

THE UNIVERSITY OF QUEENSLAND

THE UNIVERSITY OF QUEENSLAND MEDICINE MAGAZINE

# Uamedicine

Winter Edition 2022

#### 20 YEARS RURAL CLINICAL SCHOOL

Serving regional, rural and remote communities

> Better mental health

A family pledge

Listening for a life voice



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COVER IMAGE UQRCS 20 year celebrations - article on page 6-9.

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## MESSAGE from the Executive Dean

The first half of 2022 has been challenging. Not only are we still coping with the highly infectious Omicron variant of SARS-CoV-2, but we have also been managing the impact of record rainfall and floods in many parts of Queensland and New South Wales, and have been challenged by the events in Ukraine. All of this results in a sense of existential angst which may trigger or exacerbate mental health disorders, particularly depression and anxiety. Therefore, it is appropriate that this edition of *UQmedicine* features two senior academics working to solve the big problems in mental health – Professor Harvey Whiteford and Professor Maree Toombs.

The work of Professor Harvey Whiteford has had substantial impact in Australia and globally. Harvey is the Director of the Queensland Centre for Mental Health Research. In his eminent career as a psychiatrist and researcher, he has focused his attention on the epidemiology of psychiatric illness and its burden, and has had great impact in mental health policy and systems reform. Professor Maree Toombs, who has cultural lineage to the Kooma people of Western Queensland and the Euahlayi people of northwestern New South Wales, is the Associate Dean (Indigenous Engagement) for the Faculty of Medicine. As part of her research, Maree focuses on the complex and distressing area of Aboriginal suicide. She has developed, with others, the I-ASIST program which aims to reduce the rate of suicide across Australia in Indigenous populations. The Faculty of Medicine is very proud of these two academics working to improve the outcomes of people living with mental health disorders.

In associated areas of research, we also feature the work of our Head of the School of Biomedical Sciences, Professor Elizabeth Coulson in dementia research, and Associate Professor Nadeeka Dissanayaka in the area of anxiety treatment.

This edition of UQmedicine also celebrates the 20th anniversary of The University of Queensland Rural Clinical School (UQRCS). Although medical student teaching and rurally based research has been a feature of The University of Queensland Medical School for many decades, the formation of UQRCS in 2002 was an important milestone in our work in regional, rural and remote Queensland. Through the stories of our graduates and staff, it is clear UQRCS has made a substantial impact on health outcomes in rural areas through the provision of appropriately trained doctors, and the generation and implementation of new knowledge in a rural setting. This anniversary is appropriately timed to coincide with the next stage of our commitment to the provision of a medical workforce for rural Queensland with the commencement of the Rural Medical Pathway (RMP) in Central Queensland, Wide Bay, Darling Downs and South West, in partnership with CQUniversity and the University of Southern Queensland. In this pathway, students can enrol in undergraduate programs at a local university with a guaranteed position in the UQ MD program and connection to prevocational and vocational training in the same regions. We and our partners envisage the RMP will improve the medical workforce provision in these regions.

We also acknowledge a generous donation from the estate of Elizabeth Roberts, which is connected to a wonderful story going back more than 100 years. Finally, we highlight the lovely work of one of our professional staff members, Lisa Dingwall, as a volunteer and contributor to our community.

I commend this edition of *UQmedicine* to you and suggest that its content serves as a partial break from some of the current existential angst.

Professor Geoff McColl Executive Dean, Faculty of Medicine



## Our Vision

Knowledge leadership for a better world

## Our Mission

Our core purpose is to deliver for the public good through excellence in education, research and engagement with our communities and partners: local, national and global

## Our Values

Excellence, Creativity, Truth, Integrity, Courage, Respect and Inclusivity

## Features



BETTER MENTAL HEALTH



20 YEARS - RURAL CLINICAL SCHOOL



LISTENING FOR A LIFE VOICE



SOLVING THE DEMENTIA PUZZLE



LOOKING FORWARD TO GIVING BACK



MD STUDENT'S OARSOME SWITCH

# Opening the door to BETTER mental health

A fleeting encounter with a patient while touring a northern European mental health facility in the 1990s is a moment Professor Harvey Whiteford has never forgotten.

He doesn't know what happened to the young woman with blonde hair, but the colourful drawing of herself that she rushed across the room to give him as he was leaving the ward, turned into a touchstone for the work he was doing around the world.

"I don't know why she handed me the picture that day, but I've always thought she was giving me a message – saying 'don't forget about me'," Professor Whiteford says.

"I took that drawing back to my office at the World Bank in Washington DC and stuck it on my wall.

"She came to represent the people I was trying to help because with my role at the time, you were so far removed from the people needing services on the ground."

There have been many similar moments that have guided Professor Whiteford's long career from medical doctor to psychiatrist, roles as the Director of Mental Health for Queensland and head of Mental Health for the federal government, to the World Bank and then UQ as the Director of the Queensland Centre for Mental Health Research.

> "I've always believed when doors of opportunity open, walk through them; don't be scared to try something different," he explains.

"I never set out to do psychiatry, but while I was working as a paediatric trainee on an oncology ward, an opportunity came up to move across to the psychiatric ward at the Royal Brisbane Hospital.

"I remember getting a big bunch of keys and walking into a locked ward.

"I was taken to see a patient with desperation in his eyes as he sat on the floor of a seclusion room; he needed help and I felt like there was something I could do for him."

This was a time when psychiatry and mental illness were more stigmatised and marginalised, and it wasn't an area many doctors and nurses chose as their first career. Since then, Professor Whiteford has been at the forefront of mental health – helping drive change through policy and the structural reform of services in Australia and internationally.

After a research fellowship at Stanford University, he returned to Australia, established the Queensland Centre for Mental Health Research and oversaw the implementation of the first national mental health plan as Chair of the National Mental Health Working Group. He was then appointed to the first mental health position at the World Bank in Washington DC where he negotiated loans for countries to establish programs for mental and neurological disorders.

