

# UQmedicine

A FACULTY OF MEDICINE MAGAZINE | SUMMER EDITION 2017

## Medicine and the media

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Stem cell hope  
for babies

From farm life to  
neurosurgery

One of the best:  
Jake Najman



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**COVER IMAGE**  
1985 alumnus Dr Anthony Grabs, Director of Trauma at Sydney's St Vincent's Hospital.

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# NOT IF, WHEN.

## THE CAMPAIGN TO CREATE CHANGE

The gracious sandstone of the Great Court and the heritage-listed home of UQ Medicine are magnificent reminders that our institution has been built through philanthropy. Dr James O'Neil Mayne and his sister Mary Emelia Mayne gifted £55,000 to The University of Queensland in 1926 to purchase the land at St Lucia which would become one of Australia's most attractive campuses.

Four years earlier, the Mayne family's generosity had secured the site at Herston where the medical school was built. A lot has changed since the Mayne family's donations, but the importance of philanthropy has not. While we have the research expertise, passion and determination to succeed it is donors who help us progress from good to great.

Philanthropy enables us to recruit the most talented teachers and researchers, to provide exceptional learning opportunities in the classroom and laboratory, and to create change—not just in Queensland, but worldwide.

Giving can have an extraordinary impact in both education and research. Our alumni, researchers, educators, and clinicians are internationally renowned. UQ has produced almost 100 Rhodes Scholars, provided scholarships to exceptional students in need, and is taking great strides toward addressing global health issues such as antimicrobial resistance, skin cancer, mental health, diabetes and obesity. Our philanthropic partners play a crucial role in achieving these outcomes.

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We invite you to join us as a philanthropic partner. Philanthropy isn't about giving to UQ, it is about giving *through* UQ to further your values and interests.

*Not If, When* – the Campaign to Create Change is our first university-wide fundraising endeavour. Launched in October, it is raising funds to elevate the great work being done across our university and I'm proud the Faculty of Medicine is helping to lead the way.

Gardasil vaccine co-creator Professor Ian Frazer is chairing the campaign along with his wife Carolyn who also studied at UQ. Alumnus Dr Paul Eliadis, co-founder of ICON Cancer Care, and generous Faculty supporter Dr Xiao-Yi Sun, are serving on the campaign board. Their generosity, leadership and vision will help the Faculty chart a new course for the future through:

- Empowering student success – through more resources for scholarships, accommodation and opportunities for international experience;
- Transforming teaching and learning – through attracting and retaining the best academic leaders and improving learning environments;
- Driving discovery and impact – through our research strengths.

We invite you to join us as a philanthropic partner. Philanthropy isn't about giving to UQ, it is about giving through UQ to further your values and interests. Gifts of all sizes are valued, and every dollar makes a difference—for our students and for our community. I hope you'll consider making an investment in the UQ program that resonates with you. If you already give through UQ, I thank you for your partnership.

It has been a busy period for the Faculty and I have enjoyed the challenges of leading such an important cog in the wheel of UQ. The work happening across teaching and research positions allows us to make a continued impact. It has been a privilege to fill the Executive Dean (ED) position on an acting basis for the past 19 months. I am pleased to advise the Vice Chancellor has commenced the recruitment process for a permanent ED, and we hope the appointee will join the Faculty by mid-2018.

When I head to Sydney to start a new position next year, I'll leave with a renewed appreciation of the talented staff and alumni that call the Faculty home.

**Professor Robyn Ward AM**  
Acting Executive Dean  
Faculty of Medicine



# Features



## FIGHTING INFECTION WITH FRIENDLY FIRE

The lab tackling high rates of Indigenous ear infections



## FROM FARM LIFE TO NEUROSURGERY

Wendy Findlay's remarkable journey



## A NEW ERA FOR RURAL PRACTICE

Alumnus Konrad Kangru at the helm of RDAQ



## MND DRUG NEARS CLINICAL TRIALS

Surviving the 'valley of death' of drug development



## ONE OF THE BEST

Jake Najman's 40 years of research



## GOING THE DISTANCE

Adding a research higher degree to the med school experience



# Medicine and the media

1985 alumnus Dr Anthony Grabs was mistaken thinking life as a consultant surgeon would be seeing patients and operating all day. He soon came to realise that working in a public hospital has many other demands. And, in his case, this also extends to dealing with the media.

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As the Director of Trauma at St Vincent's Hospital in Sydney, Dr Grabs is the go-to person whenever there's media interest in a particular medical emergency at the hospital.

"This might involve answering questions from a reporter, taking part in a radio interview, conducting a press conference with the media pack, or participating in a TV feature story with a program like 60 Minutes," explains the aptly-named Dr Grabs.

"A good clean haircut, some theatre blues and a stethoscope are all you need in most cases."

Dr Grabs was thrust into the spotlight when multiple shark attacks brought panic to Sydney's shores in February 2009. A diver lost a hand and leg after being mauled by a bull shark in the harbour. In the coming days, a surfer was attacked by a great white at Bondi beach.

Dr Grabs says the hardest interviews are when patients die unexpectedly, in tragic circumstances, and the community is looking for answers.

"Interviews about Australian cricketer Phillip Hughes and one punch victim Thomas Kelly were extremely difficult for me. Just like in court, it was important to stick to the facts and not answer questions outside your speciality."

Phillip Hughes was fatally struck by a bouncer while batting in a Sheffield Shield match at the Sydney Cricket Ground.

"The day Phillip Hughes was brought in there was chaos around the entrance of the hospital," Dr Grabs recalls. "But everyone was kept at bay as the family's privacy and protection was our priority. It was a story of significant interest for the media, but they showed good restraint given the sensitivity of the situation."

Dr Grabs says the key to successful media liaison is to understand what the media needs, their tight timetables and to have a few clear messages to deliver.

"Just as you need to prepare for a lecture, you need to practise your responses to questions that may be asked. I've developed media skills on the run, which I wouldn't recommend. Many organisations – such as UQ, the colleges and the AMA – can help doctors with media skills to represent their hospitals and institutions."

Dr Grabs has come to see how the media can play an important role for his hospital in delivering key messages to the community promoting health and preventing injury.

"Prevention of injury has always been a focus of the hospital. The introduction of lock-out laws, although controversial, has had an impact on trauma within the Sydney CBD. Every time the alcohol lobby talks about consideration for relaxation of the laws, my colleagues and I hit the media." ●

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Dr Grabs says the key to successful media liaison is to understand what the media needs, their tight timetables and to have a few clear messages to deliver.



# UQ focuses on superbug solutions

The prospect of a world with limited treatment options for common infections is difficult to comprehend given the reassurance antibiotics have provided for more than half a century.

More complications post-surgery, lengthier illnesses, having to use more expensive or potentially toxic drugs, and more deaths could be expected in middle to high income countries. The situation would be more foreboding for developing countries with limited resources already facing the increased burden of infectious diseases such as malaria, tuberculosis and HIV/AIDS.

UQ Medicine is at the sharp end of translating knowledge about antibiotic resistant organisms into optimal prevention and treatments. Infectious diseases expert Professor David Paterson leads these efforts as Director of the Centre for Clinical Research. The UQ alumnus is internationally recognised for his research focused on molecular and clinical epidemiology of infections with antibiotic resistant organisms, and as a consultant infectious diseases clinician.

Health professionals are worried for their most vulnerable patients. "Think about the thousands of patients who have compromised immune systems because they are undergoing chemotherapy," Professor Paterson says. "Remote Indigenous communities with a significantly higher incidence of some infectious diseases will be at risk, along with patients on dialysis for kidney failure. But even simple surgeries any of us might be faced with – like hip replacements, appendectomies or caesarean sections – would carry a much greater risk."

