



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

FOR ALUMNI AND COMMUNITY WINTER 2013

CONTACT

In this issue:

UQ's health and
medical impact

Food security in focus

The RD Milns
Antiquities Museum
celebrates 50 years

CONTACT

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COVER IMAGE:

Joannah Underhill

Molecular Regeneration 2011

76 x 76cm, ink, acrylic and oil on canvas

Molecular Regeneration is a visual representation of the potential that all cells have for regeneration. It is inspired by the artist's ongoing exploration and observation of molecular and sub-cellular processes through microscopic images, facilitated through a residency at UQ's Institute for Molecular Bioscience (IMB). A limited number of prints of *Molecular Regeneration* and other Joannah Underhill paintings are available to purchase at imb.uq.edu.au/prints



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IVF pioneer Christopher Chen's endowment to fund the gift of life.

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The Forgan Smith Building is a UQ icon that served as army headquarters during WWII.

+ CONTACT APP



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SEE PAGE 4 FOR DETAILS



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Finger on the pulse

UQ has a long history of health and medical leadership spanning more than 75 years, and its impact is increasingly being felt worldwide.

© Rolex Awards/Julian Kingma

+ FEATURES



A MAN OF MANY PASSIONS

Dr Paul Eliadis speaks with *Contact* about his gift to fund a new Chair in Classics and Ancient History.



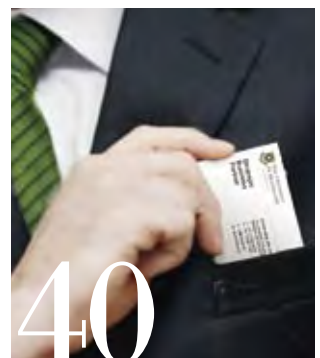
SPOTLIGHT ON UQ IN VIETNAM

UQ's relationship with Vietnam spans more than a decade, with impressive outcomes.



UQ REMEMBERS

UQ remembers three highly talented and influential figures who passed away recently.



INDUSTRY CONNECTIONS

Strong industry relationships are increasingly important for universities, with far-reaching impacts.

LETTERS TO THE EDITOR

I have just read "100 Years of Great Professors", which appeared in the Summer 2012 issue of *Contact*. I looked in vain for the inclusion of Sir Fred J. Schonell.

Sir Fred, Head of the Faculty of Education and later Vice-Chancellor of UQ, was a person who had enormous influence worldwide. His scholarly books, especially *Backwardness in the Basic Subjects*, were standard compulsory reading at all UK education departments, as well as in other English-speaking countries, while his countless tests of achievement and his diagnostic tests in



Sir Fred J. Schonell

reading, spelling and arithmetic, many of which had the word "Essential" in their titles, were standard equipment for virtually every UK Child Guidance Clinic.

Professor John McLeod

PhD in Psychology – '66

I'm delighted with the new-look *Contact*! It engaged me for the first time ever. Proud to be an alumna. I congratulate and thank you and your team on this splendid publication.

Moya Henderson AM

Bachelor of Music (First Class Honours) – '73



I would like to commend your staff on the production of the excellent revamped alumni *Contact* magazine. As an alumnus of two separate UQ faculties, my interests are diverse, but it is so of many others who have passed through our institution. This is the first time I have actually read almost all of the articles. Could you please pass on my congratulations to your editorial team responsible for its publication.

John Brannock

Master of Urban and Regional Planning – '77



I was very interested in the article about Professor David Fairlie's work on arthritis [Summer 2012]. I am a 70-year-old UQ graduate who is still active in the grazing and mining industries – but severely hamstrung by constant pain and restrictions to movement. Most medical people I have contacted advise me to have major operations, such as

knee replacements, but I have resisted this approach as long as I possibly can in the hope that someone will one day find a simpler and less invasive solution.

Jim Elliot

Bachelor of Applied Science (Industrial Chemistry) (Second Class Honours) – '64
Bachelor of Engineering (Second Class Honours) – '65

We appreciate your feedback – if you have a letter for the editor, please email the *Contact* editorial team at contactmagazine@uq.edu.au or write to us at:

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UQ Contact**



GLOBAL IMPACT



One of the things I have enjoyed most since joining The University of Queensland last October has been meeting many outstanding alumni who are achieving wonderful things in Australia and abroad. For example, during my recent trip to China to further the University's commercialisation opportunities, I was fortunate to meet some of our 6000 alumni born in China, including pioneers of industry, community leaders and globally recognised scientists.

As a UQ alumnus, your achievements are so important to the continuing development of UQ as one of the world's top universities.

People are the very essence of our institution and, more and more, our alumni are defining us as a university without borders. Throughout the world, in every profession, sector and field of endeavour, we know that UQ graduates are serving and making an impact on society.

Nowhere is this more evident than in the health and medical field, where many UQ alumni are transforming lives. UQ's record of discovery in this field is also impressive, as you can read in this edition, including phenomenal products such as the Gardasil cervical cancer vaccine and, more recently, the Nanopatch needle-free delivery technology, which has the potential to revolutionise disease prevention.

UQ is widely regarded as being the best in Australia at translating our research into products that have an impact on global problems. As well as the Gardasil vaccine, we have developed the Positive Parenting Program (Triple P program) and GroundProbe Slope Stability Radar technology, with the latter used to improve safety on mine sites around the world.

Our achievements have been made possible by our collaborations with universities, institutions and industry partners globally. UQ has agreements, links and relationships with institutional partners in 48 countries, and our focus is firmly on strengthening and growing these connections. This will most importantly spread the benefits of Australian discoveries, and will also earn export income that can be reinvested in more research.

In this edition of *Contact*, we celebrate just some of the work being undertaken by UQ academics, researchers and alumni globally, not only in health and medicine, but across diverse fields, including economics, psychology, community services and the arts. We are very proud of these achievements, as well as those of the many thousands of alumni whose contributions, while very valuable, do not receive fanfare.

Please continue to send us your feedback so we can continue to make your *Contact* magazine even more useful and enjoyable. And I look forward to meeting many more of you in the future.



Professor Peter Høj
President and Vice-Chancellor



A MAN OF MANY PASSIONS

*Thanks to the generosity of alumnus Dr Paul Eliadis,
UQ is set to host Australia's newest Chair in Classics and Ancient History.*

Like his ancient Greek ancestors, medical specialist Dr Paul Eliadis is convinced that knowledge is at the root of freedom and democracy.

"The greatest danger any society faces is having its population uneducated in a broad way," he said.

"We need people who can read, who can come to their own conclusions and not have the wool pulled over their eyes or fall prey to demagogues and propaganda.

"Universities are very special institutions that need to be devoted to learning, not just turning people out for jobs. As a society, that is something we must afford."

At 60, Eliadis is at the peak of his career. The chain of high-profile cancer clinics he helped found (Haematology and Oncology Clinics of Australia) will celebrate its 25th anniversary this year, supporting an active body of medical research that is exploring promising avenues in haematology and blood-borne cancer treatment.

As well as a devotion to his patients, there are other passions in his life. His eyes sparkle when he talks about his love of art, particularly the contemporary Australian paintings and Indigenous works that dominate the Paul Eliadis Collection. A number of pieces from the collection have been gifted to the Queensland Art Gallery or hung in prominent public locations for all to enjoy.

Already a significant donor in both art and medicine, Eliadis has surpassed his previous benefaction with a gift to establish a perpetual Chair in Classics and Ancient History at his alma mater, where he graduated with a Bachelor of Medicine/Bachelor of Surgery in 1977 and a Bachelor of Science in 1978.

In this interview, the senior clinical haematologist and oncologist, entrepreneur and patron of the arts shares his views with Pro-Vice-Chancellor (Advancement) Clare Pullar.

CLARE PULLAR (CP): Paul, everyone is talking about your wonderful decision to endow a Chair in Classics and Ancient History. What has brought you to this point – how did you come to UQ and study medicine?

DR PAUL ELIADIS (PE): There are a lot of jokes about my grandmother and how she may or may not have influenced me, but she was always quite insistent that I was going to be a lawyer or a doctor. I don't know what it is about Greek families, but they want their children to get ahead and go to university, even though the parents have rarely seen the inside of a high school. I had not made up my mind between law and medicine by the time I won a university scholarship. I ultimately decided on medicine because I felt it would be more absolute, more scientific and not open to the whims of human beings. I was very wrong about that.

CP: What do you remember about that time and who were the significant figures who shaped you as a young medical student and doctor?

PE: The Dean [Professor Eric Saint] was someone that we all, as a group, came to feel close to. As the years went on, we got to know him very well. He was a great teacher and father figure. There was a humanity about the man that I think defined him.

CP: Coming to your interest in the classics, where did that originate?

PE: I am Australian, but my heritage is essentially Greek. The ancient Greek history is something Greek kids grow up with. I enjoy reading and I always find history, particularly the history of Greece and Rome, much more interesting than fiction.

The classics, in particular Greece and Rome, influence us all in Western civilisation no matter what you do. You can just walk through Brisbane and it is just there. The three main architectural forms of Greece are within a block, between City Hall and the Eternal Flame. I think the classics will always remain relevant as long as Western civilisation exists.

CP: Does your passion for classics help you make decisions in your work as an oncologist?

PE: There are instances that focus on our humanity and I think the classics still guide us in that area. Certainly [as doctors] we try and make decisions based on evidence and science, but sometimes you have to make decisions based on how you feel as a human being.

CP: You have been noted for saying that a university that doesn't teach classics is not a real university.

PE: To me, any Western university that doesn't have a department that teaches the classics does not have a birth certificate. It is not just one faculty that makes a university, they are all important, but to forget about where you came from is bizarre. I feel very fortunate and privileged that I found myself in a position where I could do something meaningful. In the scheme of things, it is a small amount of money that will bring back returns for many generations to come.

CP: What advice would you have for someone who knows nothing about the classics but wants to start?

PE: If they are at university, I would advise them to do some units from ancient history and the classics. For an amateur, who is not at university, there are a lot of beautiful books. My favourite is called *The Greeks* by Professor Kitto. And of course, the original works are there to be read – *The Iliad*, *The Odyssey*, *The Peloponnesian War*. You won't want to put them down.

CP: That's a lovely place to end this conversation and thank you again for what you are doing for the University. It is quite transformative.

To find out more about classics and ancient history, visit uq.edu.au/hprc

app • Watch the full conversation on the UQ Contact app.

THE VALUE OF VOLUNTEERING

Director of Alumni and Community Relations
Gina Wheatcroft talks about how alumni can make a difference by getting involved at UQ.



Many of us share our time and skills regularly and in a number of ways, from professional mentoring to school tuck-shop duty, or at one-off events like Clean Up Australia Day.

As American poet Ralph Waldo Emerson so eloquently said, "It is one of the beautiful compensations of life, that no man can sincerely help another without helping himself."

UQ also has a strong tradition of volunteering that has helped foster the strong connection we enjoy with our alumni and community, while also helping the University to grow and evolve.

In the 2011 Alumni Survey, alumni worldwide indicated a strong desire to volunteer and get involved with current students and the wider university.

There are a number of ways alumni can volunteer. From sharing talents and expertise with current students at networking events and through mentorships and internships,

"UQ has a strong tradition of volunteering that has helped foster the strong connection we enjoy with our alumni and community."

to sharing stories and expertise at one of our many alumni events or through our publications, the opportunities are vast.

This year, the University is looking at ways to continue to develop and grow opportunities for alumni volunteerism, and we are well on our way to achieving this goal.

For example, through the class reunion initiative, we already have nearly 20 reunions planned for this year, led by alumni volunteers. It was a great pleasure to

welcome many of these reunion leaders back to campus, in some cases for the first time in decades, to help them plan their celebrations.

We will also continue to support and promote global alumni networks, where alumni can stay connected to UQ, regardless of distance. Our Singapore and Hong Kong alumni associations and the newly established Indonesia Alumni Advisory Group are just a few examples of our global alumni groups. We also have many local groups such as Alumni Friends of The University of Queensland Inc. and the Gatton Past Students Association. Visit alumni.uq.edu.au for a complete list of alumni volunteer networks.

Volunteering not only helps UQ continue to build its network of alumni professionals, but it also provides opportunities for alumni to reconnect with former classmates and remain connected to campus life, while helping build the skills and knowledge of future generations of UQ graduates.

ALUMNI NETWORKS

As a member of the alumni community, you are part of a network of more than 200,000 people worldwide.

Alumni networks provide opportunities to access exclusive alumni events, benefits and networking opportunities by geographic area, as well as by campus, faculty and school of study.

Current global and campus-based alumni networks:

- Alumni Friends of The University of Queensland Inc.
- UQ Alumni Advisory Group of Indonesia
- UQ Alumni Association of Beijing
- UQ Alumni Association of Central Vietnam
- UQ Alumni Association of Hong Kong
- UQ Alumni Association of Malaysia
- UQ Alumni Association of Northern Vietnam
- UQ Alumni Association of Shanghai
- UQ Alumni Association of Singapore
- UQ Alumni Association of Southern Vietnam
- UQ Alumni Association of Thailand
- UQ Alumni in Japan
- UQ Gatton Past Students Association Inc.

For more information about your local alumni network, including faculty and residential college networks, visit alumni.uq.edu.au/networks



Executive Members –
Alumni Friends of The University of Queensland Inc.

GET INVOLVED AT UQ

OPPORTUNITIES FOR VOLUNTEERING

- The Alumni and Community Relations Team currently works with more than 200 alumni volunteers, including 74 involved as members of an alumni network executive and 30 reunion class organisers.
- As an alumnus, you can also get involved by sharing experiences and insights with fellow graduates and students.
- Volunteer roles include:
 - helping at a Global Leadership Series event, at student graduations or at other Alumni and Community Relations events
 - organising a class reunion
 - hosting a student as part of the Mates@UQ Aussie Family Mates program
 - acting as an alumni contact in your region or country
 - presenting or sitting on the panel at a UQ Advantage Award Symposium.
- To find out more about volunteering opportunities, visit alumni.uq.edu.au/volunteer or contact our Manager of Alumni Programs Daniel Brennan at d.brennan@uq.edu.au or on +61 (0)7 3346 3163.



Students benefit from the opportunity to meet inspiring alumni such as Dr Pat Taylor ('54). See page 36 to read about Pat's extraordinary story.

2013 REUNIONS

Thank you to our volunteers who have organised class reunions this year. To find out more about upcoming reunions, or how to organise your own celebration, visit alumni.uq.edu.au/reunions

50th Anniversary Reunions

Class of 1963	Agricultural Science
Class of 1963	Chemical Engineering
Class of 1963	Mechanical Engineering
Class of 1963	Mining & Metallurgical Engineering
Class of 1963	Electrical Engineering
Class of 1963	Veterinary Science

40th Anniversary Reunions

Class of 1973	Commerce
Class of 1973	Architecture
Class of 1973	Pharmacy

30th Anniversary Reunions

Class of 1983	Veterinary Science
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25th Anniversary Reunions

Class of 1988	Physiotherapy
Class of 1988	Occupational Therapy
Class of 1988	Veterinary Science

20th Anniversary Reunions

Class of 1993	Agricultural Science
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Alumni events such as those recently held in Shanghai, China, provide great opportunities to share experiences and insights.

WHAT'S HAPPENING ON CAMPUS

MAKE A SPLASH AT THE UQ GATTON AQUATIC CENTRE

Stay fit and healthy with UQ Sport Gatton in the 25-metre year-round heated pool, complete with change facilities and undercover BBQ and function space. The pool is part of the state-of-the-art, \$4.1 million Fitness and Aquatic Centre, which opened in July 2011 and is available to UQ alumni and community.

For more information, visit uqsport.com.au/gatton



STAY CONNECTED ON LINKEDIN

LinkedIn connects you with alumni in your field and keeps you up-to-date with your colleagues' careers. See what your fellow alumni are talking about by searching for "The University of Queensland alumni" at linkedin.com and joining our LinkedIn alumni group.



