For the benefit of future generations, Composer Peter Sculthorpe announced he would leave his estate to the University of Sydney’s Conservatorium and Department of Music.

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JULY 2012

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21ST CENTURY MEDICINE
TODAY’S RESEARCH, TOMORROW’S HEALTHCARE.
A weekly free lecture series starting August 15.
Our best medical researchers speaking on the latest developments in their fields. Members of the public, doctors and others working in health, patients, supporters and students are all welcome.

Topics include:
- Cancer Cures – are we nearly there?
- Drinking for Two – alcohol in pregnancy
- Sitting – the new risk factor for chronic disease
- Vaccine scares and successes
- Not just older, wiser – the science of healthy ageing
- Pathways to depression

For full details and dates, check the Sydney Medical School website sydney.edu.au/medicine
FOUNDATIONS FOR THE FUTURE

Medical schools are obviously far more than bricks and mortar, but modern facilities with good technological capabilities and well designed spaces are also unquestionably important to the provision of quality education and research programs.

So it has been gratifying in recent months to attend a series of celebrations to mark improvements in our infrastructure – the opening of the new clinical school building at Nepean, the sod turning ceremony for the new education centre at Sydney Adventist Hospital, the opening of the new clinical teaching areas at Hornsby Hospital, and refurbishment of the teaching spaces in Orange. Later this year, we are also looking forward to the opening of new clinical school facilities at Concord Hospital – students will be out of old accommodation, some of which was built as temporary in the 1940s.

For each of these developments, we are grateful for the funds that have come from either or both of the Commonwealth and NSW Governments, as well as from philanthropists and the university. Thank you is also due to staff in Dubbo and Orange, Nepean, Concord, Hornsby and at the SAN, for their drive and energy at all steps along the way. Without a doubt, the next faculty priority for development is Westmead where the growth in research and teaching has been so strong and, as a result, students and staff are shoehorned into spaces long outgrown.

In this issue of Radius we highlight some of the wonderful work being done by staff, by alumni and by our amazing students. The achievements and the dedication by so many associated with this faculty never cease to amaze me.

FROM THE SENATE

The May Senate meeting was disrupted by noisy protests over the University’s change management program aimed at addressing the budgetary difficulties.

Scheduled to meet at the Darlington Centre, the Senate was relocated to avoid a confrontation with activists, however, the new venue was also blockaded. Ironically, half the Senate was already inside at a Chair appointment committee, so we ended up with two venues linked by teleconferencing.

It seems to some of us who have lived through repeated cutbacks that the level of protest has been out of all proportion to the proposed changes. Perhaps the explanation lies in the fact that universities have in the past been insulated from such fiscal realities.

Reduced investment income, declining domestic and international student fee income, underfunding for research and the need to improve campus infrastructure affect all universities. The protest cry of ‘people before buildings’ is a little hollow when we all know that without good, safe facilities we will not attract and keep the best staff and students.

Perhaps a more relevant question is whether the process to reduce staff numbers was as fair as possible; an important issue as we are likely to be faced with further budget cuts in coming years and staff costs are a high proportion of our budget.

The Senate has recently been reviewing its own performance and how it might improve governance and effectiveness. Constituted of representatives from staff, students, alumni, management and government appointees, there are 22 fellows of Senate, making the task of managing meetings very difficult. This is exacerbated by Senate’s conflicting roles: a ‘parliament’ for debating issues and a ‘corporate’ board charged with overseeing the University’s governance.

The state government has passed legislation to give universities more flexibility in structuring their governing bodies and some universities have reduced the size of their councils. There appears little enthusiasm for such a change here. A smaller Senate would be more efficient, but no one constituency wants to reduce its representation. The group most at risk would be the alumni fellows. Previously, this group has included Ann Selton, Adam Spencer, Irene Moss and Robin Fitzsimmons who have all made outstanding contributions.

The other interesting issue relates to the Senate’s attempt to be more transparent with a part of the Senate proceedings open to staff and students. Effectively, this has resulted in the Senate holding two meetings - one open and another closed for confidential discussions - a process which is inefficient and unwieldy. I have been on Senate for over three years and, except for one occasion, the number of observers has varied between 0 and 2, with usually just the one same person attending.

At the last Senate meeting, we were delighted to hear of the successful reintroduction of the undergraduate nursing degree, and developments with construction of the Charles Perkins Centre and appointment of Professor Stephen Simpson as Academic Head. The new Lifehouse, an initiative of the late Dr Chris O’Brian and former Prime Minister Kevin Rudd, is also under construction and will bring together cancer services.

Barry CATCHLOVE
**Vice-Chancellor’s Award**

Carol Pollack, Professor of Medicine, Northern Clinical School, has received one of the nine Vice-Chancellor’s Awards for learning and teaching awarded campus-wide.

Pollack’s award was made in the category of Excellence in Research Higher Degree Supervision. She was commended for the exceptional quality of her supervisory practice, in a very demanding environment.

“Her committed, caring attention to students involves providing pathways and carving out time for them, with strong evidence that her achievements in this regard exceed normal practice. Students report that Professor Pollock managed to change the research culture for the better, and a referee commended ‘the outstanding research foundation’ that students receive under her supervision.”

The Awards seek to promote, recognise, and reward teaching excellence, and the systems that support teaching excellence. Individuals or teams who receive an award are given $10,000 and, in some cases, an opportunity to be nominated for national awards. More information about the Awards and the winners can be found on the Institute for Teaching and Learning website at www.itl.usyd.edu.au/news/bulletin.cfm

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**Vietnam Health Medallist**

Professor Peter McMinn, Bosch Professor of Infectious Diseases, was recently awarded the People’s Health Medal by the Vietnamese Ministry of Health. The medal represents Vietnam’s highest health award and was given in recognition of Professor McMinn’s work in that country.

