cancer and melanoma," Dr Saunus said.

WRITTEN BY KIRSTEN O'LEARY

Targeted treatment gives new hope on breast cancer

Queensland researchers have discovered a new way to target a rare form of breast cancer, giving hope for improved treatment options.

A [University of Queensland](#) study funded by [Cancer Council Queensland](#) found that some breast cancer patients could benefit from the new treatment.

[Professor Gregory Monteith](#) from UQ School of Pharmacy and [Mater Research Institute-UQ](#) said the recent discovery would pave the way for more targeted research and treatments for breast cancer patients.

"The study found that a cellular channel, TRPV4, which acts as a sensor in normal cells, is at a much higher level in some breast cancer cases," Professor Monteith said.

"This includes those cases that do not respond to most targeted therapies.

"We found that instead of switching off the protein to stop the breast cancer growing or metastasising, we can activate it further to cause the death of breast cancer cells.

"This work provides a new dimension into how we might be able to treat some types of breast cancers in future.

"This form of treatment may also complement other treatment options, and could represent a way to make current drugs more effective."

Cancer Council Queensland chief executive Ms Chris McMillan said the breakthrough was promising and had the potential to save lives.

"In Queensland, around 3300 women are diagnosed with breast cancer each year and sadly around 550 die from the disease," Ms McMillan said.

"Some women have a poorer prognosis due to lack of effective therapies available for their specific breast cancer.

"This research worked to identify potential new drug targets for breast cancer that act by changing the level of calcium inside breast cancer cells to stop their growth.

"While more research is still needed to further investigate these options, the ground-breaking discovery gives much-needed hope to breast cancer patients."

Ms McMillan said breast cancer was the most common form of cancer diagnosed in Queensland women.

"One in eight Queensland women will be diagnosed with breast cancer before the age of 85," Ms McMillan said.

"Through lifesaving research studies like these, we can continue to ensure that those affected have the best possible chance of successfully treating, and surviving, a diagnosis."

The research has been published in the journal [Oncogene](#).

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School of Pharmacy
[pharmacy.uq.edu.au](#)



WRITTEN BY KIRSTEN O'LEARY



with Professor Luke Connelly

Q Professor Luke Connelly is Acting Director of the UQ Centre for the Business and Economics of Health (CBEH) and Affiliate Professor with the Poche Centre for Indigenous Health. His main research interests are in health and insurance economics, and the effects of institutions on incentives and behaviour.

As a recognised leader in health economics research, what areas are you currently focused on?

We're currently focused on the use of large administrative health system datasets across a range of topics including Indigenous health, chronic kidney disease, referral and service use patterns, and questions of appropriate and cost-effective care. Much of this work is based on Queensland data, but I'm also working with colleagues at the University of Bologna in Italy on a large linked data set that provides us with data on about 4.5million individuals over a period of 11 years.

I've also been working with colleagues at UQ on insurance market problems, and with a colleague in Western Australia on a large Australian panel (longitudinal) dataset to examine the relationship between macroeconomic variables and the mental health of immigrants to Australia. Interestingly, the latter work shows that exchange rate movements and other macroeconomic indicators do affect the mental health of immigrants.

What are your goals as Acting Director of CBEH?

The main goal has been to recruit excellent personnel and to start building a strong centre profile. Thankfully, we've had enormous success in the recruitment of excellent staff including four truly outstanding Postdoctoral Fellows to date, as well as Professor Brenda Gannon who we recruited from the University of Manchester.

In February, we will welcome Professor Steve Birch who joins us from McMaster University as the Director and Taylor Family Chair. Professor Birch is a huge name in health economics, and recruiting him to UQ is a major boon for the centre.

What key issues is the centre addressing?

We're working on issues that span the age spectrum from child health through to adult health and ageing. One of Professor Gannon's areas of expertise is in ageing and dementia and she is involved in some large international projects on that topic.

One of the 'Closing the Gap' initiatives we are working on in Indigenous health is to reduce the rate at which Indigenous people discharge against medical advice (DAMA). The Australian rate for DAMA is rising and is 10 times greater for Indigenous than non-Indigenous Australians. The reality is that we don't really know why that is. Cultural matters may play a role, but it may also be that socio-economic status is a confounding factor. We're working to discover ways to reduce DAMA rates for Indigenous and non-Indigenous people.

We're also working on improving efficiency and identifying the sources of market failure in insurance markets, examining the drivers of health expenditure growth, conducting work on the economics of genetic testing and genomics, and looking at the effect of injury compensation (such as Worker's Compensation) on health outcomes, to name just a few.