"We were helping many low-income and middle-income countries, including those rebuilding after years of war," he explains.

"So, we were providing capital not only for the things that you could see like roads, bridges and schools, but also for health and education, and more invisible things like the psychological trauma from conflict.

"It was a challenge, but I felt like we made a real impact in these countries."

Fast forward two decades and Professor Whiteford is almost back where he started – as Director of the Queensland Centre for Mental Health Research and Professor of Population Mental Health at UQ, where he is also leading teams responsible for estimating the global epidemiology and burden of mental disorders, and designing and planning health service to reduce the burden.

"The change in attitude towards mental health in one lifetime has been dramatic, but there is still a long way to go to break down all of the barriers and stigmas associated with mental illness," he says.

"Illnesses that affect the brain and mind are still treated differently to those that affect our heart or lungs.

"I think the pandemic has brought mental health into focus for a lot of people, with recent research by my team finding cases of major depressive and anxiety disorders increased by 25 per cent worldwide during the first year of the pandemic."

For someone who never planned on being a psychiatrist, Professor Whiteford has carved out a long and successful career that has driven change for mental health care and patients.

"I believe I've made a difference through the impact of my research and being able to influence government decisions in health policy and planning. In this way, I like to think I've helped more people than I would have as a psychiatrist conducting one-on-one consultations with patients," he reflects.

"Mind you, I still do one day a week of clinical work seeing patients, and I do it to connect with and remember who this work is for."

# Celebrating 20 years of rural medical training

RURAL CLINICAL

2022 is a milestone year for The University of Queensland Rural Clinical School as it marks 20 years since its doors opened with the objective of improving the regional, rural and remote medical workforce in Australia.

In 2002, the Rural Clinical School was established to train medical students – giving them valuable experience with a little taste of life in a regional community - and increase the likelihood they would return to rural areas as general practitioners, specialists and academic specialist staff.

That year, 28 medical students in total crossed the thresholds of the Toowoomba and Rockhampton sites.

The cohort has grown considerably since then, with 164 third-year and fourth-year medical students studying across four Regional Clinical Units in 2022.

Since the Rural Clinical School's humble beginnings, more than 1500 students have become UQRCS alumni, after completing at least one year of learning in regional, rural and remote locations. Many have chosen to stay in these areas to complete internships and reside long-term.

It's not only the student population that has increased. The Rural Clinical School has also grown and now boasts three Regional Training Hubs that connect junior doctors to rural career pathways to improve the retention of medical graduates in our regions.

In the past three years, UQ has partnered with other universities to establish two Rural Medical Pathways. These pathways will educate even more future doctors to help achieve that important end goal of increasing and sustaining a skilled medical workforce in rural and regional areas.

The University of Queensland Rural Clinical School's 20 year celebrations are also a time to thank staff, students, and partners who have been a part of the incredible journey so far.

rcs.medicine.uq.edu.au/20-years



# Passion for *rural practice*

On the 20th anniversary of UQRCS, it is only fitting to check in with one of its first students.

As a kid growing up on a Tenterfield property in New South Wales, Dr Dan Halliday witnessed first-hand how valued rural medical practitioners were in regional communities.

So, when he headed off to study, the idea of returning to a regional town was always in the back on his mind.

"I suppose you could say I was on the path to rural medical practice from the beginning," Dr Halliday reflects.

"When I started to question the accepted premise of rural, remote and Indigenous communities having to accept poorer health outcomes and levels of care just because of where they lived, my direction was set.

"Also, the perception by many around me that my idea of becoming a doctor wasn't really feasible for a kid from the bush, was like fanning a fire."

Coming out of the harsh drought of 1993-94, farming didn't offer a secure future, so Dr Halliday's parents supported him to pursue a professional career.

"Basically, they encouraged me to use my brains, experience the world beyond Tenterfield, and if I wanted to return to a rural area, that was my decision," he adds.

After completing a Biomedical Science degree at Griffith University, Dr Halliday was accepted into the UQ Bachelor of Medicine, Bachelor of Surgery (MBBS) program in 1999. As he progressed through his studies, he married his wife Cathy in the break between second and third years.

In his fourth year of studying medicine, Dr Halliday was in the first cohort of UQ's Rural Clinical School at the Toowoomba Regional Clinical Unit.

"While some students may have been reluctant to venture into the rural clinical school space at the time, UQRCS offered me the order and diversity of rotations that suited my preferences," he says.

"It also provided me with the ability to re-engage with a rural and regional practice and patient base.

"I was very fortunate to undertake obstetric and subspecialty terms based out of Toowoomba in 2002, which built on my rural terms in Charleville and Cunnamulla the year before.

"Those remote placements were guite formative for me - I was exposed to rural icons such as Dr Jim Baker and Dr Chester Wilson.'

After graduating in 2002, Dr Halliday moved to Central Queensland for his internship and residency at the Rockhampton Base Hospital. Since late 2007, he and his family have called the regional town of Stanthorpe home.

"The variety and overwhelming appreciation from the community is what I love most about working in rural practice," Dr Halliday says.

"I hope my work will encourage more rural, remote and Indigenous kids to dream big and one day contribute to providing the excellent health care regional communities deserve.

"I would love to think that they develop the same appreciation I have for rural and remote medicine, and one day they too will call me a colleague.'

# *Celebrating 20 years* with a focus on the future



In 2002, Associate Professor Srinivas Kondalsamy-Chennakesavan was a researcher at UQ's Centre for Chronic Disease when the UQ Rural Clinical School was established. Little did he know then that he would not only join the Rural Clinical School in 2012, but also be its Head of Research in 2022.

Dr Kondalsamy-Chennakesavan has been a part of the Rural Clinical School as it's grown to be the largest rural clinical school in Australia hosted by a single university, with four sites across regional Queensland.

