

Healthlinx

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Dean's Welcome

The final Healthlinx for 2010 provides an opportunity to reflect and review the developments involving the Faculty of Health Science and to highlight new developments on the horizon.

2010 is the inaugural year of the Bachelor of Paramedic Practice at Hobart and Rozelle campuses. Students have found the degree to be both challenging and rewarding and it has also been well received and supported by the Tasmanian and NSW Ambulance Services.

Medical Science 1 provided more than a new location for the Faculty Office and the School of Medicine. The move signified a new era for the School of Medicine, bringing basic and clinical medical sciences together, providing excellent accommodation for both staff and students and facilitating excellence in teaching and learning along with research through the co-located Menzies Research Institute. With the planning and early preparation for Medical Science 2 already underway, the sky line will continue to change in the Medical Science Precinct during 2011.

2010 marked the final intake into the Bachelor of Medical Research. However in 2011, a new degree, the Bachelor of Biotechnology and Medical Research will provide our future Medical Researchers with a broader scope of practice. This new degree will combine the Bachelor of Medical Research with the Bachelor of Biotechnology from the Faculty of Science and Engineering and be taught across a number of schools, including Medicine.

In August the inaugural Service of Appreciation was held to acknowledge and give thanks to the Body Bequest Program donors for their contribution to medical sciences education. The Faculty is extremely grateful to the donors and their families and wished to recognize and acknowledge the wonderful gift the donors have selflessly made. The service provided an opportunity for all to reflect and remember loved ones, and for staff and students to express their appreciation for the generosity of the donors and their families. The Faculty is planning to hold further Services of Appreciation in the future.

Another School of Medicine initiative in 2010 was the introduction of a public lecture series.

In March Professor Margaret Morris presented an informative lecture titled "Obesity – what does your brain have to do with it". More recently in September Professor James Fawcett presented a fascinating lecture titled "Spinal cord injury: What can we do now and how are we going to repair it". The lectures were well attended by members of the health sector and the general public. With the success of these two lectures the School intends to continue the series in 2011.



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Associate Professor Tony Barnett was appointed Director of the UDRH earlier this year. Tony Barnett has held senior positions at Monash and Deakin universities. His research interests and activities include: clinical practice, rural health and the Quality of Life of older adults. He is currently working on projects investigating Advance Care Planning in residential aged care facilities and the role of IPL in the clinical education of health care professionals.

Sadly in November the Faculty will say good bye to Professor Judi Walker, when she leaves to take up a Distinguished Professorship in Rural Health at Monash University. Professor Walker has played a significant role in the Faculty and wider University, including holding the positions of Associate Dean (Teaching and Learning), Deputy Dean, and Deputy Chair of Academic Senate. She was the inaugural Director of the UDRH, inaugural Chair of Rural Health and Chief Executive Officer of the Rural Clinical School at the University of Tasmania.

In these roles she developed academic rural health in Tasmania, and contributed significantly to its development in Australia, with a strong focus on interdisciplinary and multi-professional education within health. Professor Walker is recognised for scholarship and related academic activities in rural health, primary health care and medical/health professional education, particularly innovation in health service delivery and health care workforce.

A number of interesting and noteworthy research activities have been undertaken in the Faculty. Honour student James

Mole from the School of Human Life Sciences is undertaking research to investigate why a sharp pain commonly known as a “stitch” occurs and affects the performance of many athletes. The School of Pharmacy UMORE Research reaps success with the development of software to enable the electronic documentation of clinical interventions by pharmacists. The Healthy Brain Project commenced a study into Alzheimer’s disease. This project is a world first study examining whether purposeful, complex mental stimulation later in life may be protective against ageing related cognitive decline and dementia.

Other interesting articles in this newsletter include: Pharmacy students benefiting from the School’s research following the introduction of an innovative medication review teaching program, the integration of Immediate Life Support training into the Rural Clinical School curriculum and innovative simulation education delivered by the School of Nursing and Midwifery.