In September, a World Health Organisation (WHO) report showed a shortage of new antibiotics under development to combat the growing threat. "There are now drug resistant strains of organisms that cause hospital-acquired infections, gonorrhoea, tuberculosis, pneumonia and urinary tract infections to name a few," Professor Paterson says. "Without new options coming through, we need to manage our current antibiotics to preserve those 'last line' drugs for when they are most needed. Our researchers are performing randomised trials to establish clinical guidelines and rapid testing technologies to enable doctors to use the most appropriate drug to treat the particular strain of bacteria involved in infections."

Surveillance will be key to delaying the spread of drug resistant bacteria within Australia. UQ is an active participant in health networks which are monitoring for any outbreaks. This allows health authorities to track where an isolate originated, to liaise with treating hospitals where appropriate and confirm control measures have been taken.

And according to Professor Paterson, the problem needs to be addressed with a 'one health' approach. "Antibiotics are widely used as growth promoters for food-producing animals and this can be another opportunity for bacteria to develop mechanisms to escape their effect. We are working with colleagues in veterinary sciences to see what can be done to reduce antibiotic use in farm animals."

Experts agree that it is difficult to predict how antimicrobial resistance will develop in the years ahead. A commonly held view is that without significant inroads, superbugs could kill more people per year than cancer by 2050. ●



# New horizons in infectious disease research



Associate Professor Antje Blumenthal still recalls the time in primary school when she first learned about bacteria and how it could make people sick. She was so excited she had butterflies in her stomach, and her passion for knowledge and discovery was born.

The microbiologist and immunologist now leads a team of talented scientists and clinicians in their quest to find new treatments for conditions including sepsis and tuberculosis. She established a laboratory at UQ seven years ago, and while that's a relatively short time by research standards, progress has been remarkable.

One of the lab's projects is a concerted effort to find new antibiotics for drug-resistant TB. Several new classes of compounds have been identified through this close collaboration with Professor Rob Capon (Institute for Molecular Bioscience), and drug optimisation and formulation for the most promising candidates are moving ahead. This is in addition to an NHMRC-funded study looking at molecular mechanisms that alert the immune system to the presence of TB bacteria.

Dr Blumenthal's researchers more recently turned their attention to sepsis, building on their long-standing expertise in exploring the complex interactions between pathogens and the immune system. They discovered dysregulation of a complex molecular signalling network in patients with septic shock.

The pathway – known as WNT signalling – had previously been associated with embryonic development and cancer formation rather than with immune responses. “Manipulating this pathway in sepsis models showed we could probably control damaging inflammation without affecting protective immune responses,” Dr Blumenthal said. “This was exciting because there are already new drugs targeting this pathway in clinical trials for cancer.”

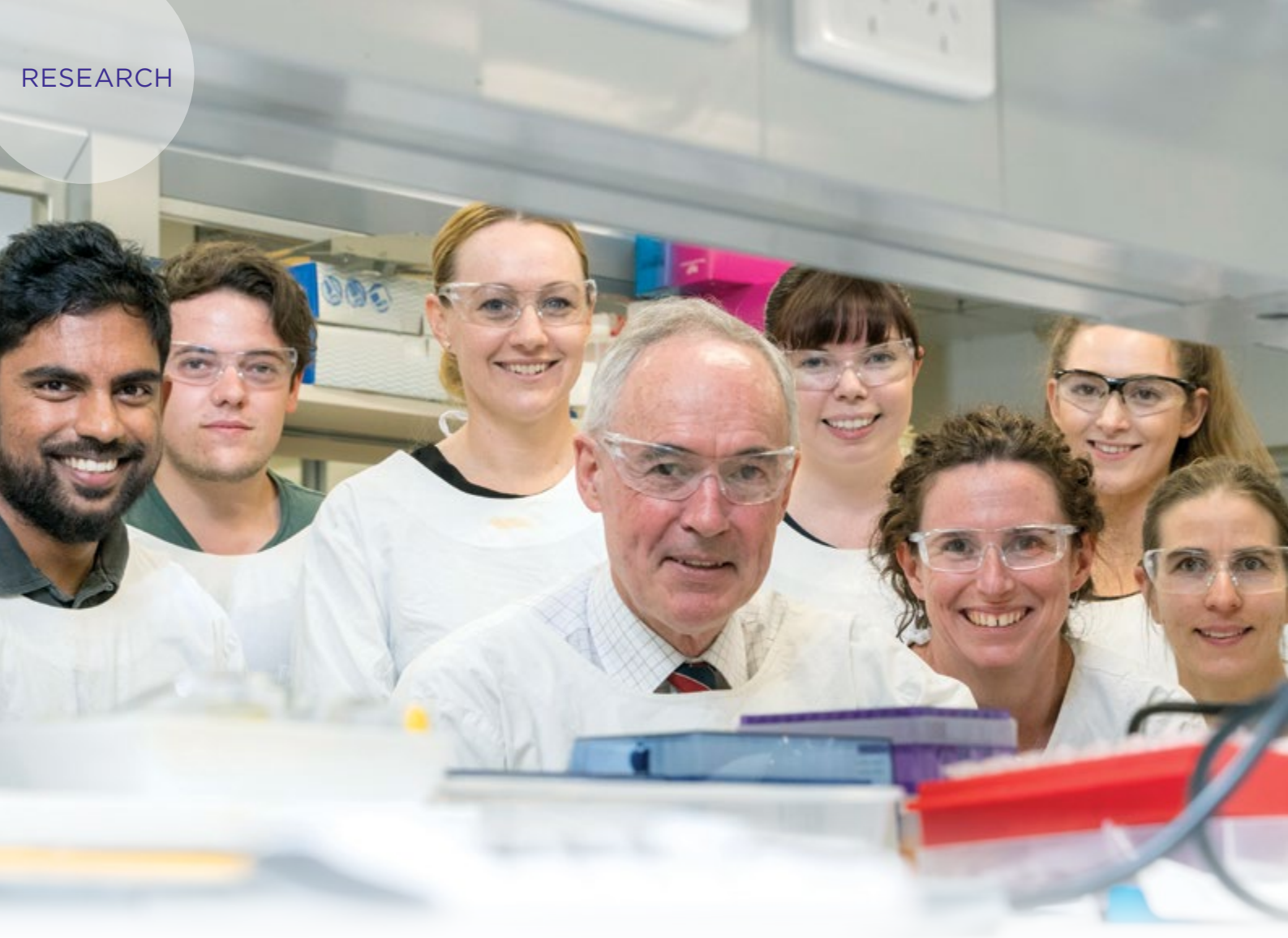
The Blumenthal lab is collaborating with Associate Professor Jeremy Cohen (Royal Brisbane Clinical Unit) and Professor Bala Venkatesh (Wesley Clinical Unit) to pair research in model systems with studies in patient samples. “Understanding the biology is the first step towards figuring out why some patients survive sepsis and others don't. These insights may reveal potential targets for urgently-needed supportive therapies to treat and manage patients at risk.”

As a child with great appreciation for the natural world, Dr Blumenthal's passion for discovery was sparked by family, and influential teachers, in her native Germany. “We started formal biology classes in fifth grade, and I'm still just as excited about

it now,” Dr Blumenthal says. “I love doing research – the excitement of being able to explore something that probably nobody has ever looked at before. It's a bit like detective work and I learn something new every day.”

Supervising and mentoring students and postdocs is another aspect of the job that Dr Blumenthal clearly enjoys. The advocate for high quality research is known for holding her team to high standards, but also for encouraging and assisting them to pursue their scientific passions. “I care about their careers and development, but also about them as people,” Dr Blumenthal says. “I can relate to a lot of what they go through, be it stressful periods in their own development, or other pressures. Just stepping back and helping them is something that's very important to me.

“Every time I graduate a student it makes me really proud. You see them grow so much, and they go off and they're fully fledged scientists. It's amazing to be a part of their journey.” ●



# Stem cell research rethinks perinatal brain injury

Ground-breaking research could see babies treated with placental stem cells to heal brain impairment caused by extreme prematurity or interruption to oxygen supply. Researchers at UQ's Centre for Clinical Research hope the approach will allow a rapid response to perinatal brain injuries with life-changing results.