"I have seen a lot of changes over the years. In fact, change has been the only constant," he says.

As Head of Research at the Rural Clinical School, Dr Kondalsamy-Chennakesavan has led UQRCS's vital research into clinical medicine, medical education, health workforce, Indigenous health and rural/remote health.

"I'm most proud of the research into the maldistribution of the medical workforce in rural and regional areas," he explains.

"For the first time, we have robust evidence to say that those who study and train in a regional, rural or remote setting are more likely to return and work in a rural area.

"Our team's research findings contribute to major policy decisions at a government level and are cited by agencies such as the World Health Organization.

"The overall impact of our work is substantial and has attracted awards at local, national and international levels.

"One of the biggest challenges I have faced was building a research culture in severely under-resourced rural clinical environments."

While 2022 is a time to celebrate UQRCS, Dr Kondalsamy-Chennakesavan has his eye on the future with a focus on securing sustainable funding for rural health research.

"The Rural Clinical School will continue to offer essential research to identify and address the challenges rural and remote communities face in the area of health care."

students.

# Are you a UQRCS alum?

As part of its celebrations, the Rural Clinical School is inviting past students to share their stories. For more detail visit: rcs.medicine.ug.edu.au/20-years

### 20th anniversary 'thank you' events

UQRCS wouldn't be where it is today without its valuable past, current and future partners, staff, students and local communities. It is grateful for everyone's contribution in supporting students' learning and living experiences in rural and regional Queensland, for promoting rural medical careers, and working with UQRCS to improve the rural medical workforce maldistribution.

As a thank you for your support over the past 20 years, UQRCS will be hosting celebration events across its footprint in August, September and October.

Please let UQRCS know which event you'd like to be invited to by registering your interest on the website - rcs.medicine.ug.edu.au/20-years



Launch of The Mob Van with Professor Maree Toombs, 2013.

Student LifeFlight visit, 2019.

capacity for students.



capacity to suit up to 80

in Rockhampton.

**Rural Clinical** School workforce outcomes

20 YEARS

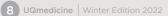
RURAL CLINICAL SCHOOL



40% working rurally

917 medical students studied **1 YEAR** at the Rural **Clinical School** 

> 27% working rurally





Emergency Service Expo, Rockhampton, 2005.

Rocky River Run, 2015.



R U OK? Campaign, 2021.

established

- South West Medical



The Rural Clinical School celebrates 20 years

# Listening for a life voice

#### "We call it the river of suicide."

"When we train Mob in suicide intervention, we use a river as an analogy.

"Some people land in the river and just bob around, and you know something is not right.

"Some people are just under the surface, and others are so deep under the water that you will never know their intent is suicide."

This is how the Faculty of Medicine's Associate Dean of Indigenous Engagement Professor Maree Toombs uses the river analogy to emphasise the endemic state of suicide in Australia's Indigenous communities.

"When someone has thoughts of suicide, they're not looking forward anymore – they're looking back," Professor Toombs explains.

"For many Aboriginal and Torres Strait Islander peoples, the despair comes from feelings of displacement and hopelessness.

"It is a massive issue, especially in small communities. Take Cherbourg, north-west of Brisbane, for example: it has around 1200 people and 94 health services. You can see a problem right there."

In her efforts to create change, Professor Toombs attended an Applied Suicide Intervention Skills Training (ASIST) workshop at LivingWorks Australia (LWA) in 2016. It was there that she realised one of her own family members was at risk of suicide.

The profound experience prompted Professor Toombs to create I-ASIST, the world's first culturally safe suicide intervention program for Indigenous Australians, in partnership with LWA and Aboriginal and Torres Strait Islander communities.

The program, which led to Professor Toombs being honoured with a LiFE Impact Award, uses a train-the-trainer model to equip community members with skills to become first responders. Since its inception four years ago, more than 90 Indigenous communities have engaged with I-ASIST and more than 6000 people have been trained. Professor Toombs can't think of a time when a participant had not been impacted by suicide.

"Some participants have had 5 or 6 direct members of their family who have taken their own life," she says.

"They come to our program because they've had enough and want to be empowered to create change in their communities."

The two-and-half day I-ASIST program begins by acknowledging the trauma caused by suicide and sharing stories.

Professor Toombs says most people cry because they think about someone they have lost.

"We make sure that everyone knows what they are in for before we begin and that they are taking part to be trained in suicide intervention," Professor Toombs explains. "I-ASIST teaches participants to notice when someone is not their normal self for no obvious reason.

"The responder is then prompted to ask a specific question, such as, 'Are you thinking about suicide?'.

"The question needs to be specific because asking something like, 'Are you thinking of doing something silly?', could mean quitting your job and moving away.

"Participants are trained to listen to stories without judgement – the person needs to be empowered to speak without fear of judgement.

"They listen for a 'life voice,' which is a hesitation during discussion. For example, 'Yes, but I wouldn't because I've got kids that need me or I have family who love me, but I do need help.'

"When a 'life voice' is heard, participants encourage the person to identify a reason to stay alive.

"The person is then helped to create a safety plan for themselves with specific time frames, such as telling mum and dad tonight or seeing a doctor in the morning."

Professor Toombs is humbled by the keen interest in I-ASIST from Indigenous communities and the results it is achieving.

"Between January and April 2021, there were 164 Indigenous suicide interventions recorded, and there are plans to do more, while saving lives," she says.

"I-ASIST is also a social enterprise model that enables people who have completed the program as trainers to learn about how they can set up their own business, manage budgets and identify funding to run their own workshops.

"During the next three years, we want to train 50 train-thetrainers for 50 thousand people in Australia. Right now, we have 20 trainers and need to secure further funding to achieve our goal.

"This program is vital because large numbers of people are dying from suicide in Australia daily. Indigenous communities need the skills and tools to report suicides and support each other, rather than treat the subject as taboo."

Professor Toombs says while nobody wants to talk about suicide, it must be discussed for the well-being of everybody.

