

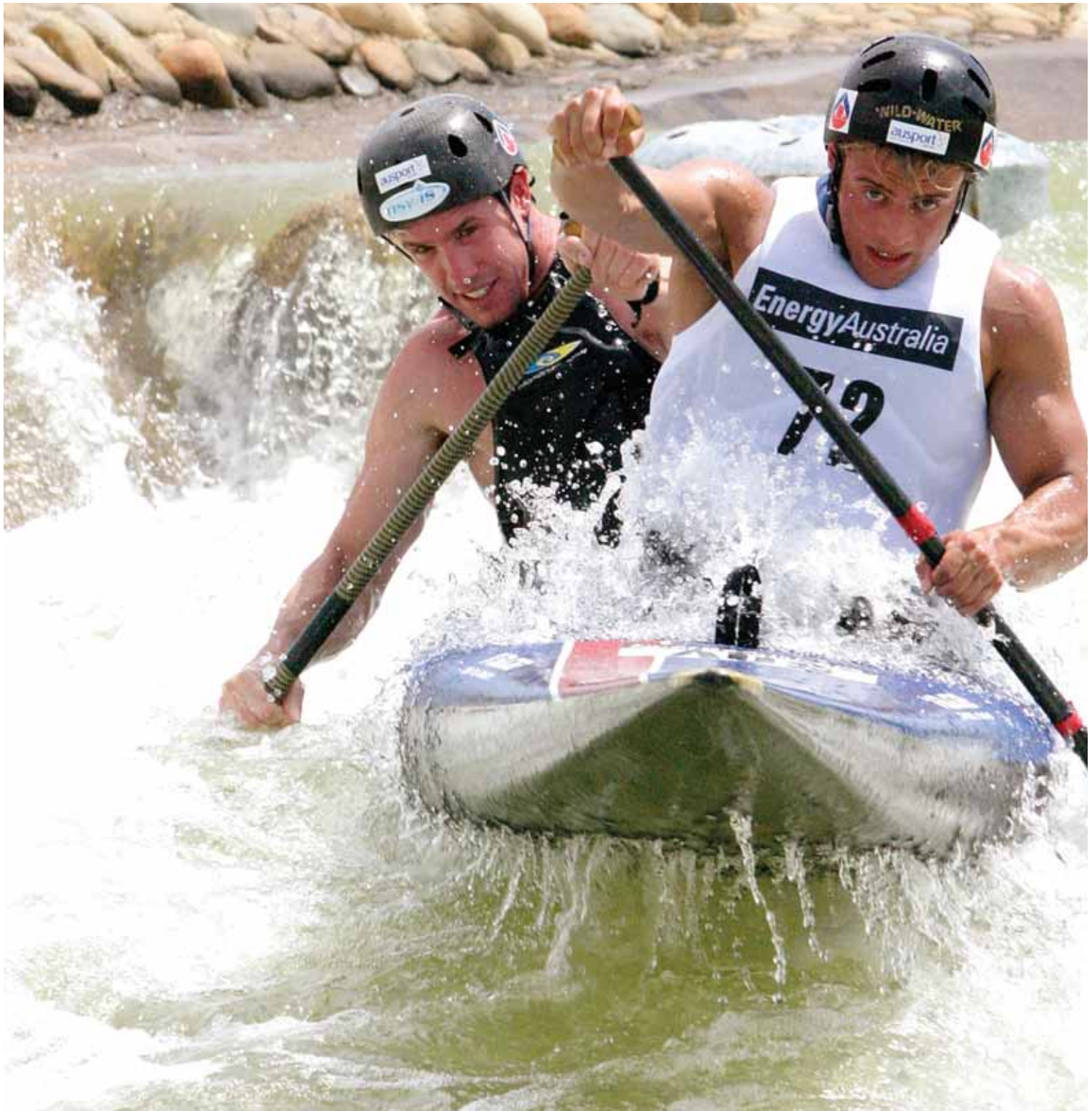


Radius

Newsletter of the University of Sydney *Medical Graduates' Association*

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Incorporating *Medical Scripts*, the Occasional Newsletter of the Faculty of Medicine



Going for gold | Male sex hormones | Brain tumour bank | Rural health | Alumni reunions



Note from the Editorial Committee

Radius is published by the University of Sydney Medical Graduates' Association (MGA) and the Faculty of Medicine at the University of Sydney. The publication includes Medical Scripts, the occasional newsletter of the Faculty of Medicine.

We aim to make this an interesting publication and encourage your contribution of news items, obituaries and letters to the editor. We do not object to controversial articles. Indeed we welcome them. The true role of a university is to provide a forum for ideas. Please note, however, that article should follow conventional journalistic etiquette. We endeavour to publish all articles sent to us.

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Front cover: Lachie Milne (left) and Mark Bellofiore in action.



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Message from the Dean

Professor Andrew Coats



Welcome to the third edition of the new Radius (incorporating Medical Scripts). In this issue we have reports and updates on some of the exciting developments within our Faculty of Medicine. Heart Disease gets a prominent position – with the Dean, Pro-Dean and two Associate Deans being cardiologists, other disciplines would be justified in feeling a little nervous!

Having said that the exciting developments from understanding the increased risk of coronary artery disease in males from the work from Dr Death and the major treatment advance of the first outcome trial of beta-blockers in elderly heart failure patients that I led are both good news stories that will help the populations of the developed world in grappling with the huge burden of disability and death related to heart disease.

Steve Leeder's contribution to the debate about health in the developing world gives us a strong wake-up call that there is a looming epidemic of major proportions as the developing world takes on some of the less healthy aspects of the Western lifestyle. The tragedy, but also the opportunity, is that much, probably even the vast majority of this epidemic, is preventable with simple measures that address lifestyle issues such as smoking cessation, increased physical activity and a reduction of obesity and in animal fat intakes. We have an opportunity, even more I believe, a duty, to inform political leaders around the world of this opportunity and need before it is too late.

Barry Catchlove is introducing in his section three exciting new developments for the Medical Graduates' Association. This goes along with Faculty's desire to work much more closely with its alumni on the future strengths of the Faculty. There is a strong buzz within the Faculty and the University and a sense of excitement about our potential for growth and excellence in research and teaching and learning. There is an accelerating pace in the appointment of international experts and an amazing growth in our success in major competitive research funding. The research statistics have demonstrated our significant growth in these areas and I am confident, in my crystal ball gazing, that this is set to continue for some time. There are exciting developments just around the corner. At the back of this issue of Radius you will see an advertisement for our prestigious new postgraduate program the Sydney Professional Master of Medicine Program (SPMMP as we now know it). You are invited to watch the developments as the program spreads to twenty or more disciplines and becomes a world standard for quality in postgraduate education.

Whilst it is difficult at this stage to give details, I can assure you that there are many other similarly exciting developments ready to be announced and launched over the next twelve months. I look forward to bringing further information about them to you.

President's report

Dr Barry Catchlove, Medical Graduates' Association



With the third edition of the new *Radius* (incorporating *Medical Scripts*) we can confidently say our journal is fully resurrected. We hope you find it interesting and helps keep you in touch. We would welcome your feedback and input.

There are three new exciting activities we are involved in which I would like to share with you.

Medical Scholarships

MGA has taken on the responsibility of developing a number of scholarships for students in the University of Sydney Medical Program.

The cost of a medical education, for a variety of reasons, is considerably higher than it was a generation ago. For many highly promising students, scholarship support is absolutely essential to their attending medical school. Our graduate entrants face more financial pressures than ever in pursuing their MBBS. Medical students today are more likely to be older, living out of home and working to support themselves.

Students are often faced with a difficult choice between work and study. The Sydney University Medical Society received over four hundred responses to a recent survey, revealing that 33% of students miss classes for paid work, with 10% of students working more than 16 hours per week.

An MGA Scholarship would have a far-reaching impact by ensuring that our best and brightest can focus on their studies.

Students were asked to describe some of their difficulties when the idea of MGA bursaries was proposed.

In a survey conducted by Medsoc in 2003 one student said,

"I think this is a fantastic idea. All of us feel financial strain to some degree, but some people are really struggling!"

After discussion with the Faculty and Medsoc, we believe scholarships of \$5,000 would be of great assistance and would be within the capacity of the MGA to initiate. We are looking to individuals or year groups to commit to funding a scholarship for a minimum of three years. The scholarships would be administered through the University, would be tax deductible and have naming rights.

From our existing resources the MGA has created the first such scholarship named in honour of Dr Gaston Bauer, one of the MGA founders and a prominent teaching hospital physician and cardiologist in Sydney.

If you, or your year, are interested in supporting a scholarship please contact me (0419 447 091), or Wendy Marceau at the Medical Foundation.

On-line library access

Currently, alumni do not have access to the University's online library service for journals, unless they are directly associated with the University. The MGA is therefore working with John Shipp, the University Librarian, and his staff to establish ways to provide alumni with access to library services. In order not to incur large costs we are proposing initially to restrict online access to the more general and widely-read journals such as British Medical Journal, The Lancet and the New England Journal of Medicine. Included in this issue of *Radius* is a questionnaire seeking your input.

Broadening the MGA base

While the MGA has, in theory, represented all alumni of the Faculty, we have traditionally focussed on medical graduates. The Faculty also includes hundreds of postgraduate research and coursework students in Public and International Public Health programs. Many of these come from all over the world and contact is difficult to maintain. We have taken steps to have a greater involvement with these groups. You will see this issue contains some material related to public and international public health activities.

We are also in discussion with Professor Bruce Armstrong and his staff as to how best the MGA can support graduates from the School of Public Health. Ms Dale Bampton has joined the MGA Council to help us better communicate with this group.

The traditional work of the MGA also continues. This year we have provided some support to seven reunions held during the year – the classes of 1944, 1947, 1954, 1964, 1984, 1993 and 1994.

Our jointly organised, with the Centre for Continuing Education, tour of Vietnam and the Meking River takes place in November 2004. We are seeking suggestions from alumni for further tours which would be of interest in 2005 and 2006.

The MGA was pleased to support this year's Lambie Dew Oration, organised by Medsoc and given by Jeff McMullen, formerly of Four Corners and 60 Minutes, on the health of Aboriginal people. Jeff is now involved with the Fred Hollows Foundation and the Ian Thorpe Foundation. He delivered a powerful oration on the health issues without over politicising the presentation. More than 500 people attended the oration in the Great Hall on 9 September 2004.

In November this year the Medical Foundation will officially open its new research facility, the Medical Foundation Building (MFB), which is located at 92-94 Parramatta Rd, opposite St John's Oval. The purchase of the MFB by the University, and its refurbishment was made possible by a \$10 million contribution by the Foundation.