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Their hope is that those babies born extremely prematurely, and those who suffer hypoxic ischemic encephalopathy, could survive without brain impairment. So, by the time these children reach school age, they would potentially have the same brain function as a child born at full term, or without brain injury.

Professor Paul Colditz, director of the Perinatal Research Centre, says early research is delivering positive results. "We've looked at stem cells in animal models and we've had encouraging results from the preliminary data, which show the stems cells going to the brain," he says.

"The placental stem cells are administered intravenously in preclinical models, and we've been able to show that they travel through the bloodstream to injured regions of the brain. They can then engraft into the brain with no apparent adverse side effects."

Professor Colditz says the potential advantages of this type of stem cell treatment are threefold: early intervention; a high dose of stem cells; and using cells from the baby's own supply, in the placenta.

This work by the Perinatal Research Centre has been underpinned by a technique developed by another UQ Faculty of Medicine team.

Associate Professor Kiarash Khosrotehrani and postdoctoral researcher Dr Jatin Patel were able to isolate and harvest large quantities of stem cells from the placenta. These could then be used to create blood vessels in areas of the body lacking blood flow.

This method could now provide the key to unlocking new treatment for perinatal brain injury. Professor Colditz says placental stem cells are more beneficial than those from the umbilical cord because of their high dose and ability to secrete pro-growth repair factors within the brain.

"The stem cells congregate around the injured parts, pump out these 'good guys' and the brain gets on with repairing itself," he explains.

UQ Medicine's placental stem cell research has the potential to save millions of dollars in healthcare costs, while transforming treatment and health outcomes for our tiniest patients. ●



# Securing a safe transition to internship

**Professor Stuart Carney**  
Medical Dean

Any visitor to London who has travelled on the Tube will be familiar with the train drivers' exhortation to "mind the gap." Learning from experience, the newer stations on the Tube network have been designed to reduce the risk of accidents. Similarly, medical education over the last few decades has been grappling with how it can secure a safer transition from medical program to internship.

The transition from medical student to intern is not the only transition that generates anxiety. Many of us will also recall our first nervous few weeks as vocational trainees and later as newly appointed specialists. While as a university, we must equip our graduates with the skills needed to be life-long learners and ensure they are capable

of adapting throughout their careers, we also have a particular responsibility to prepare medical students for the transition to internship.

Working with our clinical partners, we have been focusing on preparing medical students to deal with the key challenges they face as interns, such as the recognition and management of the acutely ill patient, safe prescribing, task prioritisation, and working effectively as a member of a team.

In the 2016 Graduate Outcome Survey, 87.8 per cent of our recent medical graduates reported that their degree prepared them well for their job. This compares favourably with other Australian medical programs. The range

of results was: 74.3 per cent to 97.1 per cent. However, we are not complacent and we await the detailed breakdown from the first Medical Board of Australia/AHPRA and Australian Medical Council Work Readiness for Internship Survey, which will be published later this year.

The results of the Work Readiness for Internship Survey, coupled with feedback from employers, will help us to clarify which areas will benefit from further attention. This will build on the work that we are already doing with clinical partners to prepare medical students to work in a digital hospital and broader digital healthcare system. Together, we can reduce the size of the gap between the medical program and internship. ●

## 'Leap of faith'

Dr Susannah Gattas is an intern at the Princess Alexandra Hospital in Brisbane. While she found the transition daunting, she felt confident she had the skills needed to succeed.

"One of the best aspects of studying medicine at UQ was the emphasis on problem-based learning," Dr Gattas says. "As an intern, your ability to problem solve is your most valuable skill set."

"Even with a strong foundation in clinical knowledge and procedural skills, I think starting your internship is always going to feel like a leap of faith."

Dr Gattas says her internship has, fortunately, gone very well. "I am already looking forward to my next year at the PA Hospital. I am sure this is in no small part thanks to studying medicine at UQ."





# Searching for treatments for childhood's 'silent injuries'



Concussions sustained in high-profile contact sports have raised awareness of the major health issues surrounding adult brain injuries. However, there has been significantly less public discussion about how such injuries impact the developing brain.

A fall in the playground or a knock playing sport are common causes of concussion for children and adolescents. There are usually no outward signs of injury, and most kids recover quickly and are back to normal within a month.

However, for up to a quarter of such injuries, recovery is much slower and symptoms linger. This 'post-concussion syndrome' can result in serious headaches, impaired concentration and changes to mood and sleep patterns, which can impact schooling and other aspects of life.

Paediatric neurologist Professor Karen Barlow started out researching severe traumatic brain injuries. "Much to my surprise, 90 per cent of referrals to the program were children with post-concussion syndrome," she says. "They eventually recover, but it can take a very long time. This sparked my passion for investigating better treatments for post-concussion syndrome."

Professor Barlow has moved to Brisbane from Canada to take up a joint clinical and research appointment. Her time is shared between treating traumatic brain injuries at Lady Cilento Children's Hospital, and pioneering research to improve the care and outcomes for these patients. She looks forward to working with Queensland's paediatric brain injury rehabilitation program and establishing links throughout Australia and overseas.

As Professor Barlow explains, for young people with post-concussion syndrome, there are currently few evidence-based treatments. "We have moved on from the old 'rest in a dark room' approach, and understand that a healthy diet, regular sleep and a return to exercise need to be part of the recovery process. There is a lot we can do without drugs, but some children will need medication."

The paediatric neurologist is analysing results from a small clinical trial into the use of melatonin for post-concussion syndrome. "Melatonin is a hormone produced in the brain with analgesic and neuroprotective properties," she explains.

"It also has a good safety profile, which makes it a sound candidate for use in young people."

Raising awareness of the syndrome is another priority. Her team at the University of Calgary developed a website and electronic tools to guide parents and teachers through the recovery process. "We wanted to provide a clearer pathway for managing these children, who have no outward signs of injury, but can be really struggling and not feeling themselves." It is hoped a modified version will be piloted in Brisbane.

**As with all injuries, prevention is better than any treatment. Wearing helmets while riding bikes and around horses, safe playgrounds and adequate supervision are all measures which may help reduce common childhood head injuries. ●**

# Fighting infection with friendly fire

Doomadgee in Queensland's Gulf Country, and Mareeba on the Atherton Tablelands, are worlds away from the Herston research laboratory of Professor Anders Cervin, UQ's Chair in Otolaryngology. That vast divide is being bridged by a strong partnership working on world-first research to address a critical health issue for Indigenous children living in remote communities.

Aboriginal and Torres Strait Islander populations have some of the world's highest rates of middle ear infections, or otitis media. They experience it earlier, they develop more serious forms, and it often results in hearing loss. The impacts can be profound, causing delays in speech and language development, and difficulties with education and participation in community activities. As these children progress into adulthood, they are at greater risk of social and economic disadvantage.

The POPI Study – or Prevention of Otitis media with Probiotics in Indigenous Children – is investigating whether 'good bacteria' specific to Aboriginal and Torres Strait Islander children could be used to fight their ear infections. Professor Cervin is leading the project, in conjunction with Queensland Health's award-winning 'Deadly Ears' program.

"We are very grateful to the people of these Indigenous communities, who have been so supportive of our research," Professor Cervin says. "We have been able to take nasal swabs from healthy children with no history or only mild cases of ear infections. This helps us to find good bugs – those types of microorganisms present in their respiratory tract that are helpful in fighting off the bad bugs that cause ear infections. These are the potential candidates for probiotics."

Back in the lab, the research group set up a bacteria showdown. Potentially beneficial bugs were added to petri dishes containing the bad bacteria known to cause ear infections – *Haemophilus influenza*, *Streptococcus pneumoniae* and *Moraxella catarrhalis*. It soon became apparent which bacteria had aptitude for probiotic use – killing off the bad bugs or reducing their growth.







