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CALENDAR OF EVENTS

2014

20 DECEMBER 2014
MBBS Year 4 Graduation Ceremony
UQ Centre, UQ St Lucia Campus, Brisbane

2015

3 FEBRUARY 2015
MD Year 1 Welcome Event
UQ Centre, UQ St Lucia Campus, Brisbane

1-3 MAY 2015
Class of 1985 30, Year Reunion
Outrigger Resort, Little Hastings Street, Noosa, QLD

14 FEBRUARY 2015
Class of 2004 10, Year Reunion
Brisbane

10 OCTOBER 2015
Courting the Greats, UQ Alumni Awards Event
Brisbane

22 FEBRUARY 2015
The Battle Against Ovarian Cancer
Sandstorm Beach Club, Queensland Sports and Athletics Centre, Mount Gravatt, Brisbane

NOVEMBER 2015
MBBS Year 4 Farewell Event
Brisbane

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We are always looking for interesting stories to feature in the UQ Medicine Magazine.

Published twice a year, July electronic and December printed, this magazine is a key device for communicating with our alumni, staff, students and stakeholders of the UQ School of Medicine. Circulated to about 8700 alumni, 2550 staff (paid and volunteer) and 1800 students, it is the largest publication of its type in Queensland. It is distributed to alumni living in Queensland, and more than 15 countries world-wide.

UQ’s School of Medicine network has many extraordinary individuals and we would love to tell your story.

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The year is drawing to a close, the graduating class is starting celebrations, and the School’s staff are looking forward to a well-deserved break after a very busy and challenging year. Without doubt, the most important event of the year was the accreditation review of the School and our new MD program by the Australian Medical Council (AMC). I am delighted to report that the AMC Directors agreed that accreditation of the existing MBBS and the new MD program was confirmed for the maximum six-year accreditation period. The AMC commended the School in a number of areas, most notably for demonstrating its capacity to deliver a consistent teaching program to its large student cohort, the impressive physical facilities across most teaching sites, our attention to objective analyses across the School to monitor student outcomes, our improvements in assessment strategies, the on-line paediatric program, the Ochsner/New Orleans project and the transformation of the anatomy program. I wish to thank all of our staff and teaching partners who contributed to this substantial review.

Coincident with the AMC review has been the development of the MD program. The first cohort entering the MD will commence studies in 2015. In the context of the MD, all entering students will have completed an undergraduate degree. The school leaver’s pathway for entry into UQ Medicine will continue. There is no defined pre-med degree, but students are recommended to undertake a number of courses within their undergraduate degree to prepare them for the medical program. The new MD program is characterised by a strong focus on the clinical sciences, early engagement with the clinical environment, enhanced teaching of research methodology and greater opportunities for intercalated research higher degrees either within the School or with any of the UQ schools/research institutes affiliated with the School of Medicine. We are looking forward to establishing an MD/MPH program with the School of Public Health and we are in discussions with the Business School regarding an MD/MBA degree.

The time line at the bottom of this page illustrates the other major activities undertaken by the School this year. The dividends of the faculty restructure are starting to emerge as the School and Faculty work more closely to reduce duplication and inefficiencies, mitigate risk and increase collaboration between teaching and research institutions. The UQ Ochsner Clinical School goes from strength to strength with accreditation of the program by the Californian Registration Board being a major landmark event. Indeed, the Ochsner program drew four commendations from the AMC review. The School has experienced the loss of senior professional staff with the resignations of Mr Phil Berquier and Ms Katrina Tune – both of whom served the School with great distinction. Following an extensive interview process an offer has been made to a new School Manager due to start in the new year. As most are aware the MBBS/MD program will cease being taught at the Ipswich campus in the next couple of years and the School is well into the process of planning for this withdrawal.

Thus, this busy year hastens towards its concluding event being the graduation ceremony in this month. I wish the graduating class all of the best for their future endeavours and I want to thank all of our teachers who exist in many different health environments for their continued support of the School and their contribution towards producing the very fine graduating class of 2014.

Best wishes,
This will be the last update before UQ introduces the Doctor of Medicine (MD) program in 2015. This is a four-year postgraduate entry program, which will replace the current four-year Bachelor of Medicine/Bachelor of Surgery (MBBS) program. 

We are very grateful to our staff, students, alumni and Academic Title Holders who have contributed to the development of the program. The MD program is more clinically focused and equips our students with research skills that will serve them as evidence-based clinicians. 

The School has created an MD FAQ website for all our stakeholders, which aims to answer some of the questions you might have, including:

- Why change the MBBS to the MD?
- What research opportunities will the MD provide for both students and health services?
- Will students have to pay to do this program?

Get answers to these questions and more at the MD FAQ website [www.som.uq.edu.au/staff/md-program-faqs](http://www.som.uq.edu.au/staff/md-program-faqs).
The School of Medicine and UQMS is proud to announce the winners of the 2014 Award for Excellence in Clinical Teaching and the Clinical School Teaching Awards. These awards are student nominated and below are comments from those students about the award recipients.

THE AWARD FOR EXCELLENCE IN CLINICAL TEACHING

Royal Brisbane Clinical School
Associate Professor Leo Nunnink,
Associate Professor Kersi Taraporewalla and the Royal Brisbane and Women’s Hospital Critical Care team

This year the Award for Excellence in Clinical Teaching was not given to an individual but to the RBWH Critical Care team for their simulation-based training program, which forms one component of the Critical Care course. The simulations are designed to create an appropriate level of anxiety in performance to increase learning from the various situations of being on call or responding to patients arriving to the emergency department. Each simulation is accompanied with an appropriate debrief designed to understand the care, hospital processes and the various elements described. The simulation-based teaching has the advantage of being deliberate rather than opportunistic, it is standardised and safe as it does not directly affect human patients, and produces reflective learning. The simulation-based learning is supplemented by learning from patient care, which is opportunistic, but involves direct care and clinician involvement. Student feedback has always been positive and the students in general would like to have more simulation.

CLINICAL SCHOOL TEACHING AWARDS

Royal Brisbane Clinical School
Associate Professor Kersi Taraporewalla, a Consultant Anesthetist at the Royal Brisbane and Women’s Hospital

“Have there also been countless instances in which Associate Professor Taraporewalla provided my fellow students and me with great clinical teaching on the fly. His best examples of devotion to student learning would be the simulation days run for students at the RBWH during the Critical Care Rotation.”

Greenslopes Clinical School
Dr Barry Hickey, a Consultant Respiratory Physician at the Greenslopes Private Hospital.

“Dr Hickey unsparingly shared his knowledge and experiences at every opportunity with us. He not only set the example of how to be a clinician with solid understanding of disease process but encouraged students to build rapport with patients to bring better outcomes of the treatment.”

Dr Glen Wood, a Consultant Urologist at Greenslopes Private Hospital.

“Dr Wood is a great teacher and cares for his students. His VOPPS are well done and he is very funny and willing to make time for students.

He would come to tutes excited to teach, has a fantastic ability to make a comfortable atmosphere where people could freely give their own opinion, which encouraged input from everyone.”

PA-Southside Clinical School
Dr Raman Parthasarathy, a Psychiatrist at Princess Alexandra Hospital.

“Dr Raman is an enthusiastic and approachable teacher who has inspired my learning in the subject. He is encouraging and supportive, and provides valuable, constructive feedback in a way that motivates students to actively make improvements.”

Ipswich Clinical School
Dr Wayne Harris, a Paediatrician at Ipswich Hospital.

“Dr Harris is an enthusiastic clinical teacher who goes out of his way to provide quality teaching to medical students in paediatrics, is a masterful storyteller and his depth and breadth of knowledge ensured there was never a dull moment during his teaching sessions.”

Rural Clinical School
Ms Julie Bennett, a Lead Clinical Educator (Clinical Skills and Simulation) at Rural Clinical School Hervey Bay.
Recognising the need for nutritional considerations in medical education and practice

Nutrition is vital to the maintenance of health and the prevention of disease. Poor nutrition contributes to the development of disease and progression to complications, often requiring substantial medication, longer hospitalisation periods and increased healthcare costs. Research demonstrates inadequate emphasis in medical school curricula as the primary reason many doctors don’t feel equipped to discuss nutritional issues with their patients, despite recognising its importance in the maintenance of health. Doctors could effectively reduce the burden of disease if they had skills in nutritional risk management as patients listen to doctors.