The MFB Building is the centre of a major initiative to expand and promote the University of Sydney's research strengths in

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- > update your contact details and profile
- > look for classmates the easy way

The University of Sydney

post-genome research, particularly in bioinformatics and functional genomics. Peter Burrows, who was President of The Medical Foundation for 12 years, retired earlier this year after a distinguished involvement with the University. His place has been taken by Dr John Gregory-Roberts, a leading Sydney Hospital ophthalmologist and alumnus of the Faculty of Medicine.

I would lastly like to draw your attention to the new initiative of the Office of University Relations, the *Alumni Web Community*. Merely by registering (www.usyd.edu.au/alumni) you

can directly update your details and access other alumni who have joined the Web Community. We hope this will be a first step in helping alumni better access University services.

And finally, my usual appeal is not only for your financial support but also to ask you to give us feedback on the various matters I have raised in this report. Your comments and suggestions are welcome.

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Barry Catchlove

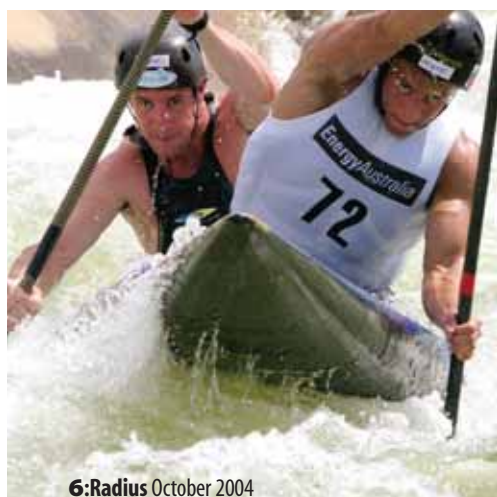
Going for gold in Athens

Skaidy Gulbis



The University of Sydney team for the 2004 Athens Olympic Games consisted of seventeen elite athletes, one basketball coach and two Paralympians, and was the second largest Olympic Games contingent after Sydney 2000. In fact, our team was bigger than those of many of the 200 competing nations.

Lachie Milne and Mark Bellofiore in training at Penrith before the Olympics.



6:Radius October 2004

Angela Harris, the University's Athlete Services Manager said of the team, "they've achieved the goal of representing Australia at Athens while playing sport at the highest levels as well as continuing their studies".

Second year medical student Lachlan (Lachie) Milne is a 'poster boy' for all-round excellence, "going for gold" in his twin passions of canoeing and medicine. He made his debut at Athens after more than a decade working his way towards an Olympic berth. Together with his canoeing partner and flatmate, Mark Bellofiore, a UTS business student, Lachie competed in the Men's C2 canoeing event.

"We didn't go to make up the numbers," said Milne, "we went to do the best we could and to try and launch ourselves at a top-three position". Since converting from K1 (single) to C2 (double) canoeing, Milne admitted he has "more of a thirst for it".

A self-confessed sports nut since high school in Melbourne, Milne only took up the canoe/kayak slalom eighteen months ago. He first represented his country in 1994 as an exchange student in Germany. From that point on, the single kayak was the way to go; he made selection for national teams each year until 2002.

A decision to team up with Bellofiore for the double canoe has resulted in their meteoric rise up the national and international ranks, culminating in the distinction of being the highest placed Australian crew at every

Above: Helleniko Olympic Complex, Athens 2004

World Cup regatta during the past season. Their fourth place at the first C2 World Cup event of 2003 was the best-ever Australian result. Spain and Germany World Championships followed, with the duo finishing tenth on the world rankings. Milne and Bellofiore maintained their 2003 form by finishing first at the 2004 Australian Olympic selection trials in February.

Citing a former Olympian canoeist, Danielle Woodward, who won a silver medal at Barcelona in 1992, as his first mentor, Milne acknowledges that canoeing is in the blood for the Milne family. Brother, Dan, and sister, Victoria, both reached their personal best at international and national levels respectively. Milne's competitive instinct first kicked in with whitewater rafting, "from there it was only months until I was addicted, and started training seven or more times per week," he said.

Angela Harris was naturally excited with the University team and had nothing but praise for Lachie. "What first impressed me about him was his ability to succeed in a multitude of challenging tasks – both mentally and physically".

By contrast with the University's first Olympian in 1906, sprinter Nigel Barker, who relied on funds raised through public subscription to follow his dream, most of Team Sydney University are on sporting

scholarships, either through the University, or its association with the NSW Institute of Sport.

Lachie Milne has been a University of Sydney sports scholarship holder since 1999 as an undergraduate medical science student. This year, the 25 year old won a prestigious Vice-Chancellor's Scholarship to support the pursuit of strong academic results and canoeing at the highest level. This scholarship is limited to only one male and one female student with outstanding academic and sporting achievements. Harris believes Lachie Milne stands out as a high achiever, undaunted by the many travel and competitive commitments, which are part and parcel of elite athletics.

Milne said the toughest competition they will face in Athens will be themselves. "Slalom is not really a race between athletes, but athletes against the clock." He described training as rather like surfing or mountain biking where, while a high level of fitness is required, it is the most technically proficient competitor who fares best. "One of the great things is the variation in training," he said, "it's fun, a sport where every time you train you get something different out of it ... it's the unpredictability."

Milne and Bellofiore call Emu Plains, five minutes from Penrith Whitewater Stadium, home base. A typical training schedule has them "up and at it" up to 12 times per week for a minimum 1.5 hours. "It's not just about pure power out there ... turning and paddling up stream, you change speed and direction, re-accelerate ... a bit like gymnastics," he explained, "a power-to-weight orientation." In the pre-competition period, the aim of the training is to reduce the bulk (by about 5 kilos) for greater acceleration strength. The shoulder muscles are developed during training, "all canoeists have big arms, big abs, with legs as the stabilisers," he said.

When asked to rate their chances of bringing home gold Milne was modest yet enthusiastic, "I think the experience will motivate me to train even harder, to ensure I'm at Beijing in 2008."

Milne reckoned his performance on the day would be 70% mental performance and 20% physical, "in our sport there are so many variables ... it's not so much strategy, as interpreting the best method of dealing with the sequence of gates ... that's the skill," he said.

The Helleniko Olympic Complex for the canoe/kayak events lies 32 km south of the Olympic Village, on an old airport site. With a spectator capacity of 8,000, it is the only course on the slalom circuit using saltwater to increase the buoyancy of the boats. The duo have already trained at the Olympic course and regard it as the best race venue in the world. "It raises the bar with much higher drops and the viaduct bringing the Aegean Sea rushing into the circuit with a vengeance," they said.

What about medical studies?

No slouch when it comes to hitting the books, Lachie believes that he does better at both sport and study as individual entities if he has the other there. "The Faculty of Medicine, and the University have been very supportive of both my passions," he added. Training full-time with a light study load in the lead up to the Sydney Olympics left him feeling unfulfilled. Commencement of full-on medical studies immediately improved his performance in both arenas.

His career goals include emergency and

sports medicine and orthopaedic surgery, although he mused that "cardiology also appeals ... it seems so logical to me".

Milne is hoping to take his elective stint at the 2006 Winter Olympics, building on some serious sports medicine research undertaken in Athens (on his time off).

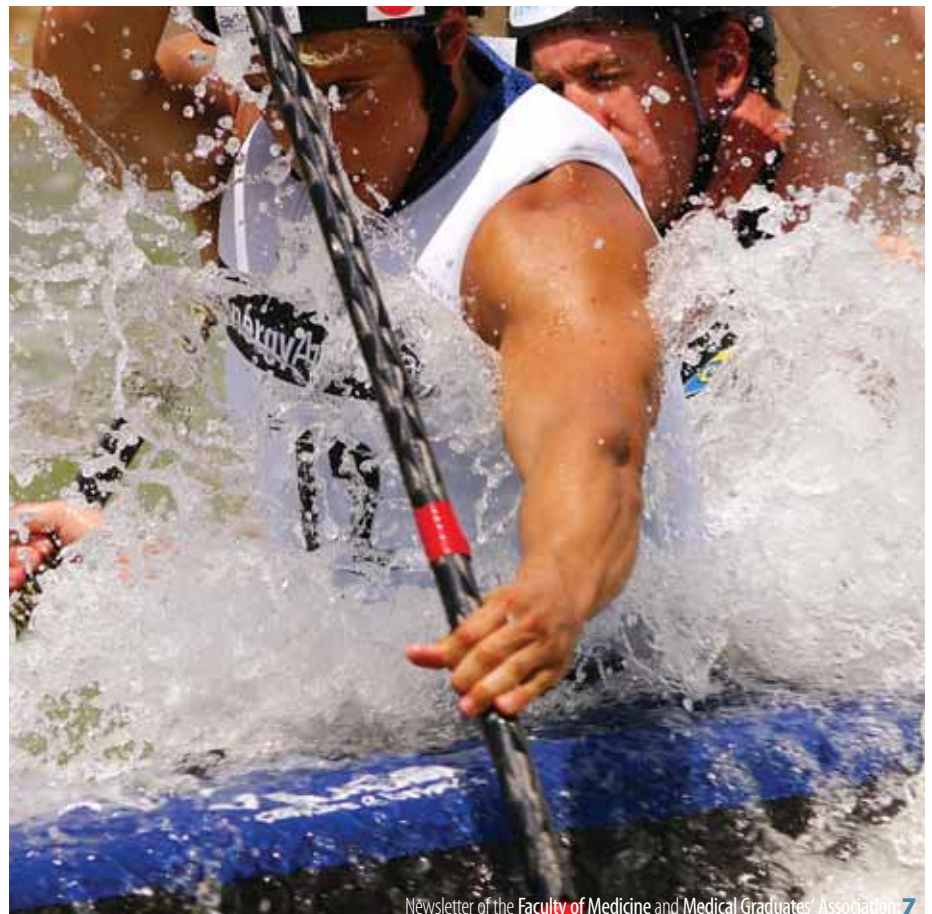
"There is definitely the potential to keep paddling until Beijing," he says. "My performance is always at its highest level when I am studying full-time ... working hard and canoeing hard does it for me."

Athens Update

Lachie Milne and Mark Bellofiore just missed out on making it through to the semi-finals. The gold medal winners, as predicted by Milne, were the Slovakian twins, Pavel and Peter Hochschorner. This came as no surprise to Milne as "they can do five one-armed chin-ups," he laughed.

Highlights from Athens?

The thrill of the Opening and Closing Ceremonies, a team BBQ with those demi-gods Roy and HG, and rubbing shoulders with Team Australia, poolside at the swimming, when gold and silver medals were won.



Heart disease and stroke set to rise in developing countries



Professor Stephen Leeder is Director of the Australian Health Policy Institute.

Renowned public health specialist and former Dean of Medicine, Professor Stephen Leeder, presented at a special colloquium, held at The University of Sydney on 5 August 2004, the central findings of a report highlighting the disturbing trend towards a growth in cardiovascular disease in developing countries.