Above:  
Professor Cervin and Dr Coleman meet  
with Mulungu Aboriginal Corporation  
Medical Centre Indigenous Ear health  
worker Chantal Hunter and CEO Gail  
Wason in Mareeba.

Below and right:  
Images courtesy of Queensland Health.



Dr Andrea Coleman is continuing testing of the most promising candidates to make sure they do not contribute to antibiotic resistance or cause toxicity. The most beneficial bacteria that pass the safety tests will be added to a nasal spray and tested in a small clinical trial.

About 10 to 20 children with middle ear infections will be given the spray to use for a few weeks after their standard course of antibiotics. The theory is that good bacteria may re-colonise the upper airways, and help fend off future infections, or at least reduce the rate of recurrence. Depending on the outcome, a larger trial would then test the spray in a larger cohort of children.

A next step could be to use probiotics to strengthen the airway defence of newborn babies. "If we can postpone or reduce ear infections in very small children, it would have an enormous impact on their development," Professor Cervin says. "These are the years that are so important for these children, and we want to work with communities to make sure they get the best possible start in life." ●



# From farm life to neurosurgery and education

Instilled with the strong work ethic of a farming family, a girl who loved maths and science dreamt of a career as a medical practitioner.

Wendy Findlay grew up on a sugarcane farm on the outskirts of Gin Gin, west of Bundaberg. Today, Associate Professor Findlay is a neurosurgeon and heads the Royal Brisbane Clinical Unit.

Wendy looks back on her rural childhood with fond memories, and credits her upbringing and the influence of her hardworking parents.

"Dad is a cattle and sugarcane farmer and Mum is in customer service," Wendy explains. "They showed us what working hard meant and I really enjoyed the community spirit that came with living in a small town. My primary school only had around 14 students. We had lots of cousins who lived in the area and there were always lots of jobs to do on the farm. We were never short of things to do."

Wendy remembers the move to Brisbane being a shock to the system as a 17-year-old. But it was an experience during the fifth year of her MBBS program that really opened her eyes. The young medical student completed her international elective in Kenya – a country at the time struggling under the burden of HIV/AIDS and tuberculosis.

Wendy recalls the challenge that awaited her and her classmates when they arrived. "There were multiple patients to a bed or mattress on the floor. Most of my time was spent in a private hospital, which was very different to the public hospital, but still lacked equipment such as paediatric ventilators. It was certainly confronting."

That early experience in Kenya inspired Wendy to want to join Médecins Sans Frontières, but those plans were put on ice when the young doctor found herself on a training program and steep trajectory towards neurosurgery.

"I initially did a neurosurgery rotation as a resident because my registrar said it would make me a better general surgeon. This then led to a rotation in paediatric neurosurgery as an unaccredited registrar and from there I became a trainee and eventually a neurosurgery specialist."

Now married to an orthopaedic surgeon and with three children, aged between five and eight, Wendy has also become a master of time management. This has certainly come in handy in her newest role as the Head of the Royal Brisbane Clinical Unit. Wendy says she wants to help students achieve their goals and see what change in the educational experience she can drive for them.

"In a medical environment, you hear a lot of rumours about the knowledge and capability of students, interns and the medical program. A lot of it is driven by general feelings and assumptions. The only way of finding out what is real and implementing change is by taking on a role like this."

Today, working across surgery and education, Wendy is keen to build bridges and collaborate to break new ground. "I'm also really keen to work closely with the other clinical units and partner with the Metro North Hospital and Health Service to deliver teaching programs that will benefit us all."

As with all families, Wendy's children keep her feet planted firmly on the ground. "Once I walk through that front door, as far as the kids are concerned, I'm just Mum. The children have an idea of what my work involves, and that it's linked to why Mum doesn't let them ride a motorbike, and why seatbelts in cars are so important." ●







# A new era for rural practice

When Konrad Kangru was accepted into medical school at The University of Queensland, he felt like he had been given a 'second chance' to become a doctor.

Konrad was part of the 1997 cohort, which heralded a new era for the discipline – when the traditional six-year degree was replaced with a four-year graduate program.

As a young boy growing up in Melbourne, Konrad dreamed of being a doctor in a rural practice. He completed his undergraduate degree in applied science at Wagga Wagga in the New South Wales Riverina. He then enrolled with UQ to complete his medicine degree.

"UQ gave me a great opportunity," Dr Kangru recalls. "It put a different perspective on a career I didn't assume I'd have. I signed up for a rural scholarship because I decided if my skills were most valued in underserved communities of rural Queensland, then I was willing to be part of that movement."

Dr Kangru spent the final year of his Queensland Health Rural Health Scholarship at the cane farming town of Proserpine, about 1000 kilometres north of Brisbane. The idyllic lifestyle, climate and being at the gateway to the Whitsundays were all drawcards to the region. But it's the community atmosphere that has kept him there for the past 13 years.

After Cyclone Debbie hit in March, Dr Kangru says community spirit became even stronger. "It was an experience that brought the town closer. We were without power here at the practice for a week, and we had to be resourceful in finding ways to cope. We're still in the rebuilding phase, but thanks to the strength of ties in the community, we're getting through that."

Today, the UQ alumnus is President of the Rural Doctors Association of Queensland (RDAQ) and believes a new era of rural medicine is here.

With the introduction of the Queensland Rural Generalist Pathway in 2007 and the announcement this year of the first National Rural Health Commissioner, Dr Kangru says the interest in rural medicine is the strongest it has been for decades. And thanks to groups like the RDAQ, Queensland is at the forefront of rural healthcare, at a time when a new national model will be created. ●



## Regional training boost

UQ is establishing three new medical training hubs with an aim of retaining doctors in regional areas. The hubs will offer doctors rural opportunities at all stages of their medical training.

Commonwealth funding has been awarded to provide additional clinical, academic and administration staff in Central Queensland, Wide Bay and South West Queensland. This will facilitate postgraduate training opportunities, including specialties, so doctors can stay in regional communities for training and not have to return to the city.

The hubs build on the high quality education and training experiences already offered by UQ's Rural Clinical School.

In announcing the funding, Assistant Minister for Health Dr David Gillespie said regional and rural health training not only addressed workforce shortages and service expectations, but was also essential to regional economic growth.



# A personal perspective on biomedical science

It was the desire to learn more about her brother's rare condition that inspired Zoe Macourt to study biomedical science.

Zoe graduated with a Bachelor of Biomedical Science (Honours) in July and gave the valedictorian address for her cohort. She spoke on the significance of studying science and medicine, as well as her personal motivations.

Zoe's younger brother, Max, has a severe muscular disorder known as Duchenne muscular dystrophy (DMD). The hereditary condition affects around one in 5000 boys. In her address, Zoe discussed her desire to engage in research that could help those with DMD in the future.

"In grade 11 we had the opportunity to do an assignment on a genetic disease and I chose muscular dystrophy," Zoe recalls. "The genetics were so interesting that I decided I wanted to look into it further. Right now, there is no cure and there are a lot of things that are still unknown."

Duchenne muscular dystrophy manifests in early childhood and causes severe muscle degradation. Those with the condition are often unable to walk by the age of 12.

Fortunately, the condition has not prevented Max from finding his own success in life. He is a national-level champion in bocce – a sport similar to bocce, developed specifically for athletes with significant physical impairments.

Zoe hopes to be able to support her brother at the 2020 Paralympic Games in Tokyo.

The mysteries of Duchenne weren't the only factors driving Zoe's studies. She also had the opportunity to engage in cutting-edge research during her honours year. "My supervisor developed his own techniques for manipulating and observing the intracellular environment of skeletal muscle. It was really cool to be doing research that no one else in the world was doing."