QUEENSLAND PREMIER RUGBY AT ST LUCIA

Winter "hots up" each year at St Lucia when the Queensland Premier Rugby competition gets underway. The Red Heavies are playing both home and away for 18 rounds until 17 August.

For more information about the season and UQ Rugby, visit uqrugby.com

SOCIETY EXAMINED THROUGH ART

Two exhibitions currently showing at the UQ Art Museum explore different aspects of culture: one tapping into the contemporary moment, and the other looking back to the innovative art of the 1960s.

Claire Healy & Sean Cordeiro from the Museum of Contemporary Art Australia examines the way the artists transform the residue of consumer society to re-imagine the forms and systems that surround us. The duo employs an eclectic range of materials, from replica dinosaur fossils to IKEA furniture, to create work that includes sculpture, installation and photography. Their quirky and often humorous take on the world around us is realised in a compelling display that will be on show until Sunday, 28 July 2013.

In the upper-level galleries, the Heide Museum of Modern Art Travelling Exhibition *Born to Concrete* features work from the museum's extensive collection of concrete poetry, as well as examples from The University of Queensland's own holdings.

Concrete poetry, sometimes called visual poetry, is poetry where the typographical arrangement of words is as important if not more important than the words themselves. Examining the emergence of the art form in Australia in the mid-1960s and its subsequent developments, *Born to Concrete* also features examples of the publishing initiatives of artists and poets who created new avenues for the presentation of concrete poetry. The exhibition is open from Saturday, 6 July 2013 to Sunday, 6 October 2013.

The UQ Art Museum is open daily from 10am to 4pm. To find out more, visit artmuseum.uq.edu.au



Claire Healy and Sean Cordeiro
Deceased Estate 2004
Lambada print, 110 x 141 cm
Collection of Newcastle Art Gallery
Reproduced courtesy of the artists and Gallery Barry Keldouls, Sydney and © the artists
Photo: Christian Schnur



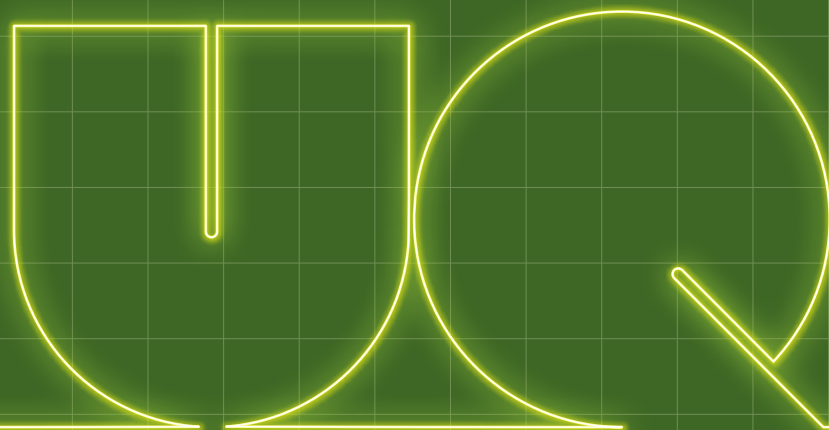
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FINGER ON THE PULSE



UQ has long held a pre-eminent position in health and medical teaching and research in Queensland, and its impact is increasingly being felt worldwide.

Whether you're in the emergency room of a hospital in regional Queensland, undergoing an ultrasound in a Brisbane clinic, visiting your local GP for a routine checkup, or even receiving specialised medical care in an overseas clinic, your health practitioner may well have trained at UQ.

UQ has a long history of health and medical leadership spanning more than 75 years. Since the first cohort of medical students walked through its doors in the 1930s, the University has grown to be a world leader in the field, as confirmed in the recent Excellence for Research in Australia (ERA) report, which found all of UQ's assessed health and medical research fields to be above or well above world standard. UQ was also ranked as one of the world's top 35 clinical, pre-clinical and health universities in the 2012-13 *Times Higher Education* World University Rankings.

The outcome has been a significant impact on the health and wellbeing of people worldwide. As well as generating world-class health practitioners, some of the world's leading medical technologies and exciting breakthroughs in genomics, immunology, cancer research and nerve regeneration, to name a few, have their genesis in UQ's lecture theatres, laboratories and institutes.

Philanthropy has played an important role in the evolution of UQ's health and medical capacity, not least the Mayne family's significant donations in the 1920s and 30s. As well as financing the acquisition of land for the University's main campus at St Lucia, the Mayne bequest established what we know today as Herston campus – the University's core campus for clinical health, teaching and research.

More recently, The Atlantic Philanthropies, in partnership with UQ and the Queensland and federal governments, has played a critical role in transforming Brisbane into a global biomedical hub, bringing together teaching, research and clinical practice.

Between 1998 and 2007, The Atlantic Philanthropies invested up to \$250 million in Queensland, with \$150 million of this directed to UQ. The tangible results of this



From left: John Story, Chancellor; Professor Perry Bartlett, Director, Queensland Brain Institute (QBI); The Honourable Campbell Newman MP, Premier of Queensland; Professor Peter Høj, President and Vice-Chancellor; Professor Jürgen Götz; and Mr David Muir, Chair of The Estate of Dr Clem Jones AO, at the opening of the Clem Jones Centre for Ageing Dementia Research earlier this year. Housed within QBI, the centre, headed by Götz, is Australia's first facility focused solely on the prevention and treatment of dementia.

investment included the establishment of three major research institutes – the Australian Institute for Bioengineering and Nanotechnology, the Institute for Molecular Bioscience and the Queensland Brain Institute, along with a \$50 million gift towards the Translational Research Institute, in which UQ is a joint venture partner.

President and Vice-Chancellor Professor Peter Høj said The Atlantic Philanthropies' investment dramatically changed Queensland's research landscape.

"Thanks to the vision of The Atlantic Philanthropies founder Chuck Feeney, The University of Queensland and the Queensland Government, led by former Premier Peter Beattie, Brisbane is now home to some of the world's top medical research and technology facilities, generating groundbreaking research that is changing the face of health and wellbeing globally.

"The current government's commitment to excellence and impact in this space will continue to build on this incredible foundation, further enhancing UQ's ability to attract global partners and international experts in the field."

In 2012, UQ and the Queensland Institute of Medical Research entered into an historic 10-year alliance with US-based Emory University, which will leverage the institutions' combined research strengths to generate a pipeline of commercial opportunities to address global health challenges.

Such collaborations, together with partnerships with major international biotechnology and pharmaceutical companies and continued support from governments, industry and private benefactors, ensure that the excellent work of UQ's health and medical experts continues to spread across the globe.

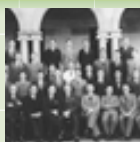
UQ HEALTH AND MEDICAL TIMELINE

app • Download the UQ Contact App to find out more about key milestones in UQ's health and medical timeline.

1935
The School of Dentistry is established



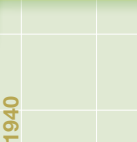
1936
The faculties of Medicine and Veterinary Science are established



1939
The UQ Medical School at Herston officially opens



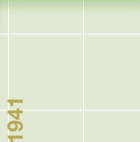
1940
Dr James O'Neil Mayne and Mary Emelia Mayne leave their estates to the UQ Medical School



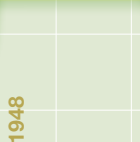
1940
The first cohort of 21 students graduate from the medical program



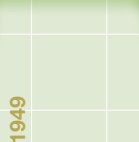
1941
The Department of Physical Education (now known as the School of Human Movement Studies) opens



1948
UQ's first Doctorate of Medicine is awarded to R.K. Macpherson on environment physiology



1949
William Sturgen Ashburn gifts an estimated £15,000 to UQ for medical work, including cancer research



Since its establishment more than 75 years ago, UQ's School of Medicine has grown into a global medical school, leading and inspiring the development of people and knowledge that are transforming healthcare both at home and abroad.

The Faculty of Medicine was formally established in 1936, with the Herston Medical School officially opening in 1939.

There were a mere 21 graduates of the first complete medical course in Queensland in 1940, with only one female graduate. The intake of medical students has grown exponentially from the early years, when

Inauguration of the Faculty of Medicine in 1936.



COURTESY OF THE UNIVERSITY OF QUEENSLAND ARCHIVES

EVOLUTION OF MEDICINE AT UQ

students attended classes in various hastily adapted old buildings across the city and later at the dedicated school at Herston.

Today, more than 12,000 alumni have graduated from the School of Medicine, which offers the country's largest medical degree program and is recognised as one of only four world-class medical schools in Australia. Each year, the school welcomes another 450 students, including

approximately 100 international students.

Geographically, the school extends throughout Queensland with major sites in Brisbane, the outer metropolitan areas, and a number of rural and remote area facilities, as well as offshore clinical schools in New Orleans and Brunei. This scale provides students with a range of clinical training opportunities both at home and abroad, with more than 70 per cent of UQ medical

students visiting overseas hospitals and universities as part of their degree.

The school also has a strong research focus. With 25 research centres comprising leading national and international research groups, the school's research covers virtually all of the medical disciplines and most current methodologies, from molecular and cellular to clinical practice and epidemiology.

A LASTING LEGACY

Professor Ernest (Ernie) James Goddard was one of the most energetic and transformative professors in UQ's history and a powerful force behind the establishment of four of the University's faculties.

He began his career at UQ in 1922 as Chair of Biology, a position he held for 26 years. His practical work on the problems of fruit fly and bunchy top disease in bananas exemplified his passion for practical science and creating links with the community. He was a major force behind the establishment of the Faculty of Agriculture in 1927, where he was Dean until his death in 1948, as well as the faculties of Dentistry (1935), Medicine (1936) and Veterinary Science (1936).

Professor Sam Mellick, who graduated from UQ's Medical School with First Class Honours in 1948, recalls with delight his first

impression of Goddard at the old George Street campus.

"I can see him walking into the tiered lecture theatre, his thumbs hooked in his magnificent flowing academic gown. I'd never seen anyone quite like him," he said.

"His English was immaculate, and he could draw. He used coloured chalks on the blackboard to illustrate perfectly everything he talked about. He took my breath away."

Mellick went on to become a pioneer in the field of vascular surgery and a fine UQ professor in his own right.

Goddard was a hugely impressive scientist, an inspiring educator and a significant advocate for the advancement of tertiary health and medical education. Apart from the physical legacy of the Goddard Building, his philosophy of promoting



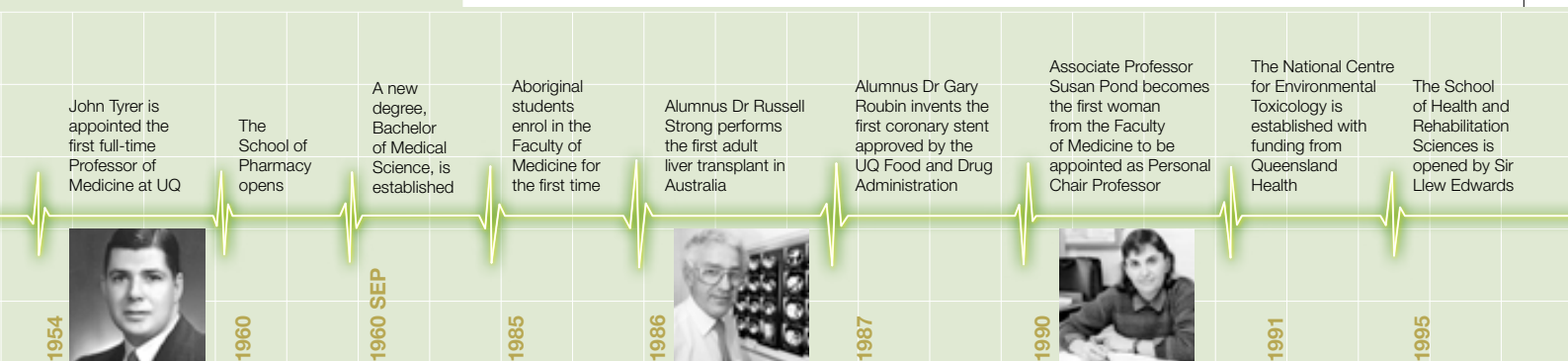
Professor Sam Mellick (pictured right) remembers Professor Ernie Goddard.

excellence, innovation and community engagement in science is a lasting gift for the University.

He died in 1948 at the age of 63 at Heron Island, where he was setting up a marine biology research station, one of his long-standing ambitions.

If you know a great professor we should acknowledge, please email contactmagazine@uq.edu.au

UQ HEALTH AND MEDICAL TIMELINE



AUSTRALIA'S GLOBAL MEDICAL SCHOOL

In 2008, UQ's School of Medicine partnered with the Ochsner Health System in New Orleans to form the Ochsner Clinical School Partnership, reinforcing UQ's reputation for excellence in an increasingly borderless medical community.

As part of the partnership, US medical students undertake a four-year Bachelor of Medicine/Bachelor of Surgery (MBBS) degree accredited by the Australian Medical Council, with the first two years (pre-clinical) spent at UQ's St Lucia or Ipswich campuses. The final two years (clinical) are spent at UQ's Ochsner Clinical School in New Orleans.

Australian-based medical students also have the opportunity to complete clinical rotations in the US.

Recently, the program reached a major milestone when all nine of its inaugural graduates received clinical residency positions in the US, where they will continue their specialty training.

Professor Bill Pinsky, Executive Vice-President and Chief Academic Officer of the Ochsner Health System and Head of the Ochsner Clinical School, said the program was a result of two institutions seeking to expand and grow, as well as a small measure of serendipity.

"At Ochsner, we were looking for a top university to partner with to help us develop our best graduates and keep them as residents," he said.

"Coincidentally, I was approached by Dr Jordan Cohen, a highly respected US medical educator and retired CEO of the Association of American Medical Colleges. Dr Cohen was acting on behalf of The University of Queensland, who wanted



Deputy Head of the Ochsner Clinical School Dr Richard Deichmann, Head of the Ochsner Clinical School Dr Bill Pinsky and (far right) Deputy Head of the Ochsner Clinical School Dr Leonardo Seoane with inaugural UQ-Ochsner graduates Dr Steven Sushinsky, Dr Emily Sineway and Dr Katherine Weyer.

to partner with a US institution to help transform UQ into a global medical school."

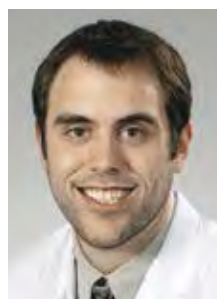
Deputy Vice-Chancellor (International) Dr Anna Ciccarelli believes UQ has achieved this goal, with the UQ-Ochsner program providing a landmark in global medical education.

"The program ticks all the boxes from UQ's perspective – it promotes excellence in teaching and learning, as well as being innovative and engaging with the global community," she said.

Wisconsin resident Dave Briski (pictured right) is in his final year of medicine at the Ochsner Clinical School.

As part of the program, he completed two years in Brisbane, where he also worked as the Chief Student Liaison Officer at the Royal Flying Doctor Service.

Briski said he had thoroughly enjoyed the program and his time in Queensland.



"The clinical emphasis on medicine is without doubt the best aspect of the program," he said.

"I've gained new friends and mentors I'll always look up to. The Australian people have left their mark on me, and I believe it's made me a more well-rounded and wiser person.

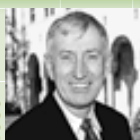
"The Australian model of medicine has given me a different outlook on American medicine. All these things will make me a better physician down the road."

Pinsky believes interest in the UQ-Ochsner program will continue to increase as more students graduate.

"Our Ochsner students who've spent their first two years

at UQ demonstrate excellent results in both their academic tests and clinical placements. I believe this demonstrates the sustainability of the program's success even at this early stage," he said.