"This reminds me about a story I heard when one elder said, 'If we talk about suicide, it will happen.'

"Another elder replied, 'Well, we're not talking about it and it's happening, so maybe we should talk about it, and it might not happen."

"At that point, the first elder sat down and began his suicide intervention training."

#### Anyone needing help should call:

- Lifeline on 13 11 14
- Beyond Blue on 1300 22 46 36
- MensLine Australia on 1300 78 99 78
- headspace on 1800 65 08 90









Elizabeth in Jordan 1994

FAMILY PLEDGE: the generational donation for teaching and research

"What you leave behind is not what is engraved in stone monuments, but what is woven into the lives of others." Pericles

Often there is a compelling story or connection associated with a donor's bequest - for Elizabeth Roberts and her sister Rosemary Roberts it was undoubtedly both. When 94-yearold Elizabeth passed away, she bequeathed \$1.5 million to The University of Queensland to fulfill a pledge made by their grandfather more than a century earlier.

The donation is the final chapter in an extraordinary story and connection between Queensland pioneer Robert Christison and UQ that dates back to 1909. A successful pastoralist, Mr Christison made one of the earliest recorded donations to the University – a substantial gift of £1000 for the study of tropical, pastoral and agricultural science. The donation was made with a promise of a further £1000 gift, but after Mr Christison moved back to England with his second wife and young family, it was never fulfilled.

However, through the decades and generations, his initial donation and pledge to UQ was never forgotten by his family, who were extremely proud of his pioneering achievements and philanthropy. His place in Queensland's early history, his innovation, good relationships with the local Indigenous people, and support for medical and scientific research have been well documented in the pages of history and in a book written by one of his daughters - author and activist, Mary Bennett.

His adventurous life was echoed in his descendants including his granddaughter Elizabeth Roberts, who also led a remarkable life and was an intrepid traveller.

Growing up on the family sheep property near Roma in Queensland, Elizabeth enjoyed an adventurous life with her sister Rosemary until the family moved to Sydney. After graduating university with a Bachelor of Arts with Honours, majoring in Anthropology and English, Elizabeth worked in academic roles before pursuing archaeological work in Greece and Jordan. She spent 14 years in Jordan living in a village where she tutored local children in English after working at the dig site. Her connection with the village didn't diminish after she returned to Australia; she maintained contact with many Jordanian families and continued to support the community.

The last surviving daughter of Mr Christison's daughter Helen Roberts, Elizabeth bequeathed her estate to charitable causes. The largest share was given to UQ - a gift made collectively with her late sister's estate - for teaching in the Master of Public Health program and research into tropical medicine, which was likely a result of the early death of their grandfather's first wife Mary from malaria.

We are enormously thankful for the generous donation from Elizabeth Roberts and her sister Rosemary Roberts, in honour of their grandfather Robert Christison.

UQ's Faculty of Medicine plays a vital role in building a healthier world. Our donors and supporters are essential partners in that endeavour; their vision and generosity elevate UQ's impact, reach and results. If your history is intertwined with UQ and you are interested in leaving a gift in your will or memorialising a loved one in partnership with UQ, please contact bequest@uq.edu.au.

# **ROBERT CHRISTISON:** the original benefactor

Robert Christison was a pioneer, pastoralist, innovator and trailblazer. His name may not be immediately familiar, but a quick search reveals he's woven into the fabric of Queensland's early history.

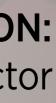
Imation

Originally from Scotland, Robert Christison first arrived in Victoria in 1852 as a 15-year-old. After several adventurous years working, learning and exploring Australia, he eventually settled down near Bowen in North Queensland in the 1860s, naming his properties Lammermoor and Cameron Downs.

His policy of friendship with the local Yirandali-speaking Dallenburra people has been well documented in the pages of history. As a pastoralist, he was an innovator who worked on meat preservation methods and was the first to establish meat-freezing works in the 1880s. He also researched artesian water supplies of other countries and imported Queensland's first boring plant from England.

Robert Christison came from an academic background; his grandfather and uncle both held prominent positions as professors of humanities and medicine in Scotland. He was also interested in scientific research and innovative practices in dealing with the treatment of cattle diseases, and he took a proactive approach in relation to the fight against tick infestation in the late 19th century.