We cover quite a vast array of areas, not only within the centre, but across UQ. This creates a lot of opportunity for innovation and we're only just getting started in that regard, really!

How do you hope the centre's research will influence health economics in 2018 and beyond?

CBEH is the only centre in Australia that is dedicated to the business and economics of health. Our vision is to be recognised as the leader in health economics and health business in the Asia-Pacific Region within five years. To do that we will need to continue to develop our international research and program delivery profile.



In the near-term we hope to establish strong research and capacity-building collaborations with health services in Australia and Queensland, in particular. We are currently engaging health services locally and plan to assist them through collaboration to build capacity in health services innovation and evaluation.

What work of centre researchers has had an impact in health economics?

The work we've done on disability, health and labour force participation, as well as some of the work we've done on child health and income has had an important influence. Some of the work we've produced has changed health policy and influenced road safety policy.

Much of the work we're doing now is also being published in some of the best journals in the field. Economics, as a discipline, tends to have a long citation half-life, meaning that the impact of some of what we've just produced is likely to start to become apparent in about five years' time. Given the calibre of the journals we're publishing in currently, the centre will have a strong influence on the field in years to come.

How significant was the Taylor family donation to the establishment of CBEH?

The \$1.25 million donation Fidelity Worldwide Investments Head of Australian Equities Paul Taylor and his wife Sue donated to CBEH was instrumental to establishing the centre. This generous gift has allowed us to begin conducting important research across business, economics and health, and to start building important partnerships with providers of health services nationally and internationally.

It has also assisted us to develop a critical mass of established researchers and next-generation educators in health economics. These researchers and educators will lead the nation to address one of Australia's most pressing problems, which is providing affordable and sustainable healthcare.

Both Paul and Sue are alumni of UQ. Sue is a psychology graduate and Paul is a commerce graduate. ☺



The Taylor Family donation adds to the philanthropy already raised as part of UQ's \$500 million philanthropic campaign. The campaign target is to raise \$500 million by the end of 2020. UQ's *Not If, When: The Campaign to Create Change*, aims to change lives within our community and around the world by encouraging support for research, disadvantaged students and teaching leadership.

The extraordinary support of philanthropists such as the Taylor family, who are driven to make the world a better place, are pivotal to the impact UQ can have on improving healthcare for future generations. Find out more at uq.edu.au/giving



WRITTEN BY DANI NASH

Multi-million dollar funding for RECOVER

Research into recovery from motor vehicle accidents will benefit from an additional \$3.8 million in funding.

The Motor Accident Insurance Commission has provided the funding to the RECOVER Injury Research Centre, extending the current research contract until August 2019.

RECOVER will also be fully consolidated into UQ's Faculty of Health and Behavioural Sciences, with the transfer of a stream of research from Griffith University.

The announcement coincides with the recent appointment of a new Director of RECOVER.

Professor Deborah Theodoros, from the School of Health and Rehabilitation Sciences, commenced in the role on 1 September 2017.

Professor Theodoros will also lead research on telerehabilitation, exploring the delivery of rehabilitation services to people in rural Queensland, and those who are unable to attend clinics due to limited capacity to travel.

Professor Theodoros is a Chief Investigator on UQ's National Health and Medical Research Council (NHMRC) Centre for Research Excellence (CRE) in Telehealth and has received over \$10 million in related research grants from the NHMRC and industry sources over the past 15 years.

RECOVER also welcomes **Professor Michele Sterling** who has transferred her research on whiplash injury from Griffith University.

Professor Sterling brings an NHMRC CRE on Road Traffic Injury Recovery and a number of other grants, as well as a team of researchers, to the new RECOVER.

A third stream of research will be led by **Associate Professor Venerina Johnston**, whose expertise is on return to work and social roles following injury.

Associate Professor Johnston has a rich background in occupational rehabilitation and injury management from the perspective of the insurer, provider and employer.

UQ **Faculty of Health and Behavioural Sciences Executive Dean Professor Bruce Abernethy** said the funding would allow the Centre to continue to produce breakthrough research.

"The work done by the RECOVER team has been shown to lead to better outcomes after injury caused by road traffic crashes," Professor Abernethy said.

"It is only through ongoing research that it will be possible to develop more effective treatments to lessen the physical and psychological suffering that can arise following injury."

find out
more about →

Recover Injury Research Centre
recover.edu.au

WRITTEN BY KIRSTEN O'LEARY

Students gain global health perspectives

UQ's School of Health and Rehabilitation Sciences offer four week, interprofessional, intercultural placement (IPIC) opportunities in Vietnam and Timor-Leste to final year occupational therapy, physiotherapy and speech pathology students.