The School has been piloting the integration of a variety of nutrition-based sessions into first and second year medical education since 2011. In 2013 a federally-funded national collaborative project was in the pipeline, lead by Deakin University in collaboration with UQ, Monash and the University of Tasmania. The project aims to develop a web-based nutrition competency implementation toolkit (WNCIT) to be made available for all medical schools around the country to use. Medical schools curricula can initially be mapped to a Nutrition Competency Framework to assist in identifying relevant gaps, which will then link to suitable resources available both online and within the toolkit. Further information about this project is available at www.wncit.weebly.com

Dr Jennifer Schafer (Director, Medical Program) and myself have been working on a nutrition integration project since its initial inception here at UQ and are delighted with continuing extensions both in house and nationally. In line with the new MD program, set to commence next year, nutrition will be taking more of a front seat with vertical integration intended throughout the various modules.

The rising level of lifestyle diseases such as obesity and type 2 diabetes are a major public health concern which needs to be addressed in primary health care and should be a priority. Conditions which were once minimal, particularly in children and adolescents, are becoming more and more common with poor diets and sedentary behaviours. Any nutrition resource contributions from the School’s esteemed academic community are welcome. Please direct enquiries to n.schoendorfer@uq.edu.au

About Dr Niikee Schoendorfer

Dr Niikee Schoendorfer is a clinical nutritionist, nutritional biochemist and research fellow in the School of Medicine. As an academic, she lectures extensively within tertiary institutions over a number of related disciplines and also in the corporate sector to the general public. Niikee is passionate about disseminating accurate evidence based nutrition information with hope to improve overall diet and lifestyle habits, in turn increasing the health and happiness of our population.
Medical students from UQ Rural Clinical School in Bundaberg were given the inside story on plastinates, an art that gives a unique window into the human body.

World renowned expert, Professor Tony Schneiders, Discipline Lead Physiotherapy at the School of Health, Human Sciences and Social Sciences at CQU said, “The plastinates truly facilitate state-of-the-art teaching in anatomy never made possible before. The collection of plastinates came from Professor Gunther Von Hagen’s Plastinarium in Guben, Germany. “The dissection and preservation techniques perfected by Von Hagen, the inventor of plastination, are world class and the level of detail is exquisite, guaranteeing a real student experience second to none. The longevity of the plastination specimens guarantees that this exceptional student experience will continue for decades to come,” Professor Schneider said.

Mr Robbie Boyes, a world expert in plastination, studied under Professor Von Hagan at Heidelberg University and continues to work in this field. He now heads Boyes Consulting which assists universities globally to establish Plastination Labs and train their staff. Mr Boyes was with UQ for 18 years, during which time he established the Anatomy Museum and Learning Centre under the then Anatomical Sciences. He also established the UQ Plastination Laboratory in Clinical Sciences, a joint project between the two faculties which operated for 15 years.

A UNIQUE WINDOW INTO THE HUMAN BODY
Alumnus appointed chancellor of prestigious US institution

Distinguished UQ medical alumnus Dr Sam Hawgood has been appointed the 10th chancellor of the prestigious University of California San Francisco (UCSF).

UQ Vice-Chancellor and President Professor Peter Høj congratulated Dr Hawgood, who is renowned for his research into the care and treatment of sick and premature babies and became UCSF School of Medicine Dean in 2009. “Sam’s selection to lead one of the world’s most prestigious, research-intensive universities is a momentous achievement and endorses his humble, collegial and grounded leadership style,” Professor Høj said.

“Under his stewardship of the School of Medicine, UCSF was ranked second in the world in clinical medicine and pharmacy by the Academic Ranking of World Universities in 2013. UQ follows Sam’s progress with pride, but we also acknowledge that the development of great alumni is a partnership extending over many decades, and that Sam credits values learned from his parents for much of his success,” he said.

“We are honoured to have someone of Sam’s calibre as a UQ alumnus, serving, making a widespread and enduring impact, and winning deserved recognition in the global arena. He is one of many outstanding members of our 210,000-plus alumni network who are demonstrating knowledge leadership, and making a difference that enhances society and inspires individuals worldwide.”

ABOUT DR SAM HAWGOOD
Dr Hawgood grew up on the Redcliffe Peninsula and attended the Anglican Church Grammar School. He graduated from the UQ School of Medicine in 1975 (MBBS First Class Honours) and was awarded an honorary doctorate by the University in 2012.

Before joining UCSF in 1982 as a Research Fellow, Dr Hawgood’s experience in Australia includes being a Resident at the Southport Hospital on the Gold Coast in 1976, a Paediatric Registrar at Royal Children’s Hospital in Brisbane between 1978 and 1980, and a Neonatal Fellow at Queen Victoria Medical Centre in Melbourne in 1981.

Prior to accepting the interim Chancellor’s position in April, Dr Hawgood was Dean of UCSF’s School of Medicine and Vice Chancellor of Medical Affairs. Under his leadership, the UCSF School of Medicine became the top medical school in the nation in research funding from the National Institutes of Health (US$439.6 million in 2013), with many of its departments also leading the nation in their fields.

He is a member of the American Academy of Paediatrics and the American Association of Physicians, and in 2010 was elected to the Institute of Medicine (IOM), which provides authoritative advice to US Congress, other decision makers and the public as part of the National Academy of Sciences.

UQ leads national healthcare review

Alumnus and Professor of Primary Care Research Professor Claire Jackson was appointed to lead an Australian Government review of after-hours primary healthcare services.

The former President of the Royal Australian College of General Practitioners and former Head of UQ’s Discipline of General Practice said the review considered the operation of after-hours services when the Medicare Local arrangements ended in June 2015.

“The review provided recommendations regarding the appropriate and effective delivery of after-hours services nationally,” Professor Jackson said.

The review was recommended in the Australian Government’s March 2014 Report into Medicare Locals. Its terms of reference was to seek to clarify the role of general practitioners in after-hours arrangements, policy implications, delivery strategies, infrastructure support and engagement with the private sector.

Professor Jackson said the process provided a unique opportunity to review and improve delivery of after-hours services at a national level.

“Primary care reform is a complex and fluid focus and this work combines with other recent reviews to ensure all communities receive high-quality and accessible health services. The review will also offer opportunities to identify and encourage innovative practice. Consumer needs and the challenges experienced in rural and remote regions will be examined as well as previous evaluations of the current program,” Professor Jackson said.

The report was delivered to the Government on the 31 October 2014. Professor Jackson is a general practitioner and student supervisor at Camp Hill Health Care and primary health care at UQ’s School of Medicine.
Re-examining learning through ‘adaptive learning’ tools  
By Mrs Kym Ward

A lot is changing in medical education. Technological change is causing desired University graduate attributes to be refined and innovation, which remains central to the School’s vision, is being expressed increasingly through adaptive technologies. These technologies empower students and enhance learning by offering ‘different content to learners, based on an assessment of what they seem to know’ (EdSurge, 2014), and according to Barrett (2005),

‘students are more likely to engage with course content if they take responsibility and ownership for some of the content, purpose and process.’

Rapid authoring tools, such as iSpring Pro and Articulate Storyline can be used to create personalised branched learning pathways that provide differentiated instruction, which is dependent on student response to a question, liken it to a ‘choose your own adventure’ style book. There are potentials for academics to integrate ‘flipped’ classrooms where students take more responsibility for their own learning and lessons focus on concept exploration, demonstration or application of knowledge.

The affordance of adaptive learning technologies is anytime-anywhere, and provides opportunities for academics to redefine teaching and learning practices to tailor lessons to student needs as well as providing a flexible pace for learning (Cavanaugh & Liu, 2013).

Benefits of using adaptive tools include: rapid feedback, self-paced learning, stimulation of higher-order thinking and reflection.

Interactive cases have recently been trialled and incorporated into the curriculum of UQ’s Paediatrics, Critical Care and O&G. In the discipline of O&G, branching scenarios require students in their own time to complete a case and then attend a one hour face-to-face tutorial to review findings and clarify any misunderstandings. Students are given rapid-feedback to each answered question and the results are retained within the grade centre of the university’s learning management system Blackboard. This integration ensures grades are centrally stored for review by teaching staff and students.

Please direct enquiries to k.ward1@uq.edu.au

ABOUT MRS KYM WARD

Mrs Kym Ward is a QUT graduate and has been working in education for more than 9 years. She is currently completing her Masters of Education in ICT (QUT). She coordinates all eLearning activities within the School of Medicine. She is working with various disciplines on reinvigorating their clinical case scenarios to enhance the student learning experience using adaptive technologies. She has a holistic approach to eLearning management and the intelligent application of these technologies.

SUTURING WORKSHOP

Medical residents have had access to the first suturing workshop of its kind at the PA Hospital. The workshop engaged interns and residents as an education opportunity to give them the chance for some supervised practise of basic surgical skills such as instrument handling, suturing, flaps and grafts, and microsurgery.