Zoe is currently tutoring in a capstone course in biomedical science, guiding students along their own paths of inquiry in science and medicine. ●



# Unravelling the genetics of child and youth psychiatry

**Professor Christel Middeldorp**  
Child Health Research Centre

Brisbane is a long way from Amsterdam – 16,183 kilometres to be exact. There's an eight-hour time difference, the average summer temperature differs by about nine degrees, and the bread in Brisbane is perhaps not quite up to European standards.

But for Professor Christel Middeldorp, who joined the Child Health Research Centre (CHRC) in February, there is nowhere she'd rather be. Professor Middeldorp was attracted to Queensland by the opportunity to combine clinical work with her research on the genetic variants underlying childhood psychopathology.

Through her conjoint appointment with Queensland Health, Professor Middeldorp hopes to establish and follow a large clinical cohort. "CHRC's close proximity with Lady Cilento Hospital gives a good opportunity for that," says Professor Middeldorp. "Genetic research may also provide information on which biological pathways are involved in mental health symptoms, and this could lead to new drug targets that could improve the outcomes of patients."

Professor Middeldorp works with a consortium that draws on data from population-based longitudinal child and adolescent cohorts from around the globe. "We'll investigate which genetic variants influence the persistence of symptoms. We'll also look at the interplay with environmental factors like birth weight and family structure," Professor Middeldorp explains.

"Given that mental health symptoms are heritable, when a child is seen in the clinic, we know that their parents are also at higher risk of mental health symptoms. This can further exacerbate the symptoms of the child. Therefore, in the clinical cohort, we want to intervene in the mental health symptoms of the parents and see if that benefits the treatment of the child.

"We also plan to follow children whose parents don't have mental health symptoms. We will assess their genetics and other biomarkers to see which factors influence outcomes of mental health symptoms. Our aim is to inform and adapt treatment programs, ensuring that children at high risk of persistent symptoms receive more targeted treatment."

Professor Middeldorp recently received the 2017 Ülkü Ülgür MD International Scholar Award from the American Academy of Child and Adolescent Psychiatry. The award recognises researchers making significant contributions to mental health services for children and adolescents. ●





# Combating public health challenges

Lieutenant Colonel David Bullock has managed combat health services in some of the world's most austere environments, with Australian and British troops.

For more than 30 years, he's planned and deployed support for military action and humanitarian disaster response, including overseeing the Shaiba field hospital in post-invasion Iraq.

He is now with the Royal Australian Army Medical Corps (RAAMC), contributing to the Army's operational capability by promoting health and well-being and preventing disease and injury. The RAAMC care for, treat and evacuate the sick and wounded. The Corps regularly work in conditions which could be daunting for their civilian counterparts. They are highly-trained regular and reserve officers and soldiers who are provided with continuous professional development.

"The provision of combat health support is a significant challenge for defence forces across the globe," Bullock explains. "In addition to providing regular health care for their own troops, there are often unknown hazards and emerging risks within a crisis zone. The tactical planning required to manage health assets in these situations requires specialist experience and training."

For Bullock, a Master of Public Health (MPH) at UQ provided a platform to consolidate his military education and experience with advanced public health planning and delivery. "Our public health environment requires evidence-based best practice, supported by an interdisciplinary response team that includes defence, NGO, and civilian contractors. Only through bringing together a diverse team with specialist skills can we achieve optimal patient-focused outcomes, to not just save one life but hundreds of lives."

The MPH proved cathartic for Bullock. "It provided an invaluable opportunity to process and express some of the situations I've been exposed to or experienced, in multiple forms," he says. "This has been of real benefit to my own psychological resilience."

The alumnus gives back to UQ by lecturing in Health Aspects of Disasters for UQ's School of Public Health. "Teaching and passing on experience saves lives and prevents unnecessary illness, injury or death for service personnel and local populations across the globe, who are already coping in extreme and dangerous conditions," he says. "We are duty-bound to continue to provide exemplary leadership in this field."



The Lieutenant Colonel says it remains vitally important for defence force personnel to push beyond personal and professional comfort zones to mitigate ever-changing global risks and threats in both combat and non-combat situations. "In addition, integrity, transparency and the highest ethical perspective is non-negotiable within health services management and health leadership," he says. ●

The flagship UQ Master of Public Health (MPH) is the first in Asia Pacific to achieve Curriculum Validation from the Agency for Public Health Education Accreditation (APHEA). This is one of the leading accrediting bodies for MPH programs in the world.



# MND drug nears clinical trials

For researchers investigating desperately needed treatments for motor neurone disease, moving laboratory discoveries through to clinical trials can seem an interminable process.

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This is the time they refer to as the 'valley of death', as many promising drug candidates are left languishing in its metaphorical depths for want of financial backing. Seeing it through to patient trials requires resilience, patience and often a fair smattering of luck.

For UQ alumnus Associate Professor Trent Woodruff, and a drug codenamed 'PMX205', the end of the pipeline is in sight. PMX205 is an inflammation-inhibiting drug that has the potential to improve outcomes for MND patients by slowing the progression of the disease and managing symptoms.

The project began in 2008 with Dr Woodruff's NHMRC Career Development Fellowship, and expanded when he started his own research group at UQ's School of Biomedical Sciences two years later. "We'd been plodding along with our investigations," Dr Woodruff recalls. "Then the Ice Bucket Challenge went viral and some high-profile cases created some much-needed momentum.

"Since then we've been fortunate to obtain the backing of a private drug company, along with funding from FightMND and Advance Queensland. As part of the Advance Queensland grant, we've also attracted funding from Huntington's Queensland and the MND and Me Foundation."





This support has led to rapid acceleration of the research towards human trials. Earlier this year, Dr Woodruff's team had expected that the earliest the first patients would trial the drug would be 2019. Now that may be as early as next year, assuming the drug is shown to be safe in preclinical testing.

Any prospective clinical trial cannot come soon enough for the hundreds of Australians diagnosed with MND each year. As researcher Dr John Lee explains, there is no known cure and the average life expectancy is only two and a half years.

"Currently the only drug available for patients prolongs survival by two to three months at most," says Dr Lee. "In animal models, PMX205 made a visible difference to tremors, muscle strength and mobility. If this is reflected in people, it could make a real difference to patients."

Dr Lee completed his PhD in the Woodruff Laboratory, and is now an MND Research Institute of Australia Postdoctoral Fellow.

Since the FightMND funding, the drug company sponsor has scaled-up manufacture of PMX205 and undertaken formal preclinical trials. The toxicology results, together with research already published, will be presented to the US Food and Drug Administration for approval to begin administering the investigative drug in humans.

In the meantime, as Dr Woodruff explains, the School of Biomedical Sciences is testing the drug in a range of motor neurone disease models. "Our initial experiments involved the inherited form of MND, but we believe the same inflammatory pathway is likely to be active in all forms of MND. Our next project will focus on sporadic MND, which accounts for 90 per cent of patients."

Dr Woodruff's team is also identifying biomarkers in blood samples collected from patients at a Brisbane MND clinic. "We are still investigating how the drug affects molecular processes to delay MND symptoms and extend survival," the researcher says. ●



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PMX205 made a visible difference to tremors, muscle strength and mobility. If this is reflected in people, it could make a real difference to patients.

# New Patient Admission Assessment System to improve care for patients with dementia in hospital

As Australia's population ages, health administrators are grappling with ways to manage dementia. It is now the second leading cause of death in Australia, and there is no cure, making dementia research a global priority.

People with cognitive impairment are at risk of adverse in-hospital events, and poorer outcomes when discharged. They are more likely to experience delirium, suffer falls, have slower recoveries and longer hospital stays, and to die. But conditions such as dementia can be difficult to identify at admission, as it is often not the primary reason a patient ends up in hospital.

Researchers from UQ's Centre for Health Services Research are recruiting eight hospitals from across Australia to trial a new patient admission assessment system. The centre's Dr Melinda Martin-Khan is leading the project. "For those who participate, the rewards include a potentially significant improvement in quality of care, particularly for patients with dementia," says Dr Martin-Khan. "And this will result in closer alignment with the new National Safety and Quality Health Service standard for comprehensive care."