Cardiovascular disease, heart attack and stroke are fast becoming a major issue in developing countries. Current estimates have cardiovascular disease (CVD) accounting for 17 million deaths annually, compared to a death rate from HIV/AIDS of 3 million. International agencies committed to improving global health have overlooked heart disease and stroke and many developing countries have not created programs to control these diseases.

The potential devastating impact of CVD has been examined in a major report *A Race Against Time: The Significance of Cardiovascular Disease in Developing Economies* co-authored by Professor Stephen Leeder, Director of the Australian Health Policy Institute.

'By 2020 there will be a billion people in the world aged over

65. As the global population ages, cardiovascular disease is set to become the leading cause of death and disability worldwide and is threatening to overwhelm health-care systems. Developing countries are witnessing the devastation to their workforces that Australia and other western countries experienced 50 years ago,' said Professor Leeder.

'We can now do much to prevent cardiovascular disease and ameliorate its impact. Cigarette smoking, an unhealthy diet, elevated blood lipids, hypertension, overweight, and lack of exercise, account for over 75 per cent of cardiovascular disease. They are amenable to medical treatment and individual and societal choices. We need research urgently into the best ways of managing and preventing cardiovascular disease in developing countries.'

Professor Stephen MacMahon, Principal Director of The George Institute for International Health said that Australia has an obligation to help developing countries, particularly those in the Asia Pacific region, reduce the burden of CVD.

'With their fragile health systems, low-to middle-income countries are ill-equipped to deal with the growing burden of diseases such as heart attack and stroke,' said Professor MacMahon.

'As one of the wealthiest countries in the Asia Pacific region, Australia is in a good position to help less-developed countries in our part of the world get up to speed in dealing with CVD. If we don't, the economic and social impact will be felt by the entire region.'

Professor Stephen MacMahon discussed some of the successful CVD projects being undertaken by The George Institute in developing countries, while Dr Alan Cass, Director of the Policy and Practice Division at The George Institute, compared the burden of chronic vascular diseases among Indigenous Australians with that among people in developing countries. Dr Paul Magnus, Medical Adviser, AIHW provided a comparative overview of the implications of the report in terms of Australian information on CVD.

Cigarette smoking, an unhealthy diet, elevated blood lipids, hypertension, overweight, and lack of exercise, account for over 75 per cent of cardiovascular disease.

The report is available online at:
http://www.earth.columbia.edu/news/2004/images/raceagainsttime_FINAL_0410404.pdf

University of Sydney scientist Research scan discovers gene for Hartnup disorder

Associate Professor John Rasko and his team at the Gene Therapy Unit at the University of Sydney's Centenary Institute of Cancer Medicine and Cell Biology, have discovered the causative gene for Hartnup disorder.

This important study has been published in the latest edition of the prestigious, international monthly journal, *Nature Genetics* (www.nature.com/ng).

Hartnup disorder affects about one in 25,000, people in NSW and can result in chronic health problems from early childhood including light-sensitive skin rashes, an unsteady gait and psychiatric disturbances. It is caused by excessive loss of some amino acids, the building blocks of proteins.

University of Sydney researchers and collaborators in Canberra have now found that Hartnup disorder is due to a defect in the gene which encodes the protein normally responsible for transporting amino acids in the kidney and intestine. When this gene is defective, some amino acids cannot be retained and

are lost from the body in very large amounts.

Professor Rasko says that "understanding these basic biochemical processes helps us explain the complexities of how the body functions and provides us with new opportunities to examine why some people are severely affected by the disorder whereas others remain relatively unscathed".

"It's beguiling," he says, "that a single error in one of the 300 million nucleotides in our genome can lead to this enormous change in the body's ability to process amino acids."

First described in 1956, Hartnup disorder is characterised by increases in urinary and intestinal excretion of neutral amino acids. "We localised a gene causing Hartnup disorder to chromosome 5p15.33 and cloned a new gene, SLC6A19, in this region. We identified six mutations in SLC6A19 that were inherited in the predicted recessive manner, with most affected individuals being compound heterozygotes. The

disease-causing mutations that we tested reduced neutral amino acid transport function *in vitro*," explained Professor Rasko.

"Hartnup disorder has provided profound insights into human biology," says Professor Rasko, "including how the body processes amino acids and, interestingly, how intestinal bacteria digest the food we eat."

For sufferers of Hartnup disorder it means better advice on diet including, for instance, the use of vitamins. It is thought that many more individuals are affected by this disorder in the developing world owing to inadequate diet.

Professor Rasko is excited about the insights this discovery will provide on how the body processes food, "this impacts on all metabolic processes from brain function to muscle growth and we hope to explore these issues based on the understanding our discovery has provided".



Photo: Associate Professor John Rasko

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Male sex hormones and heart disease



Dr Alison Death

A team of scientists has discovered one of the reasons why men are more susceptible to heart disease than women is a difference in their sex hormones. This may have great implications in understanding heart disease and the use of hormone replacement therapy in men.

"Heart disease is the number one cause of death in the western world, and men are 2-3 times more likely to develop it than women," Dr Alison Death, Group Leader from the Heart Research Institute, said.

The innovative team has led the world in taking a unique view that male sex hormones, androgens, help cause an early onset of heart disease in men, rather than the more popular

view, that female sex hormones, estrogens, protect women against heart disease.

"This is quite serious as there is an international increase in use of androgens in men," Dr Death added. "Androgens such as testosterone, the major male sex hormone, have good therapeutic qualities in men who are hormone deficient improving their general health, wellbeing and vitality, as well as rectifying bone and muscle defects. The use of testosterone in older men who are not hormone deficient, however, has potential hazards including worsening their heart disease or prostate cancer risk."

These good qualities of testosterone in hormone deficient men have spurred a 20-fold increased use of testosterone treatment medication in the USA since the 1990's, although this has been mostly for older men who are not hormone deficient. Dr Death's research suggests this may pose increased risks for heart disease. In its research, the team discovered that androgens trigger the initial steps towards heart disease in men.

"Androgens cause the blood vessel lining, endothelium, to become really sticky. This attracts inflammatory cells,

which are normally found travelling in the blood, and triggers them to enter and live in the vessel wall. Once in the wall, they eat the bad cholesterol, causing plaque to build-up and kick-start heart disease. If testosterone is to be used safely in older men who are not hormone deficient, we need to make sure that the good qualities of androgens outweigh the bad. Our next challenge is to isolate the good qualities of androgens, so that they can be used to produce therapeutic medication that will improve overall wellbeing without leading to heart disease," Dr Death said.

The team aim to define and isolate the negative effects of male hormones, which lead to heart disease, so that designer androgens can be made

avoiding these for therapeutic treatment.

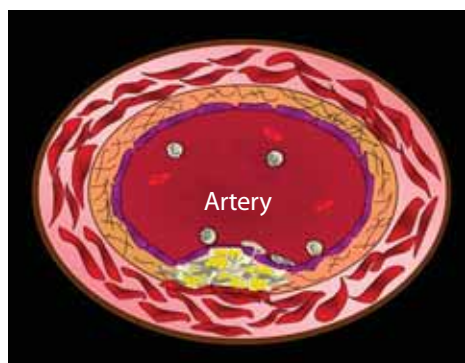
This research was a collaboration between the Heart Research Institute and the ANZAC Research Institute. Both research institutes are closely affiliated with the University of Sydney.

The Heart Research Institute is a not-for-profit organisation which strives to prevent, reverse and diagnose heart disease economically and universally.

For more information, please contact:

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Androgens appear to make the lining of blood vessels sticky, creating plaque build-up and possibly contributing to heart attacks.

Heart starter – University of Sydney researcher unveils world first

Breakthrough research into the use of beta-blockers to treat heart failure in the elderly was presented to 25,000 attendees at the European Society of Cardiologists Congress in Munich. It was the first major study of a beta-blocker in an elderly heart-failure population that has shown the benefit with nebivolol.

Dean of the Faculty of Medicine at the University of Sydney, and internationally acclaimed researcher, Professor Andrew Coats, was the keynote speaker in the late-breaking trials session, Hotline II, on August 29, 2004.

As co-chair, with Professor Philip Poole-Wilson from the UK, of the steering committee for SENIORS, a Study of the Effects of Nebivolol Intervention on Outcomes and Rehospitalisation in Seniors with Heart Failure, Professor Coats hailed the results as "the final step in a huge shift in thinking ... one of those amazing things where we thought one thing and were very, very wrong." The study has clearly demonstrated a significant reduction in the primary end point of all-cause mortality/cardiovascular hospital admissions with the beta-blocker, nebivolol, vs placebo.

Beta-blockers were until as recently as five years ago considered an absolute contraindication in heart failure, with most doctors, who qualified more than five years ago, having been drilled to avoid their use. While, in the

Beta-blockers have long been considered an absolute contraindication in heart failure, with most doctors, who qualified more than five years ago, having been drilled to avoid their use.

short term, the use of beta-blockers may even appear to make patients worse, their long-term benefits are now clear.

This major clinical trial proves that even in the most fragile patient, if given in low doses and carefully monitored, beta-blockers essentially ease the patient over the initial bad period and lead to greatly reduced mortality rates and shorter hospital stays. They can now be recommended for patients, regardless of age and left ventricular function. A win-win for the elderly patient and the health-care system.

"It was accident that these brilliant breakthroughs came about," said Professor Coats. "The sheer persistence, over twenty years, of some Scandinavian researchers resulted in pharmaceutical companies funding studies using beta-blockers with patent life still left in them. Without this we may never have discovered this advantage."

"It's the politics of making a difference ... how much of medical research operates," according to Professor Coats.

He suggested that, traditionally, clinical trials with beta-blockers have always concentrated on much younger patients, (average age 61), and predominantly male. "They bore little resemblance to the real world of heart failure, where the average age of heart failure in the community was 76," said Coats. Therefore, doubts had remained as to whether those

agents were actually beneficial in older patients. He pointed out that older patients are also more likely to have heart failure with preserved systolic function, which had not been studied in previous trials of beta-blockers.

The SENIORS study is truly unique, the first trial to mirror the real age group of the cardiology community. Moreover, the patients in the study represented more than one type of heart failure.

The SENIORS trial involved 2,135 elderly heart-failure patients, 70 years or older from 10 European countries who were randomised to nebivolol or placebo. Nebivolol was titrated up to a target dose of 10 mg once daily over a four-to sixteen-week period, with maximum tolerated doses maintained to the end of the 30-month observation period. It was noted that the mean maintenance dose of nebivolol achieved was 7.7 mg and that two thirds of patients managed to take the target dose of 10 mg long term showing that "elderly patients can tolerate decent doses of beta-blockers".

"Patients could see the benefits, got access to treatment not normally available and experienced a level of care well above the routine ... so they were very enthusiastic participants," explained Professor Coats.