As 2010 draws to a close I would like to thank all those in the professions and the community who contribute to the teaching, learning and research activities of the Faculty and on behalf of the Faculty extend seasons’ greetings to all our readers.

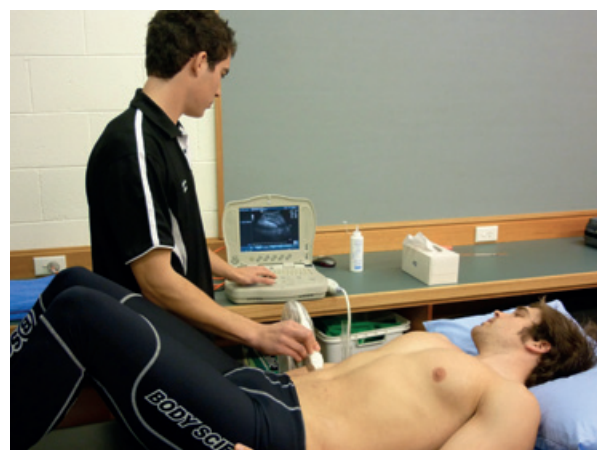
Professor Allan Carmichael
Dean, Faculty of Health Science

UTAS Researchers Stitch Up Running Pain

Why do some runners experience a running stitch and other do not? UTAS researchers are currently undertaking a study to find out why this sharp pain affects the performance of many athletes.

Current theory suggests the pain commonly known as the stitch is due to irritation of the inner liner of the abdominal wall, the parietal peritoneum.

UTAS honours student from the School of Human Life Sciences, Jason Mole is testing the hypothesis that an individual with good activation, strength and control of the transversus abdominis muscle may experience a decreased prevalence of the stitch due to less movement of the abdominal contents that possibly cause the pain. A person with poor activation and control of this particular muscle may have excess movement of the abdominal contents and therefore increased irritation and pain.



UTAS honours student Jason Mole practicing an abdominal ultrasound on participant Phil Bellinger.

“Anecdotal evidence suggests that when experiencing a stitch, a movement to relieve it is to contract the postural abdominal muscles, therefore if these muscles were contracting properly during a normal running style then a stitch would possibly not be experienced” said Mole.

“Stitches affect a third to half of the physically active population and diminishes performance of nearly half who experience it” said James Mole.

The testing involves the use of real-time ultrasound and a functional test, named the Sahrman test, to quantitatively assess the strength, activation and control of the deep abdominal muscle the ‘transversus abdominis’.

Testing commenced in early October however participants are still required for the study. If you are between 18-40 and exercise at least twice a week and either do or do not experience the stitch and would like to volunteer to be involved in the study please contact Jason Mole at jl mole@utas.edu.au or 0400 077 975.

UTAS Healthy Brain Project

There is substantial international interest in the potential for mental stimulation to provide a protective influence on the trajectory of ageing-related cognitive decline and risk of dementia. While there is significant epidemiological evidence for a protective effect of early-life education for protection against dementia; there is little direct evidence indicating that later life purposeful ‘brain exercise’ can protect from developing dementia and age-related cognitive decline through enhancing cognitive reserve. The available data also seems to indicate that education may not protect against the overt brain pathology of, for example, Alzheimer’s disease, but can enhance the capacity of the central nervous system to adapt to such pathological changes, delaying the onset of overt clinical signs.

The UTAS Healthy Brain Project is a world-first study examining whether purposeful, complex mental stimulation later in life may be protective against ageing related cognitive decline and dementia. The Healthy Brain Project focuses on education-related mental stimulation in older people, between the ages of 50-70. In this way, this prospective cohort study is unique as it takes advantage of tertiary study as a potential intervention to boost brain plasticity and potentially enhance neuroprotection as we get older.

