

# HealthLink

ISSUE 7 June 2008

## Dean's welcome

Semester 1 of 2008 has seen a number of new programs and expansions occur within the Faculty of Health Science. The School of Nursing and Midwifery has commenced an accelerated Bachelor of Nursing program in Hobart based on the same framework used for its Bachelor of Nursing program in Sydney. The Sydney program is continuing to expand and the first graduation ceremony was held earlier this year. Both these developments are aligned with State and National Health Workforce priorities to address Nursing workforce shortages.

Health workforce shortages have continued to be emphasised in National and State policy and planning developments. Staff in Schools across the Faculty have been involved in planning processes for health service initiatives such as Super Clinics and Integrated Care Centres promised for Tasmania and which have important education and training components. These services link primary and secondary health care and provide an important base for inter-professional education which is a major project for the Faculty of Health Science in 2008.

The importance of health workforce, education and training in Tasmania has been emphasised in the recently revised UTAS - State Government partnership agreement. In listing "Health" as one of five priority areas the partnership objective is to *improve the health of Tasmanians through preventative health, promoting healthy lifestyles and the development of the health workforce*. The specific project derived from this is to develop a flexible and sustainable health workforce for Tasmania which is to be progressed through the Partners in Health Management Committee. The development of the Clarence Community Health Centre as a primary health clinical education facility is an immediate priority.

Two major building projects are underway in 2008 which will provide essential facilities and expansion for the Faculty. The expansion of the School of Pharmacy at the Sandy Bay campus is well underway and due for completion before mid year. The co-location project for the Menzies Research Institute and School of Medicine has now commenced and the construction program is on track for completion and occupancy in October 2009. The Faculty is also expanding in other sites throughout the State as illustrated by the St. Helen's Rural Teaching site and Penguin Medical Practice referred to in this edition.

Research activities within the Faculty continue to expand and some of the varied areas are highlighted in subsequent pages. The Wicking Dementia Research and Education Centre development highlights the importance of multi-disciplinary research (and education). Researchers from Menzies Research Institute, School of Medicine (Discipline of Pathology) and School of Nursing and Midwifery have come together to initiate this centre. While animal research often informs



### IN THIS ISSUE:

- Tasmanian research improves asthma management* 2
- Major funding received to establish dementia research centre in Tasmania* 3
- Good news for our Tassie Devil* 4
- Cycling 'gizmos' tested by Utas Researchers* 4
- 2008 Collaborative Teaching & Learning project* 5
- ECHONet connecting Burnie to Hobart* 6
- New Penguin medical practice adds to RCS student experiences* 7
- A close shave for a good cause* 8

*continued from front page*

research and management of human disease, expertise in immunology is assisting the research into and hopefully ultimate prevention of Tasmanian Devil Facial Tumour disease as noted in this newsletter.

The Faculty anticipates further research and educational successes in 2008 and it is hoped this newsletter provides some insights into the spectrum of activity across Tasmania.

Professor Allan Carmichael  
**Dean, Faculty of Health Science**

## Tasmanian research improves asthma management

A recent study conducted by the University of Tasmania's School of Pharmacy is helping people to manage their asthma better through collaboration between community pharmacists and GPs.

Australia has one of the highest rates of asthma in the world, with an estimated two million Australians currently affected. It's estimated that if implemented on a national scale, this study could potentially identify and assist over 80,000 people with poorly managed asthma.

Utilising a \$100,000 grant from the Asthma Foundations of Australia, Professor Gregory Peterson from the University of Tasmania developed an innovative computer solution to assist community pharmacists use their medication records to identify people who may have poorly controlled asthma.

"The study used 'data mining' software to identify over 1500 adults as having poorly managed asthma, with half of these people encouraged to see their GP for a review of their asthma and the other half used as a control group," Professor Peterson said. "These identified patients were using on average, seven puffs each day of their reliever medication, which is much higher than the maximum three puffs per week recommended by the Asthma Foundation. "What we found during the following six months was a significant shift towards more people using preventer medications, relying less heavily on their reliever medications. "This results in better health outcomes for patients, and ultimately less burden on the health system."

The use of medication is the most common action taken by people with asthma. Regular use of inhaled corticosteroids or 'preventer medication' can reduce asthma symptoms and prevent severe episodes of worsening asthma. Despite the obvious benefits of preventer medication, roughly only one



*Pharmaceutical advice provided to client by Pharmacy students during clinical rounds*

in seven people with asthma regularly use their preventer medication.