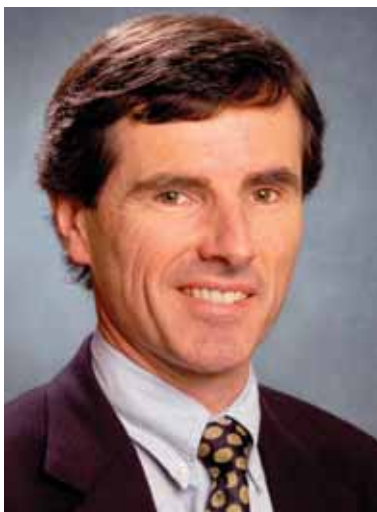
The SENIORS project was a European collaborative research project involving 100 cooperative centres from 10 nations. Nebivolol is currently marketed by Menarini in Europe for the treatment of hypertension and is the fourth beta-blocker shown to be beneficial in heart failure.

Coats is confident that the SENIORS trial should give practitioners the 'green light' to use beta-blockers in elderly patients. "It will hopefully change clinical practice enabling every elderly patient to benefit from optimal heart-failure treatment," he said.

With heart failure being the most expensive disease, this breakthrough in knowledge will save both lives and resources.

SENIORS has shattered the stereotype that advanced age is a contraindication to beta-blocker treatment.

Brain tumour bank



Professor Bruce Robinson

The creation of a unique brain tumour bank offers scientists a unique chance to study fresh tumour samples according to Professor Bruce Robinson, Head of Cancer Genetics at the Royal North Shore Hospital's Kolling Institute.

Professor Robinson hopes that the establishment of the Australasian Brain Tumour Bank by the Andrew Olle Memorial Trust in conjunction with the Sydney Neuro-Oncology Group at RNSH, will take the lead in the search for new genetic treatments.

Brain tumours are in the top five most common causes of death from cancer, with 90% of patients with a malignant tumour dying within two years of diagnosis.

The opening of the facility on 3 August 2004 brought together families of some high-profile brain tumour sufferers. Annette Olle, widow of Andrew Olle and Gayle Rivkin, whose stockbroker husband, Rene, has recently undergone surgery, were united in their support of this initiative.

Brain tumours are in the top five most common causes of death from cancer, with 90% of patients with a malignant tumour dying within two years of diagnosis. Each year 1,400 people in Australia are diagnosed with a brain tumour, with 1,100 succumbing rapidly.

"If we are to cure brain tumours, we must first understand which genes are turned on or off 'abnormally' in a tumour", says Professor Robinson, Director and a leading authority on cancer genetics.

The bank holds more than 150 tumour samples and has the capacity to store tissue removed from patients in Australia and New Zealand. Its unique feature is that it will take tissue at the time of surgery and snap-freeze it in liquid nitrogen.

Professor Robinson said that the freshness of tumour tissues is critical if we want to better understand and treat brain tumours, "quite simply, more samples can be studied, with a greater hope of finding the cause and the right treatment". Research to date has had to rely on samples provided after a victim dies.

The Andrew Olle Memorial Trust was established to honour the memory of popular ABC broadcaster Andrew Olle, who died suddenly at RNSH in 1995 of an inoperable brain tumour.

"I am absolutely thrilled that the Trust will be supporting such a worthwhile and much-needed venture," his widow, Annette Olle said.



Cross-Cultural Class 101

Usyd MP students attend voluntary clinical placement in the Torres Strait

Photos (left to right):

Poruma from the air

Christopher Lack, Rob Walsh and Cynthia Bierl together with Thursday Island Hospital Administrator Poi Pensio.

On the road on the island.

Trying out the hospital's wheelchair.

When was the last time you got up close and personal with a crocodile bite?

Three second-year medical degree students, Cynthia Bierl, Rob Walsh and Christopher Lack found this treatment par for the course during a week-long, voluntary clinical placement on Thursday Island in April 2004. It turned out to be a dream placement – a rich mix of remoteness, indigenous cultures and an introduction to health and social issues at many levels.

“It was about interpreting traditional indigenous health beliefs within the Western model of health care to make the services more relevant and responsive to local community needs,” Rob says.

Thursday Island, or TI as the locals call it, is situated in the Torres Strait, a body of water separating Australia and Papua New Guinea. It is one of 133 islands, of which 38 are inhabited. The local population of 9,000 people are a culturally unique community of Torres Strait, Melanesian, Polynesian, Aboriginal and European heritage. The main form of transport is by boat, small local airlines based at Horn Island, and Reef Helicopter Services.

Seven doctors work full-time in the Torres Strait, with two at any one time circulating around the islands. Two are based at the Primary Health Care Clinic, one at TI Hospital and one on call. Mr Poi Pensio, non-medical Director of the Primary Health Care system administers the Torres Health Strategy, developed to provide culturally accessible services, give control of the health services back to the community and build a partnership between local and state health goals.

Common health issues on TI include diabetes, heart disease, infectious disease and respiratory illness. During their placement the three “apprentices” got the real deal, starting with impromptu study sessions on leprosy, dengue, melioidosis, malaria, leishmaniasis, meningitis and Ross River fever. Their emergency medicine concepts were expanded as a result of exposure to burns patients, a crocodile attack, a death adder bite, advanced cases of “diabetic” feet and a spear injury.

Rob comments that “this placement is ideal for cracking students out of their shell”. He suggests that “... medical students need to hit the ground running with some basic skills. You will be assisting in taking basic history, venipuncture, cannulation, performing clinical screening examinations ...without these skills you’ll simply get in the way.”

Constant exposure to the doctors, either through shadowing or assistance at surgery was an eye opener to the differences in technique and patient contact.

“The main impact a placement in such a remote area has is to blatantly confront the student,” Cindy says “It’s a different world, close to the dividing line which separates what people die from in poor areas as to what people die from in rich areas ...you get a taste of being forced to make decisions not based on medico-legal issues, but on resource availability, doing the best with whatever you have.”

The students’ “two-way learning” experiences included watching a birth from the start of labour through to delivery of the placenta and a neonatal examination; performing a lumbar puncture and assistance with surgery. What Cindy calls “a sharp reminder that health is more often a primary function of borders, poverty and opportunity,” took the form of the untimely death of a young outer island woman who had come across ‘the great divide’ by canoe, “as many PNGans do” presenting with meningeal symptoms post-natally.

Rob’s clinic day on Coconut Island, particularly his encounter with Norma, a community health worker, was one of the week’s many high points. Arriving by Reef Helicopter to Poruma (Coconut Island), half an hour north east of TI, he watched for sharks and crocodiles below, remembering the pilot’s number one rule: do not enter the water on TI (even if many locals do!). Coconut Island consists of an airstrip at one end, and houses at the other, connected by a main street of 150 metres. The Islander diet is largely a mix of turtle, dugong, reef fish and sugary soft drinks from the shop.



Left: outside the hospital

Above: visitors to the island fly from the Cairns. What about the length of the flight?

It was at the Poruma community clinic that Norma, a larger-than-life Islander with a brilliant sense of humour, teased Rob in a number of island languages. Insisting that she was scared of taking blood, Norma sat beside the patients, “covering their eyes and resting their heads on her chest”, while the apprentice, Rob, quickly refined his venipuncture skills. Due to patients’ thick skin, size, fear of needles and their own blood, the Islanders presented Rob with many challenges during the day-long clinical visit.

“It can take years to understand cultural differences, to integrate information handed down from generation to generation into a holistic health care package,” he says.

Coconut Island gave him first-hand experience of the realities of remote medicine. “It encapsulated the importance of the doctor-patient relationship and that wider community trust of the medical practitioner is a prerequisite of any compliance”. Observing Dr Thompson conducting home visits to elderly patients greatly inspired Rob – “he left every patient smiling and empowered with knowledge about their health issue”. In a community “where animist

superstition still plays a role in traditional healing, people like Dr Thompson encourage trust in the ‘white man’s magic’”, he says.

A visit by the students to the Thursday Island High School with Principal, Tony Considine, addressed one of the goals for the placement: to canvass ways to improve rural, remote and indigenous representation in universities. Mr Considine’s success in lifting retention and attendance rates, targeting talented as well as academically weaker students and assisting the transition into vocational training, resulted in TI High School being awarded The Weekend Australian’s Best School for 2003 prize. What impressed the judges was the staff’s determination to strive for great academic results in a “culturally appropriate context”. The focus on literacy by the school community of students, teachers and parents, launched the students into the world as global citizens, said Mr Considine.

When asked if this type of clinical placement is for everyone, our students answer in the one voice. “In a remote and relatively small community you witness first-hand the relationship between the social, educational, health and welfare services. The primary challenge is entering a totally unfamiliar social environment. It’s cross-cultural class 101.”

While they recommend the experience of medical practice outside a larger teaching hospital during the formative stages of a medical career, our second years emphasise that it is more than just a framework for students to practice. “Students should analyse their motivations ... all patients expect to be approached with the utmost respect ... never underestimate the power of being polite and keeping your mouth shut most of the time”, advises Rob Walsh.

Christopher adds, “Be aware that the community members are going out of their way to help you ... show appropriate appreciation for their time and assistance.” The challenge is to meet strangers and politely establish trust across a cross-cultural divide.

Associate Professor Jill Gordon agrees, noting that opportunities outside the ‘normal’ curriculum are known to have a powerful influence on values and attitudes towards indigenous health care.

The students would like to thank the following individuals for their support of this placement:

- > Poi Pensio, Director, Torres Strait Health Care Services
- > Dr Les Roberts-Thompson, Medical Superintendent, TI Hospital
- > Dr Tony Woolford
- > Dr Rob Thompson
- > Dr William Houston
- > All TI Hospital Staff
- > All Community Health Care Staff
- > David Wyatt and Reef Helicopter Services
- > Tony Considine, Principal TI High School

This article is based on the diaries of Year 2 students Cynthia Bierl, Rob Walsh and Christopher Lack.

Photos are courtesy of Rob Walsh.



The Medical Society Bookshop

From strength to strength

The Sydney University Medical Society (Medsoc) is more than just a student society or club. On joining, members are guaranteed services for life. Over the past eight years, the society has delivered more of these services to graduates.

Medsoc is the most viable and involved society on campus. Since 1886, the Medical Society has been central to medical students as a representative, cultural, service, sporting and social organisation. Its range of activities has been very wide, and it has a proud and continuous history. We have been positioning ourselves to provide services in the development, production and delivery of information to students, faculty and graduates.

The Medical Society Bookshop

As a non-profit entity established more than 50 years ago, the Medical Society Bookshop is now the largest medical bookseller in Australia. We now supply some 12,000 books per year to graduates, representing half our sales and at a 15% discount that is unmatched by any other bookseller.

The bookshop has eight full-time and two part-time staff members, and prides itself on the quality of its customer service. Doctors are "time poor" and therefore value the level of service offered by the bookshop staff, including searching out titles on behalf of our members, advising on new and alternative titles and in developing a medical information database.

We are one of the few remaining booksellers or publishers to maintain a direct access telephone service. We pride ourselves on dealing with customers immediately and directly. All email enquiries

are handled within 2 hours of receipt.