The UTAS Healthy Brain Project is a collaboration of the Wicking Dementia Research Education Centre (Menzies Research Institute) with both the School of Medicine and

the School of Psychology at the University of Tasmania, and the investigating team includes researchers from Sydney and Montpellier, France. Approximately 100 Tasmanian have enrolled into University to be part of this study in 2010, and there will be a rolling recruitment of further participants over the next few years. Participants receive a detailed examination that relates to previous education, clinical history and life experiences, as well as a comprehensive battery of tests related to cognition and memory. Through this study, we should be able to determine within a few years whether such University study may affect general deficits in ageing and memory associated with aging, but it will take almost 10 years to determine whether it may help protect against dementia. With predictions of over 750,000 Australians to be suffering from dementia by 2030, and without any effective drug interventions in sight, it is hoped that there may be preventative strategies to build cognitive reserve so that we can decrease the overall health, social and economic burden of this mind-robbing illness.

If you are interested in participating in the project please email your enquiry to healthybrain@utas.edu.au.

Pharmacy Students Benefit from Research Outcomes

Students from the School of Pharmacy are benefiting from the School's research following the introduction of an innovative medication review teaching program. The program provides students with practical experience in medication reviews and helps to alleviate placement shortages in traditional training settings, such as hospitals.

Research undertaken at the School of Pharmacy has shown the clinical and economic value of home medication reviews, prompting the introduction of medication review content into the Bachelor of Pharmacy degree earlier this year. Students complete an Australian Association of Consultant Pharmacy (AACP) accredited Stage 1 training program in medication reviews as part of their degree, including a mentored medication review placement. Once they register as pharmacists, students need to only complete Stage 2 accreditation training to be qualified to perform medication reviews.

UTAS lecturer and PhD candidate Andrew Stafford said completing medication reviews alongside a pharmacist made students feel part of an integrated healthcare team and gave them a head start upon graduating. Students work closely with patients, doctors, nurses and pharmacists, improving skills in communication and teamwork.

Over the past four years School of Pharmacy researchers, in collaboration with University of New South Wales, have undertaken a comprehensive clinical and economic analysis of the Federal Government's Home Medication Review (HMR) program. The analysis found that HMRs, in many circumstances, are cost-effective, providing both healthcare savings and gains in quality of life for patients taking multiple medications for chronic conditions.



Home medication review.



Nicky Morris, fourth year Bachelor of Pharmacy student discusses medications with a patient as part of her medication review placement.

The Value of Home Medicines Reviews (VALMER) study was funded by the Australian Government Department of Health and Ageing as part of the Fourth Community Pharmacy Agreement through the Fourth Community Pharmacy Agreement Grants Program managed by the Pharmacy Guild of Australia.

The Rural Clinical School Accredited for ARC ILS Training

Australian Resuscitation Council (ARC) Immediate Life Support (ILS) training provides the foundation blocks for emergency management. To ensure a co-ordinated approach is taken to emergency management in the Rural Clinical School (RCS) teaching activities, it was decided to incorporate ARC ILS into the academic program.

ILS training focuses on -

- The cause and prevention of cardiopulmonary arrest
- The ABCDE approach to assessment
- Initial resuscitation and defibrillation
- Managing patients in cardiopulmonary arrest until a resuscitation team arrives
- Participating as a member of a resuscitation team.

The course may be run as a one day or two half days, with the ability to adapt some content to reflect local practices.

Rural Clinical School aim to include the Immediate Life Support course into the MBBS final year and will continue to collaborate with instructors and stakeholders to provide inter-professional programs throughout the state.



*Training in the Skills Centre:
Drs Satish Kumar, Nick Towle and Deb Wilson (Medical Clinicians RCS).*

ILS training ensures a standard approach to early resuscitation practice for Junior Doctors and undergraduate medical students. The course is also suitable for many health care professionals wishing to refresh their skills. These include: General Practitioners, Paramedics, Hospital and Community Nurses (undergraduate and postgraduate). The course is nationally recognized and the participants result is valid for four years.

The ILS program is accredited with the United Kingdom Resuscitation Council, it also carries General Practitioner College and Royal College Nursing Australia (RCNA) continuing education credit points. The ARC promotes ILS as an inter-professional program, this aligns with the RCS Clinical Skills & Simulation Centre mission to be a regional facility for interdisciplinary teaching and learning.