Professor McMinn has a 10-year association with the Pasteur Institute in Ho Chi Minh City and the National Institute of Hygiene and Epidemiology in Hanoi. He has assisted with the building of the Vietnamese national communicable disease surveillance system.

Professor McMinn was presented with his award in Ho Chi Minh City at a ceremony attended by the Australian Consul-General.

The People’s Health Medal is rarely awarded to foreign nationals. The same medal has been awarded to Rhondda Glasson, Executive Officer Hoc Mai Foundation, Professor Michael Dibbley, Professor Bruce Robinson, Dean of the Sydney Medical School and Emeritus Professor Kerry Goulston.

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**It’s a Pain**

“Pain is one of the biggest health issues today, every bit as big as cancer, AIDS and coronary heart disease. Yet it remains one of the most neglected and poorly understood areas of healthcare,” said Professor Michael Cousins, Pain Management Specialist and Head of the new discipline of Pain Management at the Sydney Medical School.

He was speaking at the discipline’s inaugural Pain Management Symposium, 16–17 March, which attracted around 300 students from medical and health sciences faculties, including nursing, dentistry and physiotherapy.

Symposium organiser, Dr Allan Molloy, led a case presentation with patient Charmian Frend, a 42 year-old whose chronic back pain drove her to three attempted suicides. In spite of eight spinal operations and a range of other treatments, she continued to suffer pain from her late teens.

Charman’s life changed after enrolling in the ADAPT program at Royal North Shore Hospital’s Pain Management Research Centre, where she learned to understand and manage her pain, reducing her reliance on medication. She now works as a swimming coach and competes in ocean races.

Professor Cousins chaired the world’s first National Pain Strategy held in Canberra in 2010 (which is available at www.painaustralia.org.au) and also chaired the first International Pain Summit held in Montreal in the same year and attended by over 120 countries. The Summit called for access to pain relief to be a fundamental human right.
The first sod has been turned on the site of The Sydney Adventist Hospital’s Education Centre – a $17m facility which boosts clinical training options for the health and medical students. The Centre will house Sydney Medical School’s newest clinical school at Sydney Adventist Hospital, established in 2011 as the first fully-fledged clinical school based in a private hospital in NSW.

The hospital has a long-established commitment to training, with the Avondale College Faculty of Nursing and Health - over 100 years old - situated on the hospital grounds. These nursing students will also make use of the Education Centre on its completion.

$11.83m of the cost of the Centre was awarded by Health Workforce Australia (HWA) and is the largest capital funding grant made by the Commonwealth through HWA to the private sector. The NSW State Government has committed a further $10 million from 2012-13 to fund the Education centre, train medical interns and contract health services.

Dr Leon Clark, CEO of the Sydney Adventist Hospital Group, said: “The purpose-built Education Centre will house lecture and tutorial rooms, a library, operating theatre simulator, student common room and auditoriums. The Centre will offer a unique training model by providing side-by-side clinical placements for medical, nursing, physiotherapy, pharmacy, radiography, occupational medicine, midwifery and other allied health students.”

Professor Robinson emphasised the significance of the collaboration: “The Clinical School recognises the fact that a growing number of Australians are cared for in private hospitals and a growing number of clinicians are employed in the private sector. Private facilities have long been under-utilised for training, so we are particularly delighted with this partnership.

Improved education for medical and health students, and better access to quality specialist care for people in the west of Sydney, are key benefits to come from the Nepean Clinical School building which was officially opened on May 3. The new building, a three level facility opposite Nepean Hospital, provides the latest in education facilities for the growing number of medical and health students undertaking training in the area. Nepean Clinical School is the base for more than 200 medical students from the University of Sydney each year, as well as rising numbers of students enrolled in nursing and allied health programs. The Clinical School is also used extensively by other health organisations such as the NSW Ambulance Service for its paramedic training.

The facility incorporates a suite of consulting rooms for consultants and senior hospital specialists at Nepean Hospital. Medical students will be able to participate in consultations and patients visiting specialists in the consulting rooms will be treated at Medicare rates. These outpatient clinics are being run in collaboration with Nepean Blue Mountains Local Health District and Nepean Hospital.

“The new facility also boosts Nepean’s capacity to conduct research, and it is research which leads to improvements in health care,” said Professor Bruce Robinson, Dean of Sydney Medical School.

The University of Sydney secured $17.2 million in federal funding for the new Nepean Clinical School from the Federal Government’s Health and Hospital fund in 2009.
ORANGE CELEBRATES 10 YEARS WITH NEW CLINIC

As part of the 10 year celebration of The School of Rural Health, the new Audley Clinic, based in Orange, was officially opened on 27 April.

“The School has grown significantly since its humble inception, starting with one professor, a laptop and a phone. During the past decade the School has educated more than 500 medical students at both the Dubbo and Orange campuses,” said Dr Associate Dean at the School of Rural Health, Dr Anthony Brown.

The aim of the School is to increase the accessibility and viability of the country’s rural health services. Medical students have the opportunity of extended stays in regional Australia, as well as exposure to a diversity of patient scenarios.

The rural health program is considered a great success, with some graduating students choosing to take up residence outside metropolitan hubs, and others developing an abiding understanding of regional health issues.

The new building is named after Dr William Ernest Audley, a University of Sydney graduate and later the medical superintendent of Orange Bloomfield hospital. Audley played a significant role in the development of mental health delivery and training in rural NSW, and his son was present at the opening.

IS AUSTRALIAN HEALTH IN CRISIS?
LAMBIE-DEW 2012

Highly respected epidemiologist, Professor Dame Valerie Beral, will challenge popular myths of Australian health in crisis in a free public lecture at the Great Hall on 10 October at 6pm. This presentation by Sydney University Medical Society is the 2012 Lambie-Dew Oration.