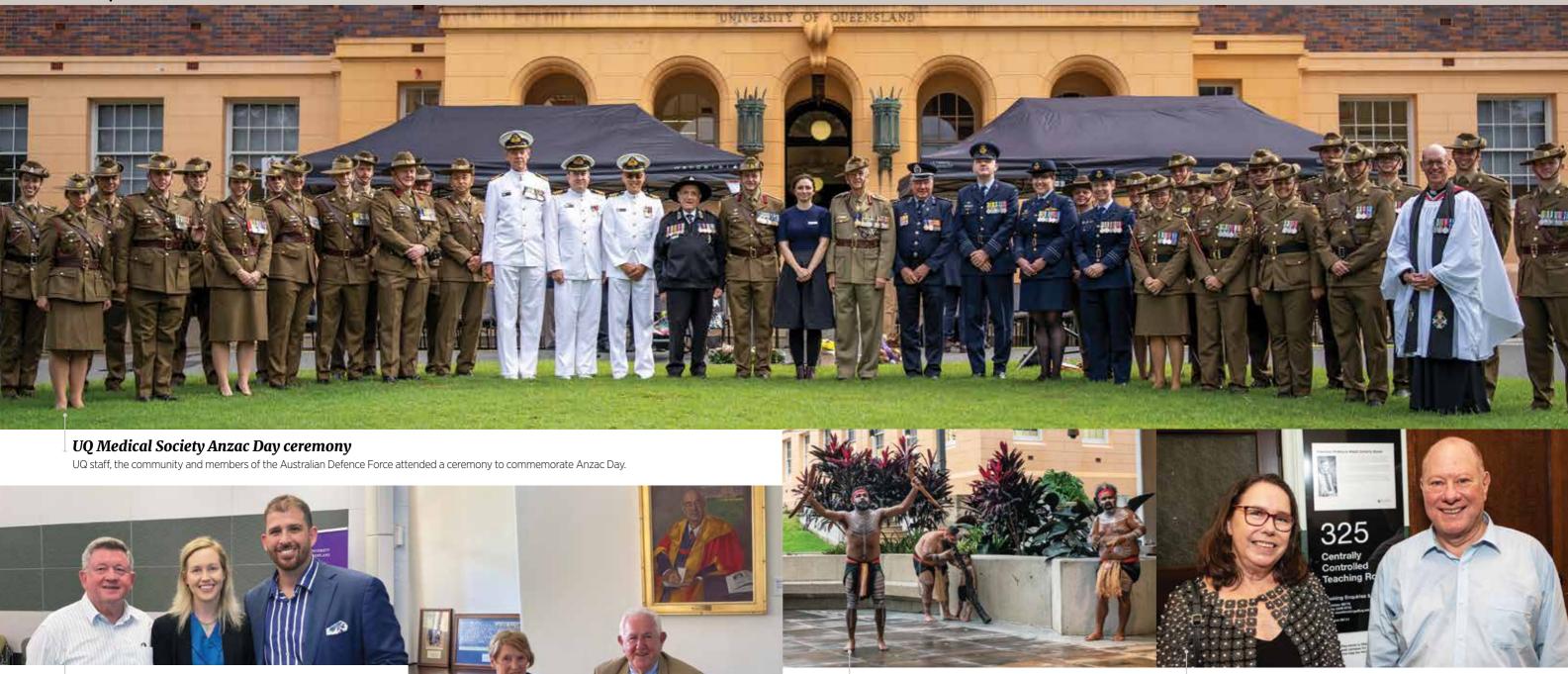
His passion for the land didn't diminish after he moved his family back to England in 1910. He farmed a property in Lincolnshire until he died in 1915 at the age of 78 years.





Robert Christison, 1912. Image: Brisbane John Oxley Library, State Library of Queensland.

## In photos





LMRF Meet the Researcher The Lions Medical Research Foundation is a proud supporter of UQ researchers. Associate Professor Carlos Salomon and supporters of ovarian cancer research at UQCCR.



**LMRF'S** Narelle Parkin and Foundation Chair David Eades formalising support for Dr Dominic Guanzon.

#### **Inaugural Family Scholar**

Jasmine Pienaar was the inaugural recipient of the Drs Donald and Isobel Perry-Keene Family Scholarship. Jasmine Pienaar (centre) with Dr Margaret Steinberg AM and Dr Don Perry-Keene.



The Mayne Events Space launch Traditional dancers at The Mayne Events Space launch.



Judy and Tom Doherty outside the newly renovated and named Emeritus Professor Ralph Doherty Room at The Mayne Events Space launch.

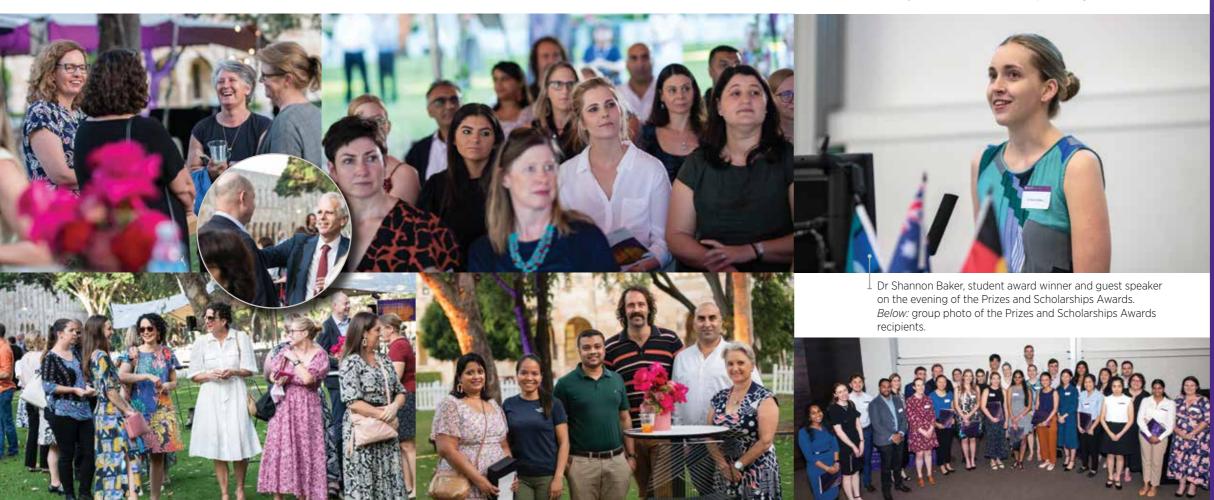
## In photos cont'd.



#### Faculty of Medicine Excellence Awards

Above: Congratulations to all the winners and nominees at the Faculty of Medicine Excellence Awards. *Below:* This year the Faculty had the largest number of nominations submitted in acknowledgment of the exceptional efforts by individuals and teams.

In 2022, philanthropic donors and partners provided more than 100 awards – positively impacting student lives, community wellbeing and global health. *From left:* Faculty of Medicine Executive Dean, Professor Geoff McColl, with donors Dr Patrick Mahoney and Dr Cathi Lawrence representing Alumni Friends.





## The Mayne Events Space

"The Mary Emelia Mayne Room was the perfect space for our event with room configuration flexibility, modern technology to cater for our hybrid inperson and online session and plenty of space for breaking out. The room was set up immaculately and we enjoyed the lovely natural lighting and city views that were offered in this room. The events team were friendly, helpful, professional and very accommodating of all our requests. Thanks so much to the team for helping our meeting run seamlessly and creating a pleasant corporate event experience."