Alumnus Peter Charles Doherty AC receives the Nobel Prize in Physiology or Medicine jointly with Rolf M. Zinkernagel



1996

The Institute for Molecular Bioscience (IMB), UQ's first research institute, commences operations

2000

The Atlantic Philanthropies begins investing up to \$150 million to support the establishment of a number of research institutes at UQ

2001

The School of Population Health is established

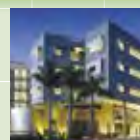
2002

The Queensland Brain Institute (QBI) is established

2003

The Queensland Bioscience Precinct, Australia's largest research complex dedicated to human, animal and plant biology and home to the IMB, opens at St Lucia campus

2003 MAY

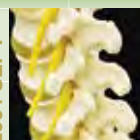


The School of Nursing and Midwifery opens

2004

QBI announces a breakthrough in spinal regeneration

2004 SEPT



BREAKTHROUGH

UQ's capacity for world-class research has attracted some of the world's top health and medical scientists, many of whom are making significant discoveries in areas of global importance.

PIONEERING TECHNOLOGY

Professor Stuart Crozier, a UQ researcher and Director of UQ's Biomedical Engineering program, is a pioneer of medical imaging technology.

Research conducted by Crozier and his team led to the development of compact, portable medical resonance imaging (MRI) machines that can scan extremities without having to immerse the whole body in the magnetic field.

Launched globally in 2008, the scanners provide the same quality of images as those delivered by full-body scanners, but at a significantly lower cost.

Deputy Vice-Chancellor (Research) Professor Max Lu said UQ's contribution to advanced imaging technology, which includes a comprehensive Centre for Advanced Imaging, is an exciting area of research with global implications.

"Big data arising from gene sequencing and advanced imaging such as MRI and



Professor Stuart Crozier (left) received an ATSE Clunies Ross Award in May 2012 for his significant contributions to MRI technology.

PET-MRI will drive new frontiers of medical discoveries and their translation to clinical applications," he said.

"Along with genomics, imaging will revolutionise the way we diagnose and treat diseases, allowing us to be more precise and more effective."

UNLOCKING THE BRAIN

Brain disease is more common than cancer and heart disease, and impacts the lives of millions of Australians.

UQ is a leader in this area of research, with its neuroscience capabilities assessed as "well above world standard" in the most recent Excellence in Research for Australia rankings.

Through the Asia Pacific Centre for Neuromodulation, a joint initiative between UQ and St Andrew's War Memorial Hospital, research is being conducted that could revolutionise the diagnosis and treatment of a range of neurological diseases, such as Parkinson's disease, Tourette's syndrome and epilepsy.

The new Clem Jones Centre for Ageing Dementia Research, housed within UQ's Queensland Brain Institute, is also contributing to this important field of study. The centre's inaugural Director, Professor Jürgen Götz, has already made several groundbreaking discoveries, including work that uncovered the molecular mechanisms underlying the loss of brain function in Alzheimer's disease.

CONQUERING CANCER

UQ researchers are behind a number of cancer research breakthroughs that are helping to understand, prevent and treat this complex disease.

One of the most significant research developments to come out of UQ is Professor Ian Frazer's work on the Gardasil cervical cancer vaccine, which he developed with research partner Dr Jian Zhou.

Protecting against human papillomavirus, the vaccine has already been administered to more than 23 million people worldwide, showing the true global impact of UQ's research.

Research led by Professor Brandon Wainwright, Director of UQ's Institute for Molecular Bioscience (IMB), has led to a new understanding of the genetic pathway behind skin cancer, which could not only help treat skin cancer, but also other cancers like lung and pancreatic cancer. This research was named one of the National Health and Medical Research Council's 10 top research projects in 2012.

In another important breakthrough, a team led by Professor Sean Grimmond from IMB and Professor Andrew Biankin from the Kinghorn Cancer Centre has discovered a new genetic marker for pancreatic cancer. This research will enable better detection and treatment of the deadly disease, which

has the highest mortality rate of all the major cancers.



IMB Director Professor Brandon Wainwright is leading research in to the genetic pathway behind skin cancer.

UQ HEALTH AND MEDICAL TIMELINE

The Centre for Military and Veterans' Health is established with funding from the Department of Defence and the Department of Veterans' Affairs

The AIBN Building officially opens at St Lucia campus

Professor Ian Frazer administers the first official HPV vaccination and is named 2006 Queenslander of the Year and Australian of the Year

The Diamantina Institute is established as UQ's sixth research institute

QBI's \$63 million research facility opens at St Lucia campus

The School of Medicine and Ochsner Health System establish the UQ-Ochsner MBBS Program

The Centre for Clinical Research, a \$70 million facility developed by UQ in partnership with the Queensland Government and The Atlantic Philanthropies, officially opens at Herston

The Australian Cancer Research Foundation's Brain Tumour Research Centre officially opens at QBI

RESEARCH AT UQ

TARGETING THE CAUSE

Professor Ranjeny Thomas, Head of the Autoimmunity division at UQ's Diamantina Institute (UQDI), and her team have developed an innovative vaccine therapy for rheumatoid arthritis, a devastating immunological disease that affects millions of people around the world.

The therapy is unique in that it targets the underlying autoimmune cause of the

disease, which has been "cooking" for many years before it manifests with symptoms of inflammatory arthritis.

Thomas's team is investigating how the vaccine strategy could be applied to other autoimmune diseases, such as type 1 diabetes, celiac disease, thyroiditis and multiple sclerosis.

Professor Matt Brown, Director of UQDI, said genetics research such as that

undertaken by Thomas would lead to earlier diagnosis and preventative treatments.

"Immune-mediated diseases like inflammatory arthritis and diabetes affect five to ten per cent of Western communities. By developing therapies that can 'turn off' or block particular pathways, we can potentially diagnose and treat diseases a lot earlier, which is a huge health and economic benefit."

NANOPATCH – THINKING OUTSIDE THE SQUARE

Professor Mark Kendall (Bachelor of Engineering '93, PhD '98), a biomedical engineer at UQ's Australian Institute for Bioengineering and Nanotechnology and ARC Future Fellow, has spent the last ten years developing the Nanopatch, a leading "needle-free" method for delivering vaccines. Kendall came up with the concept while he was at a science conference, with time on his hands and a notepad and pencil.

"I was thinking about how we could improve the reach of vaccines, so I decided to take a step back and find a different way of doing that," he said.

"Being bored in a presentation gave me the scope to think and doodle. My engineer's instinct told me that this was something important."

Kendall's design is beguiling in its simplicity and ingenuity. A tiny square containing hundreds of even tinier projections, each dry coated with the vaccine, is fired into the immune "sweet spot", just below the surface of the skin, via a mechanical dispenser.

This approach has significant advantages over the old technology of needle and syringe, which has remained virtually unchanged since 1853. Because it uses dry vaccine, the Nanopatch eliminates the need for refrigerated storage (the so-called "cold

chain"), which can be a barrier to mass vaccination in many developing countries.

It also delivers the vaccine to where it's needed most, meaning that only a fraction of the usual dose is required. Another advantage is that the Nanopatch can be self-administered. Painless and fast, it eliminates the problems of needle phobia and needle-stick injuries.

As well as being a pioneer of biomedical and bioengineering innovation, Kendall is a strong advocate for developing ideas beyond the science. In 2011, he co-founded start-up company Vaxxas Pty Ltd, garnering investment contributions of \$15 million to commercialise the Nanopatch for widespread use in humans.

In 2012, the Nanopatch achieved another milestone on its journey to commercial realisation, with the announcement of a significant partnership between Vaxxas and US-based pharmaceutical giant Merck, which will see the latter begin commercial production of vaccines using the Nanopatch platform in the very near future.

In recognition of his outstanding success, Kendall was one of only five international recipients of a prestigious Rolex Laureate in 2012 (selected from a field of 3500 applicants globally). This award has enabled his team to commence the application of the Nanopatch to the developing world, starting with a usability trial in Papua New



Professor Mark Kendall demonstrates how the Nanopatch works to nurses at Port Moresby General Hospital.

Guinea (PNG). In this trial, the team is using the cervical cancer-causing human papillomavirus (HPV) as their test case. Globally, cervical cancer claims 270,000 lives each year, and PNG has the highest incidence of HPV in the world.

Kendall said he was even more motivated to fast-track his work after a recent visit to PNG, where he saw first-hand the human face of many infectious diseases, including pneumonia and meningitis, in a clinical setting.

"It's confronting and it just made me want to jump back on the plane, get back to the lab and move the work along," he said.

To follow the Nanopatch's journey, visit Professor Kendall's page at aibn.uq.edu.au/mark-kendall

A research program into pancreatic and ovarian cancers led by IMB's Professor Sean Grimmond receives \$27.5 million from the NHMRC – its largest-ever single grant

The Atlantic Philanthropies announces a \$50 million gift to help establish Australia's first Translational Research Institute

The School of Pharmacy moves to a new state-of-the-art facility. The Pharmacy Australia Centre of Excellence

IMB researchers led by Professor David Craik engineer an orally active molecule that could be used in the treatment of neuropathic pain

The Queensland Children's Medical Research Institute joins UQ as a centre within the Faculty of Health Sciences

Queensland's first Indigenous doctor, Associate Professor Noel Hayman ('90), is named Queensland's Australian of the Year

The Asia-Pacific Centre for Neuromodulation – a world leader in brain research – is launched by UQ and St Andrew's War Memorial Hospital

2008

2009 JUL

2010 JAN

2010 SEP

2010

2011

2012

ALUMNI MAKING A DIFFERENCE

A LIFE LESS ORDINARY

Paul Stevenson OAM

Bachelor of Arts – '87, Diploma in Psychology – '89,
Master of Organisational Psychology – '93

As one of Australia's leading trauma specialists, Paul Stevenson has experienced nature and humankind at their best and worst over the past two decades – from the Thredbo landslide and Port Arthur massacre, to the Bali bombings and Boxing Day tsunami, Victoria's Black Saturday bushfires, and recent flood disasters at home in Queensland.

Stevenson's achievements in helping trauma sufferers in gut-wrenching and dangerous circumstances earned him the United Nations Queensland Medal in 2012 and an Order of Australia in 2004.

These experiences have inspired him to write four books and have taken him to the peak of his profession as current National President of the Australian Association of Psychologists – no mean feat for a boy who left school at age 14 with failing grades.

Astute mentors have been a strong influence in his life, from the teacher who recognised his Attention Deficit Hyperactive Disorder (ADHD), to the tutors and lecturers at UQ, notably organisational change expert Bob Dick, who influenced Stevenson's academic journey from a Bachelor of Arts to a Master of Organisational Psychology.

"At university I discovered self-directed learning, which was a far cry from the rote learning we had at school, and suddenly I was excelling. As I tell the parents of my young patients today, ADHD is not a deficit but a strength, if you can learn to channel it," he said.

Stevenson hopes to achieve his next career goal – a Senate seat with the Australian Democrats – when Australia heads to the polls in September, taking with him an innovative blueprint for rebuilding the mental

health system, overhauling disaster response and recovery strategies, and luring scarce health skills into remote regions.

He has spent the past few months travelling through the scarred Queensland bush with his political aspirations plastered on the outside of the minibus that is his home away from home.

"One of the party's biggest challenges will be revitalising the Democrats brand after the internal struggles of the past 12 months but, after meeting hundreds of ordinary people in caravan parks and truck stops up and down Brand Highway, I am confident the party still has huge support at the grassroots."



PIONEERING EARLY DETECTION

Dr Roz Brandon

Bachelor of Veterinary Science (First Class Honours) – '79, PhD – '86

Dr Roz Brandon is a painter, self-confessed dog lover and avid sailor. She is also the pioneer of SeptiCyte® technology, which when released to market will greatly assist the early diagnosis of life-threatening sepsis in hospitals and intensive care units.

While Brandon has achieved outstanding success in the field of health sciences, her career actually began in the animal world.

"I ventured into veterinary medicine because I loved zoology and disease pathogenesis, and I was also interested in large animals due to the family's beef cattle grazing interests," she said.

After graduating with a Bachelor of Veterinary Science (First Class Honours) in 1979, Brandon went on to complete her PhD from the Department of Medicine in 1986 under supervisor Professor Mervyn Eadie.

"We worked on low-dose aspirin and its

ability to prevent heart attacks and strokes – our role was to determine how low the dose could be, while still retaining efficacy," she said.

"As a result of this work and the work of others, the product Cardiprin was launched in the Australian market and is still on market today."

In 1996, Brandon achieved an MBA from the Queensland University of Technology and was awarded an MBA Medallion.

Ten years later, she co-founded Athlomics Pty Ltd, now known as Immunexpress Pty Ltd, which focuses on the discovery and clinical validation of genomic and proteomic "biomarkers" to support clinical care decisions.

Following a significant partnership between Immunexpress, Debiopharm and Biocartis announced last year, the SeptiCyte product is in the late-stage development and commercialisation phase and is expected to be released in the US and Europe next year.

Brandon, who is now based in Seattle and sits on The University of Queensland in America Board, said the product would enable earlier, faster and more accurate diagnosis of "the silent and stealthy killer".

"Worldwide, there are 18 million cases of diagnosed sepsis per year," she said.

"It is increasing in incidence by 8 to 13 per cent annually due to increasing antibiotic resistance of microbes, an ageing population and more patients with compromised immune systems.

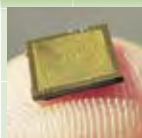
"It's something that many people would have never really heard of, yet sepsis affects more people in Australia and the US than breast and bowel cancer combined," she said.



UQ HEALTH AND MEDICAL TIMELINE

Alumnus Professor Mark Kendall from the AIBN receives a Rolex Laureate for his work on the Nanopatch

2012 JUN

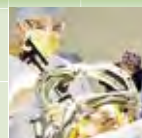


Professor Stuart Crozier receives the Australian Academy of Technological Sciences (ATSE) Clunies Ross Award for his 20-year contribution to the field of Magnetic Resonance Imaging

2012 JUN

Alumnus and neurologist Professor Peter Silburn, together with neurosurgeon Associate Professor Terry Coyne, performs his 500th deep brain stimulation

2012 AUG



UQ participates in the Stepping Stones Triple P project, the world's first ever population-wide survey of what it's like to parent or work with a child with a disability

2012 OCT

A research team led by IMB's Professor Sean Grimmond and The Kinghorn Cancer Centre's Professor Andrew Blanks discovers more than 2000 genes that are mutated in pancreatic cancer

2012 OCT



Professor Maree Smith from the School of Pharmacy receives a 2012 Life Sciences Queensland Industry Award for Excellence for her translational research into new pain-relieving medicines

2012 NOV



Alumnus Professor Christopher Chen donates \$10.5 million to establish UQ's first fully funded Chair of Reproductive Medicine

2012 DEC

UQ's evolving role in Indigenous health is particularly demonstrated by its work with the Institute for Urban Indigenous Health (IUIH) – an organisation that aims to ensure all Aboriginal and Torres Strait Islander people in South-East Queensland have access to culturally safe and comprehensive primary health care.

One of the most exciting programs to come out of the institute is the Workforce Development Program, run in partnership with UQ. Through this program, the institute works with UQ to organise, coordinate and place health students from a range of disciplines within its member health services, including student GPs, dentists, physiotherapists, pharmacists and other allied health workers.

In 2012, the institute placed 234 students in various clinics across South-East Queensland. The structure and support around these placements has created a unique model that is attracting national attention.

Alumna Katherine Williams (pictured) is the first Indigenous clinical psychologist to graduate from UQ. She is now employed in an Aboriginal medical service in Queensland, dividing her time between two IUIH member

SUPPORTING INDIGENOUS HEALTH

UQ has an impressive history of supporting Indigenous health, having set up Australia's first degree for Aboriginal health workers in the 1990s.

clinics. She graduated from UQ with a professional doctorate in clinical psychology in 2012, having completed her placement through the institute.