The placements allow students to practically apply their learnt knowledge in a global healthcare setting, gain cultural perspective, and provide much needed support to local communities.

With the language barrier as a challenge, two UQ students found they could still develop relationships and treat patients using very few words.

Occupational therapy student Sally Ennever was part of the IPIC group who travelled to Vietnam in May this year.

"The relationships I made with children, teachers and families inspired and motivated me. It's pretty special when you don't speak the same language but you know that the bond you have with one another is the driving factor of a positive experience."

Students from across the three disciplines worked together to provide culturally appropriate care and recommendations for children and their families with varying needs who lived in Hue, Vietnam. They visited homes, schools, early intervention centres and orphanages and provided rehabilitation to increase engagement and participation in the day to day activities of communities.

For Sally there were many memorable experiences, however one in particular stood out. "We were asked by a teacher to create an activity that every child in her class would engage with and enjoy. Each child had varying needs, so achieving this was challenging. After discussion with the teacher, we decided to have parachutes made by a local tailor. The next day the class sat in a circle, held the parachute and engaged in this activity as a group."

"They absolutely loved it. We were so happy to see all the children having fun, but it was the teacher's overwhelming positive reaction that made it for me."

During the placements students are taught the importance of teamwork and using sustainable strategies and interventions. They are encouraged to source resources locally and collaborate closely with teachers and carers to build on activities currently in place.

"We were in Vietnam for four weeks. If something broke the week after we left, we had to ensure it could be replaced at little or no expense. This makes you think outside the box."

Speech pathology student Bridget Greathead was part of the interprofessional team who worked in the Timor-Leste's Centre for National Rehabilitation with a diverse and complex caseload, aged between 20 months to 80 years.

"I enjoyed working with the people of Timor-Leste. Learning from them, developing an understanding and respect for the way they work—which is more of a relationship centred model of care—was so rewarding."

"An experience I won't forget was with a child with a disability who was not responding to any interactions or showing communication intent. Due to the stigma of disability, she had not been exposed to play or language with other children or even adults."

"By the end of the placement, following consistent interactions with students and centre staff twice daily, she was walking with assistance, playing with other children, vocalising, demonstrating joint attention and making clear requests. Such a huge change in her demeanour was fantastic to see and we were able to equip the staff with games and incorporate group activities into therapy to help her continue to reach her targets."

Bridget's placement experiences in Timor-Leste highlighted the impact she could have on a person's quality of life by bringing allied health services to people in need.

"This placement reinforced my passion for speech pathology, across all areas of practice and across the lifespan. Once I have finished my studies I would love to work in Timor-Leste again, as well as remote and rural areas of Australia."

The Australian Government's **New Colombo Plan Mobility Program** funded the students placements in Vietnam and Timor-Leste. The aim of the scholarships is to increase knowledge of the Indo-Pacific in Australia.



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Rehabilitation Sciences
shrs.uq.edu.au

WRITTEN BY DANI NASH

UQ to provide major boost to regional health

Health education, training and research in rural south Queensland will receive a major boost thanks to the establishment of a new University Department of Rural Health (UDRH).

The University of Queensland has joined with the University of Southern Queensland and the Hospital and Health Services of Darling Downs and South West in a successful bid for Commonwealth funding to establish Southern Queensland Rural Health.

Nursing and midwifery and allied health students (physiotherapy, pharmacy, psychology, social work, occupational therapy, speech pathology, dietetics, and exercise physiology), will be placed in the Darling Downs and the South West, and the western area of the West Moreton region.

The supervisory capacity of the existing regional health workforce will be increased and students will be embedded into local communities.

Faculty of Health and Behavioural Sciences Executive Dean, **Bruce Abernethy** said the new initiative will complement UQ's existing medical education and training for students in rural and regional areas.

"UQ's Rural Clinical School provides high quality education and training to medical students, so I am delighted that the

UDRH funding will allow us to extend this opportunity to the next generation of rural allied health, nursing and midwifery professionals," he said.

"Rural placement allows students to experience the full scope of practice, which will now include inter-disciplinary education."

Research indicates that students who have been on rural practice are far more likely to return to work in rural areas once they qualify.

"For the local communities, this is part of a long-term strategy to address maldistribution of the health workforce," Professor Abernethy said.

"Rural and remote regions of Queensland and Australia often face challenges in attracting and retaining qualified health professionals.

"Students on rural placement will discover the diverse range of professional opportunities available in regional areas, thus enhancing the sustainability and viability of rural health care services."