Born in Australia and a medical graduate of the University of Sydney, Beral is the Head of the Cancer Epidemiology Unit at Oxford University and Principal Investigator of the Million Women Study – a significant project studying the links between HRT and breast cancer.

Beral has served on many WHO committees and was appointed a Companion of the Order of Australia (AC) and Dame Commander of the Order of the British Empire (DBE) in 2010 for her contributions to science.

Register at: sydney.edu.au/medicine/register/lambie-dew

BOB BROWN AT ST PAUL’S

In his first major speech since announcing his retirement, Senator Bob Brown gave a talk at the St Paul’s Medical Dinner on 17 May. It was light on medicine, but Brown did remind his audience of his early years saving lives on the Hobart ambulance rounds. He said he never forgot the formative lesson from that time tending to patients: “Take a history. Listen to what people have to say.” It has informed his politics ever since.

Brown, who left office on June 15, talked about the long march against global warming, and what he sees as the undervaluing of our ecosystem. “There is an intrinsic value of the environment but we can’t quantify it. It’s like love, or beauty, or wilderness.”

He has left politics to concentrate on the major issues – the human community, globalism, and the need to save the planet for future generations. The big challenges in the next 30 years, he says, will be finding space for solitude in the world, protecting the Great Barrier Reef and systems like it, security and nuclear weapons, and ensuring the rights of children.

But above all, the challenge will be learning to share. For Brown, it’s about welcoming our fellow humans in China, India, and Africa into the global middle-class, in a sustainable way. It’s about “not considering ourselves superior because we’re wealthier”.

Brown’s endless optimism has been a mainstay of modern Australian politics in his fight against greed, corporatism, and homophobia. It is something of a wonder that his rose-tinted glasses remain so bright. Michael KOZIOL
The work of researchers and clinicians at the Save Sight Institute was on show at a recent Sydney Medical School Foundation seminar.

The Save Sight Institute is well known as the leading ophthalmic research institute in NSW and one of the top three in Australia. The Institute makes a major contribution to the eye health of the people of NSW through its clinic, which sees 5000 plus patients a year, and as a tertiary referral service. It also makes a major contribution to the future through its teaching, with more than 300 medical students and 75 postgraduate students each year.

The research seminar, hosted by the director of the Save Sight Institute Professor Peter McClusky, included presentations by two of the Institute’s leading scientists: Paul Martin, Professor of Experimental Ophthalmology and Mark Gillies, Professor of Retinal Therapeutics.

Professor Martin described the research by doctors and scientists at the Institute into the causes of macular degeneration, and outlined what this might mean for people diagnosed with the disease.

Professor Gillies spoke about retinal and stem cell experiments undertaken by his research team, a group within Save Sight Institute who are working to find new ways to combat retinal disease and preserve vision for people at-risk of blindness.

Save Sight receives $5 million per year in competitive research funding but still relies on community funded grants, donations and bequests.

The Sydney Medical School relies on the generosity of its alumni to provide scholarships for our outstanding students, to augment our excellent research, and to enhance our facilities so that we can continue our contribution to the international community of health science.

A publication entitled ‘Driving New Discoveries’ provides a snapshot of the ways in which the University as a whole is sustained by its alumni.

The latest edition, just released, details the contribution of the Bluesand Foundation to Sydney Medical School’s ageing and dementia research.

The Foundation has supported two scholarships for Alzheimer’s research, the most recent being awarded to Sivaraman (‘Siva’) Purushothuman for his project: ‘Impact of neuroprotectants on the neuropathology of cerebral degeneration in Alzheimer’s and Parkinson’s diseases’.

If you’d like to receive a copy of this booklet, please contact Meghan Knox at meghan.knox@sydney.edu.au

The inaugural winner of the Francis M Hooper Scholarship for Medical Research is Margaret Gall. The scholarship, made available to students enrolled in a postgraduate research degree at Sydney Medical School, was established by Sydney Medical School alumnus, Dr Francis M Hooper to support Alzheimer’s disease, cancer, heart disease or medically-related basic biology research.

“We are always grateful for the support we receive, but we are especially grateful when the support comes from alumni,” said Professor Bruce Robinson. “Helping to fund research which has such outstanding potential is a wonderful way to contribute to the faculty and to the future of medical research.”

Sydney Medical School Foundation has a number of priority research projects.

For information about these or other ways to support research and education, contact (02) 9036 9181.
Five years ago I saw the film *Amazing Grace* about William Wilberforce and his exhausting campaign in Britain between the 1780s to the 1820s against the slave trade. The film marked the 200th anniversary of the abolition of the trade in Britain.

By Stephen Leeder

Most of Wilberforce’s opponents were pillars of the church, but Quakers and a few others, convinced of the evils of slavery, were crucial to the evolution of Wilberforce’s ideas and support - he did not act alone. An inscription in Westminster Abbey reads, ‘...his name will ever be specially identified with those exertions which, by the blessing of God, removed from England the guilt of the African slave trade, and prepared the way for the abolition of slavery in every colony of the empire…’

An examination of history shows that most religious and societies are capable of condoning what we would now regard as reckless inhumanity, cruelty, suffering, genocide and death. As Richard Dawkins in *The God Delusion*, puts it, even Abraham Lincoln said in 1858:

> I am not, nor ever have been, in favour of making voters or jurors of negroes, nor of qualifying them to hold office, nor to intermarry with white people... there must be the position of superior and inferior, and I as much as any other man am in favour of having the superior position assigned to the white race.

After viewing *Amazing Grace* I pondered this question: How will future society see us? What will be the big moral failing that we didn’t see, however humane we profess to be?