For all booking enquiries, please contact: medmayne.events@uq.edu.au

We hope to see you soon at The Mayne Events Space at The University of Queensland!

288 Herston Road, Herston QLD 4006 | +61 7 3365 5071



# Solving the DEMENTIA puzzle

It's the joy of discovery that motivates Professor Elizabeth Coulson. Just like a jigsaw puzzle, piece by piece, she is searching for that elusive final part to complete the picture and solve the mystery.

As a Professor of Biomedical Science (Neuroscience) and Head of the School of Biomedical Sciences (SBMS), Dr Coulson's research is focused on cracking the conundrum of how and why the brain changes in dementia. It's an inherent pursuit that stems from her childhood.

"I grew up on Victoria's Mornington Peninsula, and I was always fascinated by behaviour, psychology and problem solving," Professor Coulson explains.

"For example, I used to ponder things like the minimum number of steps and amount of time it would take to get from bed to the school bus to maximise sleep.

"I didn't know what I wanted to do when I grew up or that research was a career. In a parallel life, I might have been a dolphin trainer, but I didn't know that was a job either!

"As a Melbourne University undergraduate, I studied biochemistry and genetics, and discovered that unravelling puzzles at a molecular level really suited my brain style.

"In my Honours year, I explored genetic mutations in fruit flies that caused strange behaviour, and for my PhD I examined a protein that is mutated in people with Alzheimer's disease," she says.

"From there, my research journey led me to study nerve cell death processes at the Walter and Eliza Hall Institute of Medical Research."

Professor Coulson then joined a UQ group now called the Queensland Brain Institute.

At SBMS, Professor Coulson investigates nerve cells that help people pay attention and undertake 'associative learning'. She has found that these neurons die early in dementia.

"I want to understand why this happens and identify the mechanisms and molecules that cause cell death," Professor Coulson reveals.

"By understanding how the brain functions normally, we may discover how to fix it when it malfunctions.

"In recent years, we have discovered clues to neuron
vulnerability through their production of a 'cell death
receptor' in animals.

"We have also blocked this receptor, called p75, and kept neurons alive in preclinical tests and developed ways to measure their function in elderly people.

"My goal is to build on these parallel pieces of research to test the efficacy of an anti-p75 drug in early dementia patients and people at risk."

The term dementia describes a range of illnesses that cause a slow decline in the function of a person's memory, intellect, social skills, reasoning and physicality, and it can begin as early as the age of 30.

It is the leading cause of death in Australian women, and the second overall cause of death nationally, according to Dementia Australia.

The organisation estimates that nearly 488,000 Australians live with dementia in 2022, and expects 1.1 million cases by 2058 without a medical breakthrough.

> Professor Coulson is confident dementia has nothing to do with getting older because some people live to 100 years old without developing Alzheimer's disease.

"I recommend the World Health Organization's guidelines to reduce the risk of cognitive decline," she says.

"Preventative measures include staying active, both physically and mentally, eating a Mediterranean diet, drinking alcohol in moderation, not smoking, being social, and managing your overall health and well-being.

#### "I think a cure will eventually come from left field, just like that hard-to-find puzzle piece when you don't have the whole picture in front of you."

"The more we can explore diverse associations between our multidisciplinary expertise and different perspectives, the closer we move towards a medical breakthrough.

"We are fortunate to have links between clinicians and other biomedical disciplines within our faculty and SBMS to increase our chances of resolving the dementia puzzle.

"I look forward to that day when the full picture is before our eyes and the dementia mystery has been solved."

# Looking forward to GIVING BACK

Lisa Dingwall may be a twin, but she is also one of a kind!

As Executive Assistant to the Director of the UQ Centre for Clinical Research (UQCCR), Professor David Paterson, it's clear that Lisa is a natural organiser.

However, Lisa is also a community leader and spends much of her spare time doing volunteer work – a pastime she has enjoyed since childhood.

"My twin brother, Mike, and I were born in Perth and moved east with our parents when we were aged one. We came to Queensland when we turned 10," Lisa explains.

"As kids, I was in the Girl Guides and Mike was involved with Scouts. I later joined Venturer Scouts, formerly Senior Scouts, so that I could be with Mike. It was lots of fun, especially doing the first-aid courses."

Scouts also had other bonuses – one of those was meeting her now husband Neil, whom Lisa met at the community organisation and married when she was aged 21. They have two children.

Lisa's community spirit and love of life come from her parents.

"Mum was a nurse and a very compassionate person, and Dad was an engineer and loads of fun. They loved sailing, and together we spent many weekends cruising around on our 24-foot trimaran," Lisa reminisces.

"When I had my children, I volunteered at their school and helped with reading, tutoring, tuckshop, the swimming club and gymnastics."

When the kids grew older, Lisa joined UQCCR as a medical receptionist in 2009.

"I love working here because it's such a friendly and supportive workplace," she says.

"One of the requirements of my role when I started was having a current first-aid certificate.

"While completing this at St John Ambulance Queensland, the trainer mentioned that they had a volunteer group providing first-aid at events. I decided to join the St Lucia Division based at UQ's Emmanuel College, and I have never looked back.

"I became Division Manager and then State Officer, providing operational support to nearly 20 divisions across South East Queensland.

"Currently, I am the Health and Medical Services Co-ordinator for St John volunteers and help with operational planning. I am also the Event Commander for major events, such as Anzac Day and the Brisbane Ekka Show, and volunteer at UQ events, including O-Week, throughout the year."

#### "Volunteering offers so many rewards, from the people you meet to memories that last a lifetime."

"I remember when the 2011 floods happened, I had only joined St John six months earlier," Lisa recalls.

"I travelled to Bundaberg as a volunteer and saw houses flattened, the local caravan park washed away, and so much mud. People started pouring into the evacuation centre to donate food, clothes and toiletries, and when they stopped to talk, I realised that many of them had also been affected, but still came to help others. That was my first volunteering experience during a natural disaster.