In our most ambitious project yet, we are aiming to have a new online bookshop go "live" by the end of 2004. An online presence will improve our accessibility to all graduates as well as the increasing number of students on rural placements.

"all things medical"

all things medical is a 12-month-old division of the bookshop responsible for publishing and distribution services, providing a new avenue for members and faculty staff to publish. We have several books already in development, and are providing consulting services for two publishing projects at Liverpool Hospital.

In recognition of evolving changes in information delivery, and in particular the development of print on demand (POD) technology, the society has invested in digital printers and plans to progress to printing/binding machines in the next three years. It is anticipated that the service will be able to store information digitally and deliver it electronically or produce bound books on demand.

Medical Society Bookshop Bursary Scheme

After becoming acutely aware that a growing number of students are precluded from focusing on their studies, or even completing their medical degree due to serious financial difficulties, Medsoc has recently established a book bursary scheme to support ten students each year (\$500 each). We have also collaborated with the Medical Graduates' Association in establishing its own scholarships.

The Medical Society Bookshop believes that its future lies in playing a more complete role in the delivery of information to medical and allied health professionals. On behalf of Medsoc I would like to thank our bookshop manager, Gavin Crawford, and his dedicated staff, who continue to provide professional services that are of such value to students, faculty and graduates. We are also grateful for the support of the Faculty of Medicine in all of Medsoc's endeavours.

Imre Hunyor
Honorary President
Medsoc

The Medical Society Bookshop

University of Sydney Branch

Blackburn Building

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Monday to Friday: 8am – 6pm

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Rm 3-1072

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Hours of Operation

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CJD researcher relocates to Sydney

A leading researcher in prion diseases has been awarded the Medical Foundation's Jessie Isabel Alberti Program Grant for research into the brain.

Dr Simon Hawke is a University of Sydney medical graduate whose research on prion replication, conducted at the Imperial College, London and published in *Nature* last year (*Nature*:422, 80-83, 2003), demonstrated for the first time that prion replication (infectivity) could be suppressed *in vivo* by immune manipulation. The grant from the Medical Foundation has allowed Simon to return to his alma mater to continue his research.

"I have been working on prion (proteinaceous infectious particle) diseases, a group of neurodegenerative diseases that affect humans and animals. The most common human form is Creutzfeld-Jakob disease (CJD), and in animals, the two best known are bovine spongiform encephalopathy (BSE) or mad cow disease, and scrapie in sheep. These diseases have some unique features and features common to a wide range of disorders such as Alzheimer's disease and some forms of Parkinson's disease."

After leaving Oxford, Simon was working at Imperial College, London and at the MRC Prion Unit at UCL. It was there that he became involved in developing a test for BSE using antibodies that were raised in his laboratory. The test, developed in collaboration with Professor John Collinge, and evaluated by the European Commission is one of most sensitive tests for BSE, and has since been commercialised by Roche Diagnostics.

"The main problem in [prion] disease seems to be protein misfolding. We all have this protein called prion protein. [which] is expressed quite widely throughout our brains and also in the rest of the body, including the immune system... What happens with these prions is that the normal protein transforms into a form which cannot be dealt with. For some reason, it gums up the normal cellular machinery and causes cells to malfunction and then to die. That is why patients end up with neurological disease," explains Simon Hawke. A similar process occurs in Alzheimer's Disease with the amyloid precursor protein. A toxic protein builds up, that cannot be metabolised by neurons.

"In prion disease, the process occurs not only in the brain but also outside the brain. But it seems that the brain is uniquely vulnerable to the build up of prions."

CJD does occur in Australia, though it is the rare sporadic form with about 15 to 20 new cases per year and for which there is no definite obvious cause. This is a different strain from variant CJD (vCJD) which has emerged in the UK since 1995 and which is thought to have been the consequence of eating meat contaminated with BSE prions. Many of the patients with variant CJD have been young, even in their teens. "That's very unusual because the sporadic form that we have in Australia affects older individuals, over the age of 50." Variant CJD resembles kuru, a disease of the Fore, a remote highland tribe in New Guinea, who practised endocannibalistic funeral rituals.

Variant CJD has a slightly different neuropathology and different protein characteristics to sporadic CJD. The clinical course is also longer. "Some patients had symptoms for two or three years before they died. There are other clinical differences such that they often presented with



Dr Simon Hawke

neuropsychiatric presentations, and with limb pain. Particularly worrying for public health, and unlike the sporadic form of CJD which you can barely detect outside the central nervous system, variant CJD is actually easy to detect in lymphoid tissue. In fact, tonsil biopsy has become a way of diagnosing the new variant in life - the tonsils, any lymph node, and the spleen are actually packed full of the infectious protein ... the key difference between prion diseases and other protein misfolding diseases as far as we know is that [with prion diseases] the protein which causes neurons to degenerate is also infectious."

"The infectious agent is problematic in prion diseases because the abnormal protein has a very rigid structure. It is actually rather hard to inactivate." It has been demonstrated that scrapie is transmissible to sheep from pastures that have previously been grazed by scrapie-infected sheep and have remained unused for several years, suggesting the prions can persist in the environment.

"For humans, of course, the main issue is surgical operations and blood transfusions, and the standard instrument sterilising protocols are not sufficient to decontaminate prions."

Australia currently has relatively few research workers with expertise in the field of prion disease, calling in to question our ability to deal satisfactorily with potential epidemics, such as have been faced in Europe. Dr Hawke and his team will significantly increase Australian expertise in the field and would be highly complementary to current prion research in Melbourne. As protocols for the therapy of prion diseases are trialled, it is expected that Dr Hawke will play a significant role in the implementation of these in Australia in collaboration with Dr Steve Collins in Melbourne. Much of the expertise in biochemistry, immunology and brain inflammation accrued by Dr Hawke and his team will be applicable to other neurodegenerative diseases in which protein misfolding plays a key role. These disorders constitute one of the major public health issues for the 21st Century.



"For humans, of course, the main issue is surgical operations and blood transfusions, and the standard instrument sterilising protocols are not sufficient to decontaminate prions."

2004 Lambie Dew Oration

Jeff McMullen, Director of the Ian Thorpe Fountain for Youth Trust



Jeff McMullen

The Lambie Dew Oration is an annual event, organised by the University of Sydney Medical Society (Medsoc), honouring the first professors of medicine and surgery at the University of Sydney. Since 1958, Medsoc has chosen a distinguished person each year to address the University community on issues relevant to medical education. Past speakers have included Sir Lorimer Dodds, Sir Gustav Nossal, Professor Fred Hollows, Justice Michael Kirby and Professor Marie Bashir.

This year's speaker, Jeff McMullen, is Director of the Ian Thorpe Fountain for Youth Trust, which is currently working towards improving the state of Indigenous health within the Jawoyn communities of the Northern Territory. In partnership with The Fred Hollows Foundation and the Sunrise Health Service Aboriginal Corporation, the Trust has contributed funding towards a maternal and child health program in the Jawoyn region.

The 2004 oration was entitled *Walking in the Footsteps of Fred Hollows: His Vision Twenty Years On*. Jeff McMullen's address concentrated on the latest assessment of what causes the pattern of chronic illness in Indigenous communities called Syndrome X. He explored the new research and understandings of a worldwide pattern of bad health among indigenous people - this cluster of chronic illnesses and the most recent scientific discoveries. The following are extracts from his oration:

The full text of the 2004 Lambie Dew Oration is available on the Faculty of Medicine website:
www.medfac.usyd.edu.au

"In Australia's heartland a terrible plague of chronic illness is scything through a generation of Indigenous people. "Syndrome X" the doctors call it. Literally it is the new 'Black Death'. Diabetes, end-stage renal disease, strokes, hypertension and heart disease are felling Indigenous people at a terrifying rate. So etch this into your brain like the carvings on their tombstones: we are letting some Australians die 20 to 25 years before the rest of us. Look closer at the graves. Can you see the National Epitaph we offer Indigenous people? These Australians are born in disadvantage and die that way.

"In the remote communities of the Northern Territory where Ian Thorpe and I were asked to lend a hand, the median age at death for Aboriginal men is only 46 years. Usually, I'm the oldest man in the street. It is confronting. There is a regular procession of funerals, a constant grieving. One day a sweet, smiling young mother holding her child asked to pose for a photograph with Ian and he did so cheerfully. A year later she is gone. People die as relentlessly as if they were being put up against a wall and shot. One after the other I watch them fall. Bodies have not just one chronic illness but two, three or even four. The leaders are sick. The wisdom and knowledge are being buried. We are watching the heart cut out of a generation of Indigenous people. 'How can this be?' Ian asked when he saw this state of separation and inequity. 'And what can we do to help?'

"We must begin by asking our nation to face the truth. Aboriginal health is a genuine national emergency, more threatening than terrorism or the water crisis. We responded to these challenges. We talked about them often. But we have yet to focus on our greatest crisis and it is weakening us at the very heart of our nation, wreaking massive damage on the oldest continuous culture on earth.

"Aboriginal health is now so poor that 45% of Aboriginal men will die before the age of 45. About 34% of Aboriginal women will not reach that same early middle age. Some people tell me that our country is quite familiar with this long-established pattern of suffering, that people understand these facts because it has been like this for most of our lives. But I don't think so. We still live apart.

"In the remote communities of the Northern Territory where Ian Thorpe and I were asked to lend a hand, the median age at death for Aboriginal men is only 46 years. Usually, I'm the oldest man in the street. It is confronting. There is a regular procession of funerals, a constant grieving."

“...the lower a baby's birth-weight, the fewer nephrons there will be in that tiny kidney. These are the parts that process sugars. After birth you don't catch up on nephrons. The hand you are dealt is what you must get through life with ...”

“For some Australians there is a kind of amnesia about the "Aboriginal problem" as they so often call it. They do know the truth but do nothing. Many others live in a state of total separation, with a gulf between black and white, a silent apartheid that allows them to live with this ongoing tragedy and do very little. Maybe some really hope that Aboriginal people will just disappear from this land. Whatever the excuse, as a Nation we retreat into the comfort of knowing that generally we can pride ourselves on the fact that most Australians have among the highest quality of life, the longest life expectancy and the best health care of any people in the world. But Syndrome X challenges this complacency. Syndrome X is the front-page story yet to be written. During this Federal Election campaign I would like to hear a candidate talk about Syndrome X.

“This plague of chronic illnesses among Indigenous people is not the result of a 'genetic flaw', a 'weak gene' or any other variation of that convenient and racist excuse for us failing to deal with this health emergency as it has gathered momentum. Even thirty years ago as I filmed for Four Corners in the American First Nations I heard many claim that the diabetes and kidney disease among Native Americans also were the result of a 'weak gene'. The truth is far more provocative. A combined American-Australian Research team from Monash University, the Menzies School of Health Research in the Northern Territory and the University of Mississippi has done extensive autopsies on the kidneys of whites, Afro-Americans, and Indigenous Australians. What they discovered was that there is a common link among so many people with fatal kidney and heart disease. It crosses over races but it certainly hovers around poverty wherever it's found. The common link is being born a low birth-weight baby.