This moral failure cannot be something that we know about and are straining hard to rectify. This rules out Indigenous health, childhood obesity and environmental calamities that are grist for the modern prophetic mills.

Is it possible to ever know what this “thing” might be at the time? Are we such children of our age that we simply cannot recognise it?

My guess is that today’s moral blind spot is poverty. Future generations will shake their heads and say, as we do about slavery now, “How could they have done so little?”

One billion people ‘live’, if that’s the right word, on less than $1 a day. They cannot move unless they become refugees in war, because they have no identity, no capital, no money for health care, nothing. One billion. There are about 50 million people in the US who live below the poverty line, as do half the citizens of Mt Druitt.

Poverty is the principal social determinant of disease and the heaviest impediment to health. No other Mephistophelean force claws to itself with such avarice and cruelty every disease and risk factor known to afflict humankind – infectious, non-communicable, mental and physical. Every health marker and is influenced by poverty.

Understanding poverty and well-being: a note with implications for research and policy was published in the UK in April 2012 by the Poverty Analysis Discussion Group. It started in November 2010 when the UK Department of International Development convened a small group of senior researchers on poverty to explore current understanding of poverty and to find where more research might help.

Two roundtable consultations followed and the note now published captures thinking to date. Interest has strengthened because the UN Millennium Development Goals (MDGs) that were explicitly aimed at halving poverty by 2015 run out of puff at that point. Then what?

The note begins by asserting strongly that poverty cannot be understood purely in financial terms and is really a political phenomenon. Power relations determine the distribution of opportunities and benefits. I am reminded of the observation by Indian Nobel economist, Amartya Sen, who said that while starvation may be due to crop failure, the catastrophe of famine is a failure of politics.

Poverty is multidimensional but, the note suggests, even the MDGs tend to focus on health, education and nutrition as metric markers of poverty. They ‘underplay the significance of socio-cultural difference and powerlessness, stigma, discrimination and isolation’, and so fail to do justice to the complex nature of poverty.

The note points to the changing nature of poverty. As India and China have moved to middle income status, and millions have moved out of poverty, nevertheless the absolute number of people in poverty has not changed, nor has it in 30 other countries that made a similar economic transition. The result is that ‘most of the world’s poor now live in middle income countries.’ Some of these countries, like China, are now themselves foreign aid donors!

Many of the world’s poor live in urban rather than rural settings and the configuration of poverty needs fresh description. People who were not in desperate poverty in rural settings but sought a brighter life of opportunity in the new cities, do not always succeed, ending up as the disgruntled inhabitants of the penumbra of shanty towns.

The note says: While we recognise that the last decade has seen great progress in some dimensions of poverty reduction (notably in terms of improved human development indicators in most non-conflict affected countries, and great reductions in income poverty in East Asia) a better understanding of how poverty should be assessed is important to ensure continued progress in the eradication of absolute poverty and reduction of disparities in the next ten years.

The note is short and beautifully written. Your copy awaits you at www.odi.org.uk/resources/docs/7654.pdf. Read, digest, and may the (Wilber) force be with you as you come to terms with your obligation to do something about poverty in 2012. Just remember that UNICEF, Freedom from Hunger and Save the Children suggest that about $200 is sufficient to save the life of a child. radius
At Sydney Medical School, research underpins everything we do. The outstanding quality of research undertaken here draws academics to the School who are at the forefront of their area of enquiry. In turn, they attract high calibre postgraduate students who wish to work alongside them at the lab bench, in the clinic, or out in the community. Our medical students are increasingly undertaking research projects during their study here, and we hope to see a growing number of coming back in future to undertake PhDs.

The knowledge gained in this research feeds back into the lecture rooms – as does the enthusiasm that comes from being involved in an international, collaborative pursuit to improve human health.

In 2011, just over 2500 research papers were published in quality journals carrying the names of our academics, with 2250 published the previous year. So much of this work deserves greater recognition beyond the specialist readership of these journals. It is interesting, thought-provoking, challenges the way we practise medicine and, is ultimately, inspiring.

To give you a taste of some of the recent research publications in faculty, we have sampled a few from the past year in the following pages. No matter your practice or specialisation, they are interesting reading.

– Bruce Robinson
SYDNEY MEASURES UP

Stories by Aviva Lowy

A GROWING CONCERN

In children with Attention Deficit Hyper Activity Disorder (ADHD), the balance between effort and reward is less favourable than for their unaffected classmates. This means that ordinary rewards, such as gold stars and good marks, aren’t enough to keep them on track. Tasks have to be easy, short, or sufficiently rewarding to get them engaged.

“Stimulant medications have been very effective in treating ADHD, which is why so many children are on them. Methylphenidate, best known under the proprietary name of Ritalin, and dexamphetamine, are the most commonly prescribed psychotropic drugs in childhood and adolescence,” says Sally Poulton, Senior Lecturer at Sydney Medical School at Nepean. She’s been treating children with ADHD for the past 16 years.

Stimulant medications affect behaviour by improving the ability to focus on tasks and to complete tasks, and by increasing motivation. But they also suppress appetite, which in turn affects growth.

“We are always concerned about weight loss in the growing child. Energy is important for growing more bone, more blood, more muscle. Height is also affected, with about one centimetre of growth being lost each year for the first three years of medication, so that after three years, these children are about one inch shorter than you’d otherwise expect them to be.”

However, the body’s drive to eat and grow in adolescence is overwhelming. The generally held belief is that, even if there is a temporary reduction in their growth rate, these children ultimately catch up and reach the height they would have achieved if they had not taken medication. With the enormous variability in puberty, though, it is hard to detect any lasting effect.

“While we don’t really want weight loss in children, if we keep drug dose so low that it doesn’t affect weight, there will be no therapeutic effect either. The two are very closely aligned.”