Dr Michael Wagels and five other members of the PAH Plastic Surgery faculty were able to inspire 12 participants to spend their Friday evening practising varied suturing techniques.

The positions available for the workshop filled up within 24 hours. In fact, the workshop was oversubscribed when applications closed indicating the level of interest and demand for this kind of learning opportunity.

With six faculty members from plastic surgery supervising, the ratio of faculty member to participant was 1:2 so the opportunity was more than just spending the evening suturing pigs, trotters.

Dr Wagels said pigs, trotters are an ideal model for practising suturing because pig skin was very similar to human skin and for the microsurgical component, the workshop used the nerves and vessels of whole chicken carcasses.

The team hopes to run the workshop four times per year targeting registrar and student levels as well.
NEW CHILDREN’S HOSPITAL OPENS ITS DOORS

The Lady Cilento Children’s Hospital opened its doors and welcomed its first patients and families on Saturday, 29 November 2014. The Lady Cilento is the largest and most advanced paediatric facility in Australia, serving as the single specialist paediatric hospital for Queensland children.

Children’s Health Queensland Board Chair Susan Johnston said it brought together the people, expertise and excellence of the Royal and Mater children’s hospitals, who together share more than 200 years of excellence in caring for children and young people.

“This purpose-built facility has been designed with the needs of young patients and their families in mind, and will allow our staff to deliver an enhanced level and quality of family-centred care that has not previously been possible. For example, open and naturally-lit environments; outside views from inpatient areas; a majority of single rooms with ensuites and provision for parents/carers to stay overnight; a family resource centre; a pet-visiting area and several roof-top gardens aim to make a hospital stay as comfortable, stress-free and pleasant as it possibly can be for patients and their families,” Ms Johnston said.

The Lady Cilento Children’s Hospital is also the new hub for the School’s Discipline of Paediatrics & Child Health, located on level 7. It is expected there will be between 50-60 students at the Lady Cilento rotating between this tertiary centre and other near metropolitan centres.

A ‘virtual tour’ of the Lady Cilento Children’s Hospital can be viewed at www.health.qld.gov.au/childrenshospital

GOVERNMENT GRANTS SUPPORT INTERNATIONAL STUDENT MOBILITY

UQ medical students will travel to China and India to gain valuable clinical experience thanks to assistance grants from the Australian Government’s Department of Education. The Mobility Grants provide funding to eligible Australian higher education providers to support their Australian students to undertake short-term international mobility experiences in eligible destinations throughout the world.

The School’s International Partnerships and Global Development Manager Ms Elise Moore said the grants’ purpose was to increase the overall number of students with first-hand international experience related to their field of study.

“They also aim to increase collaboration and deepen relationships between higher education institutions in Australia and the participating organisations. These mobility grants are very competitive and we are extremely lucky to have received two, a Short-Term Mobility Grant to China and an AsiaBound Grant to India. This opportunity will allow our students to experience medicine in a global setting and expose them to clinical situations not available here in Australia,” Ms Moore said.

Five first year medical students will each receive $2,000 to participate in the School’s China Study Tour and the School will receive $1,500 to support the program and enhance the collaboration with their China partners. Students will be hosted by the Second Military Medical University (Shanghai) and Capital Medical University (Beijing), and will be exposed to a different medical discipline each week, for four weeks. Another group of three first year medical students will also each receive $2,000 to participate in the Manali Medical Aid project.

This unique project was founded in 2007 by a group of UQ medical students who saw the need to support the Lady Willingdon Hospital, a charitable hospital in the town of Manali in the Indian hills of Himachal Pradesh, who will also receive $1,500 to support the students while they are there.

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Ophthalmic Surgeon, Dr Keith Zabell, a 1974 UQ MBBS graduate and now the director of the Toowoomba Eye and Skin Clinic, is on a mission to help the people of Myanmar (formerly Burma), a country that has one of the world’s highest published rates of blindness. Only 200 ophthalmologists service the country’s 60 million people, which has a current backlog of 600,000 cataract operations. Less than half of the practicing ophthalmologists perform surgery, with the majority servicing only the two largest cities. In contrast, Australia has approximately 800 ophthalmologists for a population of 22 million.

What is the Myanmar Eye Care Program?
The Myanmar Eye Care Program (MECP) is led by Sydney-based ophthalmologist Dr Geoff Cohn. Every couple of months, Dr Cohn and a team of more than 40 Australian medical eye specialists, technicians and support staff, self-fund their trips to Myanmar and volunteer their time to provide treatment to 30,000 people each year. We treat eye diseases such as cataract and glaucoma and provide essential equipment for ophthalmic surgery. Importantly, the program helps train local indigenous ophthalmic personnel to operate independently, which enables them to continue the work when we return home. The aim of the MECP is to reduce the prevalence of preventable and avoidable blindness in the rural areas of Myanmar by developing a high quality, locally staffed, self-sustaining and efficient eye care health system by 2020.

How did you get involved with the Myanmar Eye Care Program?
Geoff and I met as registrars. Geoff was with Professor Fred Hollows and carried on with developing international eye care. In 2008, he coaxed me to fill in when a team member wasn’t able to go due to illness. He is a master at using guilt as a motivator to overcome my reticence and fear going to a place then described as an ally of North Korea and ruled by a reclusive military junta. One has to be very circumspect in carrying out surgery with so many unknowns. Nevertheless, the challenges from one trip was enough to inspire me into gathering a team for MECP.

Why does Myanmar have such a high blindness rate?
It is probably multifactorial with diet that is poor in vitamin A and C as a major contributor. It is an agrarian society so UV exposure is a factor. Also dehydration seems to have a role as access to water in the drier months becomes limited.
What sort of cases do you treat?
By far, cataract blindness and angle closure glaucoma are the main fare. The MCEP teams try to vary their expertise so that we can expand the surgical procedures offered. For instance, my team is usually the first tranche each season (November to February) and we mainly do cataract and glaucoma. However we try to organise a surgical load for following teams such as vitreo-retinal or oculoplastics.

What challenges do you and the team face?
For novices, finding your feet in what you can hope to accomplish and knowing your limitations and that of the hospital in managing problems. Next would be coming to grips with being in a strange operating theatre with staff who haven’t seen you operate. Fortunately there are colleagues around you in OT, unlike home.

What does an average day look like on these trips?
The days start at 7am with outpatients and surgery run concurrently and we rotate to try and avoid fatigue. The load is usually 800 patients for a week with 200-300 operations and 200 laser treatments. Fortunately, the Myanmar nurses ‘call the shots’ on taking breaks and meals (and are not to be disobeyed lightly). The day ends at 6pm with a drink overlooking the river.

What future projects do you have planned?
Geoff is always on the prowl, looking in developing countries for places that have no eye care. Cambodia is in process and Myanmar still has places needing help. (some are in ‘no go’ areas). Back here it is a case of getting teams together and encouraging younger surgeons to come up, especially to pass on some surgical techniques which are no longer required in Australia but can ‘save your bacon’ in remote eyecare.

How can readers support the program or get involved?
For funding, please contact Jacinta Spurrett at The Eye Foundation via jspurrett@eyefoundation.org.au

For equipment donation, please contact Dr Geoff Cohn via cohnclave13@gmail.com

If surgeons, registrars or optometrist feel they want to be involved then contact Geoff or myself at kwzi@tpg.com.au
Meet Dr Alex Markwell
UQ’s Distinguished Young Alumnus

Dr Alex Markwell was named a Distinguished Young Alumnus at UQ’s 2014 Alumni Awards. The award recognises young alumni (35 years or younger) whose early accomplishments inspire and provide leadership to students and alumni.

Dr Markwell graduated from the UQ School of Medicine in 2002 (Honours) and is a dedicated Emergency Physician, medical advocate and educator making a positive difference in her profession and her community.

With her stated career goals of improving education, training and leadership skills in Emergency Medicine, Dr Markwell is a passionate advocate for doctors and medical students across Australia, working tirelessly to improve learning conditions and progress the medical profession.

Aside from her current role as an Emergency Physician at the Royal Brisbane and Women’s Hospital and Greenslopes Private Hospital, Dr Markwell’s many achievements include being an academic reviewer, an in-demand public speaker, a qualified company director, and a serving member on a number of medical association and college advisory boards and working committees. In addition, Dr Markwell was the youngest ever president appointed to the Australian Medical Association Queensland (AMAQ).

During her term in 2013, Dr Markwell said she discovered that it is often easier to effect change the lower down the chain you are.

“Improving patient experiences and outcomes are as a result of ‘grass-roots’ (everyday clinician) activity rather than high-level policy statements - that means...no matter how ‘junior’ you are, you can still have an enormous impact.”