The Asthma Foundation of Tasmania (AFT) Education and Training Manager Melanie Blackhall said the AFT was excited to be part of a study which has such potential to improve asthma management through the use of preventer medication. "The reality is that asthma is a life threatening disease responsible for an estimated 1000 presentations to emergency departments throughout the year in Tasmania alone. It is also the number one reason children end up in emergency departments. "Asthma is a disease which affects 55,000 people in Tasmania alone. However, many people who have asthma don't take it seriously enough. "This study is vital, as it has the potential to be implemented across the country assisting thousands of community members to take control of their asthma and ensure they don't end up becoming one of the Australians which die from asthma every day."

## Major funding received to establish dementia research centre in Tasmania

The Menzies Research Institute announced a \$1.5million funding grant from the JO & JR Wicking Trust, along with \$1million additional funding from the University of Tasmania including the School of Nursing and the Menzies Research Institute as well as the State Government to establish a groundbreaking dementia research and education centre in Tasmania

Professor James Vickers and Professor Andrew Robinson are the joint Directors of the new Wicking Dementia Research and Education Centre (WDREC).

Professor Vickers said in the very near future, nearly every Tasmanian family will be impacted by dementia and its consequences.

“This significant five year funding will provide the infrastructure to develop a coordinated and systematic approach to dementia research and education in the State,” Prof. Vickers said.

“This initiative will span health and community services, clinical research as well as tackling education and workforce capacity.

“The centre will also bring together Australia’s leading biomedical researchers focussed on determining new therapeutic strategies to treat ageing-related dementia.”

Professor Vickers said dementia is an incurable ageing-related condition that will soon be the biggest single cause of disability in Tasmania.

“The Australian health cost burden of this condition in 2000–01 was over \$2 billion. As there are currently no drugs available which effectively treat any of the major causes of ageing-related dementia, treatment roles rely heavily on primary health care, community based care and resident and acute care services,” he said.

“Access Economics estimates that more than 5,500 Tasmanians currently have dementia with this number more than doubling to 12,000 by 2030.

“As an example of this crisis, imagine the total population of Sorell being unable to function on a day-to-day basis without considerable support and assistance.



*Professor James Vickers, Ms Jean Elder and Professor Andrew Robinson*

“Tasmania has the oldest demographic of any state/territory in Australia, yet we are currently underprepared for managing the health, social and economic consequences of these demographic changes.”

Prof. Robinson said that current research shows that caring for people with dementia places great strains on the related families, carers and associated health care providers.

“We are currently facing an urgent need to establish better ways of approaching and dealing with dementia care,” Prof. Robinson said.

“In light of this need, the new centre will have a strong focus on training new graduates, including specialist training and an ambitious program of dementia-based graduate research.”

The centre was launched and began operations in April 2008.

## Good news for our Tassie Devil

Associate Professor Greg Woods, School of Medicine and Menzies Research Institute, has undertaken research to determine why the Tasmanian Devil Facial Tumour Disease (DFTD) is transmitted between unrelated devils. The research has revealed that the devastating cancer is not transmitted due to an ineffective immune response, but due to a lack of genetic diversity in the diseased population.

The immune function research undertaken by Greg Woods' PhD student Alex Kreiss has had a recent breakthrough with a devil from the northwest of Tasmania named Cedric. This devil was immunised with irradiated tumour cells and, remarkably, produced a protective immune response against this tumour. An analysis of this devil's major histocompatibility genes revealed that these immune response genes were very different to the tumour and therefore the tumour was recognised as non-self and its establishment was resisted.

Further analyses, with collaborators from the University of Sydney, has uncovered a greater genetic diversity in the Western population than the Eastern (diseased) population



*Cedric the Tasmanian Devil who may hold the key*

of Tasmanian Devils. This provides hope that there may be some animals in the west of Tasmania with sufficient genetic diversity to provide a natural immunity that could protect against the transfer of cancer cells from an infected devil with the facial cancer.

It remains unknown what triggered the first index case(s) of this unique infectious cancer in Tasmania's (in fact the world's) largest wild marsupial carnivore.

Through Cedric there is now a ray of hope for the survival of the Tasmanian Devil.

## Cycling 'gizmos' tested by Utas Researchers

Cycling interest is peaking with fast approaching Tour de France and Olympic Games. Many cyclists wanting to get the most out of their training in an attempt to achieve their personal best often look for ways to get a competitive edge. One method recently suggested to heighten performance is through training with a new independently geared bike crank.

The new crank is unique as it makes the rider consciously lift their foot through the upward motion of the cycling action. The expected outcome is the muscles learn to work better in the upward motion which produces more power for moving forward. Theoretically the rider achieves a faster race time.

Utas academic staff from Human Life Science in conjunction with TIS sports scientists, have put the theory to the test. A group of well-trained riders were recruited and put through their paces three times per week for six weeks either training with the new cycling gizmo or with a normal crank set up. A comparison of peak power output and race performance was used to determine the effectiveness of the new training device.