Poulton sees this relationship with cognition and appetite as having potential use in other settings, particularly in achieving weight loss in obese adults. And indeed, dexamphetamine was excessively used - and abused – by dieters in the 50s and 60s, before falling into disrepute. In that incarnation, the drug was used as an appetite suppressant.

“That approach is OK, but as you lose weight, the body adapts and you have to turn the ‘thermostat’ to a lower level by continually increasing the dose. Another approach to weight loss says that you need to address lifestyle. You have to be active, you have to be motivated to keep to a diet and you need impulse control to avoid eating inappropriately.”

Stimulant medication could be used in the treatment of obesity to increase motivation in establishing a healthy lifestyle. Any suppression of appetite then becomes an added bonus, not the main focus of the drug regime. The dose could be adjusted according to behavioural outcomes rather than continually being raised to increase the weight loss.

Ironically, stimulant medications have been so successful in the treatment of children with ADHD that there has been a public backlash, with claims in the media that these drugs are being over-prescribed.

While there is surprisingly good agreement between one doctor and another in assessing a child as having ADHD, it’s extremely difficult to determine the prevalence of the condition in the community. There is some consensus that as many as 5-11% of children have ADHD. With less than 2% on medication for it, perhaps it is actually undertreated,” says Poulton.
BABIES AND OXYGEN - HOW MUCH OF A GOOD THING IS ENOUGH?

“To put it bluntly, there has never been a shred of convincing evidence to guide limits for the rational use of supplemental oxygen in the care of extremely premature infants. For decades, the optimum range of oxygenation [to balance 4 competing risks: mortality, retinopathy blindness, chronic lung disease, and brain damage] was, and remains to this day, unknown.” So wrote Dr William Silverman in a 2004 editorial in Pediatrics. To address the issue, researchers in Australia, NZ, the UK, the USA and Canada began an unprecedented collaboration to establish the ideal oxygen saturation level for use with very premature infants.

The history of providing supplementary oxygen to preterm infants has been a vexed one, says William Tarnow-Mordi, leader of the Australian BOOST II trial and Professor of Neonatal Medicine at Westmead Clinical School and Director of the WINNER Centre for Newborn Research.

“In the 1940s, there was an epidemic of infant blindness which was first picked up in the US and affected over 10,000 premature babies in the Western world,” says Tarnow-Mordi. “Three small trials in North America concluded that giving unlimited oxygen into the incubators of premature babies led to retinopathy blindness. When the results were published in the 1950s, it became de rigueur to limit the concentration of introduced oxygen to no more than 40%.

“The researchers had considered following up the babies for mortality and disability, but never did. Over the next 20 years, 150,000 premature babies died of hypoxic respiratory failure. For every infant whose sight was saved, it is estimated that 16 died and many sustained cerebral palsy—a result that haunts the neonatal community. The epidemic of blindness was stopped – but at a heavy cost.”

Oxygen is the most common therapy for very premature infants, but they are highly sensitive to its harmful biochemical and physiological effects. BOOST II was set up in Australia with funding by NHMRC to compare rates of disability-free survival with low (85-90%) versus high (91-95%) oxygen saturation targets in infants born at less than 28 weeks’ gestation, from the day of birth until breathing air.

BOOST II is one of five trials with the same targets and similar protocols, known as the NeOProM, Collaboration. Coordinated by Associate Professor Lisa Askie of the NHMRC Clinical Trials Centre, the NeOProM trials have recruited nearly 5,000 infants – a number no single country could have achieved on its own. After all five trials have been published, the data for each baby from each trial will be combined to allow a much more powerful analysis.
The researchers are testing the hypothesis that the low target has no effect on mortality or major disability, but reduces other outcomes, such as severe retinal damage and neonatal chronic lung disease. In other words, they expected that the adage ‘less is more’ would apply, and that the lower range of oxygen would preserve both sight and lives.

The US team was the first to publish its preliminary results at hospital discharge. As expected, the higher oxygen target had caused more retinal damage.

Surprisingly, however, the high target was also associated with higher survival rates: 84% vs 80% in the low target group. Researchers in the other countries asked their independent data monitoring committees to see if any similar result could be found in their own studies.

“We were about 100 short of our planned target of 1,200 in the BOOST II study in Australia, and the combined data monitoring committee for Australia and New Zealand couldn’t see any statistically significant difference in mortality between the two oxygen target groups. It was the same in the UK and Canadian studies. To be more certain, we asked two data monitoring committees to examine interim pooled results in 2,315 infants in the Australian, NZ and UK BOOST II trials. This more powerful, combined analysis confirmed that - as in the US study - babies allocated to the high target had a significant increase in survival.

“On Christmas Eve, 2010, investigators in the UK and Australia held a teleconference and unanimously decided to stop recruitment in both trials. This decision was rapidly reported to investigators and ethics committees and published in the New England Journal of Medicine,” says Tarnow-Mordi.

Until longer-term data on survival and morbidity at two years of age are available in 2015, the researchers consider it prudent not to target an oxygen saturation range of 85-89% in infants born earlier than 28 weeks’ gestation. Of course, as Tarnow-Mordi is keen to point out, “disability-free survival is our primary outcome rather than just maximising survival rates alone. The final results will take us closer to answering William Silverman’s challenge.”

Tarnow-Mordi and Askie note that the perinatal field has been a springboard for the technique of meta-analysis. The logo of the Cochrane Library contains a meta-analysis, done in 1989, of seven trials which showed that an inexpensive corticosteroid given to women about to deliver early reduced the risk of their baby dying by 30 – 50%. www.cochrane.org/about-us/history/our-logo

BOOST II could not have succeeded in Australia without the wholehearted collaboration of the Neonatal Intensive Care Units in Perth, Adelaide, Melbourne, Hobart, Canberra, Sydney, Newcastle and Brisbane.