“If you are studying medicine or in the medical professions I urge you to look at this because Syndrome X is the front line of your professional challenge. It will connect you to the neediest patients in Australia. It will also give you a far greater understanding of why obesity is such a rising threat around the world and why American medical authorities warn that this current generation of their children may be the first NOT to outlive their parents. Unless we recognise the dangerous connection between bad nutrition and chronic illness this plague, Syndrome X, will grow far worse.

“What the American and Australian researchers have confirmed is that the lower a baby's birth-weight, the fewer nephrons there will be in that tiny kidney. These are the parts that process sugars. After birth you don't catch up on nephrons. The hand you are dealt is what you must get through life with and if you have too few nephrons they try to overcompensate. If the child has poor nutrition as so many Indigenous children do, and especially if they become obese as a result of bad diet and lack of affordable healthy food, there is a greatly increased risk of scarring and subsequent kidney failure, as well as high blood pressure and heart disease. Now surely here is the key to unlock the mystery of Syndrome X?

“Syndrome X is the result of decades of neglect and inequity. It is the diseases of poverty like scabies that make this epidemic of so-called 'lifestyle illnesses' so much worse for Indigenous people. Untreated skin sores, pyoderma, allow streptococcal infections to invade the body. This in turn can lead to the very high rates of chronic renal failure among Aboriginal people and the world's highest incidence of acute rheumatic fever. Have you ever seen a child with acute rheumatic fever? Maybe not, because it was mopped up in our cities decades ago. But I witnessed an Aboriginal girl pushed in a stroller with her joints all swollen and rheumatic fever raging. She has no treatment, but this is an entirely treatable, preventable disease. Monthly injections of penicillin cost only a few cents per dose. But when not treated the worst part of rheumatic fever is that it can attack that child's heart valves and heart muscles and cause permanent, life threatening heart damage. This is how Syndrome X does its deadly job, one illness intersects with another, and then another, until there is a sickening implosion, with thousands dying prematurely.”

Jeff McMullen concluded his oration in proposing a blueprint for action built on one very clear principle. We must listen to Indigenous voices if we are to overcome the Indigenous Health Crisis.

He advocated a number of steps as the way forward:

- > Urgent Government action and investment to change the inequality that has created this health tragedy.
- > A bi-partisan parliamentary effort to end "institutionalised racism".
- > Establishment of a new and respectful relationship between Indigenous people and the Parliament of Australia, to establish a legal basis for giving Indigenous people their right to better health.
- > Coordinated national health care.
- > Expansion of the number of Indigenous doctors, nurses and health workers (at present only 55 Indigenous doctors instead of 1,250).
- > Education and affirmative action to create a culturally appropriate health service.
- > Addressing health challenges, such as deafness and hearing impediments, that become major learning disabilities. (Results showing health benefits of salt water pools in remote communities).

“This is not about US and THEM. These are our children. This is not about RACE. It is about the HUMAN RACE,” concluded McMullen.

Opening of the School of Rural Health

Partnership creates medical hub



The African proverb, "It takes a village to raise a child", can be applied to the collaboration which produced the new School of Rural Health facilities in Dubbo.

Declaring the new educational facilities open on Wednesday, 18 August 2004, the Honourable Tony Abbott, MP, Federal Minister for Health and Ageing said: "It's a great day for Dubbo and the wider community that testifies to the social fabric in country areas. This project will be good for students, by giving them a taste of the bush, for doctors, by stimulating a richer and more sophisticated medical culture in Dubbo, and, for the community, by providing better services."

The new University of Sydney facilities comprise a teaching block consisting of a fully equipped skills laboratory, conference room and state-of-the-art rooms and student common room, together with an administration block and five separate student accommodation modules catering for 25 students.

The formerly named Dubbo Clinical School has been in operation since 2001, located in temporary space within the Dubbo Base Hospital. The construction of the new Clinical Education Centre for the School has been made possible by Federal funding of almost \$5 million.

Addressing the almost 250 invited guests, Professor Rick McLean, Head of the School of Rural Health acknowledged that the opening was an extraordinary culmination of support and enthusiasm from the government, the University of Sydney, health professionals, students, staff and the local community in establishing a fully

functional and successful clinical school in rural Australia. A real win-win situation.

"It shows that the government is serious about having a long-term presence in the bush, not just Mickey Mouse stuff, demountables and the like," he said.

Speaking on behalf of the Vice-Chancellor, Professor Don Nutbeam, Pro-Vice-Chancellor and Head of the College of Health Sciences, commended the school staff who had "worked incredibly hard to take a bold idea and make it reality."

Professor Nutbeam hailed the partnership "a great start ... the way forward in ensuring that health care in rural and regional Australia is as good as that available in metropolitan NSW."

The Minister thanked all stakeholders who "believe in country Australia for pushing back the frontiers of learning ... and everyone who believes the world can be a better place."

Dr Greg Stewart, Deputy Director-General of Public Health NSW and Chief Health Officer of NSW, emphasised the need to have this kind of collaboration when dealing with the medical workforce to solve rural health problems. "There's no question that rural clinical schools are an integral part of developing a health workforce that will do what a health workforce does, which is to improve the health of people in NSW."

Professor Andrew Coats, Dean of the Faculty of Medicine, summed up the totality of the rural clinical experience as "learning from physicians, allied health workers, nurses and the community who all share the same passion for their work and are yet also not divorced from the educational content that

Photos:

1. Group of year three and year four students at the opening of the School of Rural Health, Dubbo. The School of Rural Health logo (in foreground) was developed to reflect the central west environment. Its clear blue skies, bright yellow sun and red earth are represented as concentric circles radiating out from the centre. The colours used are the same as the University of Sydney crest.
2. (left to right) John Cobb, Tony Abbott and Rick McLean
3. Dennis Yeo (centre) with students of the School of Rural Health.

can be delivered via video conferencing and the Bushnet internet connection. "It's a model that the rest of the world will learn from ... as we see how it is possible to train medical health workers in communities that are disadvantaged by distance but very much empowered by the strength of their local communities."

Ms Jyoti Chaku, a year three student doing a one year Dubbo rotation, and Vice-President of Mirage, the University Rural Student Club, praised the new facilities and the benefits of a rural placement. "The increased amount of hands-on experience due to smaller treatment teams, the closer contact with senior medical staff and health professionals, access to the Rural Flying Doctor Services and Aboriginal Medical Services is why I volunteered ... The length of the rotation allows integration not only into the hospital, but also into the community and an understanding of rural and Indigenous issues."

Distinguished guests also included Mr Russell Ryan, distinguished elder of the Tubba-Gah people, Wiradjuri nation, Professor Ian Goulter, Vice-Chancellor, Charles Sturt University, Mr Roger Fletcher, Mr John Cobb, Ms Jeannine Biviano and Professor John Horvath.





Making a real difference

Tribute to Professor Sirius Naraqi, 1942 - 2004

On Friday 13 August 2004 the College of Health Sciences and Faculty of Medicine held a Symposium, *Contributing to Health Development in the Asia Pacific Region* to honour Professor Sirius Naraqi, former Associate Dean of the Western Clinical School at Nepean Hospital. Professor Naraqi had been desperately ill for almost two years and died the week after the symposium.

Sirius Naraqi was appointed to the Faculty of Medicine of the University of Sydney as Professor of Medicine and Associate Dean of our Western Clinical School at Nepean Hospital in 1998. He had a distinguished international reputation as a high quality physician and talented scientist with many publications in clinical virology, infectious disease and internal medicine.

The entirety of Sirius - his personal and professional actions - was inspired and strengthened by his Baha'i faith, an inclusive belief that expresses the oneness of humanity and the permanence of the human spirit and which considers work in the spirit of service to others as worship of God. As former colleague, Michael Alpers, of Papua New Guinea said, Sirius was the embodiment of equanimity, graciousness, clarity and generosity.

Sirius used his interest in infectious diseases to express his strong humanistic desire to serve in areas of greatest need, such as Papua New Guinea, where he took up the Chair of Medicine at the University in 1983. During his time at the University of Papua New Guinea (UPNG), major research projects were conducted on severe forms of malaria, snake bite and meningitis, resulting in international recognition of the UPNG Faculty.

The legacy of Professor Naraqi's leadership and inspiration at UPNG over 15 years includes many local consultant physicians, some of whom are occupants of top UPNG and PNG Health Department positions. One of them, Professor Sir Isi Kevau, spoke eloquently of his former mentor for them all.

The Queen made Professor Naraqi a Commander of the British Empire in 1998 for his service to Papua New Guinea.

Born in Persia on September 30, 1942, Sirius came top of 80,000 candidates in his medical school entrance exams. After graduation, he served as a general practitioner to the Persian army before emigrating to America in 1969. There he completed postgraduate training at the University of Chicago and the University of

Illinois, followed by taking up numerous consultant physician and academic appointments. Professor Naraqi was a Fellow of both the American and the Royal Australasian Colleges of Physicians and a member of the American Board of Infectious Diseases.

Professor Naraqi was treasured by many people. First and foremost, he was the husband of Mitra and father of Ladan, Naysan, Anisa and Gulita. Ladan and Naysan studied in America, Ladan following in Professor Naraqi's medical footsteps, Naysan in communications and media. Recently Sirius became the grandfather of Sana.

Medical students respected his dedication to them, his profession and his generosity of spirit. He did not seek effect or popularity - he just believed in the worthiness of work and the value of human engagement. That was the sort of world citizen he was - he gave respect spontaneously and received it in turn. His academic colleagues delighted in his integrity, commitment, firm principles and intellectual capacity.

Medical students respected his dedication to them, his profession and his generosity of spirit. He did not seek effect or popularity – he just believed in the worthiness of work and the value of human engagement.

Professor Naraqi's involvement in community service included consistent participation in public debate; services to the World Health Organisation in tuberculosis, malaria and HIV/AIDS; research and rural health in PNG; literacy, international human rights; hygiene and nutrition for the underprivileged; and numerous positions of leadership within the Baha'i congregation.

The Faculty of Medicine at the University of Sydney together with Professor Naraqi's family considered it appropriate to mark his retirement with a symposium that spanned and displayed his range of interests and his splendid life.

Proceedings of the Sirius Naraqi Symposium

More than 200 University of Sydney staff and students, international and local medical and health care professionals attended the full-day Symposium, *Contributing to Health Development in the Asia Pacific Region*. Special guests included Mrs Mitra Naraqi and family, Professor Sir Isi Kevau, University of Papua New Guinea, His Excellency Renagi R. Lohia, CBE, Papua New Guinea High Commissioner to Australia, Professor Stephen Leeder, who gave the Sirius Naraqi Oration and Stephen Hall, Continental Board of Counsellors for Australasia, Baha'i Faith.