"I never intended to go into Indigenous community health, but now I know it's where I'm meant to be," she said.



"During my placement, I recognised how clinical psychology doesn't really meet the needs of Indigenous people. It's been a real challenge to find a better way of working, to make it a better fit.

"The institute helped me to challenge myself to develop my skills and genuinely supported me. They were keen to have me in these clinics and worked really hard to make it happen."

UQ's Pro-Vice-Chancellor (Indigenous Education) Professor Cindy Shannon believes the IUIH has given prominence to urban Indigenous health and has created a model with UQ that is making a real difference to health outcomes.

"This is a case where a university has responded to Indigenous leadership in a really positive way," she said.

"The IUIH has highlighted important policy and strategy issues. This is a genuine partnership, where both organisations collaborate and support each other to make a real difference to Indigenous health."

AIMING HIGH

Dr Alex Markwell

Bachelor of Science '98, Bachelor of Medicine/
Bachelor of Surgery (First Class Honours) '02

Alumna Dr Alex Markwell is setting an outstanding example for women in both medical and non-medical professions, having recently received a qualification that will assist her on her journey to becoming a board director.

Markwell, who works as an emergency physician at the Royal Brisbane and Women's Hospital and Greenslopes Private Hospital, achieved the Company Directors Course qualification from the Australian Institute of Company Directors after accepting a Board Diversity Scholarship. This scholarship, partly funded by the federal government, aims to increase the representation of women on the boards of Australian companies.

Currently, women make up a very low proportion of board representation in Australia. As at March 2013, only 16 per cent of ASX 200 board members are women, and almost half

of the companies listed on the ASX 200 do not have any women seated on their board.

Markwell, who recently concluded her term as President of the Queensland branch of the Australian Medical Association (AMA), said she hoped the qualification would help her achieve her next professional goal.

"Although up to 60 per cent of graduating medical students are women, few seem to go on to hold representative roles or become board directors," she said.

"I wanted to make sure I was as qualified as the next person so that I could be appointed on merit, and the diversity scholarship enabled me to access this fantastic training opportunity."

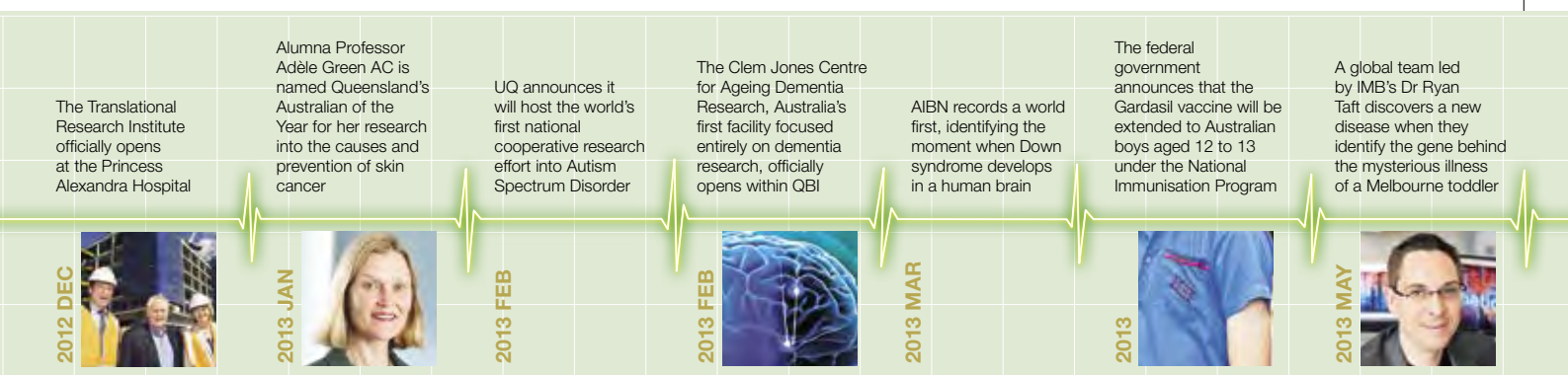
Since graduating in 2002, Markwell has been named a Fellow of the Australasian College for Emergency Medicine, undertaken a six-month fellowship in pre-hospital emergency care with the Queensland

Ambulance Service, and was Acting Deputy Director Queensland Medical Education and Training.

In addition to her academic and professional achievements, Markwell is a strong advocate for quality health and medical training and academic facilities. She has lectured at UQ's School of Medicine since 2006 and has been a mentor for both students and junior doctors.

She believes teaching is an essential part of a doctor's role.

"Whether you are passing on pearls of wisdom to the next generation of doctors or explaining the importance of an aspect of treatment to a patient or their family, doctors need to be skilled in teaching and communication," she said.



FEEDING THE WORLD



THE CHALLENGE AND OPPORTUNITY OF FOOD SECURITY

By Professor Robert Henry, Professor of Innovation in Agriculture and
Director of the Queensland Alliance for Agriculture and Food Innovation (QAAFI)

The challenge of feeding the world's population sustainably has probably always been a key issue for human societies. The development of agriculture about 10,000 years ago enabled greatly expanded food production, which in turn facilitated the creation of large permanent human settlements and allowed rapid growth of human populations. The long success of agriculture has isolated much of the human population – now in large “mega cities” – from food production in rural areas, with an ever-shrinking proportion of the population involved in food production.

Public awareness of the issue of food security was revived by sharp global food price rises in 2007–08. The strong growth in demand for food will continue because people are eating more – and not just because of population growth. Recent growing affluence in large human populations, especially in Asia, is driving growth in demand for food. Food production doubled during the second half of the 20th century as we doubled population from three to six billion. If the global population grows by about 50 per cent during the first half of the 21st century as expected, it will require a further doubling in food production because of the increasing per capita consumption.

The food security challenge is exacerbated by other factors. Growing affluence leads to discerning food choices and is resulting in growth in consumption of foods that require more resources such as land and water. As such, we have more people eating more food and consuming food types that put more demands on agricultural production systems.

Several factors combine to work against food production, including declining soil nutrients and loss of agricultural land to salinity, land degradation and alternative uses. A variable climate and the threat of climate change, especially in Australia, are factors that suggest a need to be concerned about our ability to continue to deliver the amount and type of food demanded by modern human societies.

What are the solutions? We need ongoing innovation in agriculture driven by research at many levels. However, this probably needs to be complemented by some changes in food consumption habits. Much of the food that is produced is discarded. Changing habits that resulted in smaller serves and less food left on the plate could make a major contribution. To achieve this, we may need to engage consumers in responsible use of food.

The difficulty of changing human behaviour on this scale suggests that we have little room to relax our efforts to improve agricultural production efficiencies. For example, we may be able to develop technologies that convert more of the discarded food in human garbage into some forms of edible food, or at least animal feed. However, the main option remains research to deliver greater production capability.

“The last few years have seen an unprecedented revolution in genetic technology that promises to accelerate genetic improvement of crops.”

More food is not the only requirement. I often argue that it is at least as important to continue to focus on producing better food with less resources. Food needs to be attractive to human consumers and have nutritional characteristics that are desirable for human health. Producing more human nutrition per hectare is the objective, rather than just more food. This is especially important in countries such as Australia, where our advantages in competitive export markets are often in the quality of the food we produce. From an economic perspective, we should aim to produce high-quality food that will attract the highest price from discerning food consumers both in Australia and in nearby Asian markets.

The increases in agricultural productivity that kept pace with growth in food demand in the late 20th century are showing signs of plateauing, despite increased research efforts in some cases. Two areas of innovation have supported increased food production. Both genetic improvements in agricultural plants and animals, and improvements in the way these plants and animals are used in agriculture, have made and will continue to make major contributions to food security. We will need continuous innovation in both of these areas, including improvements in production processing and handling.

Despite the challenges, we do have reason to believe that solutions might be found and that we can be part of the key discoveries. Without wanting to underestimate the size of the task, I am optimistic. The last few years have seen an unprecedented revolution

in genetic technology that promises to accelerate genetic improvement of crops.

Research will need to intensify and focus on food security outcomes. All options and technologies should be considered to address food security, which may include more radical options than those used to date. With modern technology and understanding, we may be able to rapidly domesticate completely new species for agriculture. This strategy might deliver the advances needed, especially in more marginal production environments.

For example, Australian agriculture is largely based on imported species of plants and animals. Recent identification in Queensland of what are apparently new species closely related to rice, a major food crop internationally, may provide new opportunities for local food production.

I believe QAAFI and UQ have a great opportunity to be major contributors to global food security. We are a world-leading university uniquely placed to deliver technologies for food security in the tropical and subtropical world, where most food demand will be in coming decades.

ABOUT THE AUTHOR



Professor Robert Henry is Director of the Queensland Alliance for Agriculture and Food Innovation and Professor of Innovation in Agriculture. His research

aims to improve food security by applying biochemical and molecular tools to the development of improved crop varieties.

Henry holds a Bachelor of Science (Honours) from The University of Queensland, a Master of Science (Honours) from Macquarie University and a PhD from La Trobe University. He was awarded a Doctor of Science from UQ in 2000 for his work on analysis of variation in plants.

For more information about QAAFI's research, visit qaafi.uq.edu.au

app • Download the UQ Contact App to watch a video interview with Professor Henry.

FARM *to* FORK

FOOD SECURITY INNOVATIONS



From strategies to control weeds, to new hybrid “superfruits” and energy-efficient ways to deliver produce to market, researchers from the School of Agriculture and Food Sciences are fighting the threat to global food security from all angles.

Weeds cost the Australian economy \$4 billion every year, choking the country's waterways, smothering native vegetation and robbing farmers of agricultural land.

To combat this menace, Associate Professor in Plant Pathology Dr Victor Galea is developing Australia's first “home-grown” commercial bioherbicide.

“By inserting a single gelatine capsule containing pathogenic fungi into the trunk of the perennial weed, we allow the fungi to kill the weed,” he said.

This new biological agent is a sustainable and long-term solution for invasive woody weeds such as parkinsonia, prickly acacia, mimosa and athel pine.

Through the work of Professor Daryl Joyce, new varieties of the fruit red bayberry (*Myrica rubra*), which carries high levels of antioxidants and other potentially beneficial phytochemicals, is close to global market launch following a licensing agreement with Victorian-based grower-owned berry production and marketing company, Y.V. Fresh. UQ's main research commercialisation company, UniQuest, facilitated the deal.

UniQuest Acting CEO Dean Moss said the partnership between UniQuest, UQ,

Y.V. Fresh and Horticulture Australia Limited would help establish the red bayberry industry in Australia.

“One advantage for consumers is that they will be purchasing a fresh product, whereas other recently commercialised ‘superfruits’ have been almost exclusively marketed as relatively lower value processed or dried products,” he said.

As well as establishing new fruit varieties, Professor Bhesh Bhandari and PhD student Binh Ho have developed a technology that will dramatically improve the safety, efficiency and effort involved in the controlled ripening of fruit during its transport to market.

Currently, compressed ethylene gas is used extensively to control-ripen fruit such as bananas, mangoes, avocados, citrus and tomatoes, which are picked at “commercial maturity” (a hard green but mature stage) before ripening has started.

Bhandari said the gas was highly volatile and explosive accidents have occurred in the past.

“To avoid these disadvantages, we have encapsulated the gas in various types of solid materials to create a safe and convenient powder form, which is released when the temperature and humidity is raised.”

The powder is environmentally friendly and could be placed in trucks transporting fruit from the farm, ensuring it arrives at the market perfectly ripened, without the need for energy-hungry coolrooms.

All three of these research innovations have been commercialised through UniQuest. Recognised as one of the most successful university technology transfer companies in Australia, UniQuest benchmarks in the top 10 per cent globally.

Researchers from other areas of the University are also addressing the global issue of food security.

A team led by UQ plant scientist Professor Ian Godwin and colleagues from the Queensland Alliance for Agriculture and Food Innovation recently identified a sorghum gene that could lead to the development of more digestible feedstocks for farm animals and much-improved nutrition for some of the world's poorest nations.

Researchers for the Pacific Agricultural Research for Development Initiative, coordinated by UQ and funded by the Australian Centre for International Agricultural Research, are leading a research team in partnership with the Fijian Government and local industry to identify ways to strengthen food production in the South Pacific.

From farm to fork, outcomes from UQ research are at the forefront of global agricultural development. By working together, researchers and producers are helping to find solutions to feed an increasingly hungry world.

For details on how you can contribute to the University's research efforts, contact giving@uq.edu.au

$$e^{i\pi} + 1 = 0 \quad F = \frac{Gm_1m_2}{d^2}$$

$$\Delta E = h\nu \quad P_{\text{net}} = \epsilon \sigma A (T^4 + T_0^4)$$

$$\text{UQ} + \text{BCEC} = \text{more}^2$$

$$F = ma \quad K = \frac{1}{2} KA^2 \sin^2(\omega t + \delta)$$

$$a = \frac{q}{m} E \quad \frac{d}{dx} \int_a^x f(s) ds = f(x)$$

Brisbane Collaborates

Did you know that Brisbane Convention & Exhibition Centre (BCEC) is more than just a venue? We are proudly collaborating with UQ scientists and alumni all around the world.

Did you know we have a team whose job is to help UQ scientists bid for international conferences to be held in Brisbane? BCEC bidding support is free and we facilitate financial support for travel scholarships and speaker costs.

We work together to attract conferences that will put the spotlight on UQ's research and development.

If you are attending or speaking at an international conference that could be held in Australia, please remember to 'put in a good word' for Brisbane!

ENERGY, CARBON THE DILEMMA OF

By Professor Chris Greig, Director of the UQ Energy Initiative

ABOUT THE AUTHOR



Professor Chris Greig is Professor of Energy Strategy at UQ and Director of the UQ Energy Initiative, a University-wide initiative providing strategic leadership for

energy research across UQ.

Prior to joining UQ, Greig had 25 years of project and executive experience in the industrial, mining and energy sectors, both within Australia and abroad.

He has a Bachelor of Engineering ('82), Master of Engineering ('84) and PhD ('95), all from The University of Queensland.

For more information about the UQ Energy Initiative, visit uq.edu.au/energy

app • Download the UQ Contact App to watch a video interview with Professor Greig.

The industrialised world has enjoyed two centuries of steady improvement in living standards, life expectancy and health. This improvement in social condition can be traced to science and the ability to efficiently extract and harness fossil fuels.

In the 1860s, coal provided heat, lighting and steam-driven transport to ignite the industrial revolution. Liquid hydrocarbons then revolutionised energy for transportation, and natural gas offered an alternative energy source for heating, power generation and the manufacture of a range of useful materials, from plastics to fertilisers.

It has been a truly remarkable journey that laid the platform to exploit the tremendous creativity of humankind. Astonishing advances in computing, communications and medical science would not have been possible without the industrial revolution, driven by abundant and affordable fossil energy.

But storm clouds are amassing around this perfect story. The use of fossil fuels, upon which our prosperity has depended, has had a range of unintended consequences. For example, we have seen serious environmental and aesthetic consequences, ranging from smog to acid rain. Human ingenuity has helped tackle these problems. Today, in most advanced economies, we have cost-effective

technology to burn fossil fuels with very low, safe levels of dust and toxic chemicals such as sulphurous and nitrogen oxides and heavy metals such as mercury.

In more recent times, a new threat has emerged. Carbon dioxide (CO₂), an invisible, non-toxic substance and an unavoidable product of fossil fuel combustion, appears to be having a significant impact on climate. This new threat is not localised to the place where the CO₂ is being emitted. Its impact is globally dispersed and the precise location, timing and severity of the consequences are veiled in uncertainty. Despite this uncertainty, most of the world's political, industrial and scientific leaders agree that a response to this threat is both necessary and urgent.