The plan is to test the nursing admission assessment system for all adult patients on a hospital-wide basis. The project is part of the NHMRC Boosting Dementia Research initiative, which aims to accelerate detection, treatment and management of dementia.

"We know that it is difficult for hospital administrators to look at syndrome-specific solutions, so we've come up with a whole-of-hospital solution," says Professor Len Gray, who heads UQ's Centre for Health Services Research. "We are not talking about an additional assessment on top of what hospitals are already doing, but a new system which has built-in questions to detect cognitive impairment along with other relevant risk assessments."

The electronic system is being described by researchers as a 'third generation' assessment tool. It takes nurses about 15 minutes to collect admission information on a tablet device. The system interprets the data entered, and generates a summary report flagging possible risks. This can be used to guide treatment by multiple stakeholders, including treating and specialist physicians.

The system also enables quality of care to be scored – by patient, ward and hospital. "Our focus is on helping hospitals to identify what is working – what happens to ensure a patient receives quality care – and to share that information," says Dr Martin-Khan. "Hospitals in the trial will be invited to form a benchmarking group to encourage discussion about what hospitals or wards are doing to improve their quality of care."

Each participating hospital will be asked to implement the system for six months, with assessment to include the cost of transitioning. The research team is hopeful that it will be permanently adopted, showing that an affordable system good for patients with dementia, will be good for everyone. ●





# Seeking adventure in a sunburnt country



A taste of the quintessential Aussie outback roused third-year medicine student Laura Frederiksen's adventurous spirit. And now she has her sights set on a medical career in regional and remote communities.

As part of the John Flynn Placement Program, Laura chose to visit Elliott – a remote Aboriginal community of 350 residents, halfway between Alice Springs and Darwin. For a girl from the Sunshine Coast hinterland who had never crossed the Great Dividing Range, it was an eye-opening experience.

"I had no idea what to expect. It was a 12-hour bus trip from Alice Springs and I'd never been further west than Toowoomba or Stanthorpe," Laura says. "I learnt from the doctors, nurses and Aboriginal health practitioners and heard the patients' stories. Their resilience and experiences blew me away and my interest in rural medicine grew from there."

Laura's favourite moments have been on rural placements, including six weeks in Roma where she gained valuable clinical experience. "I got to fly to Chinchilla in a Royal Flying Doctor Service aircraft for a day with the Flying Surgeon Service, which was amazing," she recalls.

"The adventure and seeing beautiful parts of the diverse country that we live in has really drawn me to rural medicine. It's challenging but the medicine itself is very interesting – you get to see such a variety of presentations and the doctors and nurses have to be equipped to deal with anything. But the biggest thing for me is the feeling of kinship – people looking out for each other and that tightknit community feeling."

Laura is an advocate for rural practice as president of Towards Rural and Outback Health Professionals in Queensland (TROHPIQ) – a rural health club for university students studying medicine, nursing and allied health.

"It's about having fun, raising awareness of rural health and trying to close the gap in terms of access to health practitioners," she says.

As she prepares for her final year of study, Laura is eager to remain involved in rural medicine. And if that means getting off the beaten track, then she already has her bags packed. ●

The adventure and seeing beautiful parts of the diverse country that we live in has really drawn me to rural medicine.







# One of the best

The University of Queensland is privileged to foster the work of thousands of researchers, but few can equal the dedication and achievements of Emeritus Professor Jakob Najman.





Emeritus Professor Najman has been recognised in the National Health and Medical Research Council's *Ten of the Best 2016*, which acknowledges the most outstanding research projects.

Through the Mater Mothers' Hospital – University of Queensland Study of Pregnancy (MUSP), Emeritus Professor Najman and a team of fellow researchers have been following the lives of mothers and their children for almost 40 years. The study has generated more than 250 publications to date.

Beginning in 1981, more than 8000 pregnant women were recruited to take part in a long-running study aimed at investigating the mental and physical health of mothers and their children over their lifetimes. As the participants aged, data was collected at key development points for the children, such as early childhood, during puberty, and as young adults.

The study's long lifespan allows for a huge range of factors to be studied, including socio-economic wellbeing, physical and mental health of the mothers and their children, and the effects of varying lifestyles.

MUSP also made it possible to assess the evolution of healthcare values over its almost 40-year existence, allowing researchers to see how changing norms have affected the wellbeing of the participants. The wealth of data collected through the study continues to provide researchers with resources for new publications and follow-up studies.

Since his appointment in a joint role at the Department of Social and Preventive Medicine (now the School of Public Health) and the School of Social Science in 1973, Emeritus Professor Najman has made an unrivalled impact at UQ.

With more than 500 publications to his name and over 14,500 citations worldwide, Emeritus Professor Najman has been one of UQ's most prolific researchers across his 43 years of continuous service. He has received more than 80 research grants across his career, totalling more than \$20 million in funding.

He has held a number of prestigious roles at the University, including Head of the School of Social Sciences, and Director of the UQ-based Queensland Alcohol and Drug Research and Education Centre. His contributions to UQ include mentoring future generations of academics. Despite his retirement in 2016, he continues to supervise PhD students.

He remains active in academic work, continuing to apply for research funding, and editing and reviewing research papers.

Emeritus Professor Najman describes his interest in healthcare as stemming from his studies in sociology at the University of New South Wales in the 1960s – the political upheaval and social change of the time leaving a clear mark.

"Sociology students were engaged in political activity, and the prospect of doing 'good' on a national and global scale was highly motivating," he says. "There appeared to be an opportunity to participate in changing the world." ●

**Left image – top row left to right:**  
Greg Shuttlewood, Professor Rosa Alati,  
Associate Professor Zandy Clavarino,  
Professor Gail Williams,  
Associate Professor James Scott

**Bottom row left to right:**  
Associate Professor Abdullah Mamun,  
Shelby Marrington, Dr William Bor,  
Emeritus Professor Jake Najman



There appeared to be an opportunity to participate in changing the world.



# Exploring new potential for old drugs

Given the enormous resources and long timeframes involved in getting a new drug to market, drug repurposing is an appealing alternative.

UQ researchers are investigating existing drugs to find out if they have benefits beyond the disease for which they were originally created.

Dr Richard Gordon is testing four drugs with the aim of slowing progression of Parkinson's disease. One of the drugs being tested has been commonly used since the 1980s to treat high blood pressure. It now shows promise in benefiting patients with the degenerative neurological disease.

If testing in preclinical models is successful, a phase II clinical trial could begin as early as next year. As the project only started this year, this represents rapid progress from the laboratory to patients – at a fraction of the cost associated with developing a new drug.

As Dr Gordon explains, once the safety and effectiveness are confirmed, there are two possible outcomes. "In some cases, the drug can be prescribed by neurologists as an off-label therapeutic for the management of Parkinson's disease," he says. "If drug effectiveness and safety is confirmed in larger clinical trials, it could then be formally approved by regulatory agencies as a new treatment for Parkinson's."

An important factor enabling the project to progress rapidly towards clinical translation is the fact that many repurposed drugs have already passed rigorous clinical testing in humans.

"The repurposed anti-hypertensive drug we are evaluating is considered to be safe and can be taken for an extended period without major adverse side effects," explains Dr Gordon. "That makes it very attractive as a drug for people with Parkinson's disease who could potentially take the drug for a long period of time."

Dr Gordon believes the benefits of drug repurposing extend far beyond Parkinson's. Researchers are searching for treatments for conditions including motor neurone disease, Alzheimer's, cancer and arthritis.

The UQ researcher says there is also immense potential in repositioning 'rescued drugs' – those that have already been tested to be safe in humans, but were not effective enough for the disease for which they were originally developed.