Imagine a drug that could spare you from suffering jetlag or improve disorders where disturbed circadian rhythms are part of the problem, by resetting your body clock.

Chris Liddle, Professor of Pharmacology and Hepatology with Westmead Millennium Institute for Medical Research and Westmead Hospital, University of Sydney, believes that as a result of the research he has been involved in with the Salk Institute in San Diego and recently published in Nature, we may eventually have effective drugs to directly target disorders of body rhythm.

That’s important news not just for shift workers, international travellers and others having difficulty getting a good night’s sleep, because the team has discovered that when our body clocks go awry, we can be prone to other health problems, such as high blood fats and diabetes.

“We’ve known about the core body clock components for some time, but not necessarily all of them, or how important each component is. We were working with two receptor proteins which were known to be involved in the clock and we were able to establish that they were actually core gears of the clock, both in the brain, which is the central clock, and in the peripheral clock, which exists in other tissues in the body. In particular, we studied the liver,” says Liddle.

“If you think about it, the brain clock is important so that we can synchronise our sleep cycle with the day/night cycle, but also we have to synchronise our body with things like when we eat and when we exercise, and that’s probably the main driver to have clocks in tissues like the liver. The liver then takes a really important role in processing what we eat and what we digest. The liver also regulates energy metabolism. During the day we need energy, but during the night we don’t want to use energy; we want to build it up for the next day. That’s where the liver clock comes in.”

“When we take these receptors out of the liver, we see high blood sugars and high blood fats, and that is interesting because we know that shift workers have a higher incidence of obesity and diabetes than the general
population. We used to think that they had bad diets, and that still may be part of the problem, but when you eat at the wrong time for your body clock and when your body clock is out of synch with your eating and sleeping, you are more prone to develop these metabolic disorders.”

Liddle has worked with the Salk team for nearly a decade, where more than his liver research skills have been of value. Among his many hats, including that of clinician and laboratory-based researcher, is that of a bioinformatics specialist. He has twice held the position of Associate Dean for Information Technology, Sydney Medical School, for a total of six years, and laments that there are insufficient hours in the day to accommodate all his competing professional interests.

The other thing Liddle is keen to point out is that, now in his late 50s, he’s had the opportunity to learn new research skills, and it is these skills that were his main contribution to this recently published work.

“I was involved in next-generation DNA sequencing, which is a recent technology that is revolutionising science. The Salk was one of the first institutions to get this new gene sequencing platform and it was a perfect opportunity for me to contribute my experience in IT and gene regulation with respect to livers.

“You can’t do anything with the data that this technology generates unless you have fairly powerful computers to sort through the vast amounts of sequencing data. I spent three months at the Salk as part of a studies program setting up computers then analysing the information into something we could understand.

“In a nutshell, we were able to see every site in the human genome where transcription factors, like the receptors we were working with, are binding so we can see what they are regulating, and that’s very powerful.”

He says Salk bought into the technology in a big way, which was not matched anywhere in Australia at the time. “Working with the Gene Expression Lab at Salk I was able to help them exploit the technology to the full and bring back those skills to the University of Sydney.”

While Prof Liddle maintains that you can still gain new skills in the latter part of your career and that you have to keep on learning, there are still some questions for which he simply doesn’t have the answers.

When the Nature paper on the circadian clock appeared and Liddle found himself doing a number of radio interviews, one person phoned into the station asking how to get his 20-someting-year-old out of bed. “I’ve got one of those myself and I don’t know how to do it,” he quipped.

► NICE SUGAR

When a person is acutely ill, there is an increase in blood sugar levels as part of the body’s stress response, even if they have not previously had diabetes. Traditionally, this increased blood glucose had been tolerated as a natural part of the stress response, unless it was extreme.

However, just over 10 years ago, researchers in Belgium released remarkable results in the New England Journal of Medicine which claimed that “intensive insulin therapy” to bring blood glucose back into the normal range significantly improved the prognosis for critically ill patients. Under Professor Greet Van den Berghe at Leuven Hospital’s surgical ICU, the team reported that intensive insulin therapy reduced both mortality and morbidity. It quoted figures such as reduced in-hospital mortality of 34%, and a reduction of bloodstream infections by 46% and acute renal failure by 41%.

To Professor Simon Finfer, a critical care researcher with The George Institute for Global Health at the University of Sydney, the results seemed too good to be true. “The reduction in mortality was quite dramatic and we thought the research should be replicated. After all, it related to only one hospital in Belgium where other practices are quite different from many ICUs around the world,” says Finfer.

In collaboration with researchers in NZ, Canada and the US, Finfer was able to recruit 6,104 patients from 42 hospitals in what was to become known as the NICE-SUGAR* study.
The study targeted the more critically-ill patients staying in intensive care for a minimum of three calendar days. Those patients scheduled for shorter stays weren’t as likely to benefit from changes to their blood sugar levels and intervention was unlikely to make a difference to their outcome. The study results were also published in The New England Journal of Medicine.

“To our surprise, intensive care patients whose blood sugar was intensively controlled with insulin in our study actually had an increased mortality rate when compared to patients where moderate increases in blood glucose were allowed,” says Finfer. This was exactly the opposite of the Belgian findings.

In response to NICE SUGAR, medical bodies around the world have adopted practice guidelines which recommend that blood sugar levels should not be normalised and that a less intense approach should be taken. Organisations such as the American Diabetic Association and the Association of American Clinical Endocrinologists, for example, which had supported the Leuven protocol, changed their recommendation to members to now follow the NICE SUGAR investigators’ findings.

Finfer is now leading an international collaborative group which is conducting a patient level meta-analysis.