*New independent geared bike crank*

James Fell, from the School of Human Life Sciences, said 'Despite the hype put out by the company that manufactures this particular training aid, we did not find any beneficial effects on cycling performance, however our riders were very well trained so we can't discount that it may still provide some benefit for athletes new to the sport'.

Each volunteer was entered into a prize draw for a gift voucher from Bike Central in Launceston. The lucky winner was local Launceston rider Will Robinson.

## 2008 Collaborative Teaching & Learning project

The buzz word in the Faculty of Health Science for 2008 is collaboration. Collaboration between the Schools of Nursing and Midwifery, Medicine, Pharmacy and Human Life Sciences as well as the Rural Clinical School and the University Department of Rural Health will assist the Faculty to address future challenges including increasing student numbers, continuing fiscal constraint and emerging trends in patient care.

To kick start the process, the Faculty is undertaking a major project in 2008 to facilitate more interaction between the Schools in undergraduate teaching and learning. The project will identify areas of learning common to more than one School and will investigate new ways of learning and teaching together. The project will also tackle obstacles currently limiting collaboration across the Faculty and intends to develop guidelines to assist staff with the implementation of co-operative teaching arrangements in areas of common learning.

These user guides will be supported by staff development for those wishing to participate in future collaborative teaching and learning initiatives.

The Faculty Teaching and Learning Committee chaired by Dr Justin Walls, Associate Dean (Teaching & Learning) is responsible for the project and in November 2007, appointed Glenyse Frost as project manager. Previously, Glenyse was employed by the Department of Education and Training in Victoria and has a background in project management and labour market economics.



*Glenyse Frost - Project Manager*

The project is supported by a working group comprising a representative from each School. Communications with individual Schools will be managed by its representative on the working group, your representative is:

- School of Human Life Sciences – Assoc. Professor Dom Geraphty
- School of Medicine – Professor James Vickers
- School of Nursing & Midwifery – Assoc. Professor Rosalind Bull
- School of Pharmacy – Dr Stephen Aldous
- Rural Clinical School – Professor Judi Walker
- Department Of Rural Health – Dr Christine Stirling

Glenyse was invited to attend staff gatherings in February and March to introduce the project and to discuss the project parameters with staff from all Schools.

For further information on the project, check out the Faculty website at <http://www.healthsci.utas.edu.au/> or contact Glenyse directly by phone (036324 3358) or email: [Glenyse.Frost@utas.edu.au](mailto:Glenyse.Frost@utas.edu.au).

## ECHOnet connecting Burnie to Hobart

A number of Rural Clinical School staff including Professor Judi Walker, Associate Professor Marcus Skinner, Senior Clinical Research Fellow Dr Mark Reeves and Junior Research Fellow Heidi Behrens, along with Sue Whetton (UDRH) and Professor Greg Peterson (School of Pharmacy, are involved in the coordination of clinical processes and a clinical trial of the ECHOnet (Echo Cardiographic Healthcare Online Networking Expertise in Tasmania) project.

The project which began in August 2007 is being conducted by CSIRO in conjunction with the Department of Health and Human Services and aims to connect the North West Regional Hospital and the Royal Hobart Hospital to provide access to expert assistance for managing patients requiring echocardiographic investigation. A high-tech communications system developed by CSIRO scientists enables cardiologists in Hobart to be part of bedside consultations with patients in Burnie's ICU in "live time" and to assist local clinicians decide on the best course of treatment for patients at the North West Regional Hospital. Minister for Health, Lara Giddings, was able to see the benefits of the ECHOnet project during her recent visit to Burnie.

The system also enables cardiologists in Hobart to request particular views of the heart and to guide a less experienced sonographer through the procedure should this be necessary.

*The project is seen as an innovative example of the provision of specialist services in regional and rural hospitals through an innovative high-tech telemedicine approach.*

The project has created significant interest among its immediate users and of course the patients and their families. For a number of patients, the system has meant they have been able to remain under the care of local clinicians in Burnie, without the need to be hospitalised in Hobart, away from their usual support networks.

The clinical trial, which is assessing ECHOnet's effectiveness and impact covers four distinct but separate areas – clinical; cost-benefit; social and organisational; and usability and technical. While the trial runs until August 2008, the Research Team is confident early results will be available by May 2008.