Some say that the response must be to abandon the use of fossil fuels, especially coal. Others say Australia must immediately cease the mining and export of coal. These are drastic actions that would have an immediate and dramatic negative impact on the Australian economy. If such actions would lead to us saving the world, then of course we should implement them with haste. But Australia's coal exports amount to about five per cent of global coal consumption, so would we really be saving the planet?

Saving the world is complex. Something often overlooked in wealthy countries such as



AND POVERTY OUR TIMES

Image courtesy of *Portraits of the Energy Impoverished: Fires, Fuel, and the Fate of 3 Billion*
Gautam N. Yadama
Photographs by Mark Katzman
Oxford University Press (forthcoming September 2013)
<http://energyimpoverished.wustl.edu/>

“More than 2.6 billion people (40 per cent of the population) do not have access to clean fuels for heating and cooking.”

Australia is the issue of “energy poverty”. I spent much of my business career involved in industrial development in developing countries. Over 30 years in South-East Asia, India, Africa and parts of Latin America, I witnessed the plight of the energy impoverished. I also witnessed the rise in social condition and health of communities as reliable, affordable electricity was delivered to certain regions.

Much has been achieved in recent decades, but even today the situation is startling. According to the International Energy Agency, almost 1.3 billion people do not have access to electricity, while more than 2.6 billion people (40 per cent of the population) do not have access to clean fuels for heating and cooking. They continue to burn wood, crop residues and animal dung in their homes. The endless cycle of gathering and burning biomass fuel has staggering impacts on the environment,

human health and social deprivation, especially among women and children.

Few Australians realise that two million people in developing countries die each year due to indoor air pollution from biomass combustion – typically a black smoke containing fine particulates, carbon monoxide and nitrogen oxides. The indirect consequences are also far-reaching. The relentless harvesting of biomass wood for fuel is responsible for depleting groundwater systems and declining agricultural productivity, which in turn leads to food and water shortages and reinforces the poverty cycle. And let’s not forget the one billion tonnes of CO₂ that are released annually as a result of this rudimentary burning of biomass materials.

A new book by Gautam Yadama entitled *Portraits of the Energy Impoverished* presents a stark account of the plight of more than 800 million people living in rural India.

In this society, women and children are responsible for gathering household fuel – a task that each year becomes increasingly arduous as the population grows and lands are degraded. The implications for education, self-esteem, health and life expectancy of those already underprivileged are tragic.

Australians may have an abundance of affordable energy solutions, but much of the planet is energy-poor, and many throughout the world suffer through the failure to provide abundant, affordable, “clean” energy to all. This situation will compound as the population grows by two billion over the next 30 years or so.

Renewable energy offers great potential to satisfy the world’s energy needs, but there are issues such as intermittency and high costs that limit their widespread deployment. Globally, we do not have the luxury to “turn-off” the supply of coal or gas when more than one-third of the population live in poverty because they do not have reliable, affordable energy. We must develop and deploy all of the energy technologies available to us to assure the most sustainable solutions at the lowest cost to all of society. This trade-off, abhorrent to some, is the reality we face: no easy choices and no silver bullets.

HISTORY IN THE

The RD Milns Antiquities Museum, showcasing more than 5000 items across 2000 years, celebrates its own 50-year milestone.

The RD Milns Antiquities Museum is a magnet for people from all walks of life, ranging from young children through to mature-aged volunteers.

It seamlessly blends the ancient with state-of-the-art technology for thousands of visitors each year.

What began as a collection of artefacts stored in the corner of a professor's room now comprises more than 5000 separate objects, many of which are available to view in an online database (see Fast Facts).

This year, the museum is celebrating a milestone in its own history, albeit only 50 years – not long when compared with the age of the objects from ancient Greece, Rome and Egypt it showcases and stores.

This collection of classical Mediterranean antiquities, the largest in Queensland, dates from between 2000 BC to 600 AD.

The 50-year milestone is being marked by an exhibition, "Then and Now: 50 Years of Antiquities (1963–2013)", which celebrates

the museum's history, stories of its artefacts and contributions made by donors, staff and students.

"The museum's collection is constructed from a variety of materials – stone, papyrus, terracotta, metalware and glass – giving a picture of the technological and artistic advances made by the forerunners of Western civilisation," Museum Director/ Curator Dr Janette McWilliam said.

The museum is integral to the learning and curriculum of almost 1000 UQ students who use objects in classes and participate in their handling, cataloguing and storage. This informs programs such as the museum's successful internship, which has seen students go on to work at the Australian Sports Museum in Melbourne, Tate Modern in London and University of Sydney Museums.

"The theme of the exhibition reflects the way the museum is evolving in tandem with the University curriculum in the area of ancient history," McWilliam said.

During 2013, the museum will host a number of anniversary events alongside its

regular public programs and school visits. This includes a community event in October that is hoped to include the unveiling of a significant new artefact, the result of a major fundraising campaign throughout the year.

UQ began collecting artefacts in 1963 with the purchase of a red-figure Attic amphora – a large pottery storage container from ancient Greece – at a London auction house, with the intention of enriching the teaching programs of Classics and Ancient History at the University.

In the 1970s, the museum benefited greatly from the vision and dynamism of Emeritus Professor Robert Milns AM, a Professor of Classics and Ancient History for 33 years, and staff of the Classics and Ancient History department, who made the collection publicly accessible for the first time.

In 2007, the collection was renamed the RD Milns Antiquities Museum after Milns, who by then was retired but continues to be a great supporter and benefactor of the museum.



MAKING

VISIT THE MUSEUM

The RD Milns Antiquities Museum is part of the School of History, Philosophy, Religion and Classics (Faculty of Arts) and is supported by the Friends of Antiquity, the UQ Alumni Association and the Classics and Ancient History Society.

Visitors are welcome at the museum on Level 2 of the University's Michie Building between 9am and 5pm, Monday to Friday. School and special interest groups are able to organise guided tours in advance for a small fee.

For more information about the museum or its 50th anniversary celebrations, please contact the Museum Office on +61 (0)7 3365 3010 or by email at antiquitiesmuseum@uq.edu.au, or visit the website at uq.edu.au/antiquities

app • Download the UQ Contact app to take a look inside the museum.

FAST FACTS

- The museum houses more than 5000 separate objects.
- The oldest item is more than 4000 years old: a cuneiform tablet dating from 2046 BC. It comes from the ancient Sumerian town of Drehem, and records a list of animals paid as tax by a man called Akhuni.
- The most popular item displayed is a 2300-year-old Egyptian mummy mask.
- More than 1000 objects have already been entered into a state-of-the-art database system. This will soon be followed by around 100 3D models. This project allows unprecedented access for users to interact with the museum's collection electronically in the classroom or at home.
- Over 1500 school children tour the museum each year.



DR STANLEY CASTLEHOW – A TRUE TREASURE

The Antiquities Museum owes much to the devotion of the late Dr Stanley Castlehow, who taught Greek language in his role as Associate Professor and lecturer at the University between 1915 and 1957.

Funds from Castlehow's estate have allowed the purchase of more than 200 objects in the museum's collection, now worth more than \$500,000. The bequest continues to fund conservation works to ensure the collection is preserved for the next generation.

Objects purchased as a result of Castlehow's bequest include an ancient Greek wine cup, or skyphos, and a large painted amphora for storing wine or oil, both dating to before 400 BC.

Other artefacts purchased include a Roman portrait of a young boy in marble dating back to 300 AD and a Samnite bronze breastplate (circa 400–300 BC).

Educated at Brisbane Boys Grammar School, Castlehow is honoured in his inclusion as one of the grotesques, sculpted by Dr Rhyl Hinwood AM in 1977, adorning the Great Court.

He was among the first Rhodes Scholars from Queensland and a member of Balliol College at Oxford University from 1908.

Castlehow was the son of a Methodist Minister, Reverend I. Castlehow. He is remembered fondly by staff who knew him at the end of his career.

Above: Dr Stanley Castlehow and a grotesque in the Great Court that was sculpted in his honour.

Right: A red-figure neck amphora from Campania, Italy. Made some time around 350–325 BC, the artefact was purchased with funds from the Castlehow bequest.





THE I AND WE IN LEADERSHIP

By Professor Alex Haslam, Professor of Psychology and ARC Laureate Fellow

My own definition of leadership is this: The capacity and the will to rally men and women to a common purpose and the character which inspires confidence.

– General Montgomery (1982)

Quotes like this are routinely reproduced in books on leadership and management to provide would-be leaders with a sense of what it is they are meant to be doing. If you google words like “leadership”, “vision” and “inspiration”, you’ll

find thousands like it. All convey a sense that leaders need to do “the vision thing” and that when they do, followers will be drawn to them like moths to a flame.

In reality, it’s not that simple. Just as vision is the stuff of leadership, so too is it the stuff of despotic tirade and grandiose delusion. Possession of a vision has been found to have almost no power to predict whether or not a leader will hold sway over followers. All great leaders have a powerful vision, but not all people who have a powerful vision are great leaders.

So what is it exactly that gives traction to some leaders’ vision? This is a question my colleagues and I have been investigating over the past two decades. Our answers centre on two key observations: first, that leadership is a process of social influence, and second, that such influence is contingent on the sources and targets of influence having a sense of shared identity – a sense that they are part of the same in-group. So, just as we are unlikely to be swayed by the captain of a rival football team, so too are we unlikely to be moved by any leader who doesn’t appear to be “on our side”.

I first explored this idea in *The New Psychology of Leadership*, a book I co-authored with Professor Steve Reicher (University of St Andrews) and Professor Michael Platow (Australian National University). I am now studying it further as part of a large UQ-led research project with Dr Nik Steffens and Dr Kim Peters (University of Exeter).

Central to our study is the idea that

effective leadership is a group process where leaders need to be of us, for us, and they need to make us work.

LEADERS NEED TO BE “OF US”

A leader’s capacity to display leadership depends on their ability to capture what it means to be a member of the group they want to lead. They need to tap into “who we are” and project this to both internal and external audiences. If a leader is seen as being “one of them” or someone who is only out for themselves, it can be fatal to their leadership.

Groups have little confidence in maverick leaders who are intent on “doing their own thing” with no heed to the concerns of the team as a whole. This is not to say that leaders cannot be creative, but their creativity must be seen to promote rather than to compromise the interests and identity of the group.

So, when you get to your next job, don’t go on and on about how wonderful the group you used to work for was. Instead, find out what makes your new group great. If you don’t, you’ll never be able to lead it. What’s more, you probably won’t want to either.

LEADERS NEED TO BE “FOR US”

Attributes considered good and worthy in a leader are partly determined by what it is the leader needs to do to define the interests of the group clearly and positively, and take

ABOUT THE AUTHOR



Professor Alex Haslam is a Professor of Psychology and an ARC Laureate Fellow. Prior to joining the University, he was Professor of Social and Organisational Psychology at the University of Exeter.

His research interests centre on issues of self and identity as applied to a variety of topics such as leadership, motivation, communication, decision-making, negotiation, productivity, collective action, space management, gender, stress, stereotyping and prejudice.

His book *The New Psychology of Leadership*, co-authored with Stephen Reicher and Michael Platow, was the winner of the University of San Diego Outstanding Leadership Book Award in 2012.

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those interests forward. This is one reason why models that suggest leaders need to have a particular set of predetermined characteristics often fall short. Leaders need to contribute to a group identity and action that allow "us" to be construed as different from, and better than, "them".

For example, while people may generally be disposed to favour leaders who are intelligent, if an organisation is competing with a group that prides itself on its intelligence, the leader has to be careful to differentiate the organisation's intelligence from that of the other group. To win the 2004 US election, George W. Bush didn't need to show that he was smarter than his rival, John Kerry, which is probably just as well. What he did need to do was show that he was more in touch with the American people and more concerned about their interests. It would have been foolish for him to project the image of a Harvard-educated scion of a fabulously privileged family, just as it was a colossal mistake for Mitt Romney to be overheard infamously disparaging 47 per cent of Americans – many of whom he needed votes from in order to get elected.

So, if you want to lead a group, don't trash it. If you do, you won't have a group to lead.

LEADERS NEED TO "MAKE US WORK"

You might imagine from the previous points that leadership is all about rhetoric and image: about saying the right things and

being seen in the right place. These things certainly help, but on their own they're not enough. Good leaders have to work very hard. In particular, they have to work hard to create the structures and initiate the activities that allow the group to succeed.

40-odd years of research shows that effective leaders work to transform groups in ways that allow their potential to be realised. An obvious way of doing this is through restructuring. Indeed, awareness of this fact has meant that in the contemporary organisational world, most would-be organisational leaders embrace restructuring with something close to religious zeal. Yet studies show that around 80 per cent of restructures fail. Rather than help followers, they leave them demoralised, dispirited and broken.

Why do so many restructures fail? One answer – which the research of another of my UQ colleagues, Professor Jolanda Jetten, has found – is that leaders routinely forget that for change to be effective, they need to work with their followers' identities, not against them. If someone has spent a lifetime working for Unit X, it's a fair bet that Unit X has become an important part of who they are and how they see the world. If they turn up to work one day and find that Unit X is now Unit Y, they're going to experience identity threat, and probably identity crisis. But why should you care? Well, for the simple reason that such identities are almost certainly a basis for much of a person's work-based motivation. Our research also

shows that they are a basis for good communication, effective support and trust. In short, identity is the stuff of their followership, and hence your leadership.

THE THREE R'S OF LEADERSHIP

These three points boil down to what we term the three R's of leadership: the need to *reflect* upon the nature of the group you want to lead, the need to *represent* that group, and the need to devise structures and activities that help group members *realise* their collective potential. While much of leadership literature is written in the first-person singular (it's "all about me"), it should in fact be written in the first-person plural. Leadership is "all about us".

If you find this a bit far-fetched, let me leave you with this tantalising fact recently brought to light by the (yet to be published) research of my colleague Nik Steffens. Since 1901, there have been 43 Australian federal elections. In 40 of those elections, the candidate who went on to win was the one who used the words "we" and "us" most in their official campaign speech. Why is this? The answer, we suggest, is that these were the leaders who not only understood most clearly that they needed to represent the electorate, but also who felt most keenly that they were in a position to do so.

In short, if you find it hard to say (and think) "we", you're probably in the wrong place to be a leader.

REPRODUCING SUCCESS

REPRODUCING
SUCCESS

UQ's global contributions to reproductive medicine will continue for generations to come thanks to a generous endowment from alumnus Professor Christopher Chen.

Professor Christopher Chen, who received a Doctor of Medicine from UQ in 2009, is considered an IVF pioneer and the "father of human egg freezing", having published a groundbreaking paper detailing the first successful attempt at deep freezing and thawing a female egg cell, resulting in a successful pregnancy.

Chen is also renowned for achieving the world's first in-vitro fertilisation (IVF) triplet pregnancy.

His \$10.5 million endowment will contribute towards advanced research into reproductive medicine by way of the first fully funded Chair of Reproductive Medicine within the University's Faculty Of Health Sciences.

Health Sciences Executive Dean Professor Nicholas Fisk said that following a competitive global search, the first Professor Chen Chair in Reproductive Medicine would be announced shortly.

"Reproductive medicine is such an exciting and fast-moving area at the moment, combining cutting-edge clinical techniques built on the latest biologic discoveries.

"Great advances are in play, resulting from knowledge in implantation, epigenetics, cryopreservation, genomics and stem cells.

"Professor Chen's prescience and vision will allow us to attract a world-leading clinical scientist in this field, a real fillip for The University, for Queensland, and for infertile couples everywhere," he said.

After the announcement of his donation, Chen said, "My greatest hope is that the Chair will be able to expand upon the research I began over 30 years ago, and achieve medical advances that will benefit the University, academia and all mankind".

Chen is the past World President of the International College of Surgeons, Editor-in-Chief Singapore of *International Surgery* (the official journal of the International College of Surgeons), an Honorary Professor of The University of Queensland and a Conjoint Professor of

the University of Newcastle. He heads the Christopher Chen Centre for Reproductive Medicine at Gleneagles Hospital in Singapore.