Speakers included Professor Don Nutbeam, Pro-Vice-Chancellor and head, College of Health

Sciences, Professor Andrew Coats, Dean of the Faculty of Medicine, Professor Frank Billson, Professor Tania Sorrell, Professor Stephen MacMahon, Professor Warwick Britton, Professor Robyn Norton, Professor Richard Taylor, Professor Bruce Robinson, Professor Bruce Armstrong and Ms Kirsty Thompson.

Proceedings are available online at www.medfac.usyd.edu.au. Contact Marie Trypas on 9351 5692 for further information.

Sirius Naraqi Oration: Liberalism and the Challenge of Global Health
Presented by Professor Stephen Leeder
For full text go to www.medfac.usyd.edu.au

Degree of success

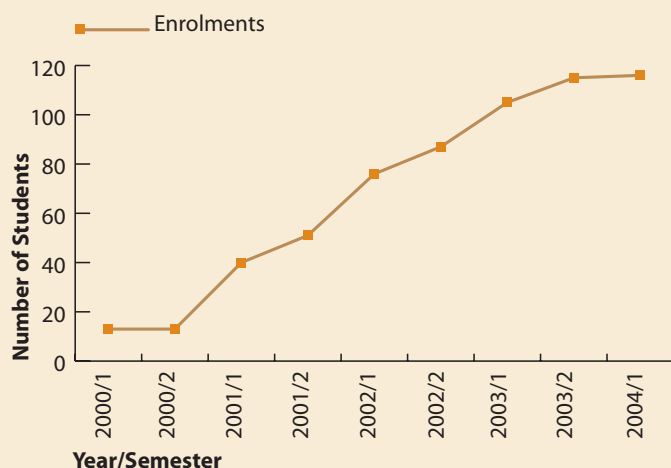
Dale Bampton, Associate Lecturer, International Public Health

The Master of International Public Health program (MIPH) in the School of Public Health, University of Sydney, started modestly in 2000 in an environment of growing concern about public health issues in developing countries, and pressure from both local and international students to provide a postgraduate program that trained public health professionals to work specifically in resource-poor settings.

The rapid growth of the MIPH, and the success of its graduates, has demonstrated that the program has effectively responded to an unmet need both in Australia and abroad.

The program has seen an unprecedented explosion in enrolment figures from its initial intake in 2000 (refer to Figure 1). This initial intake comprised 13 students, and there were 2 key staff dedicated to the program. In Semester 1 of 2004 there were 116 students in the program, six key staff and a number of external academics, health professionals and consultants closely involved with the program. As of April 2004, 122 students had graduated from the program.

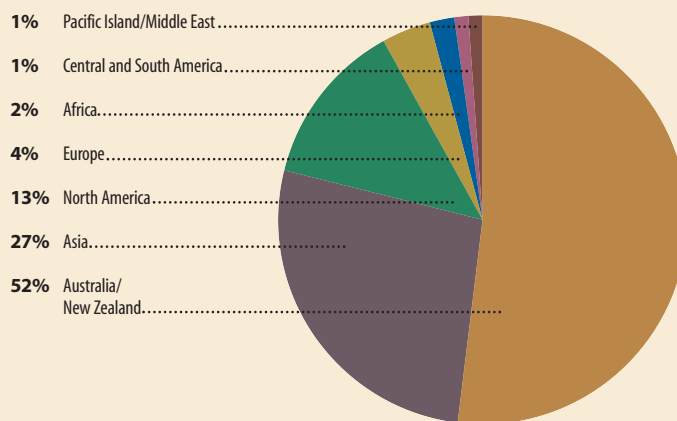
Figure 1: MIPH enrolments 2000-2004



The success of the MIPH program is in part due to it satisfying an unmet demand in the Australian and overseas population for a public health postgraduate qualification that focuses specifically on public health needs in developing countries. At the start of the MIPH program, no other university in Australia offered an equivalent degree.

In developing countries, too, the MIPH met a need that was not catered to in 2000. Many MPH programs offered by universities in developed countries – increasingly accessed by scholarship students and those wishing to study outside their country of origin – continued to focus specifically on the public health problems and responses in developed-country contexts. The emphasis of the MIPH on the often-unique needs and scenarios of many developing countries has appealed to those students from developing countries who wish to practise public health in their country of origin. Increasingly, the MIPH has expanded its numbers of international students. While only 15% of the original intake in 2000 were international students, in 2004 this figure has grown to almost 50%. Of international students, approximately 65% are from developing countries (refer to Figure 2).

Figure 2: Country of Citizenship – All Students 2000-04 (Sem 1)



Most of these students return to their countries of origin after completion of their MIPH, and work within Ministries of Health, non-government agencies and international organisations to facilitate improvement of public health in those countries.

Australian students, too, largely find work in, or focussed on, developing countries, in a variety of contexts. Many find work with non-government agencies both in Australia and abroad that focus on health and development issues. Others are employed in agencies such as *Medicins Sans Frontières* and *AusAID*. Others go into research and academia, focusing on issues surrounding public health in developing countries. Students entering the program are highly committed to working professionally to better the health situation of populations in developing countries. The MIPH works with this commitment to produce students who are able to work effectively, creatively and in culturally sensitive and sustainable ways in an array of public health settings.

The MIPH program is oriented both towards training new professionals in the field – those who have come from non-public health fields as well as recent graduates – along with strengthening the professional training of those already working within the public health field. The program does this in a variety of ways, including using external public health consultants with recent experience in the field, facilitating attachment programs for overseas placements for less experienced students, and using educational tools such as small group work and problem-oriented learning to encourage participation, cross-cultural communication and critical analysis. Students are offered a broad array of compulsory and elective units which allow students to create a curriculum that best suits their interests and career aspirations.

There is some indication that the growth of the program is slowing as some of the demand for a program of this kind is met. However, it is expected that the program will maintain itself at a level similar to its current enrolment figures, and that it will continue to produce high quality, passionate and dedicated public health practitioners for the future. The number and diversity of students currently in the program provide the critical mass necessary both to take the program into the future and to provide the next generation of committed, effective public health professionals.

Reunions 2004, 2005



Let others know of your planned reunion by contacting the Medical Graduates' Association. We will list your reunion on this page, and on our website (www.mga.usyd.edu.au). We can also assist you by sending your invitation to your fellow graduates.

Contact the MGA by:
Phone: 02 9351 8947 or
Email: mga@med.usyd.edu.au

2004

Graduating Year of 1984 – 20 years

When: 20 November 2004
Where: Powerhouse Museum
Time: Dinner
Contact: Bronwyn Gaut, email: Bronwyn@ampco.com.au
Cost: \$100 approx

2005

Graduating Year of 1950 – 55 years

When: Monday 14 March 2005
Where: Concord Golf Club, Concord
Time: 12.00 for 12.45pm
Contact: Dr Gordon Parkin, Phone: 02 9922 4891
Cost: \$85

Graduating Year of 1955 – 50 years

When: 9 April 2005
Where: Refurbished corridors & Courtyard of Anderson Stuart Building, University of Sydney
Time: Luncheon
Contacts: Professor Tom Taylor, email: tktaylor@med.usyd.edu.au
Phone: 02 9362 9223 Fax: 02 9362 0505
Cost: To be advised

Graduating Year of 1956 – 50 years

When: 25 October 2005
Where: Royal Sydney Yacht Squadron, Kirribilli
Time: 12 noon
Contact: Dr Michael Owen, Phone: 02 9327 6236,
Dr Edward Alam, Phone: 02 9130 5678
Cost: \$120 approx

Graduating Year of 1965 – 40 years

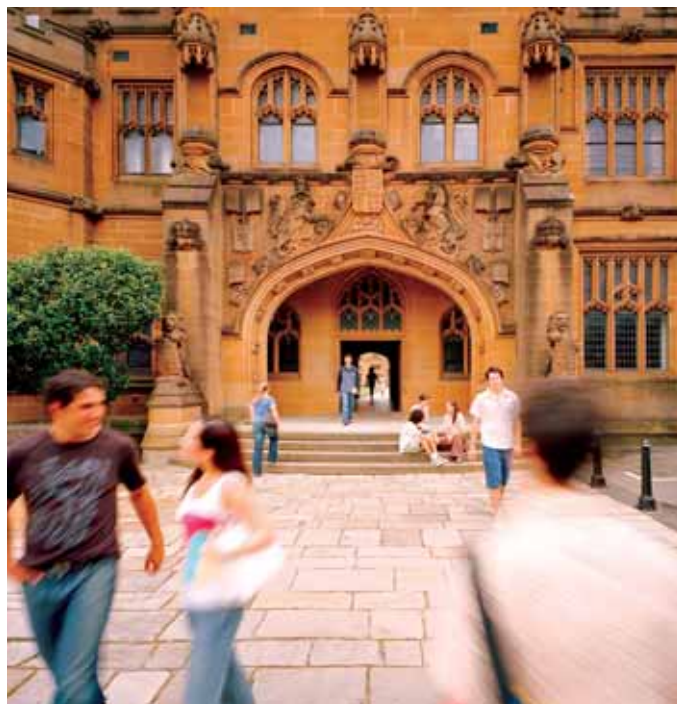
When: Saturday 29 January 2005
Where: Intercontinental Hotel, 117 Macquarie Street, Sydney
Time: 7.00pm
Contact: Dr Allan Meares, Phone: 02 9879 7137
2 Campbell St Hunters Hill NSW 2110
Cost: To be advised
Notification: Will be mailed

Graduating Year of 1975 – 30 years

When: 2005
Where: to be advised
Time: to be advised
Contact: Dr Alan Stern, Phone: 02 9546 6544
email: medreunion75@yahoo.com.au
Cost: To be advised

Graduating Year of 1985 – 20 years

When: October or November 2005
Where: to be advised
Time: to be advised
Contact: Peter Barnes, email: peterbarnes99@hotmail.com
An informal event is also planned for 12 February 2005. For details contact Tanya Dus, email: wartan@tpg.com.au





Left: Noel and Helen Van Dugteren of Moss Vale at the 1947 Graduates Reunion.

Right: (left to right) Alice Roster, Pat Dearman, Grace Warren at the 1954 Reunion

Recent Graduate Reunions

1947 Medical Graduate Reunion

Saturday, 1 May 2004 saw the class of '47 celebrate its 57th anniversary at the Royal Automobile Club.

Judging by the decibel level it was a very enjoyable time, the rekindling of memories and discussing current activities were enjoyed by all present.

There was an attendance of 65 of 120 at the graduation lunch; this included 4 widows of colleagues and a number of spouses, over 40 of whom were in attendance and four apologies.

All present expressed their gratitude to Kevin Byrne and Peter Crowe who have marshalled us all so well, as they carry on in the tradition of the late Bill Bryan.