“Another key point I learnt is that you shouldn’t let age or perceived lack of experience dissuade you from getting involved - enthusiasm and interest are much more important!”

On a more personal note, Dr Markwell and her husband recently welcomed their baby girl, Bronte, into the world, which has brought a number of new challenges their way.

Dr Markwell said she was once given the advice that there is never a “right” time to start a family, you just have to pick a time and make it work.

“Obviously if you can avoid other major career events such as exams/transition times (e.g. student to doctor, prevocational doctor to registrar, registrar to consultant) then that might make things a little easier, but I know many colleagues who have started families during these times and made it work.” she said.

“Having the support of family and friends though is essential, having a young baby is a tough gig!”

With her numerous accomplishments and commitments Dr Markwell is a strong advocate for achieving a work/life balance.

“Work/life balance is essential, without it we lose our ability to recover and recharge from the stress and strain of day-to-day clinical work. Eventually this can lead to compassion fatigue, burn out and other associated conditions such as depression and poor physical health. Ensuring we are healthy is the best way of ensuring career longevity and the best outcomes for our patients.”

Dr Markwell has also lectured at the 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.”
A GUT FEELING HELPS MEGAN Rossi WIN THREE-MINUTE THESIS COMPETITION

PhD student Megan Rossi’s gut feeling about kidney disease helped her secure the win at UQ’s Three Minute Thesis (3MT®) competition. In a tightly fought contest at Customs House in Brisbane, Ms Rossi edged out runner-up Sachin Thakur from UQ’s School of Pharmacy, who is developing a delivery system to treat age-related blindness using ultrasound.

3MT is a competition that challenges research students to communicate the significance of their projects to a general audience in just three minutes. The concept sprang from the UQ Graduate School in 2008, and competitions are now run in about 200 institutions internationally.

Ms Rossi said that participating in the 3MT had been a fantastic learning experience that had allowed her to develop better communication skills which are essential to researchers.

“As a dietician I find it completely frustrating that despite the incredible research being done, it’s the unfounded and potentially dangerous nutrition messages that influence industry.

One of the reasons is that we as researchers struggle to condense our work into simple concepts, a trait all fad diets share. My dream is to change that, ensuring evidence is translated appropriately and I believe this is what 3MT has taught me,” Ms Rossi said.

Ms Rossi studies the role of pre and probiotics in the management of chronic kidney disease. Her research is focused on the community of bacteria that live in our gut and outnumber human cells ten to one. In kidney disease these bacteria are less healthy and are known to produce toxins that are thought to aggravate heart disease as well as lead to further kidney disease progression.

While it is only early days her research has shown that manipulating the gut bacteria in this population may be a promising therapy for alleviating some of the health burden associated with kidney disease.

“Learning first hand from my internationally renowned supervisors Associate Professor Katrina Campbell, Professor David Johnson, and mentor Associate Professor Maree Ferguson, has opened up a new world for me. PhD’s are full of high’s and low’s, and it’s the highs like sharing what you’ve been doing 60 hours a week for the past three years in a language your friends, family and industry can understand. This to me is what the 3MT is about and it makes it all worth it,” Ms Rossi said.

As the winner of the 3MT UQ Final, Ms Rossi was awarded a $5000 travel grant, which she used to travel to the Swedish medical university, Karolinska Institutet. She will now face off against competitors from more than 45 universities across Australia, New Zealand, Hong Kong and the South Pacific in the Trans-Tasman 3MT Final.

UQ’S NEW TELEHEALTH RESEARCH CENTRE OPENS ITS DOORS

Australians will soon have even better access to health care with the opening of The University of Queensland’s Centre of Research Excellence in Telehealth (CRE) last month.

Health Minister Peter Dutton officially launched the new CRE in Brisbane. The CRE is funded by the Australian Government, through the National Health and Medical Research Council, to boost telehealth research to better understand its benefits and how best to implement it. The new $2.5 million CRE is led by telehealth expert Professor Len Gray, and will focus on settings where access to health services is especially challenging, such as small rural hospitals, residential aged care facilities, home health care, and Aboriginal and Torres Strait Islander communities.

Associate Professor Anthony Smith, one of the Chief Investigators for the CRE, said that over a million Queenslanders live in remote and regional areas, sometimes hundreds of kilometres from a health clinic or access to a medical specialist.

“Telehealth links clinicians with patients using techniques such as videoconferencing and email and connects people living in remote places with services not readily available in rural and remote areas,” Dr Smith said.

“The CRE will support collaboration between research teams working to develop capacity in telehealth for everyone in Australia.”

The CRE team aims to examine the challenges in using telehealth and will work with a number of service providers to develop, implement and evaluate a telehealth program appropriate to their needs.

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THE CRE WILL SUPPORT COLLABORATION BETWEEN RESEARCH TEAMS WORKING TO DEVELOP CAPACITY IN TELEHEALTH FOR EVERYONE IN AUSTRALIA.”

THE CRE TEAM AIMS TO EXAMINE THE CHALLENGES IN USING TELEHEALTH AND WILL WORK WITH A NUMBER OF SERVICE PROVIDERS TO DEVELOP, IMPLEMENT AND EVALUATE A TELEHEALTH PROGRAM APPROPRIATE TO THEIR NEEDS.
Skin cancer packs a killer punch, especially in Queensland, but a team of UQ researchers is fighting back thanks to the $5 million philanthropic efforts of three key organisations.

Epiderm, formerly the Australian Dermatology Research and Education Foundation, got the ball rolling with the promise of $500,000, which then became $2.05 million. Together with financial support from the Merchant Charitable Foundation and PA Research Foundation, that figure skyrocketed to more than $5 million.

The funding will underpin vital, world-leading research into melanoma and non-melanoma skin cancers at UQ’s School of Medicine’s Dermatology Research Centre (DRC) and the UQ Diamantina Institute (UQDI).

This philanthropy will support Professor H. Peter Soyer’s Chair in Dermatology and dermatology and skin cancer research at the DRC. The Merchant Charitable Foundation and PA Research Foundation will also support his centre’s melanoma research and the skin cancer research being done under the direction of UQDI’s Professor Ian Frazer.

Consultant Dermatologist, President of the Australasian College of Dermatologists and Epiderm Board of Directors’ Secretary Associate Professor Stephen Shumack said the foundation wanted to make a real difference and enable transformational advances for dermatology and skin cancer research.

“Our decision to support UQ with all of our resources is a credit to its collaborative approach to skin cancer research under the leadership of Professor Soyer, coupled with UQ’s ability to leverage our donation so effectively,” Associate Professor Shumack said. “We couldn’t think of a better way to conclude the final chapter in Epiderm’s 22-year history then by investing in Professor Soyer’s research and leveraging so much additional support for dermatology and skin cancer research. By doing this we’ve achieved all the foundation’s goals.”

Professor Soyer said the generous support of three organisations and the leverage attracted by this donation would ensure that their clinical and translational research in the skin cancer arena would remain internationally competitive in the years to come.

“The School of Medicine and the Faculty of Medicine and Biomedical Sciences is unique in Australia by currently employing four full-time academic dermatologists, and with Epiderm’s leading support and other philanthropic donations, we will boost all three of the centre’s major research programs,” Professor Soyer said. These programs are:

- The refining of the genetic characteristics of melanoma patients that might make them more susceptible to this type of cancer.
- The continuing development of teledermoscopy and ‘melanoma diagnosis by one click’ so people can detect suspected melanoma using a mobile phone app.
- Further developing minimal invasive biopsy methods and searching for biomarkers for understanding the natural history of moles and their progression to melanoma.

Professor Soyer said the three programs integrating personalised precision medicine with the ubiquitous mobile technology will position UQ to make a major impact on skin cancer research across the globe.

“We are very grateful to Epiderm for recognising and investing in UQ’s transformational research in skin cancer. I would like to thank Epiderm, along with the Merchant Charitable Foundation and PA Research Foundation, for their generous support,” he said.
Scientists from UQ’s Faculty of Medicine and Biomedical Sciences (M+BS) have received nearly $30 million in the allocation of National Health and Medical Research Council (NHMRC) grants.

M+BS Professor Melissa Brown, Associate Dean Research, said the extent of grant funding received was testament to the excellent research and results achieved at the faculty’s schools, institutes and centres.

“Our researchers and scientists are having a serious and significant impact on the health and medical needs of people across the globe and they have led successful funding bids for centres, fellowships and projects totalling about $29 million,” Professor Brown said.