Chen's donation cements his place in UQ's philanthropic history and will allow the

University to pursue reproductive research to benefit and change the lives of families around the world.

To find out more about the Faculty of Health Sciences, visit uq.edu.au/health



Professor Christopher Chen with President and Vice-Chancellor Professor Peter Hoj.

Donation helps promote equality and diversity at home and abroad

BREAKING DOWN BARRIERS

School of Psychology tutor and PhD candidate Alexandra Gibson is hoping to highlight the disparities of breast cancer treatment received by women from diverse backgrounds when she heads to the UK in July.

Her trip to the International Society for Critical Health Psychology has been made possible by a donation from alumna Dr Belinda McKay, Senior Lecturer, School of Humanities at Griffith University, who provided the funds to set up a bursary to assist UQ students from the lesbian, gay, bisexual, transgender, intersex, questioning (LGBTIQ) community.

McKay, who graduated with a Bachelor of Arts (Honours) in 1976 and a Graduate Diploma in Education in 1977, said the bursary was designed to help LGBTIQ students reach their potential.

"LGBTIQ students often experience rejection within their family or social context, and can struggle to reach their

potential due to a lack of financial and emotional support.

"My donation was motivated by a desire to provide encouragement to these students, and I am delighted that this bursary will help Alexandra Gibson to travel to the UK to further her PhD research."

Gibson left her homeland of South Africa due to the ongoing threat of physical and sexual violence experienced by the LGBTIQ community.

"I felt that being a woman and being in a same-sex relationship was really difficult in South Africa, especially facing the high levels of homophobia that continue to exist there, which led me to do my PhD in Australia," she said.

"I felt that by studying at UQ, I could develop my career in women's health and sexuality by working on a more international platform.

"This bursary gives me hope that opportunities for LGBTIQ people to



Alexandra Gibson is grateful for the opportunity to further her research in the UK.

participate and contribute to change within academia and society are well and truly on the horizon.

"I am truly grateful to Dr McKay for donating this money and to have this opportunity," she said.

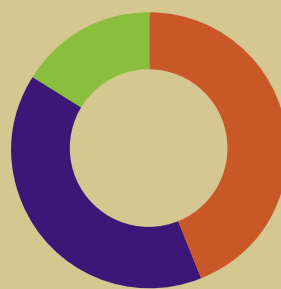
Gibson is a PhD candidate with the School of Psychology. Her study examines the way in which breast cancer is typically perceived within Western, English-speaking cultures, and how women with breast cancer are subsequently expected to experience their illness.

For more information, visit
uq.academia.edu/AlexandraGibson

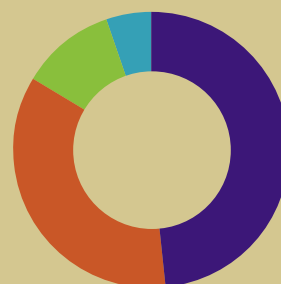
THANK YOU!

We would like to extend a heartfelt thanks to our alumni, industry partners and the broader community for your continued support. To view the donor honour roll, visit alumni.uq.edu.au/donor-honour-roll

In 2012, the generosity of many individuals and organisations enabled us to raise more than \$35 million to support our students, excellence in teaching and learning, research and innovation, with worldwide impact.



Allocation of gifts received



Gifts by source

Research **44%**
Teaching & Learning **40%**
Vice-Chancellor's
Discretion **16%**

Industry **48%**
Foundation **35%**
Alumni **11%**
Community/Friends **6%**

SPOTLIGHT ON UQ IN VIETNAM

The University's relationship with Vietnam spans more than a decade, underpinned by significant support from The Atlantic Philanthropies.

UQ's relationship with Vietnam began in the mid-1990s, when the University welcomed a small intake of full-degree students, who were predominantly sponsored under the Australian Government's AusAID program.

The relationship broadened and accelerated in 1999, when The Atlantic Philanthropies announced funding for coursework masters and doctoral development programs at UQ, providing scholarships for almost 300 Vietnamese scholars to study postgraduate degrees between 2000 and 2007.

The opportunity these programs provided for the Vietnamese participants was life changing, and the benefit to capacity building in Vietnam was significant. In 2006, the Government of Vietnam awarded UQ a Friendship Medal for its active contribution to the education and training of Vietnamese students, and for its work in developing closer links between Vietnam and Australia.

The University's support of Vietnamese Research Higher Degree (RHD) students continued in 2008, when UQ welcomed five talented young Vietnamese researchers as part of its Vietnam-Australia 35-Year Commemorative RHD Scholarship program. Recipients were given the opportunity to undertake research within UQ's globally recognised research institutes, many of which were established with funding from The Atlantic Philanthropies.

Another important milestone in the UQ-Vietnam relationship was the establishment

of the University of Danang-University of Queensland English Language Institute (UD-UQ ELI), located in Danang, Central Vietnam. The institute was made possible by the continued generosity of The Atlantic Philanthropies, which provided funding for the construction and fit-out of a purpose-built building, as well as initial operating costs.

Since its official opening in 2007, the institute has delivered a wide range of international-standard English language

training programs to public, institutional, government and corporate clients in Vietnam. The institute has also been significantly involved in multiple high-profile visits, providing Danang with an expanding international profile and linkages.

Deputy Vice-Chancellor (International) Dr Anna Ciccarelli said the institute was a genuine capacity development venture and an integral part of UQ's engagement strategy in Vietnam.

"Since its official launch, the UD-UQ ELI has delivered over 27,000 hours of English language teaching to more than 4000 students and professionals across Vietnam and administered more than 3000 English language tests in Danang," she said.

Nguyen Ba Thanh, Secretary of the Danang Municipal Party Committee and Chairman of the Danang People's Council, said the institute played an important role in human capacity development in Danang.

"English is an essential tool for government officials, civil servants and people of Danang, and is an urgent priority for the region's development and global engagement."

Since 2005, UQ's Institute of Continuing and TESOL Education has continued to make a significant contribution to capacity development in Vietnam, delivering a range of customised continuing education, TESOL teacher training and professional development programs for Vietnamese government departments.

Today, UQ remains committed to long-term engagement with Vietnam, and has a full-time representative based in Hanoi.



The UD-UQ ELI building in Danang.

STUDENT MOBILITY

Many students enjoy international learning experiences as part of their degrees, and Vietnam has proved to be a popular destination in recent years.

During Summer Semester 2013, 20 students from the School of Geography, Planning and Environmental Management travelled to the Mekong Delta as part of a new course, developed in conjunction with Can Tho University, that aims to teach students about the social, urban, rural and environmental issues facing communities in the region. This was the second cohort of students to participate in the course, with the inaugural group travelling to Vietnam in 2012.

Ten students from Health and Rehabilitation Sciences completed a five-week clinical placement in Hue last year, working with disabled children in schools and orphanages. During their placement, the group ran workshops, created playground areas and worked closely with local teachers, carers and parents.

Also in 2012, ten journalism students travelled to Hanoi to take part in an



Students from the School of Health and Rehabilitation Sciences have travelled to Vietnam in past years to work with disabled children.

intensive 10-day field reporting course, where they generated stories that were further developed on their return to Australia and later broadcast on Vietnam Television, ABC News Breakfast, ABC News 24 and ABC Local Radio.

RESEARCH AND DEVELOPMENT

Senior researchers are working with the Government of Vietnam and other Vietnamese institutions to tackle some of the region's most pressing health issues.

Professor Matt Cooper from the Institute for Molecular Bioscience, together with Paul Young from the School of Chemistry and Molecular Bioscience and Stephen Mahler from the Australian Institute for Bioengineering and Nanotechnology (AIBN), are leading a project to develop a cheap, simple test for diagnosing dengue fever.

Involving researchers, hospitals and healthcare workers in both Australia and Vietnam, the project aims to develop a best-in-class field test for early detection of dengue fever, and a sensitive and accurate lab-based test for screening blood donations.

Cooper said early, accurate detection was vital both for limiting transmission and ensuring clinicians can help identify cases that may progress to potentially lethal dengue haemorrhagic fever.

"Globally, only about three per cent of people infected with the virus are currently being diagnosed accurately," he said.

Professor Anton Middelberg and Dr Linda Lua, also from AIBN, are working on a pilot study in vaccine development for pre-pandemic avian influenza (H5N1), with

evaluation to be conducted in collaboration with partners including the Pasteur Institute in South Vietnam and Vietnam National University in Hanoi.

The development work at AIBN is using fast-growing bacteria to produce virus-like particles (VLPs), which are shells of the virus that contain no genetic material. This means they can elicit a strong immune response but are inherently safe.

Initial results show that the VLP technology can be tailored to emerging influenza strains and potentially mass deliver vaccines in weeks rather than months, stopping a virus from causing a pandemic.

Middelberg said the collaboration with Vietnam was an important step in developing the VLP technology.

"We need to prove the efficacy of the VLP technology. Our collaboration with researchers in Vietnam provides information on emerging strains and testing under real-world conditions," he said.

Research undertaken by the School of Population Health, as part of a project funded by The Atlantic Philanthropies, has also resulted in significant outcomes in Vietnam, including improved mortality data collection systems; the first National Burden of Disease study, which highlighted stroke as a major cause of disease burden; and studies into tobacco, cardiovascular disease, alcohol, schizophrenia and diabetes, with direct implications for Vietnamese health policy.

ALUMNI ENGAGEMENT

UQ has an active and engaged alumni community in Vietnam, with more than 550 alumni aligned with UQ alumni associations in Northern, Southern and Central Vietnam.

In 2012, UQ announced a three-year commitment to provide ongoing professional development training through the UQ-Vietnam Professional Development Seminar Series to enhance the careers and personal growth of Vietnamese alumni.

The series offers professional development training to alumni, institutional partners, government and corporate partners in Vietnam at no cost to participants, presenting updates on a range of contemporary issues across various professions. It also provides an opportunity to network. Seminar topics are chosen to appeal to a broad range of alumni, and to align with Vietnamese government higher education priorities and the Australian Government's priorities in reducing poverty through the Millennium Development Goals initiative.

In 2013, UQ is a Platinum Sponsor of events associated with the 40th anniversary of diplomatic relations between Australia and Vietnam. The seminar series will align with the Australian Government's science theme by presenting seminars in Ho Chi Minh City, Hanoi and Danang relating to the science of food safety and health.

For more information, visit uq.edu.au/vietnampdss



Sally Bledsoe
People Partner North, NAB

Justin Golding
Supply and Logistics Manager, QGC

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CHALLENGING THE FUTURE

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Dr Jean Calder AC

Diploma in Physical Education – '58

Certificate in Education – '63

Certificate in Teaching and Training

Sub-Normal Children – '67

Bachelor of Arts – '68



HUMANITY ON THE FRONT LINE

Surrounded by the aftermath of civil war, Dr Jean Calder AC shirks politics. Despite this, she has been chased, shot at, bombed and banished across borders in her tireless bid for social justice.

Her adopted home on the Gaza Strip bears the scars of intergenerational fighting. Unemployment is high and more than half of the population live below the poverty line.

At age 76, and having spent 30 years in the Middle East, the 2012 Alumnus of the Year (awarded by Alumni Friends of The University of Queensland Inc.) is still a woman of action, working tirelessly for people with disabilities, who are often on the very lowest rungs of the economic ladder.

Her efforts won her Australia's highest civil honour in 2005 – Companion of the Order of Australia – for her inspirational humanitarian service, leadership and commitment to international relations, and academic and professional training in rehabilitation.

The refugee camps of Lebanon and Gaza, and the poorest suburbs of Cairo, are a far cry from Calder's home town in Mackay, north Queensland, and from the peaceful halls of UQ, where she studied physical and special education in the 1950s and 60s. A Nicklon-Macgregor and Fulbright Scholarship followed, taking her to the University of Connecticut, where she completed a Masters degree in Physical Education for the Disabled. This led to a government fellowship to obtain a PhD in Recreation for Special Populations from Pennsylvania State University in 1979.

"I always had a great interest in people and the international community," she said.

"As I grew older, I grew more concerned about its inequalities. I had the overwhelming feeling that I needed to do something important in my life, and to share my opportunities, but I had no idea I would end up in Palestine. Being

a grassroots person, things just seem to happen to me."

After watching a documentary about the Palestinian crisis in the 1970s, Calder was touched by the scene of an orphaned baby with cerebral palsy in a temporary hospital under siege. This led to her eventually becoming a volunteer with the Palestinian Red Crescent Society (PRCS) and a member of the International Federation of Red Cross and Red Crescent Societies (IFRC).

"My task has always been on the ground with the people, and there is still a great deal to do here."

Later, as fate would have it, she found and "adopted" the baby with cerebral palsy, Hamoudi, who became an important anchor in her life, along with two other children, son Badr and daughter Dalal, now both in their thirties.

Found as a four-year-old among the rubble of a bombing raid on a Palestinian Camp in southern Lebanon, Dalal, who is blind, recently completed her Masters degree in Social Anthropology at Edinburgh University. She is now looking for a sponsor to further her studies in social inclusion, a concept that gets much time and attention in the Calder household.

"Inclusion – what it means and how to go about it – is a challenge internationally," Calder said.

"People have a lot of trouble dealing with differences, so we need to build on a broader dimension of similarity and not keep putting others in a box."

In early 1981, Beirut was a mess. After experiencing war and massacre, and having been held at gunpoint, imprisoned and finally expelled from Lebanon in 1983, Calder went to Cairo to continue her work with the PRCS, where she was later joined by the three children. The PRCS moved the family to Gaza in late 1995. In 2007, Calder published an autobiographical account of their perilous adventures under the title *Where the Road Leads*.

Now based in Khan Younis, in the south of the Gaza Strip, Calder continues to act as a consultant to the ever-developing work of the rehabilitation centre she established within the PRCS. Five hundred children and young adults with different disabilities receive regular services, some of which extend to other towns and villages in the Gaza Strip.

PRCS also has centres throughout the West Bank, which were being followed by Calder in her consultant role. For several years, however, she has been unable to visit these centres because, like many Palestinians, she is not permitted to cross into the West Bank.

In addition to her work with PRCS, Calder has been involved in giving lectures and presenting conference papers at local universities, and to organisations and international groups. She has also been instrumental in setting up a four-year accredited baccalaureate degree in Special Education and Rehabilitation, based on the professional program she developed to train rehabilitation workers at the PRCS centre in Cairo.

"We teach everyone that disability is behind the child, not in front, which is particularly encouraging for parents who have struggled on with little hope or support," she said. "Palestinians are often misrepresented, but my task has always been on the ground with the people, and there is still a great deal to do here."

REAL-LIFE HEROES IN HOLLYWOOD DRAMA

Dr Pat Taylor

Bachelor of Science (First Class Honours) – '54

Pat and Ken Taylor were not in the audience when their sensational story previewed at the Toronto International Film Festival. Nor were they rubbing shoulders with the glitterati as Ben Affleck's blockbuster *Argo* was named Best Picture at the 2013 Academy Awards.

Instead they were home in New York, preparing to fly to a family reunion in Melbourne, with a stopover in Pat's home town of Brisbane.

The movie is loosely based on the couple's experience as they risked their lives to protect six US diplomats during the 1979 Tehran hostage crisis. Ken was the Canadian Ambassador to Iran when Ayatollah Khomeini's revolutionary forces took control of the country, resulting in strong anti-US sentiment throughout the country. Together with consular colleagues John and Zena Sheardown, the couple hid the escapees in their home for three months.

Pat found herself grappling for cover stories when domestic staff asked why important Canadian visitors came to stay without any luggage. "In circumstances like that, you have to think quickly on your feet and tell it as you mean it," she said.