“We have a single database at the George Institute which will analyse all the data from all the trials. We want to see if there is a feature of the patients or of the hospital treatment that can explain the results.”

Of trials conducted to date, 19 different international trials that recruited more than 10,000 patients are contributing data to the meta-analysis.

No other high quality trial has been able to replicate the results from Leuven, yet Leuven Hospital continues to hold to its practice of intensive insulin therapy. It is still adamant that this is the right treatment.

“There is a discussion at the moment as to whether blood sugar is a marker for the severity of the illness, because the higher it goes the more likely the patient is to die, or whether it is actually a mediator of mortality and so tighter control might be beneficial.

“One of the spin-offs of this line of research has been the realisation that current bedside technology used to measure blood sugar may not be accurate enough. There are a number of companies developing continuous blood glucose sensors offering minute-to-minute readings, instead of the current system which might take a reading every two or four hours. This more accurate and continuous measurement should allow us to do a better job of controlling blood glucose, which may be beneficial for the patient.

“Blood glucose levels are much more variable than we previously thought. We know that patients whose blood glucose levels bounce all over the place have an increased risk of death. As we learn more about the patterns of blood glucose behaviour which are associated with increased risk, we can start to look at how to modify them and determine whether that helps critically ill patients to survive.

“You can never say, ’OK, we know the answer to this problem’. We only know some of the answers. There’s still a lot of research to be done,” says Finfer.

*The study acronym combines Normoglycemia in Intensive Care Evaluation (the name given to it by the Australian researchers) and Survival Using Glucose Algorithm Regulation (the name the Canadians adopted).*

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**CANNABIS WITHOUT THE HIGH**

Macdonald Christie, Professor of Pharmacology, takes issue with the simplistic view that cannabis is either the cause of terrible problems or a useful medical intervention.

“Like many other psychoactive drugs, it has both valid medical uses and it also has serious problems. Morphine is a glaring example of this,” says Christie.

As Christie notes, you can get wonderful pain relief from morphine and it has become a mainstay of severe pain management regimes, but no one would deny the negative impacts of its addictive nature or risk of life-threatening overdose.

Christie was invited to take part in a working party set up by Bob Carr to see if there were legitimate medical uses of cannabis more than 10 years ago. The conclusion was that cannabinoids, the active molecules of cannabis, shouldn’t be ignored in the treatment of chronic pain patients. The big problem, however, was the psychoactive effects.

The major psychoactive compound – or principal ‘ingredient’ – of cannabis is tetrahydrocannabinol (THC). It has limited medical uses in a lot of countries and is available in Australia, though with some difficulty.

Other extract forms of cannabis have been developed which are easier to administer. A combination of several cannabinoids has been developed which is principally used for treatment of spasticity in multiple sclerosis (MS)
that does not respond to other treatments and is registered in the UK, Spain Canada and New Zealand, but not yet in Australia. The treatment is also in final stages of large clinical trials for cancer pain.

“People who use cannabis for pain relief or MS spasticity, don’t want the nasty side effects. They don’t actually want to be ‘high’. That’s the challenge. Unfortunately, the psychoactive effects are experienced with doses similar to those that produce the pain relieving effects, so reducing one affects the other.

“We got very excited early last year when we saw that THC had been chemically changed so that, when administered to the spinal cord, the psychoactive effect was removed and the novel pain relieving effect of the molecule was left intact. The molecule was enhancing the level of inhibition in the spinal cord.

“In chronic pain, one of the major deficits which develops in patients is that the ability of their inhibitory nerves to damp down pain is pathologically depressed. As a result, they become hyper-responsive to pain. A light touch can become painful, and stroking of hairs evokes serious pain. Response to cold becomes exaggerated and a mild reduction in skin temperature can cause pain.”

“This is a failure of the inhibitory mechanism to do its job. If we can enhance the mechanism, we can relieve pain. It seems that the major problem in chronic inflammation or chronic pain is that it leads to the loss of inhibition. Usually when a person sustains an injury, once the injury is resolved, the pain resolves. With chronic pain, the pain doesn’t resolve.

“We do have existing drugs that provide pain relief by working on the inhibitory systems throughout the brain but they cause sedation which can be intolerable. The hope is that we will have cannabis-based drugs that can enhance inhibition without producing a great deal of sedation. These THC-sensitive molecules are quite specific to the spinal cord. They are not found much elsewhere in the nervous system so we are confident specific pain relief can be achieved. We may yet see other side effects but they don’t produce psychoactive effects.

“This inhibitory system in the spinal cord is working on the sensory and the motor neurone side. There probably will be some spasticity benefit for people with MS because we think it will damp down spasticity as well. We will be testing how the molecule works on that system,” says Christie.

“Professor Michael Kassiou in Chemistry is developing the molecule with us, and Dr Christopher Vaughan at the University’s Pain Management Research Institute is directly developing these drugs with us.”

### POSTCODE WITH A VIEW

Twenty years ago, Professor Paul Mitchell began a study that has become the largest and longest-running study on eye disease in Australia. He set his sights on the residents aged 50 and older of just two postcodes, 2780 & 2782: the upper Blue Mountains.

“T

he Blue Mountains Eye Study has been very valuable,” says Mitchell. “Four hundred papers have been published from it and it has been a corroborative source of data for researchers working in eye disease internationally.”

Mitchell, based at the Westmead Millennium Institute, says the geographic area was chosen because it was a microcosm of Australia, not overwhelmed by any particular ethnic group. It also could easily be targeted with publicity.

In 1992, 3,654 people were enrolled in the study and underwent comprehensive eye testing at Blue Mountains Hospital. The initial cohort was invited back for another examination five years later, when further recruitment increased the number to 5,000. Subsequent examinations were held 10 and 15 years later.