This is more than 55 per cent of the funding awarded to UQ and 5 per cent of the funding awarded nationally. The School of Medicine recipients are:

**CENTRE FOR RESEARCH EXCELLENCE**

**Professor Wendy Hoy** from the Centre for Chronic Disease was awarded $2,496,981 to establish a Chronic Kidney Disease Centre of Research Excellence.

**EARLY CAREER FELLOWSHIPS**

**Dr Leanne Sakzewski** from the Queensland Cerebral Palsy and Rehabilitation Research Centre was awarded $216,605 for a cluster randomised controlled trial which aims to improve translation of intensity and quality of upper limb rehabilitation provided by occupational therapists to children with unilateral cerebral palsy.

**Dr Anthony Raphael** from the Dermatology Research Centre was awarded $393,276 for his project that modulates the skin immune system with physical stimulus

**PROJECT GRANTS**

**Professor Roslyn Boyd** from the Queensland Cerebral Palsy and Rehabilitation Research Centre was awarded $939,039 for her project, REACH, a randomised trial of Early Rehabilitation in Congenital Hemiplegia.

**Professor John Upham** from the Lung and Allergy Research Centre was awarded $1,266,560 for his study into using influenza vaccination to understand and improve anti-viral immunity in some lung diseases.

**Professor Michael Stowasser** from the Endocrine Hypertension Research Centre was awarded $263,133 for his project to streamline the diagnosis of primary aldosteronism.

**Associate Professor Richard Sturm** from Dermatology Research Centre was awarded $579,492 for his project to investigate the molecular basis of human nevogenesis and melanoma initiation.

**Professor Gerald Holtmann** Associate Dean (Clinical), Faculty of Medicine and Biomedical Sciences & Faculty of Health & Behavioural Sciences was awarded $719,480 for his study into the pathophysiology of functional dyspepsia: Integration of upper gut function, inflammation and a systems biology approach.

**Professor Paul Colditz** from the Perinatal Research Centre and UQCCR was awarded $1,645,141 for a five-year study into brain development in preterm babies.

**PROFESSOR WENDY HOY**

**CENTRE FOR CHRONIC DISEASE**

**Chronic Kidney Disease Centre of Research Excellence**

We will establish Australia’s Centre of Research Excellence in chronic kidney disease (CKD). CKD is a common condition with heightened cardiovascular (CV) risk, and it also precedes almost all end stage kidney failure (ESKF). Patients with ESKF die unless they receive renal replacement therapy.

Costs of RRT pose an immense burden on the Australian health care system, and with current trends, will soon be unsupportable.

All the potential to contain ESKF and RRT lies with better understanding and management of CKD. However little is known about CKD. There is no systematic CKD surveillance in the ambulatory (outpatient) setting, optimal care pathways are still being defined, and predictors of CKD’s progression and of CV events are poorly understood.

Research in the CRE will generate information to fill those knowledge gaps. Through established nationwide collaborations, we will develop profiles of CKD patients in various primary care and renal practice settings, in several states, and in Indigenous and nonindigenous people. We will follow the courses of those patients, their outpatient trajectories, their management, hospitalisations, costs and outcomes. We will strengthen management of CKD patients in primary care, and supportive care pathways for complex and elderly CKD patients who might not benefit from dialysis. We will establish Australia’s first CKD BioBank and conduct collaborative national and international biomarker research to define predictors of progression and cardiovascular events, which will influence CKD management pathways.

Health economic evaluations will be woven into all the research streams, to define current costs, predict future costs, and test alternative models aimed at improving efficiencies in CKD care and containing RRT.

CRE outputs should result in improved detection of CKD, slowed progression, fewer cardiovascular deaths, better care pathways, and some deceleration in rising rates of RRT, with more rationalised resource utilisation. This program, in all its elements and incorporating most public health systems nationwide, appears to be the most comprehensive CKD research program internationally. There is not quite such a model anywhere else.
A novel approach to streamlining the diagnosis of primary aldosteronism

Hypertension (high blood pressure) affects over 30% of Australian adults and is a major risk factor for strokes, heart attacks and kidney disease. Although high blood pressure can be controlled, this usually means having to take lifelong medications. For the significant minority of hypertensive patients fortunate enough to be found to have a curable cause, the most common of these is a condition known as primary aldosteronism (PA), however it is difficult to diagnose accurately.

Our research centre within UQ at Princess Alexandra (PAH) and Greenslopes Hospitals has developed a novel diagnostic test for PA, which on early analysis appears to be highly reliable. Furthermore, because it requires only a single outpatient morning visit, it is much faster and less costly than the traditional approach, which involves a five-day hospital inpatient stay.

This project will clarify the role of this new test in diagnosing PA. If successful, it will lead to substantial cost savings in the diagnostic workup of this important condition. Furthermore, because the test is much less complicated and time consuming it will pave the way for confirmatory testing to become a reality nationwide, rather than being confined to major hospital tertiary referral centres. In this way, it has the potential to markedly increase the rate of diagnosis of patients with PA who can then benefit from optimal treatment and improved quality of life.

Modulating the skin immune system with physical stimulus

Our research group and others have observed that the application of physical diagnostic or delivery devices with or without drug results in rapid cellular changes to resident immune cells. However, there has been no mechanistic characterisation of the potential immunological consequences following diagnostic or therapeutic related physical stimulus in healthy and diseased skin. The consequences of diagnostic and physically enhanced therapeutic approaches in a clinical setting.

The outcomes of this Fellowship will result in characterisation of the resident immune system in healthy and diseased skin before and after disruption. The research sets the foundation for utilising physical stimulus alone or in conjunction with topical immune-modifiers currently in clinical use. Additionally, the integrated optical micro-manipulation system can be used for molecular profiling of skin diseases such as early skin cancer and its respective precursor lesion (eg actinic keratosis) as well as inflammatory skin diseases (psoriasis and atopic dermatitis) with emphasis on their immunological differences. The long-term benefits are projected to be better characterisation of inflammatory skin conditions resulting in new targets and therapeutic strategies.

Using influenza vaccination to understand and improve anti-viral immunity in chronic lung disease

Chronic obstructive pulmonary disease (COPD) is one of the leading causes of mortality and morbidity worldwide. Respiratory infections are responsible for much of the clinical burden. It is clear that aberrant anti-viral immune function makes an important contribution to infection susceptibility in COPD, and we have recently shown that influenza vaccination induces a weak antibody response in over 50% of COPD patients. Over the next 4 years, together with colleagues from Melbourne, we will undertake a comprehensive evaluation of immune responses to influenza vaccination in a large group of COPD patients and control subjects. This is an ideal model system to understand immune function in COPD in a way that cannot normally be achieved in human studies. The study will identify clinical features associated with suboptimal antibody production in COPD. Gene expression profiling and systems biology will examine gene expression signatures and molecular pathways that predict suboptimal antibody responses in COPD. In the final year of the project we will access whether changing the vaccine schedule will improve immunity in COPD.
Diagnosing prostate cancer could be as easy as peeing on a stick

UQ researchers are working on a prostate cancer test that is as simple as a pregnancy test. The research was building on the work of UQ Centre for Clinical Research’s Professor Frank Gardiner in improving prostate cancer diagnosis.

Dr Matthew Roberts, from the School of Medicine said we’re trying to develop a test that will assist or replace the PSA test by looking for markers for the cancer in urine and semen.

Current tests for prostate cancer include a digital rectal examination of the prostate and the prostate-specific antigen (PSA) blood test.

“The blood test could falsely predict the cancer and wasn’t accurate enough to detect small cancers. Like most cancers, the earlier you find it, the earlier you can treat it.”

Prostate cancer is the most commonly diagnosed internal cancer in men, affecting about 20,000 Australians every year. It’s also a cancer that, if not detected early, can have a serious impact on a man’s quality of life.

If deposits get into their bones, the treatment is to suppress testosterone levels, which has side-effects, including heart problems, sexuality and psychologically.

Our vision is to design a non-invasive test similar to a pregnancy test that could be used to select those men who are likely to benefit from further investigation in the form of MRI and biopsy procedures,” Dr Roberts said.

Professor Gardiner said it was still taking too long to diagnose the cancer and quicker detection would lead to better targeted treatment.

“We anticipate that when we can pick it up earlier than it is being diagnosed at present then we use it for triaging patients to select those who would then go on to have MRIs and biopsies. We need to find the earliest changes in these cells using other methods and the logical place to start was by looking at bodily fluids because about 40 per cent of ejaculate comes from the prostate,” he said.

Dr Roberts and Professor Gardiner said the research was ongoing and it could be several years before a test was available. Dr Roberts’ research is funded through Cancer Council Queensland.