"Within days of returning to Brisbane, the floods arrived in the city and Lockyer Valley. I volunteered at the Grantham and Murphy's Creek evacuation centres, and again, the devastation was incredible.



"Other disasters where I have volunteered include Townsville during Cyclone Debbie and Glen Innes following the bush fires."

During the 2022 Brisbane floods, Lisa co-ordinated the St John response, volunteered at two evacuation centres, and spent a lot of time talking to displaced people.

"Many of them just needed an ear and were so grateful for the help they had received," she reveals.

In recognition of her community service, Lisa was inducted as a Member of the Order of St John in 2020. She has also received several citations and awards from the Queensland and Federal governments for volunteering during natural disasters.

Even though Lisa feels deeply honoured, it's the people she meets through her community work that mean the most to her.



"There are so many good people involved in community work, including the best friends I have made through St John," she says.

"You always get something out of volunteering, including ongoing training, life-long learning and attending some amazing events!

"Volunteering is good for the soul and if you find something that you really enjoy and have time to give, you will get so much out of it.

"I am so lucky to be involved in something that I love, and hope that my passion for volunteer work inspires others to think about how they can help their communities.

"There is so much that needs to be done, and it is important to give back to communities when you can."

# Virtual assistance for DEMENTIA

Anxiety is on the rise. It's that feeling of dread, distress and despair caused by a significant event or ongoing stress that leaves you vulnerable in unfamiliar territory or unable to cope.

More than one guarter of Australians (26.3 per cent) aged 16-85 years will experience the debilitating effects of anxiety in their lifetime, according to Beyond Blue, which is equivalent to almost five million people today.

The impact of anxiety is extensive, causing accelerated cognitive decline, increased aggressive behaviours and a higher risk of suicide.

Those most at risk are people living with dementia, who are four times more likely to experience anxiety compared to our overall older population. Anxiety reduces quality of life for them and their carers, increases the likelihood of early institutionalisation and amplifies Australia's economic burden - outcomes that are almost 1.5 times more prevalent in rural areas than major cities.

By 2050, the number of Australians diagnosed with dementia, currently the nation's second highest cause of death and leading cause of death in women, is expected to rise to more than one million.

Associate Professor Nadeeka Dissanavaka from the UQ Centre for Clinical Research (UQCCR) describes the need to reduce disease progression as imperative.



Associate Professor Nadeeka Dissanayaka.

"Inappropriate chemical restraints to manage anxiety and ongoing social isolation of those living with dementia needs to change rapidly," Dr Dissanayaka says.

"We need sustainable and accessible interventions so that care doesn't impede, or worse, stop service delivery like it did for a lot of people during the COVID-19 lockdowns.

"Anxiety treatment for people living with dementia isn't routinely available, easily accessible or integrated into current primary health care or memory clinics, and the demands on society caused by anxiety are growing."

Dr Dissanayaka and her team are currently working on an innovative intervention – a national project supported by a recently funded MRFF Dementia, Ageing and Aged Care Mission grant of more than \$1.6 million.

"We are developing a digital platform to deliver personalised psychotherapy via video-conferencing, guided by a customised digital assistant voice application," she explains.

"People with lived experiences of dementia, carers, community members, and industry partners are helping to co-design the platform during the development phase.

"This holistic and scalable tool will help mitigate social isolation for people living with dementia and reduce the burden on carers."

The personalised treatments will incorporate cognitive behavioural therapy (CBT), widely used by health care professionals to effectively manage anxiety.

"We have developed tailored CBT packages for people with dementia and Parkinson's disease - another common neurodegenerative condition that is second to dementia," Dr Dissanayaka reveals.

"CBT has traditionally been delivered as inperson therapy, but there's now increased interest in delivering this via telehealth videoconferencing to increase outreach and reduce the reliance on carers to drive people living with dementia to treatment appointments.

"Virtual delivery of interventions via telehealth to people's homes gives people living with dementia a sense of independence and reduces the burden on carers."

UQCCR researchers will use the platform as part of a study where people living with dementia receive six one-hour sessions of CBT delivered by



#### If you or someone you know is experiencing anxiety, please seek help.

- 1300 MH CALL 1300 64 22 55
- Any public hospital emergency department
- UQ Health Service 07 3365 6210
- General practitioner
- Clinical psychologist
- Psychiatrist
- Beyond Blue 1300 22 46 36
- Lifeline 13 11 14

"We expect the new platform to achieve similar outcomes to in-person treatments," Dr Dissanayaka reveals.

than a decade.

Dr Dissanayaka knows how valuable this experience is in education.

"I worked in aged care during my undergraduate life and was exposed to chronic health conditions in older people. I witnessed social isolation and related mental health conditions, as well as challenging behaviours and psychological conditions associated with dementia," she reveals.

postgraduate trainees, who are either completing advanced psychology training with UQ and are provisionally registered psychologists with the Psychology Board of Australia or are registered Mental Health Counsellors enrolled in PhD programs with the University.

"UQ has been successfully using postgraduate psychology trainees to deliver interventions in our funded psychotherapy research for more

"All therapists are supervised by registered academic psychologists at the UQ School of Psychology or at Queensland Health Psychology departments.

"In this way, we are training the next generation of psychological providers specialised in dementia and increasing the number of specialists available for people living with dementia."

> "This sparked my interest in understanding brain mechanisms associated with age-related chronic disease and mental health conditions, and developing new treatment strategies.

"I was also motivated by experiences in my native country of Sri Lanka, where people aren't typically treated for anxiety due to stigma and a lack of understanding.

"It's important that people experiencing anxiety identify, acknowledge and accept their condition.

"The first step is to talk to somebody, so the condition can be evaluated."