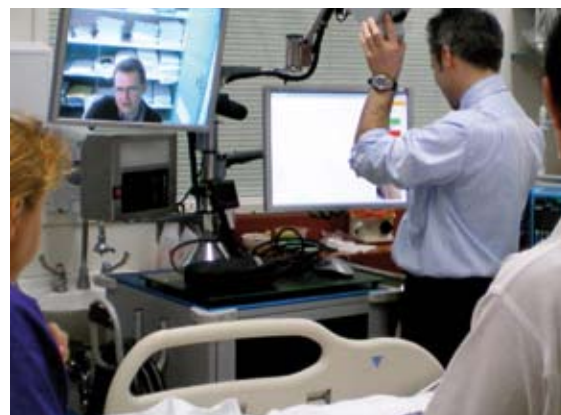
An unexpected outcome from the trial to date has been follow-up consultations on patients living in the north west region have been possible using the ECHOnet system, saving

patients and their carers a long return journey to Hobart.

The reactions of patients to these consultations will also form a part of the overall evaluation.



*Dr Alan Rouse, Head of Intensive Care at North West Regional Hospital, takes part in a case discussion originating at Royal Hobart Hospital*



*Dr Allan Beswick, Intensivist at Royal Hobart Hospital, sets up for a bedside case discussion with Dr Mark Reeves (at the Burnie end) visible in the monitor*



*Specialist's view of an ECHONET trolley during a remote echocardiogram examination*

## New Penguin medical practice adds to RCS student experiences

Medical students based at the University's Rural Clinical School will benefit from a new medical practice which opened in Penguin, March 2008. The University has contributed funding to the new centre to enable fit-out of a teaching consulting room for students attached to the practice.

The new clinic will join ten other Clinical Teaching Practices across the north west coast involved in the training of fifth year medical students as part of the RCS program.

An experienced senior academic and respected local general practitioner, Dr Miranda Hudson, is one of the GPs at the new Penguin practice, and will play an important role in teaching and mentoring RCS students working with her.

Professor Judi Walker, Chief Executive of the RCS, said she was delighted to have had the opportunity to be involved from the start in the planning process for the new practice, which has been auspiced through the Patrick Street Clinic in Ulverstone and developed by the Central Coast Council.

"The Rural Clinical School has close partnerships with a number of general practices from Port Sorell to Wynyard. Fifth year students spend time allocated to two practices in the region during the year's program and gain tremendous clinical experience from the GPs, practice nurses and allied health colleagues working in these primary care settings.

With a growing number of medical students expected at the RCS in coming years, we have been delighted to be able to extend the current highly successful clinical teaching model in integrated primary care to a new practice in Penguin".



*Dr Emil Djakic from the Patrick Street Clinic cuts the ribbon with Central Coast Mayor Mike Downie to officially open the new Penguin Clinic (Dr Miranda Hudson is in the background)*

"The clinical teaching model is based around practices making a separate consulting room available for students, so they can see patients, take histories and conduct examinations across a slightly longer time-frame than the normal general practice appointment. This provides enhanced opportunities for students to develop their consulting and patient management skills. Students are still under close clinical supervision, but with increasing autonomy as their skills develop throughout the year".

"The Penguin community has sought to attract additional GPs to the area for some time. The new practice will be greatly appreciated by people in the area as well as providing an excellent additional training opportunity for students and junior doctors," Professor Walker said.



# A close shave for a good cause

Leukaemia and related disorders affect more than 30,000 Australians. It is a life threatening disease which requires continued research to help in the prevention and curer of the disease.

Students studying Haematology in the Bachelor of Biomedical Science, as well as staff from the School of Human Life Sciences, took part in the Leukaemia Foundation World's Greatest Shave, which was held nationally on 13-15 March.

The School felt it was important for the Biomedical Science students to help raise awareness of Leukaemia, as well as learn the skills to help in the laboratory diagnosis of these diseases.

Senior Lecturer in Haematology, Dr Murray Adams hopes that being involved with the World's Greatest Shave will help students better appreciate the "human" side of such diseases and their impact on the individual, their families and friends.

Through the enthusiasm of the students, in excess of \$750 dollars was raised, with 2 heads being shaved and 5 heads of hair experiencing a new colour.

A big thanks goes to Wendy Baker, the Student Association Hairdresser, Wendy put her skills to work, providing a close shave for some and donated both her time and hair colour products, which provided a bright outlook for others.

Murray Adams is keen to make the event even bigger next year. So if you feel like a change next March, be sure to join in. Help brighten your day and someone else's future.



*Wendy Baker prepares Murray Adams for a close shave*



*Murray with a new look*



*Murray set a new hair trend to heighten Leukaemia awareness*



## Contact Details

Faculty Manager

Private Bag 99  
Hobart, Tasmania Australia 7001

Clinical School  
43 Collins Street Hobart

Telephone 03 6226 4741  
Facsimile 03 6226 4747

Email [Faculty.Secretary@healthsci.utas.edu.au](mailto:Faculty.Secretary@healthsci.utas.edu.au)  
[www.healthsci.utas.edu.au](http://www.healthsci.utas.edu.au)