Previously there were nine centres nationally accredited as ILS course providers, with Tasmania not being represented. RCS is now accredited as an ARC ILS training centre. RCS has a number of accredited ILS instructors. These include: Dr Satish Kumar, Dr Lizzie Shires, Dr Deb Wilson and Dr Nick Towle, Luanne Steven and Lynn Greives.

RCS aim to include the ILS course into the MBBS final year and will continue to collaborate with instructors and stakeholders to provide inter-professional programs throughout the state.

School of Nursing & Midwifery Lead the Way in Simulation Innovation

The School of Nursing Simulation and Clinical Education Centre (SCEC) simulation specialists Nigel Chong and Angela McKay recently delivered a 90-minute workshop at the national SimTecT Health 2010 Simulation Conference in Melbourne.

The workshop focused on the innovative approach in In-Situ simulation that the School of Nursing and Midwifery (SNM), along with Glen Williams of Calvary Healthcare North, has developed to educate nurses and other health professionals to identify deteriorating patients.

Nigel Chong, manager of simulation for the school said “we delivered a unique style of workshop, which was fully interactive for all those who attended. We used our Laerdal 3G human simulator known as “Simmy” to highlight that clinical simulation can be delivered in any setting to meet the learning objectives of the participants.”

During the opening of the workshop, to the surprise of the participants, “Simmy” whilst sitting in the audience, had a cardiac arrest to which participants had to take action. Even the Victorian Mobile Intensive Care Ambulance paramedics turned up to assist in the treatment of the patient. At the conclusion of the scenario, the team debriefed the participants on the benefits of In-Situ simulation.

Nigel said, “our aim was to demonstrate that with the right simulation program, clinicians are able to practise skills in their own environment using scenarios that meet their establishments’ own unique requirements.”

The SNM simulation team is the first to develop and deliver this type of education in partnership with a private healthcare provider in Australia.

Due to the nationally recognised success of the simulation education program at UTAS SNM, Nigel and Angela were called upon to deliver a full day simulation education session for Eastern Health Box Hill Hospital Practice Development Unit before returning home to Launceston.



Calvary Day Procedure Unit nurses practise airway rescue techniques.



Calvary Day Procedure Unit nursing staff relax with “Simmy” after a hectic day of workshopping.

In November 2010 Nigel, Angela and Glen Williams from Calvary Healthcare have been invited to present at the National Commission for Quality & Safety in Health Care conference being held in Adelaide, to showcase the In-Situ simulation concept to a national clinical education audience.

Nigel stated, “we have many more exciting developments on the drawing board, and look forward to reporting on these in the future.”



Glen Williams (second from left) of Calvary Healthcare teaching bag mask ventilation to Calvary nursing staff.

UMORE Research Success

\$97m worth of Federal Government funding for the electronic documentation of clinical interventions in community pharmacy is the outcome of ten years research and development at the School of Pharmacy’s Unit for Medication Outcomes Research and Education (UMORE). Software to enable the electronic documentation of clinical interventions by pharmacists will be based on that developed and tested by UMORE.

Head of School and Chief Investigator, Professor Gregory Peterson, said the new software would achieve improved safety and effectiveness of medication use on the community. “A pharmacist’s intervention can improve patient care through improved medication use and prevent hospitalisations caused by adverse medical events, potentially reducing pressure on hospital beds and saving the government about \$900m in healthcare costs.”

The adoption of the UTAS research follows evaluation by clinical and economic experts of software installed in 185 pharmacies and used by over 500 pharmacists in Tasmania, Victoria and New South Wales.

The UTAS project was in partnership with the University of New South Wales, University of Sydney, Monash University and Curtin University.

The announcement in May as part of the Federal Budget and 5th Community Pharmacy Agreement, reflects UMORE’s growing success and consolidation of the Unit’s place as a national leader in pharmacy practice research. The funding is indicative of the increased exposure of translational pharmacy practice research in recent years. UMORE is committed to continue to enhance awareness of research and research outcomes in this area.

Research was funded by the Department of Health and Ageing as part of the fourth Community Pharmacy Agreement.



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