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feMMMe Trial Expands

The Queensland Centre for Gynaecological Cancer (QCGC) Research has expanded the feMMMe trial to the Royal Women’s Hospital in Melbourne and the Christchurch Women’s Hospital, New Zealand.

QCGC Research has pioneered this clinical trial in Queensland since November 2012, which focuses on the non-surgical treatment of endometrial cancer. feMMMe aims to treat patients non-invasively with the use of a Mirena IUD hormone device. Patients are also administered Metformin (typically used as a treatment for Diabetes) or recommended for weight loss intervention. This aims to allow patients with high-risk factors such as obesity to avoid the risks of major surgery (hysterectomy), and for those of child-bearing age, preserve their fertility.

Ms Lili Gibson was diagnosed with endometrial cancer in November 2012 when she visited a fertility specialist after not falling pregnant.

“I was shocked to be told I had cancer, it wasn’t part of my plan. Nobody factors in things like that,” said Ms Gibson.

Her desire to have children meant she jumped at the chance to be part of the feMMMe trial, and in November 2012 she became feMMMe’s first patient.

“I felt I had nothing to lose. If the treatment doesn’t work, the worst-case is a hysterectomy. I didn’t want to turn 50 and think I should have done more to try to fall pregnant.”

To be eligible for the trial, women will be diagnosed with complex endometrial hyperplasia with atypia or grade 1 endometrioid endometrial adenocarcinoma (EAC) and have a body mass index (BMI) greater than 30.

First feMMMe patient Ms Lili Gibson
Smartphone app tackles Indigenous youth suicide

A UQ project to develop a smartphone app that aims to prevent Indigenous youth suicide has received more than $800,000 from the National Health and Medical Research Council (NHMRC) Targeted Call for Research scheme. The School’s Indigenous researcher Dr Maree Toombs leads the project and it was one of only four awarded nationally.

Dr Toombs said Queensland had Australia’s highest rate of youth suicide and Indigenous youth suicide rates were twice as high as that in the State’s overall population aged between 15 and 44.

“With this grant we will develop a community-led training program, which links health providers, community members, peers, school leaders and sporting mentors who will serve as gatekeepers. A smartphone app will then be developed that will connect the gatekeepers with local agencies, contact people and support help lines to get quick and accessible help for at-risk youth,” Dr Toombs said.

The study will address two national health priority areas: Indigenous health and mental health.

This will involve collaboration between Indigenous researchers, building research capacity in the participating organisations, performing evaluation research to inform policy decision makers and promoting the role of NHMRC in Indigenous health.

“The grant would help close the gap in the area of Indigenous mental health, reducing morbidity and mortality.

There has been an overwhelming community endorsement of the application of this grant, with community forums held to seek advice on what is required to reduce the rates of suicide in youth,” she said.

Building a culture of co-creation in research

Researchers at UQ have found that involving the end-users including partner organisations, stakeholders, and the community in every step of the medical research journey you co-create value in the research and this maximizes the impact that research makes at the coalface. The team from the APHCRI Centre of Research Excellence in Primary Health Care Microsystems recently published eleven manuscripts describing the positive impact of co-creating in research in the prestigious MJA Supplement.

Centre Director, Professor Claire Jackson said that by building a research culture that interlocks the end-user and researcher the gap between evidence and practice is closed which has significant benefits.

“It increases the translation and utility of research into policy and practice - meaning that it will have greater impact to the end-users and the wider community. The end-user assists by shaping the research questions, methodological approach, implementation challenges and identifying the most important outcomes. Clinicians, managers, policymakers, consumers and bureaucrats are all involved in this process that requires extensive consultation, flexibility and front-end review and adaptation,” Professor Jackson said.

A great example was the co-creation of the Primary Care Practice Improvement Tool (PC-PIT), which will help Primary Care Practitioners identify areas for improvement and assist them to plan and implement change to improve their practice performance to achieve better patient outcomes.

Postdoctoral Fellow Dr Lisa Crossland worked in consort with influential national partners, including: The Australian Association of Practice Managers (AAPM), the Royal Australian College of General Practice (RACGP), the Australian Practice Nurses Association (APNA), Australian Commission on Safety and Quality in Health Care (ACSQHC), and the Australian Medicare Local Alliance to develop the PC-PIT.

Professor Jackson said her team is thrilled about the eleven publications in the MJA Supplement and hopes that it encourages other research groups to adopt an approach that co-creates value in research with the stakeholders and end-users.
Pollen allergy in subtropical regions is primarily due to subtropical (e.g. Bahia and Johnson) grasses, but tests and treatments are not optimised for these grass pollens. Dr Janet Davies of the Lung and Allergy Research Centre, TRI, and Professor Ian Godwin (School of Agriculture and Food Science), recently applied an innovative molecular and bioinformatic approach to identify the ‘allergome’ of Johnson grass pollen.

“Toward unique approach enabled us to discover the complete allergen repertoire in the absence of the genome data from the source” Dr Davies said.

This research was published in the top ranked Journal of Allergy and Clinical Immunology. A PCT patent application was lodged to protect the potential of these new allergens for component resolved diagnostics and therapeutics. Dr Davies is an inventor of a patent granted in Australia this year pertaining to uses of the major Bahia grass pollen allergen, Pas n 1.

With support from an NHMRC Development grant, industry engagements with Sullivan Nicolaides Pathology (Taringa) and Thermofisher (Sweden), and a team of clinical allergy specialists, Dr Davies has developed to pre-commercial stage a highly accurate blood test to measure Pas n 1-specific IgE for diagnosis of Bahia grass pollen allergy.

“My research shows clinically relevant differences in allergic sensitivities and species-specific serum IgE recognition of subtropical and temperate grass pollens. Two thirds of the immune T cell epitopes differ between subtropical (Bahia) and temperate (Ryegrass or Timothy) grass pollen allergens. This means specific immunotherapy aimed at modifying the underlying T cell responses, will need to target subtropical grass pollen allergens to be effective for patients primarily allergic to Bahia and Johnson grass pollens” Dr Davies explained.

Dr Davies has 9 papers in press or provisionally accepted this year.

“Collaboration with academics and clinicians, as well as engagement with industry partners are key to this success. These interactions are...a rewarding way to translate research into practical outcomes.” Dr Davies said.

Allergen discoveries lead to better tests for hay fever in the subtropics.
It is my pleasure to provide another update on the research achievements of our medical students. They are difficult to keep up with and how they manage all the requirements of their full time medical degree plus do research, write papers and grants and present at conferences is beyond we ‘mere mortals’. Please keep me informed of all student research achievements; publications, presentations, grants or awards via the repository on the Research Options in your Medical Degree website.

Student Research Depot

**Tim Tattersall**  
2015 MBBS-PhD

Tim has recently completed his intercalated PhD and currently in his 3rd year MBBS. Tim’s thesis was titled “Neuronal activity in the pedunculopontine nucleus and globus pallidus in patients with movement disorders”. He had the opportunity to work with several world-renowned researchers and clinicians including his Principal Supervisor Professor Pankaj Sah at the Queensland Brain Institute, and Professor Peter Silburn and Associate Professor Terry Coyne from the UQCCR. Tim’s research made a breakthrough discovery about how the brain plans movement. They examined the brain activity of patients with Parkinson’s disease while the patients were awake during deep brain stimulation surgery. They found that the pedunculopontine nucleus, located in the brainstem, contained networks of neurons that were involved in the planning of gait. Improved understanding of how the brain plans movement could lead to more targeted treatments for people with Parkinson’s disease. Tim undertook the intercalated MBBS-PhD model and spent two years full-time working on his PhD research between Years 2 and 3 of the MBBS. This allowed Tim to focus entirely on his PhD without having to juggle medical studies at the same time.

**Dr Ben Lazarus**  
2013 MBBS Honours 1st Class

Dr Lazarus has recently had a paper accepted by Clinical Infectious Diseases (impact factor 9+). This paper was the literature review that Ben researched and wrote for his MBBS Honours project and is a great achievement for UQ medical student research. Ben was supervised for his Honours research by Professor David Paterson and Dr Ben Rogers from UQCCR.

**Mathew Tunbridge and Beatrice Sim**  
2014 MBBS & Concurrent MPhil

Matt and Beatrice are supervised by Professor John Fraser. They were successful in their application to The Prince Charles Hospital Foundation and won a grant for $87,000 to fund both of their projects. They are examining patient outcomes following 750,000 transfusion events in Queensland from 2007-2013. Matt’s area of research is in the pre-transfusion indications for transfusion, and correlating the pre-transfusion haemoglobin or haematocrit result with patient outcomes. Beatrice’s area is in the age of the blood product transfused; comparing outcomes of patients transfused with fresh vs old blood. Their outcomes will include mortality, hospital lengths of stay, and morbidity. This is an exceptional achievement for these two novice researchers.