Despite Hollywood's myopic view, which has been criticised for giving unfair credit to the US Central Intelligence Agency (CIA), the Canadians took real centre stage. Ken received 112 awards for heroism, and all four (the Taylors and the Sheardowns) were awarded Canada's highest civilian honour.

Pat, played by Page Leong, appeared only fleetingly on screen, but she played a starring role in real life. She has always stood shoulder-to-shoulder with her husband during the perilous adventures that punctuate more than 50 years of marriage.

Six diplomatic assignments over 25 years have taken them to Pakistan, London in the swinging Sixties, Detroit during the 12th Street racial riots, and finally to Ottawa, Canada. Their first posting was Guatemala in 1960, as civil unrest erupted over the US invasion of Cuba. Pat emerged from rehearsal at the Guatemalan National Ballet to find she was caught out by a curfew as demonstrators and tear gas filled the streets.

"We didn't ask for the trouble spots, but there was no choice in diplomatic service postings in those days," she said.

"Tehran was seen as a plum job and trade prospects were bright. I arrived at the



Ken and Pat Taylor in New York after being presented with the "Key to the City" in 1980.

end of 1978, just months before the Shah was overthrown. The revolution came as a surprise to everyone.

"It is difficult when you see people in turmoil, but you can't participate because you are a visitor in someone else's country. You need to accept what you find and try to understand both sides."

Pat is a slight, spritely person who proudly displays her Australian roots. Performance has always been a first love for the violinist and ballerina, but is a sideline to her impressive career in medical research. Her work in bacteriology, including a study of tropical disease on Queensland's remote Palm Island more than half a century ago, earned her First Class Honours from UQ and ultimately a scholarship to Berkeley, California, where she was awarded a PhD for her 1963 thesis on *The Inter-relationship between Nutrition and Infection*. It was there that she met Ken.

A fourth-generation Australian of Chinese descent, Pat was one of 11 children and the first to go to university. She grew up in outback Ayr and moved to Brisbane, where she worked at the Queensland Institute of Medical Research (QIMR) by day and studied at night. She credits mentors, such as former QIMR Director Ian Mackerras, Q fever discoverer Dr Edward Derrick, and UQ engineering Professor Manfred Shaw, for fostering her love of science.

Pat was active in university life, playing violin in the UQ orchestra and singing in

the choir, and was secretary of the South-East Asian Students Association. She also danced with the Queensland Ballet Theatre.

"In those days, the University was small and you knew everyone. We had most of our classes in Customs House, and had a great time with everyone joining in UQ vaudeville revues and other joint activities."

At times, it was difficult for Pat to sustain her career. However, she juggled two jobs in Iran at the height of the bloodshed: Senior Consultant in Virology at the Iranian National Blood Transfusion Service and lecturer at the Iranian Postgraduate Medical Centre.

"The ordinary Iranians were the real heroes," she said.

"On the day I was leaving, I had been paid by cheque, which I could not cash. My Iranian colleagues scraped together the little money they had and Ken used that to buy plane tickets to get the embassy staff out."

On returning to the US from Iran in 1981, Pat joined the Research Institute of the New York Blood Centre, spending 14 years as Associate Director (Epidemiology) of the National Cord Blood Program, before retiring in 2007.

For the past 15 years, she has chaired the Women's International Leadership Program at International House in her adopted home town of New York.

"You can be taught a lot about leadership but, in the end, true leaders have something special inside. They understand what a situation needs and they just step up."

THE ZEN TRADER

David Hobart

Bachelor of Economics – '91



With his tailored suits, modern city office and blue-chip résumé, David Hobart fits the mould of a successful trader in the heady and often self-absorbed world of international money-making.

But press a little deeper, and those who know him well are quick to point out he is anything but stereotypical. Rather than crunching numbers in a spreadsheet and doing deals over lunch, the 41-year-old economist is more likely to be found poring over philosophy books while sipping coffee on Mount Tamborine, in his home state of Queensland.

Some call him the “zen trader”, referring to the unique point of view that sets him apart from many of his peers, and which he credits for his success as Managing Director of global macro hedge fund Blue Sky Apeiron.

In this role, Hobart’s approach focuses on the nexus between classic macro-economic theory and short-term crowd psychology to generate income for his investors.

“It is my job to track trends and to identify any disconnects in world markets, then to figure out how to make money from that,” he said.

His philosophical bent and keen understanding of human psychology are crucial planks in his business strategy.

“Markets, in the short term, are totally driven by human

emotion, by crowd psychology. I wanted to get myself in a place where I could perceive that emotion and profit from it,” he said.

Brisbane is an unlikely base for a global macro fund, but it is home for the devoted husband and father of two, who completed his undergraduate economics degree in 1991.

“I went on to a second degree in banking and finance, thinking that would be more practical, but it was my macro-economics lecturer Brian Parker who had the biggest influence on my career choice, because he was so inspiring and so passionate.”

After holding senior trading roles in Sydney, Hobart returned to Brisbane in 2005 and struck out on his own. Five years later, his business merged with Blue Sky Alternative Investments, with Hobart retaining strategic control of the global macro fund portfolio.

There is something almost lyrical in the way he describes his role on the investment scene.

“Our aim is to get in early and to be the archer, rather than the swordfighter. It is a lot more graceful and you lose a lot less skin that way, but you need to be in sync and listening to the market voice.”

BLACKBIRD SOARS

Tim Munro

Bachelor of Music (First Class Honours) – '99

After seven years, Tim Munro is still one of the newest birds in the eighth blackbird nest. Turnover has never been a problem for the group, whose eclectic brand of classical music is a must-have for fans and critics alike.

The Chicago-based sextet picked up its third Grammy (Munro’s second) earlier this year, and is about to embark on one of the most ambitious creative projects in its 17-year history.

Designed in collaboration with a composer and choreographer, the new production will see the musicians sing, speak, play and move on stage in an intricate mosaic of theatre, music and dance.

“I have never worked in quite this way before,” said the 35-year-old flautist from Toowong, in central Brisbane. “Dance and theatre open new things in me, and I expect this will totally change the way I exist as a performer.”

There is nothing new about eighth blackbird challenging boundaries. With a performance style that “combines the finesse of a string quartet with the energy of a rock band and the audacity of a storefront theatre company”, the group is building momentum at a stage when many other groups start to lose their puff.

As well as a busy tour schedule that has seen the group tour 40 US states in the past seven years alone, there are

composing and recording commitments, concert collaborations, and a musical coaching program that has instilled them as artists-in-residence at some of the most elite campuses across America.

The group’s mission – to engage new audiences in the classical music genre – binds the team of six performers and three management staff, who equally share all creative and business decision-making.

“There is no one head honcho.

All of us are involved in administrative tasks and in the creation and promotion of the brand,” Munro said.

PHOTO BY
LUKE RATRAY



“Although we are very different and intense people, we are all 100 per cent committed and all constantly thinking about programming, marketing, publicity and getting people to our concerts.”

The perennial search for audience is one of the key reasons Munro left Australia after graduating in 1999 with a Bachelor of Music (First Class Honours) and further study at the Queensland Conservatorium and Australian National Academy of Music.

“Artistically, people in Australia are comparable with the best in the world. It makes me proud to be an Aussie and I look for every opportunity to come back.

Unfortunately we simply don’t have the population for many performers to live off their art full-time.”

The group is active in the social media space and Munro tweets regularly as part of an ongoing quest to connect with contemporary audiences.

“I am the talkative bird and what I am really good at is outspoken inappropriateness,” he said.

Angela Slatter
Bachelor of Arts – '87



FANTASY STAR SHINES

Angela Slatter's head might be in the clouds much of the time, but her feet are firmly planted on the ground.

As one of Australia's emerging "speculative fiction" writers, she is best loved for her wicked takes on the contemporary adult fairy tale, which have attracted international acclaim.

In the past two years, 46-year-old Slatter has won a British Fantasy Award for Best Short Story, two Aurealis Awards for Best Fantasy Short Story and Best Collection, and a finals place in the 2011 World Fantasy Awards.

It has also been two years since she decided to throw in the security of a well-paid job, as Communications Advisor for the Queensland Department of Transport and Main Roads, to see if she could make a living by pen alone.

The former job seems out of place in a résumé dominated by service to tertiary education and the professional development of other creative writers, including three years as Membership Coordinator for the Queensland Writers Centre.

"Back in 2004, I was living in Sydney, not writing and miserable. I knew I wanted to try writing for a career and I wanted to do it before I was 40," she said.

"Out of the blue, a relative rang and offered me a granny flat in

Mapleton [on Queensland's Sunshine Coast] and, within four weeks, I quit my job and moved back to Queensland. It was hard not to be scared about chasing my dreams, but every now and then the universe gives you a hint you are doing the right thing."

Since then, Slatter has published four short-story collections – *Black-Winged Angels*, *Sourdough and Other Tales*, *The Girl with No Hands* and last year's release, *Midnight and Moonshine*, the latter of which was a collaboration with close friend Lisa Hannett. Her work has also appeared in dozens of anthologies, journals and magazines, and she has a string of technical articles attesting to her credentials as a writing coach, editor and critic.

After successfully cracking the short-story genre, she is planning to release her first novel later this year. The urban fantasy draws on one of her best-known short stories, *Brisneyland by Night*, and is currently titled *Hallowmass* in deference to an international audience. The manuscript is in the final stages of editing, with two sequels underway, along with a hectic program of lectures, celebrity appearances and murmurings of a television pitch.

"Screenwriting is all about turning emotion into action, and that isn't my gift," she said. "But if Peter Jackson wants to call me up and do something, I'm all ears!"

SECRETS TO SUCCESS

Jarrod Palmer
Bachelor of Engineering – '12

Jarrod Palmer has met and rubbed shoulders with some of the biggest names in Australian business and the community. He has explored their inspirational stories, shared a laugh and picked up some priceless advice along the way.

It is rare for a person to hold life firmly by the reins before they even win their first real job. At 21, he can already tell you where he wants to be in one year, five years ... and even by the time he is 45.

His goal is to become a leader in the industrial processing or manufacturing industries, and his first step on that ladder is a graduate position at the Newcastle operations of chemical giant Orica.

A regular volunteer at premium UQ events such as the Global Leadership Series and Courting the Greats, networking has become the secret weapon in Palmer's quest for the future. It has introduced him to career icons such as fellow engineering alumni Doctor Andrew Liveris ('75), now President, Chairman and CEO of The Dow Chemical Company in the US, and former Powerlink Chair Else Shepherd ('65), one of the first female engineers in Queensland.

"I met Andrew at the Centenary Oration

for the University where he gave a talk to about 200 people," he said.

"I wasn't sure how to approach him, but we met and I asked what advice he could give me. He said, 'You need to go away and think about where you want to end up. Once this is clear, keep attending events like this where you'll meet people like me who will help you achieve these goals.'"

Palmer has taken that advice to heart and is working to build his network, while also making a valuable contribution to the various organisations he cares about, such as the Cancer Council and Beyond Blue.

"Volunteering is a fabulous opportunity to meet the kind of really successful people I aspire to be. You give your time and have experiences you couldn't buy, even if you wanted to," he said.

"At first I was nervous about contacting people and offering to help, particularly in areas I knew nothing about, like organising major events, but people are really happy for you to get involved.

"Success is not so much about luck as it is about the choices you make in life. Volunteering is a great way of giving back and learning at the same time."



UQ REMEMBERS

The University remembers three highly talented and influential figures who passed away recently. Actor Bille Brown, print media executive Keith McDonald and artist Nevil Matthews forged remarkable careers in their respective fields, while making time for deeply valued contributions to UQ.



Bille Brown AM

11 January 1952 – 13 January 2013

Illustrious actor and writer Professor Bille Brown passed away on 13 January, aged 61.

Born in Biloela in Central Queensland, Brown completed a Bachelor of Arts at UQ and a Postgraduate Diploma of Education in the early 1970s.

More recently, he was named an Adjunct Professor in Drama.

Over the years, UQ students and staff benefited from Brown's experience as a performer across many different types of stage plays and films.

He began his career in the 1970s alongside Oscar-winning actor and fellow alumnus Geoffrey Rush ('72) in the early days of the Queensland Theatre Company (QTC).

Brown's connection with the QTC would span more than 40 years, and there is now a studio theatre named in his honour.

Brown also worked for many years with the Royal Shakespeare Company. A well-known figure in film and television, he continued to perform on the stage in Australia, the UK and the US.

In 2001, he was awarded an Honorary Doctor of Letters by the University and, in 2011, he was appointed a Member of the Order of Australia.

Brown carved out an impressive career in film, from several John Cleese films to *The Chronicles of Narnia: The Voyage of the Dawn Treader*. He was also familiar to Australia television audiences, with notable roles in *Rake*, *Curtin*, *Grass Roots* and *Wild Boys*.



Keith McDonald OBE

24 February 1926 – 30 November 2012

Doctor Keith McDonald, the inaugural Chair of the editorial board of this magazine, formerly known as *Graduate Contact*, passed away in November last year.

The son of a southern Queensland dairy farmer, McDonald won an Archibald Scholarship in 1944 to study commerce at UQ, graduating in 1949 with First Class Honours, a University Medal and a government gold medal for outstanding merit.

Following graduation, he worked as an investment advisor and stockbroker before entering the newspaper business. He worked as a finance writer and editor for *The Courier-Mail*, moving up through the ranks to eventually become a director and chief executive of Queensland Newspapers. He served as a director of News Corp from 1987 until 1998 when he retired.

As well as his long stewardship of *Graduate Contact*, McDonald was a member of the board of governors of The University of Queensland Foundation, and a member and treasurer of the King's College Council for more than 40 years.

Jack Lunn, former Chair of the *Graduate Contact* editorial board, said he drew heavily on McDonald's style.

"The words 'meticulous' and 'thorough' were what you thought of when you thought of Keith," he said.

The University paid tribute to McDonald by awarding him an honorary Doctor of Philosophy in 1998. He was also appointed Officer of the Order of the British Empire in 1989 for services to the print media industry.



Nevil Matthews

19 April 1930 – 4 January 2013

Respected Queensland artist Nevil Matthews passed away on 4 January this year, leaving an enduring legacy at UQ's St Lucia campus.

Matthews designed the famous coloured-glass windows in the UQ Art Museum, which were installed in 1972 when the building was known as Mayne Hall – UQ's graduation hall for many years.

He was born in Ayr, North Queensland, in 1930, and later studied at the Brisbane Central Technical College (1948–50). He became one of a group of young artists who gathered around influential painter Jon Molvig at his Kangaroo Point studio in the 1950s.

He later studied with sculptor Clement Meadmore and spent time working in London and travelling throughout Europe in the 1960s.

In a 1973 interview with Liane Maxfield for *The Australian Women's Weekly*, Matthews described the windows as "a movement in refracted light".

"The thickness, broken surface and cut edge of [the] dalle de verre [used in the windows] gives the glass a rich translucence not found in traditional stained glass," he said.

The windows were sponsored through a donation from Mr and Mrs Errol (Barney) Joyce, of Eidsvold Station in the Burnett district of Queensland.

Matthews's contribution to the promotion of contemporary art in Brisbane is well recognised, and his contribution to UQ will be enjoyed for generations to come.

INDUSTRY CONNECTIONS: THE KEY TO SUCCESS

Strong industry relationships are an important component of any high-performing university, with far-reaching impacts not only for the university but also for industry, government and the wider community.

There is no doubt that successful universities are an integral part of every successful nation. They are a leading contributor to Australia's economic, social and cultural wellbeing. The high quality of graduates and research undertaken at Australian universities helps solve global problems and positions us to meet the challenges of the future.

Research conducted for Universities Australia last year found that more than 90 per cent of individuals and businesses consider that universities make an important contribution to Australian society.

The inaugural Excellence in Innovation for Australia trial conducted in 2012 found that a number of UQ research projects have delivered outstanding economic, social and environmental benefits to the nation.