The Very Best of Health

The Faculty of Health and Behavioural Sciences is at the forefront of innovation in health education and research and comprises six schools and five research centres:

- School of Dentistry
- School of Health and Rehabilitation Sciences
- School of Human Movement and Nutrition Sciences
- School of Nursing, Midwifery and Social Work
- School of Pharmacy
- School of Psychology
- Centre for the Business and Economics of Health
- Centre for Youth Substance Abuse Research
- Poche Centre for Indigenous Health
- Queensland Alliance for Environmental Health Sciences
- RECOVER Injury Research Centre.

Our state-of-the-art teaching and learning facilities include:

- Oral Health Centre – our \$134 million purpose-built Oral Health Centre is Australia's largest and most advanced tertiary oral health facility.
- Pharmacy Australia Centre of Excellence (PACE) – \$100 million specialist facility with particular focus on pharmacy and pharmaceutical science.
- Whitty Building at the Mater Hospital – \$30 million redevelopment transforming a heritage listed building into a modern educational health precinct.
- New clinic space for the School of Psychology and the Centre for Youth Substance Abuse Research in the re-developed Upland Road precinct.

Excellence in teaching

Many of our academic staff have received teaching awards at the faculty, university, national and international level, meaning our students are learning from some of Australia's best and most highly-regarded teachers. Students across the globe take advantage of our teaching excellence through our partnership with edX, the world's leading consortium of massive open online courses (MOOCs) developed by Harvard and MIT. The MOOC 'Crime 101: The Psychology of Criminal Justice' won a 2016 MERLOT Classics award at the Innovate Conference in the USA.

UQ health students have won the Health Fusion Team Challenge—an annual national competition focused on interprofessional healthcare—every year since 2014. In 2017, we implemented a faculty-wide course to ensure our students are taught the fundamentals of interprofessional care within the context of the Australian Health Care system; and in the same year, the Faculty hosted the University of Toronto Centre for Interprofessional Education to run a series of workshops on Advancing the Future of Healthcare through Interprofessional Learning for our staff and partner institutions.

Excellence in research

By comparison with the Group of 8 Australia universities, and with local comparator universities, UQ has the strongest Excellence in Research for Australia (ERA) results across the broad scope of health sciences. In 2015, UQ's health and behavioural sciences research achieved the top score of 5 (well above world standard) for dentistry, human movement and sports science, nursing, nutrition and dietetics, pharmacology and pharmaceutical sciences, social work and psychology.

The Faculty is home to three National Health and Medical Research Council (NHMRC) Centres of Research Excellence:

- The NHMRC Centre of Clinical Research Excellence in Spinal Pain, Injury and Health
- The NHMRC Centre of Clinical Research Excellence in Aphasia Rehabilitation
- The NHMRC Centre of Clinical Research Excellence in Recovery Following Road Traffic Injuries.

Industry partnerships

We collaborate closely with government, not-for-profit organisations, international and national organisations, the private sector and the community to ensure our research addresses the 'big picture' issues.

Our partnerships include:

- Australian Maritime Safety Authority
- Australian Paralympic Committee
- Australian Red Cross Blood Service
- beyondblue
- Boeing Research and Technology Australia
- Brisbane Broncos
- Darling Downs Hospital and Health Service
- Defence Science and Technology Organisation
- Federal Police
- Great Barrier Reef Marine Park Authority
- Lives Lived Well
- Metro North Hospital and Health Service
- Motor Accident Insurance Commission
- National Institute of Forensic Sciences Australia
- Queensland Firebirds
- Queensland Health
- South West Hospital and Health Service.

Fast Facts

- 2 Universitas 21 Teaching Awards since 2015
- 6 National Teaching Awards since 2012
- 1 Higher Education Academy (HEA) Principal Fellow, 4 HEA Senior Fellows, 2 HEA Fellows
- 2 Australian Research Council (ARC) Laureate Fellows, 7 ARC Future Fellows
- 3 NHMRC Research Fellows, 1 NHMRC Career Development Fellow

Students

OVER 5670 number of undergraduate students
OVER 1450 postgraduate students
OVER 870 international students
from 42 different countries

More than \$20 million in research income (2016)

#3 in the world for sports-related subjects in the 2017 QS World University Rankings

find out more at habs.uq.edu.au



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UQ HEALTH CLINICS



Our clinics provide healthcare and rehabilitation services to the general public, including children and seniors, in:

- Audiology
- Dentistry
- Exercise Physiology
- Nutrition and Dietetics
- Occupational Therapy
- Physiotherapy
- Psychology
- Speech Pathology
- Telerehabilitation

As one of Australia's leading universities, many of our supervising specialists are leaders in their fields ensuring clients receive the best possible assessment, care and treatment from our student practitioners.

Visit our clinics online to find out more and request an appointment:

habs.uq.edu.au/health-clinics