A donation of \$500.00 has been made to the Medical Benevolent Association.

The Medical Graduates' Association had sent graduates a questionnaire which revealed a lot of continuing activity, a

series of cogent remarks mirrored a lot of satisfaction with their medical life, but Government failed to score well as time passed.

A decision to meet again was unanimous - probably early 2007 to mark our 60th year, but mid 2006 might still be the time. Graduates of the year of '47 might like to let Kevin Byrne know their preferred meeting time.

Tan Reeve

1954 Graduate Reunion

Our reunion luncheon was held at the Royal Sydney Golf Club through the good offices of Rod Clark, on Friday, 26 March. Rod and his wife Susie had a fantastic idea for name tags. They scanned the photos from our year book, added names in suitably large print and laminated them. They were a great hit. One hundred and one graduates attended. It was the first time that students who had left us after third year to do a BSc Med degree were invited and this proved to be a most popular move. Gus Nossal, Kay Ellem, Frank Johnson, Jim Wright, Jim Scougall, Dick Guy, David Glenn and David Bell were all very pleased to meet up with old friends.

Among those who would not miss a reunion at any price were Geoff Burgess from Vancouver, Howard Duncan from Detroit, Harry Stark from Israel and several each from Victoria, Queensland and Western Australia.

We had been one of the two or three post war years with a very large enrolment in first year, consisting of school leavers, ex-service personnel and overseas students whose studies had been interrupted by the war. It was not only the numbers that made the year unusual then but also the mix of youth (some were not yet 17 years old – secondary schooling being 5 years then) and people who had experienced the war, some married with children. The survivors who gathered together at this reunion generally looked back with considerable satisfaction at their medical careers.

Max Clayton spoke for many *"I loved it. I couldn't have done anything else. I always wanted to be a doctor. I've been very fortunate."*

And now 50 years on? As you might expect from this lively and talented group there is virtually no-one with time on their hands. It is surprising how many are still working actively in medicine, albeit mostly part-time, some are fundraising for medical research, some are farming. Grandparenting is a prominent and rewarding role and USA, travel, golf, tennis, sailing and bowls are popular leisure pursuits. Ken Wilson has successfully completed a lifelong ambition with a Bachelors degree followed by a Post-graduate Honours degree in Ancient History from UQ,

Jeannie Wright has taken up the clarinet and plays in a community orchestra, Laurie Georgeson is building his second aeroplane.

The formalities began with Brian Clarke proposing a toast to the University. Ray Hollings read messages and gave us news of colleagues who couldn't attend and Mark Killingback proposed an amusing vote of thanks to the organising committee headed as usual by Brian Shearman. The address was given by Gus Nossal who took us, with humorous anecdotes, through the undergraduate years reminding us of the double classes in first year, the 32 students to a table in the anatomy dissecting room in second year and the grossly overstretched teaching resources.

What we have experienced since then, he said, is clinical medicine (and teaching) utterly transformed by medical research. He spoke passionately of the accelerating rate of that transformation and of the promise of the new biotechnologies. The problems, he said, were threefold - the cost of the new treatments and of continuing research, the equitable distribution of the benefits and the need for a major focus on prevention. He urged us to become interested and active in these matters.

Continued over

Recent Graduate Reunions continued

It was an enjoyable and inspiring address and he was thanked by the chairman of the organizing committee, Brian Shearman. Brian also reminded us of the debt we owe to the Medical Graduates' Association, and Wendy Marceau in particular, for the help we had from them in arranging this delightful reunion.

Finally, on asking the usual question "when will we meet again?" quite a few hands went up for next year. Were these the pessimists or those who were enjoying themselves the most? I think the vote was marginally in favour of 2009 but quite a large number would be in favour of an earlier gathering, leaving the question open and in the hands of the organising committee.

June Raine



The Class of 1994

10 Year Reunion - 1994 Graduates

The 10-year reunion of the graduating class of 1994 was held on 13 March 2004 at the Sebel Pier One, Sydney.

This was our first reunion function since graduation and it was wonderful to catch up with friends again. It was also interesting to discover where life had taken us both personally and professionally.

There were 118 attendees, 81 being graduates (or 'ectopic' students associated with our year) and 37 partners. Apologies were received from another 20 graduates, many of those being interstate or overseas as part of their specialty training. We also sadly remembered our deceased friends (two) and our Dean, the late Professor John Atherton Young.

Throughout the evening there was a lovely convivial mood with much conversation and reacquainting going on. We enjoyed spectacular harbour views and a sumptuous three-course dinner and our thanks go to the staff of Sebel Pier One for their gracious hospitality. Between courses we were entertained by Penny Spring who masterminded a fun, nostalgic quiz and Steve Lightfoot who warmed our hearts with a reflective (and humorous!) PowerPoint presentation. Our sincere thanks go to both speakers for their efforts and for enhancing the enjoyment of the reunion dinner.

Thanks also to Wendy Marceau from the Medical Graduates' Association for her support and assistance with the organisational aspects of the reunion.

Finally, it was pleasing to be able to donate the proceeds of the function equally to the Medical Graduates' Association and the Medical Benevolent Association of NSW.

Katrina Ison



Do you recognise anyone in this photo from 1911?
Thanks to Ella Knibbs for sending it to Radius.

Alumni news

Graduating Year of 1911

I have come across this photograph (above) of 1911 medical school students (graduates?) and thought you might care to have it for your records. My (late) uncle, John McKenzie, is in it.

Ella Knibbs

Graduating Year of 1952

Dr Colin Campbell Burnside

Dear Sir/Madam,

It is with great sadness that I inform you of the passing of my father, Dr Colin Campbell Burnside of Gordon, NSW. He died peacefully at the RSL Retirement Village at Narrabeen on Saturday, 6 March 2004 after a short illness. He is survived by his wife June, his son Cam (also a Sydney University graduate) and daughter Jill. Colin was in his 85th year.

My father was part of the post war intake of medical

students to Sydney University completing his MB BS in 1952 and commencing his medical practice as an ophthalmologist following the completion of his Diploma in Ophthalmology in 1960. He was made a Fellow of the (then) Royal Australian College of Ophthalmologists in 1979.

He had his primary practice at West Ryde, NSW, and was, for many years, an ophthalmic surgeon on the staff of Concord Repatriation Hospital and later the resident ophthalmic surgeon at Ryde Hospital. He retired from active surgery in the 1980's but continued to practice until 1993.

My family would be most grateful if you would record my father's passing in the records of the Medical Graduates' Association and inform your members accordingly.

Yours faithfully, Mark Burnside

Please send your news to the MGA:

Email: mga@med.usyd.edu.au or

Post: Edward Ford Building, University of Sydney NSW 2006

Recent books by staff and alumni

Evidence-Based Pediatrics and Child Health Second Edition

Editors: Virginia A Moyer and Elizabeth J Elliott

Publisher: Blackwell Publishing

ISBN: 0727917463

Published: July 2004

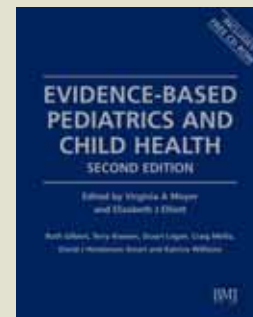
Binding: Hardback

Price: \$248

Extent: 544pp

Illustrations:

Includes a free CD-ROM



Medical Foundation Building for post-genome research

The purchase of the Medical Foundation Building in 2001 was made possible by a \$10million contribution by the Medical Foundation.

Located at 92-94 Parramatta Road, Camperdown The Medical Foundation Building is the centre of a major initiative to expand and promote the University of Sydney's considerable research strengths in post-genome research, particularly in bioinformatics and functional genomics.

To celebrate the completion of the major refurbishment works and full occupancy of this new research facility, the Medical Foundation has planned an official opening for Tuesday 30 November 2004.

For further information call:
02 9351 7315,
or email:
medfdn@med.usyd.edu.au

The Sydney Professional Master of Medicine Program



The Sydney Professional Master of Medicine Program (SPMMP) is the latest initiative in postgraduate education in the Faculty of Medicine.

Commencing in July 2005, the SPMMP represents an exciting new modular approach to postgraduate medical training. The program is delivered by some of the world's leading clinicians and researchers and integrates clinical application with scientific knowledge and research practice.

It will equip participants to meet the challenge of keeping pace with the rapid changes in medical knowledge and global developments in health care delivery.

Subject to University Senate approval, the Professional Master of Medicine will offer three specialist courses in 2005:

- > Master of Medicine (Renal Medicine)
- > Master of Medicine (Intensive Care)
- > Master of Medicine (Paediatrics)

In future years courses will be offered across a wide range of specialities.

The SPMMP is designed for practising clinicians in their senior years of training or early consultancy. Participants in the program will:

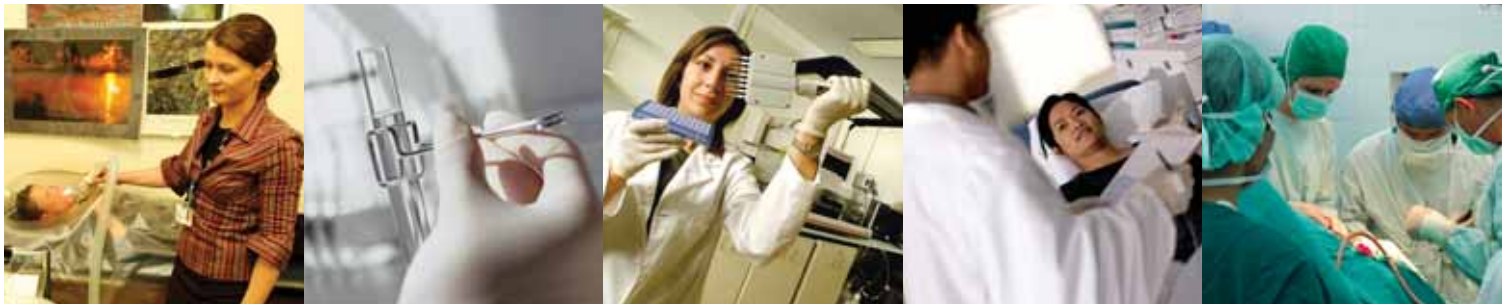
- > extend and update knowledge and skills in their specialisation
- > gain access to expert opinion on best-practice clinical management
- > extend their skills and knowledge into other key areas such as ethics, research practice, patient safety and law
- > enhance their career opportunities
- > gain formal recognition of professional standing from an institution of international stature
- > form professional contacts and networks

The SPMMP is delivered primarily online, to allow flexible integration of study with participants' professional and personal lives. Participants will also attend at least one residential intensive block in Sydney at the start of their course and can study either full-or part-time.

For more information on the program please contact:

Jackie Ross (02) 9351 8799, jross@med.usyd.edu.au

John Egan (02) 9351 7089, john.egan@med.usyd.edu.au



The University of Sydney