Such projects include the Gardasil vaccine, which protects against human papillomavirus and cervical cancer; the award-winning "Triple P" Positive Parenting Program; and the GroundProbe Slope Stability Radar, which is helping to improve mine safety around the world.

President and Vice-Chancellor Professor Peter Høj said universities were "the key to keeping Australia strong".

"Australia has one of the finest university systems in the world and we are becoming increasingly aware of the role of our universities for the long-term wellbeing of the nation," he said.

It is perhaps surprising then that Australia, one of the strongest economies in the world, ranks 25th out of 29 developed economies for public investment in higher education.

Despite this, Australian universities are ranked amongst the best in the world. In the 2012 Academic Ranking of World Universities, Australia had the third highest number of universities in the global top 100, including UQ.

The 2012 Excellence in Research for Australia assessment found 100 per cent of UQ's assessed research fields were at world standard or above, with 80.5 per cent above or well above world standard.

Support from industry, as well as from governments and private benefactors, has assisted UQ in its continued pursuit of excellence. For example, collaborations with industry partners such as The Dow Chemical Company and Rio Tinto have enabled UQ to conduct research on a scale that would have been difficult to achieve alone.

However, Professor Høj said there was more to be done.

"If we are to progress further to be amongst the very best, let alone consolidate our position, we will need even stronger partnerships and enhanced investment from partners and alumni alike," he said.

An example of an initiative that is delivering significant benefits back to industry is the Geotechnical Engineering Centre at UQ, which officially opened last year.

Supported by funding from a consortium of industry partners including Rio Tinto, Anglo Gold Ashanti, BHP Billiton and Golder Associates, the centre offers dual majors in civil and geotechnical engineering and mining and geotechnical engineering, both of which are unique in Australia.

Martyn Robotham, Chief Advisor, Geotechnical at Rio Tinto, said the centre was helping to address a specialist skills shortage in geotechnical engineering.

"The centre will create high-quality graduates in these key disciplines in Australia," he said.

"Previously, most companies would have had to look at the much more expensive, offshore option.

"Now we are going to have the capability of generating graduates from an Australian university for Aussie operations, which will be a great step forward."

The centre is part of a five-year, \$2.5 million Education Partnership Agreement with Rio Tinto, which is designed to create a sustainable mining industry, not to mention a future pipeline of graduates. Rio Tinto also provides financial support to new UQ academic staff through its Future Mining Academics Program.

Robotham said Rio Tinto's collaborations with UQ were mutually beneficial.

"The realisation for Rio Tinto was that if we support and build capacity at UQ, ultimately it comes full circle back to us," he said.

"And obviously, with Rio Tinto being engaged, our name is at the fore with the students, and maybe they'll consider us to try-out when they are ready for a job. It's really a win-win situation."

To support high-quality graduates, global engineering, construction and project management firm Bechtel is one of many industry bodies that provides scholarships for UQ students. To complement this, Bechtel offers a four-year graduate pathway program that allows graduates to further enhance their knowledge and capabilities in their chosen fields.

Bechtel's Asia Pacific General Manager Shaun Kenny said the company's investment in scholarships at UQ was about "pushing the next generation of talent along to benefit industry".

"It is in both Bechtel's and the University's mutual interest to see well-equipped people entering our marketplace," he said.

Professor Andrew Griffiths, Dean of the UQ Business School, said the desire to secure high-quality graduates was one of the key attractions for industry partners to work with the University.

"Industry is seeking these relationships as a way of securing high-quality human capital for their businesses," he said.

"We find that the same companies that work on projects with us come back to us



because of the quality of outcomes, both research and graduates. If they know that the quality is here, they'll come back."

He said the other key drawcard for industry was universities' capabilities to solve problems and address specific industry needs.

"Whether it be strategic needs or a particular engineering problem, universities are ideally suited to that.

"What we present is unbiased; it's impartial; it's empirically driven. There is no real agenda in what we are showing through our data and our analysis."

At last year's Business Higher Education Round Table Awards, the Sustainable Management Alliance in Research and Teaching (SMART) was recognised for Outstanding Excellence in Collaboration.

Run by the School of Geography, Planning and Environmental Management (GPEM), the program has had great success in connecting industry, government and community groups with the University's experts and students to address business sustainability issues.

Since SMART's inception, UQ students have identified millions of tonnes of potential greenhouse gas emission reductions for SMART's industry partners, including Billabong International, LCR Group, Groundworks, Low Carbon Australia, carbonjobs, Virgin Australia and the Queensland Murray Darling Committee.

GPEM Senior Lecturer and Director of the SMART group Dr Paul Dargusch said the program provided a "win-win outcome".

"Our students benefit from real-world experience, and partners have access to expert advice and high-quality research capability," he said.

Griffiths said alliances such as this were becoming increasingly common and creating a perfect environment for innovation.

"We are driving increasingly towards a tighter coupling of relationships between industry and universities, particularly locally, whether they be industry or industry associations.

"I'm not saying that these industry groups control the research agenda, but it's certainly a much more focused relationship on dealing with current issues and problems.

"Industry partners are proactively seeking out UQ as a strategic university partner because we deliver high-impact research and produce top graduates."

"It's the tension between industry and universities that creates a nice hub for innovation. Innovation then drives your knowledge, developments and insights," he said.

Professor Høj said innovation was critical to Queensland's future growth and prosperity, which in turn would benefit students and alumni.

"As a global top 100 university, UQ is ideally positioned to contribute to a more confident and competitive Queensland, where joint investments will support a nation-leading innovation culture and, as a result, a more resilient economy.

"A prerequisite for industry involvement is that we demonstrate world-leading capacity. Industry partners are proactively seeking out UQ as a strategic university partner because

we deliver high-impact research and produce top graduates.

"The rewards for UQ students and alumni include access to internships and employment with leading international firms, with prospects of working overseas and helping tackle global challenges," he said.

Robin Levison, Global Director, Strategy, Mergers and Acquisitions at GE Mining and MBA alumnus ('10), said Queensland's growing international profile, largely driven by the resources boom, was already benefiting students and alumni right here in Queensland.

"What we're seeing is a real focus and concentration from the major players in allocating resources here and setting-up, and I would say internationalising, Brisbane and Queensland as the global headquarters for certain mining activities," he said.

"I really think it has helped from a recruitment point of view, and secondly, I think it has helped the students coming out of UQ, or any uni to be honest, get a far quicker global understanding of what's going on in the world, and also perhaps a level of training in large company process and function that they wouldn't have got a decade ago.

"I am very enthusiastic about Brisbane and Queensland and its place globally and in the community," he said.

No matter which way you look at it, it's clear that UQ's success in attracting industry support and investment is vital, not only for the University, but also for the wider community.

Professor Høj said UQ was committed to building and strengthening its industry connections.

"We are in the process of forming an industry council to assist us in connecting external stakeholders with academics across our 30 identified research capabilities of undisputed world-class standing.

"It is going to be exciting," he said.

RECOMMENDED READING FROM UQP

Established in 1948, UQP is a dynamic publishing house known for its innovative philosophy and commitment to producing books of high quality and cultural significance. It has launched the careers of many celebrated Australian writers, such as David Malouf, Peter Carey, Kate Grenville, Doris Pilkington and Nick Earls.

Originally founded as a traditional university press, UQP has since branched into publishing books for general readers in the areas of fiction, non-fiction, poetry, Indigenous writing and youth literature.

UQP's books and authors have received national and international recognition through literary prizes, rights sales and writers' festivals.

From 2010, UQP has been meeting the challenges of a changing publishing landscape by releasing selected out-of-print titles in digital formats, in addition to the digital and print publishing of new books.

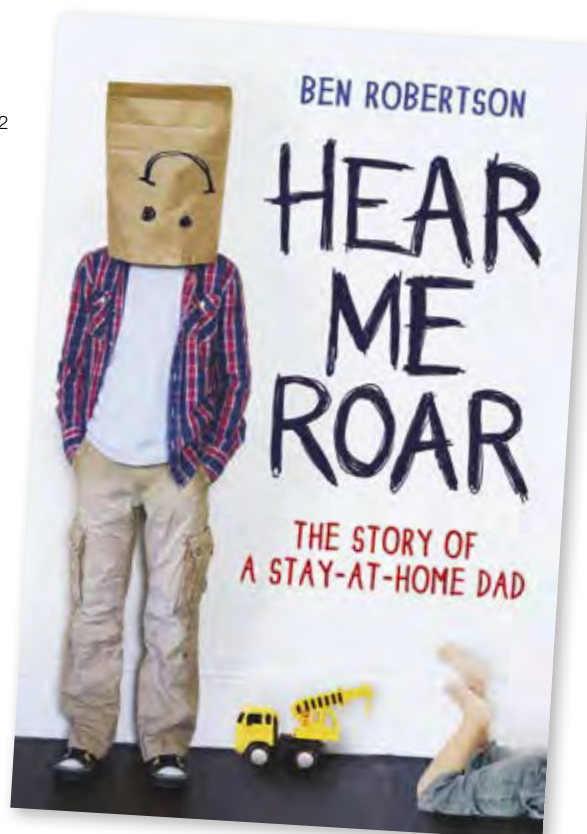
To purchase any of these books, visit uqp.com.au

Hear Me Roar

Ben Robertson

Reviewed by Susan Bush – Master of Arts '12

In his strikingly candid memoir, Robertson captures the joy and indelible heartbreak of home-parenting with a sense of humour and candour that will resonate with mums and dads everywhere. He recognises parenting as something equally thrilling and soul-destroying, articulating the duality of the most challenging role in the world with a remarkable clarity that focuses on the unexpected fear and shame found embedded in the job description. But while the book is both humorous and entertaining, it also serves as a cathartic process for the author, who strives to balance the privilege of his position with an immobilising fear of turning out like his own domineering and oppressive father. While not every parent succumbs to the depression that Robertson subsequently experiences, his struggle with isolation and self-fulfilment should be familiar to many. The daddy of all parenting books, *Hear Me Roar* is a revelation for stay-at-home parents and a must-read for their partners.



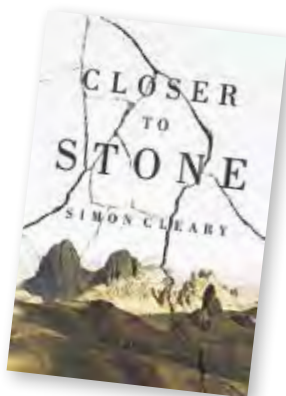
Closer to Stone

Simon Cleary

Bachelor of Arts, Bachelor of Law – '91

Simon Cleary's second novel follows sculptor Bas Adams as he travels to the Western Sahara to hunt down his older brother Jack, who has abandoned his post as a UN peacekeeper and disappeared.

In the barren desert, Bas is far outside his comfort zone, both emotionally and



Reviewed by Bill Burmester – Master of Arts student

physically. He is exposed to the complicated religious politics of the region and gradually realises his own latent racism. Cleary builds the tension perfectly, and Bas's naiveté is exacerbated by the ominous desolation of the setting.

The second half of *Closer to Stone* does not reach the same

heights of tension as the first, but is deeply thought-provoking. What begins as a quest to rescue a lost brother becomes a meditation on family, religion and acceptance. *Closer to Stone* is a beautifully written and evocative book, which will appeal to anyone with an interest in the world at large.

Kitchen Table Economics & Investing

Damian Lillicrap

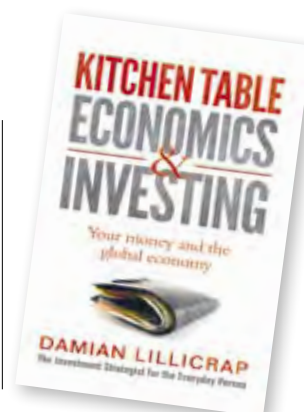
Bachelor of Engineering – '88

Reviewed by Angie Andrewes – Master of Arts student

According to a *Sydney Morning Herald* article on the National Youth Survey (2012), when it comes to the future, the economy is a top concern for young Australians, above health and the environment. But how much does the average person actually understand about how the global economy works and how

it affects us as individuals? This is the knowledge gap Damian Lillicrap seeks to fill with his new book, *Kitchen Table Economics & Investing*. Current Head of Investment Strategy for QSuper, Lillicrap draws on his expertise to explain the basics of economics in terms that everyday people can understand. But the value of this book really lies in what it can

teach us all about investing our money wisely and planning for a future that is more uncertain than we may realise. A timely read as our country moves towards an election, *Kitchen Table Economics & Investing* is straightforward and easy to follow, and a book everyone should be putting on their reading lists this year.



REMEMBER WHEN



LAYING THE FOUNDATIONS

The Forgan Smith Building and the Great Court, constructed during the 1930s and 1940s, are UQ icons and the heart of the University's St Lucia campus.

The Forgan Smith Building is a UQ icon and one of the most impressive pieces of architecture in any Australian university today.

Designed by architects Hennessy, Hennessy & Co, with initial cost estimates of £1 million, the building's construction began in 1937 as part of the Great Court complex at the new St Lucia campus.

The plan included the Main Building (now the Forgan Smith Building) to accommodate the faculties of Arts, Commerce and Law and the University's administration offices. The 299-metre-long building was designed with a six-storey, 22.7-metre-high central tower to house a carillon of bells, splitting the western Law wing and eastern Arts wing, with the building flanked on each end by the Library and a Great Hall (the latter of which was never built).

At its rear was a double arc of buildings to accommodate Chemistry, Geology, Physics, Biology, Architecture, Veterinary

Science, Anatomy, Physiology, Engineering and the Student Union. The D-shaped Great Court was positioned on top of a small hill, the high point in the bend of the river, to give the best views and to be above flood level.

Construction continued until 1942, at which time the Main Building, the Library and the Chemistry Building were almost complete. During the Second World War, the complex was taken over for General Blamey's Advanced Land Headquarters and was central to the Allied fight against the Japanese in the Pacific.

Restoration for University use took place between 1944 and 1948, when the first students began to use the buildings, and the move from the old inner-city George Street campus was completed in the early 1950s. The Main Building was renamed after William Forgan Smith in 1967 to commemorate the ex-Premier of Queensland's vision to begin construction of the St Lucia campus,

and his Chancellorship of the University (1942–1953).

With its exaggerated entrances, the Forgan Smith Building is a striking example of a large and well-executed inter-war stripped classical style, with a nod to 1930s art deco. The Great Court buildings were constructed with granite from Greymare, near Warwick, and Samford; sandstone from Helidon; and marble from Bajool, south of Rockhampton. The mix of violet, lavender, cream and brown sandstone has created a mottled but beautiful unified core for the St Lucia campus.

The Forgan Smith and other Great Court buildings are a potent statement of the importance of tertiary education. They were a huge 1930s–1970s investment in the future of the State and its citizens, in a manner never before attempted. With their completion, Queensland came of age after a century and a half of European settlement. The Great Court is now the heart of our world-class, global university.

FROM UQ GRADUATE TO GRAMMY® WINNER

Winning a GRAMMY® is a dream many musicians hope to realise. UQ graduate Tim Munro can add this to his list of triumphs – for a second time. Together with his ‘eighth blackbird’ ensemble members, the flautist and self-confessed music nerd recently received the award for Best Chamber Music/Small Ensemble Performance.

While studying a Bachelor of Music at UQ, Tim spent countless hours refining his craft, developing his knowledge and learning from some of the best teachers. Since graduating with first-class honours, Tim’s noteworthy accomplishments include playing with the Queensland Symphony Orchestra, as well as performing solo at the Melbourne Festival, the prestigious Carnegie Hall, and Washington’s Kennedy Center. He has also taught and held residence at several American universities and is now based in Chicago.

These achievements are made possible through the combination of our world-class facilities, leading programs and inspiring teachers. Imagine the difference having access to all of this could make to you.

YOUR UQ. YOUR ADVANTAGE.