Dr Gordon's research is being funded by the Michael J Fox Foundation, the Cure Parkinson's Trust UK and the Queensland Government's Advance Queensland program. ●





# A collaborative and personal commitment to Indigenous health

The health of Indigenous Australians and those living in remote communities is being improved through the collaborative research and personal commitment of UQ Professor Wendy Hoy AO.

Professor Hoy is the Director of UQ's Centre for Chronic Disease, and leads the NHMRC Chronic Kidney Disease Centre of Research Excellence. She is recognised internationally for her multidisciplinary research and leadership in combating kidney disease, diabetes and cardiovascular disease in high-risk populations.

Over the past year, Professor Hoy has led support for the development of a resource to progress Indigenous health research and inform policy development. The UQ researcher is putting her own money where her dedication lies – donating to UQ to fund a repository of existing knowledge, data and biological samples. This resource will be stored across various UQ research institutes, fostering further collaborative research into Aboriginal health.

As Professor Hoy explains, it is important to ensure Indigenous groups and community leaders take ownership of Indigenous health initiatives. “We encourage the Aboriginal communities we work with to contribute their knowledge to wider healthcare conversations. They have taken ownership and assumed leadership roles. They are keen to contribute to global knowledge – not only of health issues, but of ancestry and customs.”

Through Australia's first NHMRC Chronic Kidney Disease Centre of Research Excellence, Professor Hoy manages another registry of chronic kidney disease that has become one of the largest resources of its kind in the world.

“The first tranche of data from the registry will provide a treasure trove of information on the growing burden of chronic kidney disease,” says Professor Hoy. “Chronic kidney disease precedes almost all end-stage kidney failure, which requires life-saving dialysis. With current trends, dialysis will place an insurmountable cost on our health system. We need data to better understand how we can prevent and manage this disease.”

With 7800 patients now on the registry, which is linked to Queensland Health data sets, Professor Hoy says the resource will generate significant information on multiple aspects of chronic kidney disease, its trajectory and patient outcomes.

The UQ researcher is confident of the substantial impact the scientific community can achieve by working together. “While we have seen enormous advances in health services, outcomes and survival over the past 60 years, more progress can be made. The possibilities for productive collaborative research are almost limitless.” ●





# Going the distance

As an elite athlete, Sarah Vitug pushed herself on the training track so she could be at the front of the pack come race day. The 26-year-old Californian is applying that same dedication to her studies, as she strives for a career in the highly competitive field of academic dermatology.





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I look forward to having the ability to bring wellness to peoples' lives.

The hardworking middle-distance runner competed in both track and cross country as an undergraduate biopsychology and communications double major. Sarah kept running and subsequently also notched up a master's degree in education. The decision to pursue medicine came relatively late – at age 20 – as she realised her Olympic dream might elude her.

The UQ-Ochsner program appealed to Sarah as it gave her the chance to tick another goal off her bucket list – studying abroad. The four-year UQ-Ochsner MD program involves two preclinical years at UQ in Brisbane, followed by two clinical years at the UQ-Ochsner Clinical School in New Orleans. But after finishing the two-year preclinical program, Sarah decided to stay in Australia to add a higher degree by research to her already impressive CV.

The incentive to explore skin cancer research came while on a clinical elective at the Melanoma Institute Australia, where her mentor, Associate Professor Robyn Saw, proposed a project she could help with. “I soon realised a research degree would best suit my endeavours,”

Sarah says. “It’s adding a year to my studies but having research experience will help me to understand the science behind diseases and treatment options.”

Now with her Master of Philosophy, Sarah is investigating why melanomas are more aggressive in pregnancy. Her supervisor is Associate Professor Kiarash Khosrotehrani, a leading clinical scientist interested in skin biology, regenerative medicine and skin cancer. Sarah couldn’t have asked for a better coach.

Laboratory work has presented a new set of challenges for Sarah. “I’ve just come from learning how to take patient histories and use a stethoscope, so the lab is a completely different environment. We medical students like to think we can work things out ourselves, but I’ve learned to ask for help as soon as I need it, and everyone has been incredibly supportive.”

After her research year, Sarah returns to the US for the clinical phase of her medical degree and hospital rotations. “Most of all, I look forward to having the ability to bring wellness to people’s lives. To make things better.” ●

Right: Sarah Vitug couldn’t have asked for a better coach for her MPhil than Associate Professor Kiarash Khosrotehrani





# UQ researchers 'turning off' allergies

A party invitation or a close encounter with peanuts or pollen can be daunting for anxious parents whose children have severe allergies or asthma. The constant vigilance required is exhausting.

It is little wonder news of progress towards a single treatment giving life-long protection has been celebrated around the world.

The reason treating allergies and asthma is such a challenge is that immune T-cells develop a 'memory' of the allergen protein and become very resistant to treatments. Each time the T-cells recognise the allergen, the response is amplified. When these symptoms become severe, allergies can be life-threatening.

A research team at the UQ Diamantina Institute, led by Associate Professor Ray Steptoe, has succeeded in turning off the immune response by effectively 'wiping the memory' of these T-cells with gene therapy. This desensitises or resets the immune system so that it tolerates the allergen.

As Dr Steptoe explains, his team takes blood stem cells, inserts a gene that regulates the allergen protein, and injects that into an animal subject. "Those engineered cells produce new blood cells that express the protein and target specific immune cells – 'turning off' the allergic response."

The research so far has focused on an experimental asthma allergen. But it has the potential to be applied to treat severe allergies, such as peanuts, insect venom and shellfish. The findings are subject to further preclinical investigation, with the next step being to replicate results using human cells in the laboratory.

The Asthma Foundation is among the supporters of the research. Dr Steptoe says the ultimate goal would be to develop a single injected gene therapy – replacing the short-term treatments that

merely target allergy symptoms with varying degrees of effectiveness.

"We haven't quite got the technique to that point, so we are working on making it simpler and safer," Dr Steptoe says. "The target population might be those individuals who have severe asthma or potentially lethal food allergies, rather than someone with milder symptoms."

The Asthma Foundation, Dr Steptoe and his team look forward to the day when a safe single treatment is available – as do the many of us impacted by allergy and asthma. ●



# Calling Australia home

Sahar Keshvari came to Australia in 2010, expecting to complete her master's degree in molecular microbiology and return home to Iran. But instead she was encouraged to undertake a PhD at the Mater Research Institute – University of Queensland (MRI-UQ). Seven years later, her passion to find a cure for metabolic diseases continues.

“My background in Iran was working in a pathology lab,” Dr Keshvari recalls. “Although it was a good job, I was dealing with the same number of patients, doing the exact same tests, even reporting the same results. There was nothing exciting about it, and I realised ‘this is not me’. But research is not like that. The beauty of research is that it can surprise you in ways that nothing else can.”