**Liam Coulthard,**  
**MBBS 2015 and PhD**

Liam is a PhD candidate working with the Taylor/Woodruff Laboratory in the School of Biomedical Sciences. His project title is Complement Anaphylatoxins, C5aR and C3aR, in neural development. Liam has had a very productive PhD candidature with several publications and presentations so far. He also won the Dean’s Award for Best Oral Presentation at the recent UQMS Research Conference. Liam is supervised by Professor Stephen Taylor, Dr Trent Woodruff and Dr David Simmons.

**Andrew Zammit**  
2014 MBBS & Concurrent MPhil

Andrew is working in the Frazer lab at Translational Research Institute (TRI) in Viral Oncogenesis in Oral Cavity Cancer. The most significant risk factor for the development of oral cavity (mouth) cancer is tobacco consumption; however 20% of all oral cavity cancers occur in the non-smoking population. His research is investigating what is causing these cancers in the non-smoking population by utilising next-generation sequencing. Andrew’s research spans across both clinical and laboratory work and he is supervised by Professor Ian Frazer and Associate Professor Chris Perry.

**David Arpon**  
2016 MBBS and Intercalated MPhil

David is just completing the full time research year of his intercalated MPhil under the supervision of Professor Maher Gandhi in the Centre for Experimental Haematology at TRI. David is working on the development of an in vitro model of monocytic myeloid-derived suppressor cells (moMDSC) and the characterisation of these cells in classical Hodgkin lymphoma patients.
REUNIONS

Planning class reunions is one of the services the School of Medicine offers our medical alumni.

For 2015, plans are underway for Classes of 1965, 1975, 1985 and 1990. If you have a milestone graduation anniversary in 2015 and would like a reunion organised please contact me.

I look forward to celebrating your UQ class reunion in 2015.

Hayley Smith  Events Officer,
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THE MAYNE CONNECTION

1960s
EMERITUS PROFESSOR
TEIK E. OH AM

Professor Teik Oh started Medicine at UQ in 1964 and graduated in 1969. He was a Kingsman and represented the University in rugby and hockey. After internship at the Royal Brisbane Hospital, Teik Oh trained in Anaesthesia and General Medicine in the UK and Perth, and also worked in Canada, US, Hong Kong, and Canberra. He became one of the pioneers of the new specialty of Intensive Care Medicine in the 1970s, as the Director of ICU at the new Woden Valley Hospital (now Royal Canberra Hospital) and Perth’s Sir Charles Gairdner Hospital. He changed career in 1988, as Professor of Anaesthesia and Intensive Care at the Chinese University of Hong Kong, where he later became Dean of Medicine. There he developed the two specialties and his department into one of international standing. He returned to Australia in 1998 as the inaugural Professor of Anaesthesia of the University of Western Australia, based at Royal Perth Hospital.

As an Anaesthetist and Intensivist, he fostered training, education, research, and clinical governance of the two specialties through his offices, such as when he was President of the Australian & New Zealand and Hong Kong Colleges of Anaesthetists, and the ANZ Intensive Care Society, and through his extensive international network of colleagues.

As an academic, he holds an MD, a Higher Doctorate of UQ through research thesis. He has served on the NH&MRC and international research committees, and was a Visiting Professor for universities in Australia, Canada, US, South Africa, UK, Japan, and other Asian countries. He has presented invited papers and named orations at international conferences and has published 168 indexed scientific papers, 30 book chapters, and the internationally acclaimed textbook Oh’s Intensive Care Manual now in its 7th edition. On a personal level, he takes pride in having mentored promising academics, some of whom have become full university professors.

For his contributions to medicine and academia, Teik Oh was honoured with an Order of Australia and the highest awards of the Colleges of Australia and New Zealand, UK, Ireland, South Africa, and Hong Kong. In 2007, the University of Western Australia conferred him Emeritus Professorship.

Teik Oh with his late wife produced them and his four grandchildren as his greatest achievements. Despite being on the wrong side of the continent, he considers his Med UQ friends as among his closest, and the six plus years with them as among his best times.

1980s
DR JANE COLLINS

Dr Jane Collins graduated from the UQ School of Medicine in 1989. After completing her residency at Royal Brisbane and Prince Charles Hospitals, she embarked on four years with the Royal Australian Army Medical Corps. Her training highlights within the military included a rotation with the US Navy at Bethesda Hospital in Washington DC, diving medicine with the Royal Australian Navy in Sydney, the Early Management of Severe Trauma course and various military training courses at Army sites including Canungra and Portsea. Her first posting was to a field medical unit in Brisbane; in 1991, it was the first time that women had been posted to combat-related employment in the history of the Army.

That same year, while on a field deployment at Canungra, Jane was ordered to the Middle East as part of Operation Provide Comfort, the humanitarian operation to provide support to Kurdish refugees in the north of Iraq, close to the conclusion of the first Gulf War. A team of 75 specialist medical, health and engineering personnel spent some gruelling time with other coalition troops providing support to allied soldiers and to the Kurds in the villages and refugee camps dotted across the north of the country.

Army work generally was interesting and varied for Jane. As an officer, she was expected to command troops and organise and run your unit as a whole. Most time in barracks (postings to Brisbane, Townsville and Portsea) Jane provided medical support to service personnel, or trained for field exercises or overseas deployments. In the field, she had the opportunity to practice medicine in remote and challenging environments, from the NT to the snowy mountains. Along the way, Jane has learnt many skills; abseiling, rappelling, diving, shooting, the thrill of working closely with aviation – helicopter retrievals and casualty evacuation amongst a catalogue of highlights.

Since resigning her commission as a Major, Jane has continued to work periodically, sometimes in uniform instructing Army medics and sometimes as a civilian doctor working in the mental health unit of the Military Hospital at Enoggera.

In civilian life, things have been more sedate for Jane. She completed her FRACGP while spending six wonderful years on the Mornington Peninsula in Victoria as a rural GP, before returning to Brisbane and developing medical centres with her business partner on Brisbane’s southside. She has managed to squeeze in some postgraduate qualifications in Paediatrics and Nutrition. These days, Jane is happy as a family doctor in Holland Park, with a large paediatric flavour. A long way from the Gulf, but the perfect way to enjoy life with her gorgeous 10-year-old daughter, Stephanie.
The second half of the year has been exceptionally busy at UQMS!

Our fairytale-themed Med Revue, Once Upon a Chyme, was an incredible success. Our cast and crew have grown to incredible proportions, and it’s fantastic to see so many students get involved! Keg III, our final keg of the year, was also a night to remember, as hordes of medical students descended on the city in Hawaiian clothing.

Other events UQMS has run include our surgical skills competition, numerous OSCE preparation workshops for second year students, a surgical specialties evening, and an obstetrics and gynaecology workshop.

Our charity, the Ashintosh Foundation, has also been busy, holding our Jazz Gala Ball, coordinating our Bridge to Brisbane fun run team and holding several Teddy Bear Hospital visits.

Our 57th annual Errol Solomon Meyers Memorial Lecture was a first class and highly engaging event, delivered by ophthalmologist and Wallabies captain Dr Mark Loane.

Dr Loane was an insightful, highly engaging and humorous speaker, and it was an honour to have him attend.

The night was also the occasion where the UQMS presented the student-nominated teaching awards, which recognised the work of Ann Candy, Dr Jim Drum, Dr Philip Nyst, Dr Julio Clavijo, and Dr William Renton-Power.

It was fantastic to see Big Ted run the 10km fun run with all the other students!
UQMS has remained involved with the Australian Medical Students Association, managing to send a delegation to the national convention in Adelaide despite an unfortunate clash with the timing of exam period. AMSA activities have also continued in full swing post-convention, with UQMS significantly boosting its performance in Vampire Cup, jumping from 11th to fourth out of the twenty medical schools involved. This increase is attributed to heavy Facebook campaigning and the launch of a competition between different clinical schools, involving promotion by our clinical school representatives as well.

UQMS has also brought AMSA Blue Week to campus for the very first time, in order to raise awareness for mental illness amongst the medical profession. An effort was made to involve students of all years, by running a ‘healthy eating’ PBL competition across our preclinical sites and distributing blue lollies to our clinical sites across Brisbane. This went as far as our rural clinical schools in Toowoomba and Rockhampton. UQMS also set up a stall at St Lucia, distributing material from Lifeline and beyondblue.

UQMS will be wrapping up the year with our first year barbecue, second years’ Halfway Dinner, Third Year Cocktails and fourth year Graduation Ball. What a year!