# MD student's oarsome switch

Studying to become a doctor requires years of hard work, training and discipline. It's a daunting task for most people, but for medical student Ria Thompson, it's second nature after years of training as an elite athlete.

aturing UQ medical student Ria Thompson (far left),

claiming bronze at the 2020 Tokyo Olympics. Image: Seb Daly/Sportsfile via Getty Images

A stethoscope hangs around Ria's neck nowadays, but last year it was a bronze medal after her team rowed into third place in the thrilling final of the women's quadruple scull at the Tokyo Olympic Games.

"I was in the bow seat, so one of my jobs during the race was to make the calls and let everyone know what was going on," Ria explains.

"Another crew in the race made a mistake with about 150 metres to go, which put us in a medal position. I couldn't explain to my team what had happened because my lungs were burning so much. All I could do was scream at them to 'go, go, go!'.

"When we crossed the line, I kept thinking there's no way we could have won a medal, but I kept looking at the display screen waiting to see where we had placed and when it popped up, that's when I knew it was real."

Standing on the podium wearing an Olympic medal with the world watching was a dream come true for Ria, but now

she has her sights set on achieving her next long-term goal – becoming a doctor.

Ria commenced her Doctor of Medicine at UQ in 2022 and chose to study at UQ after completing a Bachelor of Science honours year at the University in 2019.

"My family has always been sporty, which has made me very competitive, and I think that drive has helped me study and get to where I am today," she says.

"I wanted to become a doctor because I believe everyone should be able to be as healthy as they can be."

Originally from Victoria, Ria has rowed for Australia for the past five years, winning the World Championships in the U23 women's single scull in 2019 before her Olympic bronze medal last year.

She admits she's been surprised by the number of similarities between being an elite rower and a medical student.

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"I'm only first year, but I'm enjoying the team aspect of learning," Ria explains.

"It's almost like they're my sporting team – we push each other, help each other study, and pick each other up on the hard days."

It's difficult to say whether training for the Olympics or training to become a doctor will be harder, but both are on the cards for Ria, who has no immediate plans to put either on hold.

"I get up at 4 o'clock in the morning to train, then go to uni all day, and back to training in the afternoon," she says.

"I'm actually enjoying the new challenge. It forces me to switch off from rowing during the day so I can concentrate on studying.

"I'm training to race the single scull in Amsterdam and at the Henley Royal Regatta in England this year.

"I also really want to go to an Olympic Games again, so hopefully I get to Paris in 2024.

"After that, I'd love to be at the Brisbane 2032 Olympics – not as an athlete, but as a doctor – that would be incredible and would combine two of my passions in life."



# Student scholarships Supporting dreams

With the support and generosity of our philanthropic donors, UQ student scholarships transform lives by helping the next generation of health professionals reach their full potential.



#### Abigail Joseph - Dr David Perel Medical Scholarship (2021)

"I'm really interested in public and rural health and I'm looking towards a potential career in general practice within a regional community. But I'm also hoping to make an impact towards broader health outcomes through advising health policy.

I'm incredibly grateful to the donor, as the scholarship funds will help reduce most of the financial stress involved with medical school. It will also allow me to take on board more opportunities, such as a two-week placement in Goondiwindi which I'll be able to do later this year." *Thank you to Dr David Perel for supporting this scholarship.* 



#### Benjamin Perry - Gough Family Scholarship for Medical Education (2021)

"Having just completed my first year of medical school, I am more excited than ever at the opportunity I have been given to become a doctor. In a previous career, before applying to medical school, I completed a business degree and worked as a marketing consultant at a top-tier firm. At the end of 2018, I decided to take the risk, quit my career in marketing and study for the GAMSAT to hopefully pursue a career as a doctor, and I haven't looked back since.

This award allows me to maintain my independence and focus on my studies, without having to divide my time between study and work as much as I would have."

Thank you to Professor Ian Gough AM and Dr Ruth Gough for supporting this scholarship.



#### Paraskevi Georgiou – Gough Family Scholarship for Medical Education (2021)

"I grew up in Greece, came to Australia for high school and completed a Bachelor of Biomedical Science for my undergraduate degree. I have been working in hospitality since I was 14 years old and tutoring since I was 19 years old.

I am so grateful to have been chosen for this award and it has made a huge difference for me. The heavy weight of living from pay to pay has lifted, and I am able to breathe more deeply. I have yet to decide what direction I wish to take in my profession. I entered medicine with the drive to pursue paediatrics but I have recently been really drawn to critical care."

Thank you to Professor Ian Gough AM and Dr Ruth Gough for supporting this scholarship.



#### Meg Welsh - Medical Endowment Scholarship

"I would like to express my immense gratitude for the wonderful support provided to me through the Scholarship. It is extremely generous, and I am humbled to be granted such aid. I have completed my final year of the Doctor of Medicine and I accepted an intern position at Redcliffe Hospital.

Alongside my seven years of study, I worked part-time jobs to support myself. The final year of medical school was extremely difficult to balance a more demanding placement schedule and individual study with working enough to pay rent. This prompted me to finally reach out for help. This scholarship provided me the opportunity to continue my dedication towards my medical career." *Thank you to the many generous donors who support this scholarship.* 

Education changes lives, but many students face financial hardship. Give to **medicine.uq.edu.au/philanthropy** or create your legacy by funding a scholarship. All gifts are greatly appreciated and have a lasting impact. Email **med.advancement@uq.edu.au** 



# A gift can advance health research and educational excellence

Dr James Mayne and his sister Miss Mary Emelia Mayne (pictured) made gifts in their wills that laid the foundation for UQ's medical program, as well as the establishment of UQ's Brisbane campuses. The Maynes' visionary generosity continues to benefit hundreds of UQ medical students, staff and researchers annually.

A gift in your will in support of the next generation of medical practitioners and researchers advance the issues you care about and ensures a healthier future for Australians and people around the world. To learn more, please contact our Advancement team.

**Email:** med.advancement@uq.edu.au **Telephone:** +61 7 3365 5077

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