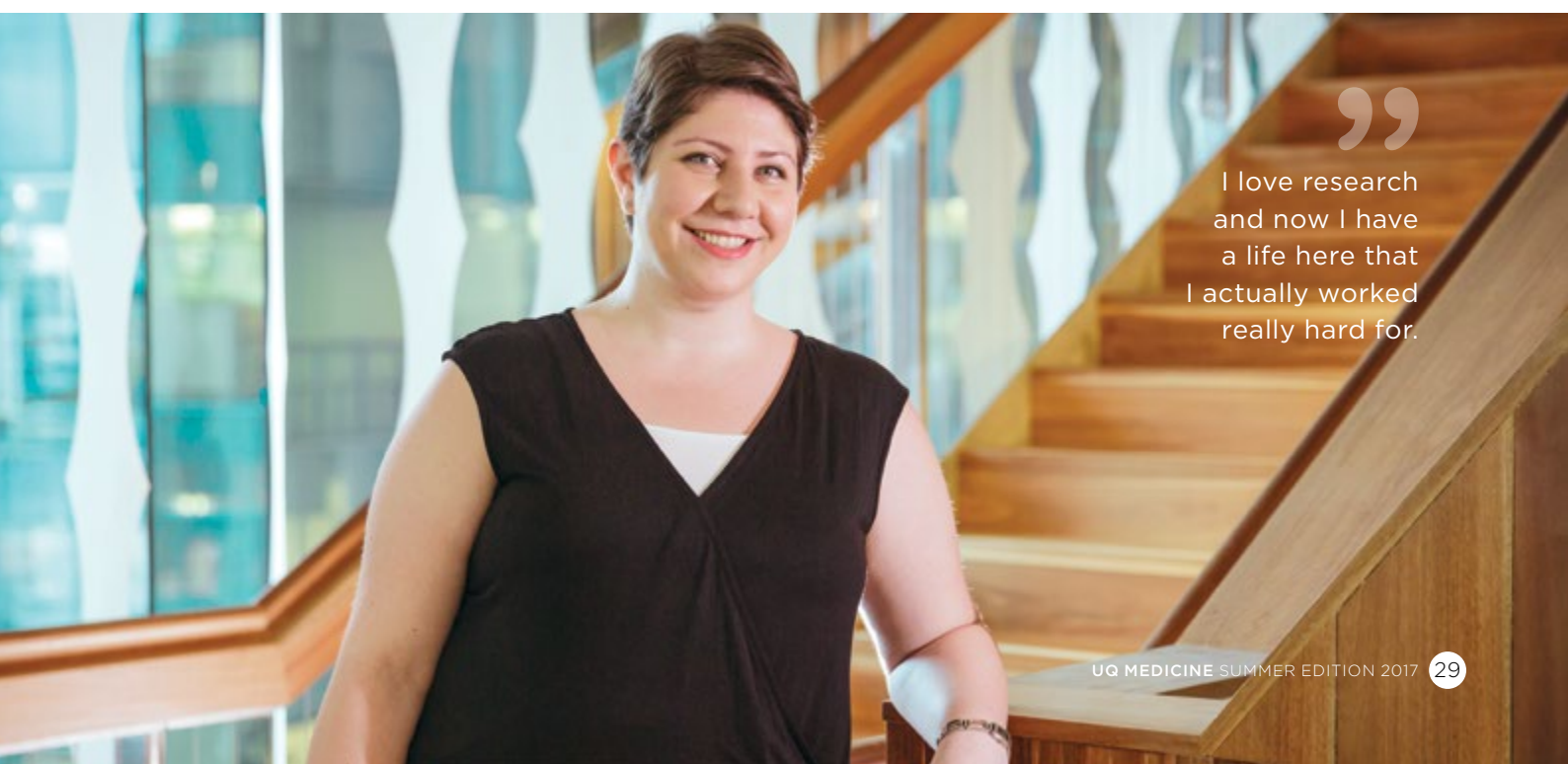
Within months of starting her PhD, the young researcher had already authored a paper on her chosen topic – identifying and characterising receptors for the anti-diabetic hormone, adiponectin. Dr Keshvari recently received the Dean's Award for Outstanding Higher Degree by Research Theses. She now works at MRI-UQ as a post-doctoral researcher.

Looking back, Dr Keshvari says the workload was a challenge, but a rewarding one. “I was working as hard as I could – sometimes from 4am to 10 or 11pm. But I was so motivated about where I was going, it was fun for me,” she says.

And despite moving more than 12,000 kilometres from her home in Tehran to Brisbane, the international student found it easy to fit in with the Australian way of life. “Australia is really multicultural, so other than the language barrier at the beginning, I never had any problems,” she says.

Now Dr Keshvari owns a house in Wishart with her husband, and her sister and mother have also moved to Brisbane. She is currently working on research to create a drug to repair pancreatic cells that produce insulin so they can function better to assist patients with type 2 diabetes and obesity.

“I love research and now I have a life here that I actually worked really hard for. I built it with my hands, so it's too important for me to even think about leaving it. Maybe in a few years I might decide to go to another country and do research. But the research here is the main part of my life at the moment.” ●



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I love research and now I have a life here that I actually worked really hard for.



## IN PHOTOS



### NOT IF, WHEN.

The Faculty of Medicine is proud to play a leadership role in *Not If, When* – the Campaign to Create Change, a ground-breaking philanthropic campaign at UQ. The campaign board is co-Chaired by Professor Ian Frazer AC FRS (co-creator of the Gardasil vaccine) and his wife Caroline, and also includes Faculty scholarship donor Dr Xiao-Yi Sun and alumnus and philanthropist Dr Paul Eliadis. All four were on hand in October to help celebrate the campaign's public launch (pictured above).

## Scholarship honours

The Faculty is enormously grateful to our alumni who support the next generation of health professionals, researchers and teachers. Dr Brian Hirschfeld (MBBS 1952) enjoyed catching up with 2017 Hirschfeld Honours Scholarship in Immunology recipient Pascale Wehr at the Diamantina Institute.







## Med Revue

La La Gland took the audience on an unforgettable journey, with plenty of skits, songs and videos along the way.



## Alumni award winners

Queensland's first Indigenous doctor and a decorated Red Cross nurse have received Vice-Chancellor's Alumni Awards. Associate Professor Noel Hayman, Queensland's Australian of the Year in 2011, was awarded the Indigenous Community Impact Award for his dedication to improving Indigenous health. Andrew Cameron completed a Master of Tropical Health in 1995, and was awarded the Vice-Chancellor's Alumni Excellence Award for his outstanding humanitarian aid work.

## Bush training buzz

There has been plenty of buzz around a new UQ program to promote rural and regional medicine. Phase 1 medical students faced simulated first aid scenarios in the inaugural Objective Simulated Bush Engagement Experience, or OSBEE.

Actors complete with 'moulage' realistically portrayed victims of snake bite, broken bones, heat stroke and allergic reactions at the Susan River Homestead, south of Hervey Bay. Other stations involved bush survival skills and a yarning circle, along with presentations by the Queensland Ambulance Service and Surf Life Saving Queensland.

Students enjoyed the opportunity for some hands-on experience in a rural setting, and the chance to test their ability to keep a level head in an emergency. Following the success of the first Bush Engagement Experience, the program is set to be expanded next year.



## Patron's Regatta

UQ medicine students rowed against their counterparts from Law in September. The regatta was held in honour of Professor John Pearn, to celebrate his 25th anniversary as patron of UQMS.





## ACRF launch

Australian Cancer Research Foundation Chairman Tom Dery AO (pictured below right), was on hand for the launch of the ACRF Centre for Lung Cancer Early Detection, along with Professor Kwun Fong (pictured below left) and lung cancer survivor Geoff Tapping. The centre at the Prince Charles Hospital has been made possible by a \$1 million ACRF grant.



Pictured above: Long-time generous donors Dr Alan Van and Minh Ha Tran enjoy RiverFire 2017 festivities with Lee Williams (left), Advancement Manager, Faculty of Medicine.



The family of the late Dr Bryant attended the Health Matters lecture in May.

## Health Matters


In 2017, The Faculty launched the Health Matters lecture series, featuring some of our renowned researchers and clinicians. Topics canvassed in four well-attended events included breast cancer, mental health, cardiac research and skin cancer. Health Matters will continue in 2018.



Above: Adjunct Professor Liz Kenny AO, Professor Sunil Lakhani and Professor Liz Eakin, Health Matters, September 2017.

Left: Both serious and light hearted questions were posed to the panel of speakers including this one from Ruth Duncan at Victoria Park.





# Together, our greatest days lie ahead.

## Growing opportunities and improving health through generosity.

Medicine alumnus Dr Hugh Kunze delights in funding scholarships for international students like Dzung Ho, who is earning a PhD from the School of Public Health. The gift of scholarship makes both Dzung's career aspirations and mental health research possible. The generosity of donors like Hugh creates positive change for students and for us all through improved health outcomes, education and care.

CREATE CHANGE. MAKE A DIFFERENCE.  
Give now at [uq.edu.au/giving](https://uq.edu.au/giving)



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