14.4% of UQMS donated, totalling 169 donations, equating to 507 lives saved.

Fond regards from the 2014 UQMS executive!

The 2014 UQMS executive
President: Rhys Thomas
Vice President (Academic): Zachary Tan
Vice President (Social): Alexandra Walton
Treasurer: Robert Nayer
Secretary: Emily Shao
Liaison Officer: Aditi Halder
Sponsorship Officer: Simon Warry
Community Officer: Rebecca Conrick
Education Officer: Anthony Saponara
Immediate Past President: Claire Mohr
Immediate Past Treasurer: Libby Forbes
A recent acquisition to the Marks Hirschfeld Museum also has a connection to penicillin use in the 1940’s. The box of lenses shown was presented to Dr JM Buchanan in appreciation of teaching sessions to members of the Ambulance class at Rutherglen Scotland in June 1888. The box was given to the museum by his Great Granddaughter.

Her Grandfather, also a doctor from Glasgow University, migrated to Queensland where one of his jobs was as a doctor at the Quarantine station at Dunwich before starting a practice at Oxley. His son, Dr John Buchanan, would go on to graduate from The University of Queensland in 1942 and joined his father in the Oxley Practice.

**Ceramic Culture Flask**

On display for a short time as part of the “Wee Things” exhibition at the Mayne Medical Building in Herston is one of 700 flasks made for the culture of Penicillin in Sir Howard Florey’s laboratory at Oxford in 1941.

The flasks were designed by Norman Heatley, Dr (later Sir) Howard Florey’s inventive laboratory scientist. Many vessels were tried in the culture and fermentation processes including bedpans and urinals from the neighbouring hospital. Heatley’s design shows links to both. One of the ceramic vessels was presented to Professor John Pearn, the first Australasian Fellow of the Royal Society, London from 1971 to 1974.

The first person treated with Penicillin was a Police Constable who had been infected with tetanus. His condition was grave and he was given the first small supply of the drug. His condition improved but the there was an inadequate amount of penicillin available. Penicillin was able to be reclaimed from his urine but unfortunately not enough to save his life. However, industrial scale production ensured the life changing impact of the antibiotic age.

**Dr JM Buchanan Lens Box**

So what about the penicillin connection?

Penicillin was very scarce during the war; most of it being used in the war effort. The Ipswich Times of Friday 6th October 1944 reported on page 2 under the headline ‘Penicillin saves the life of Ipswich resident’ that Mr Percy Manders, Ipswich Transport Operator, owes his life to penicillin. It went on to list the doctors involved; Dr Williams (Medical Superintendent), Dr Trumpy, Dr Buchanan and Dr Palethorpe. At the time Dr’s Buchanan and Palethorpe were doing their residency.
The experience of working in a cancer ward has been that there were numerous occasions in which a “courageous conversation” (CC) had to be performed to the displeasure of the doctors at hand. The displeasure was not so much the fact that the doctors involved were unprepared, uncomfortable or unskilled, but rather that these conversations are emotionally charged and often have so much at stake that there is always a significant chance of a loss of rapport with the patient and their family with just a single misspoken word.

The concept of a CC is simply a conversation that you don’t want to have. It can be related to any aspect of life such as breaking up with a partner, staging an intervention for a loved one or even difficult discussions about habits of your workmates that annoy you. These discussions range greatly but all have one component in common, there is always a concern that the person on the other end of the conversation will have a negative response that may damage your relationship with them. Be it anger, betrayal, judgment or disappointment, it is common to fear these responses, avoid the elephant in the room and therefore not confront these concerning issues. Another point that is important to realise in these situations is that there is a relationship with the person involved and that this relationship is what is at stake in these discussions. Doctors have relationships with patients and should be proficient practitioners of empathy. If we did not have this individual relationship with each of our patients then we would not have any fear of breaking it apart, as we are not so concerned over their feelings.

There are no specific guidelines to follow when performing a CC as each case is unique in itself. Acting in the best interests of the patient and having clear, truthful discussions with them and their families will enable a doctor to be in good stead for future CC. So when you need to have your next difficult discussion with your patient and you get that feeling of dread in your stomach, take a deep breath, recall the hints that are outlined and remember that you are just trying to help your patient and the only reason you have this feeling is because you care.

Useful hints for junior doctors

Do not delay the conversation due to fear.
The further the discussion is postponed, the more harm is done to the patient by not getting the best management for them sooner.

If possible, attempt to have the conversation with family or friends present so that the patient doesn’t feel like there is a group of doctors surrounding them while they are alone. Be cautious however, as sometimes relatives or friends have a positive or negative influence and try to arrange it so that they are present or absent accordingly.

Expect that the discussion will be uncomfortable.
It would not be a courageous conversation if it did not. Once you acknowledge that the conversations will become uncomfortable and plan for the worst, you can sometimes be pleasantly surprised with the outcome.

Get straight to the point and be honest.
Establish the agenda early in the discussion. If you are not precise on what you are trying to get across, the patient will not understand what you are trying to say. There can be no ambiguity with words, no medical jargon or any misunderstanding of what is being discussed. Acknowledge the seriousness of the discussions and have an honest talk about what is your medical opinion and what you believe is best for the patient. Constantly reinforce ‘what is best for the patient’ during the dialog.

Go in with a plan with a mental list of what you need to cover and don’t leave until it is done.
If things become uncomfortable, it is an easy way out to not talk about what is needed to be discussed and to come back the next day while the patient has another day of suboptimal management. Sometimes patients need time to think about large decisions but often patients will not want to make a decision and keep going on as they currently are. In these cases you need to stay there and not leave until a decision is made or you need to give a deadline.

If you are not the treating doctor and the patient does not know you well, try to have present somebody from the medical team known to the patient.
If somebody has good rapport with the patient in particular (often the resident or a nurse), attempt to have them present. Ensure you are as well informed about the patient as possible before you begin the discussion, as an error in the current diagnosis, prognosis or other issues can have negative consequences.

Avoid the final decision coming across as being made by the doctor rather than the patient.
Gently guide them towards that decision and let them have a final say so they do not feel like they do not have any input regarding their treatment.
Congratulations to the following promotions

**Professorial appointments**
- Professor Emma Duncan
- Professor Michael Muller
- Professor Hemamali Samaratunga
- Professor Owen Ung
- Professor Ian Yang

**Associate Professor appointments**
- Associate Professor Judith Greer
- Associate Professor Ruth Hubbard
- Associate Professor Tarl Prow

**PROFESSOR IAN YANG**

Professor Ian Yang is Head of UQ’s Northside Clinical School and a Consultant Thoracic Physician at The Prince Charles Hospital. He is involved in the training of higher degree students in translational research into lung diseases, and leadership of UQ’s teaching and research activities at the Northside Clinical School. Professor Yang’s clinical work is in the field of thoracic medicine, and his translational research work focuses on gene-environmental interaction in COPD, asthma, lung cancer and air pollution.

**Farewell**

Professor Jennifer Martin is Head of the PA-Southside Clinical School and recently announced she will be accepting a Chair in Clinical Pharmacology in the School of Medicine and Public Health at the University of Newcastle. Her inspiration, courage and support of medical students and clinical academics in Queensland will be missed. We thank her for her contribution to the University, most significantly for leading the Clinical School through a time of significant change and in the initial leadership team to setup and drive Queensland’s first academic health sciences centre, the Diamantina Health Partners.

Professor Martin is a dual trained clinical pharmacologist and practising general physician. She has studied politics and health economics at Oxford University as a Rhodes Scholar and has used this experience to serve on the Pharmaceutical Benefits Advisory Committee, the Economic Subcommittee of the PBAC and other Government and Statewide committees examining appropriate allocation, regulation, safety and efficacy in pharmaceuticals. She is a Graduate of the Australian Institute of Company Directors (Diploma). Her PhD (Monash) examined innate immunity in Type 2 diabetes and subsequent postdoctoral work at the Walter and Eliza Hall focussed on the function of macrophages with high fat diet. Her recent research is in the area of clinical development of both novel and old drugs for a variety of diseases and has developed collaborations with EKUT (Germany) in the combined role of therapeutic drug monitoring and pharmacogenetics to individualise choice and dose of chemotherapy, and with the NIH in identifying and managing synthetic drugs of abuse. Professor Martin is passionate about teaching in the area of clinical pharmacology and been involved in curriculum development for medical students (Otago, Monash and Melbourne Universities) was the recent teaching and learning representative on the STC in clinical pharmacology for the College of Physicians. She is currently a member of the RACP Policy and Advocacy Committee and PHARMAC, the sole purchaser for pharmaceuticals in New Zealand.
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