“As the examinations went on, they became more detailed. In the last two, we were able to use optical coherence tomography which gives an almost 3D view of the back of the eye, the retina and the optic nerve.”

Mitchell has been especially interested in glaucoma, an eye disease which is the second greatest cause of blindness in Australia. Macular degeneration (MD) is the greatest cause, but treatments for this disease have proven so successful that in Denmark, the incidence of MD has dropped by half in the past five years, and Mitchell predicts that in Australia we should see levels of blindness from MD drop to one third in the next two years.

Glaucoma is considered the sneak thief of sight. A person will start to lose their field of vision, maybe on the sides or perhaps from the top or bottom, and it is generally some time before they are diagnosed with the disease. Even with the treatment of eye drops to lower pressure in the eye, there is a continued progression of sight loss.

In the Blue Mountains study group, blood samples were taken from the majority of the participants during the second examination for later DNA extraction. The first major genome-wide association scan examined up to 1,000 genetic deficits, or SNPs, in association with MD. It has proven more difficult to find the gene associated with glaucoma.

However, a study recently reported in Nature Genetics and using the Blue Mountains Eye Study data, has discovered two new spots on the genome that code for increased risk of glaucoma.
“Professor Jamie Craig at Flinders University has established the Australian and NZ Registry of Advanced Glaucoma, which is a data set of severe glaucoma across Australasia. Using information from this group, and from South Australian residents with less severe glaucoma, as well as our Blue Mountains’ cohort with glaucoma, we saw that there were four SNPs with major hits on the genome which were significant. Three thousand participants from the Blue Mountains study without glaucoma were used as controls.”

The pooling of data by the Adelaide and Sydney researchers has allowed them to uncover two genes which are implicated in glaucoma: one on chromosome 1 (TMCO1) and the second on chromosome 9 (CDKN2B). A person with one or other of the abnormal SNPs would have about 50% increased likelihood of getting glaucoma. With both, the risk is tripled. The data also revealed a relatively frequent prevalence of these gene abnormalities, with 20% of the population having one or both.

“Before this, one gene, myocilin, had been found to be implicated in glaucoma, but only 2%-3% of most populations have this mutation. It’s important but far less prevalent than the two recent gene discoveries.”

The most important factor in glaucoma is raised pressure in the eye and these two genes have an association with ocular hypertension. A person who has these gene hits is more likely to develop glaucoma at a younger age and for progression of the disease to be more rapid.

The second gene on chromosome 9 is also in an area associated with cardio-vascular disease, diabetes and basal cell skin cancer. It is not surprising, then, that people in the Blue Mountains study who had diabetes were about twice as likely to have glaucoma as those without diabetes.

“Other factors associated with glaucoma are ageing, short-sightedness and possibly vascular problems. There seem to be no gender differences. On the whole, it is caused by systemic rather than environmental factors.”

The Blue Mountains Eye Study was modelled on the Beaver Dam Eye Study undertaken in Wisconsin, the major contemporary US eye disease study. Beaver Dam broadened its study to test hearing when participants came for the second examination. To align his results with the US, Mitchell joined forces with audiologists at Macquarie University; the cohort having their eyes tested also underwent hearing tests.

“Sensory losses generally tend to run together. You are more likely to have loss of vision with loss of hearing and smell. They tend to cluster. Vision Australia is assisting us to look at the combined impact of having these sensory losses, which can lead to depression, falls and fractures, and ultimately compromise independent living,” says Mitchell.

He is unsure whether there will be any further testing of his Blue Mountains group. At the last exam, more than half of the cohort had died. “The population is becoming frail.”
THE BIG “M”

There are about 15 genes that contribute to people getting melanoma. More than half of them have been discovered by the multi-disciplinary melanoma research program working at Sydney Medical School. Graham Mann, Professor at Westmead Clinical School and Westmead Millennium Institute for Medical Research, has been working on melanoma with the collaborative group of Professors John Thompson, Rick Kefford, Richard Scolyer and Peter Hersey for the past 20 years.

“It brings together researchers across the map, working in genetics, basic cell biology, and medical and surgical oncology. We are addressing why people get melanoma, what the important problems are that we need to define to manage melanoma better, and what treatment strategies we can use to cure melanoma,” says Mann.

Much of their research is based on the huge database of the Melanoma Institute of Australia. With more than 40,000 melanoma patients, it is probably both the largest melanoma database and the largest database on any single cancer type in the world.

The group has pioneered advances which have resulted in better melanoma care and developed a new treatment targeting the Braf mutation. The latter is the first chemotherapy to turn around melanoma treatment. Before this, nothing had proven effective.

Progress on the causes of melanoma has come from their powerful collaborations studying people in the population across Australia, with colleagues Professor Bruce Armstrong and Dr Anne Cust in the School of Public Health, at the University of Melbourne and the Queensland Institute of Medical Research. “We are trying to understand all the factors that contribute to a person’s risk of melanoma. As well as digging into and characterising the genes which affect melanoma, we are checking out other risk factors, such as sun exposure and skin type. If we put that all together, we have a more accurate picture of risk.

“For the past 10 years, we’ve been looking at people under 40 years of age living in Melbourne, Sydney and Brisbane who have melanoma, and comparing them with those who don’t.”

One of the lifestyle factors which has been included in this population study is the use of solariums. Before the story hit the media of the young 26-year-old, Clare Oliver, who died from melanoma induced by sunbed tanning, the team had already shown the very strong effect of sunbed use on melanoma, especially among young people aged under 30 whose risk is increased six-fold.

“Three quarters of all melanomas in these young sunbed-users are attributable to the sunbed. If they hadn’t been to the solarium, these melanomas wouldn’t have developed.”

Mann suggests that sunbeds account for about 10 deaths per year in Australia, and welcomes the NSW government ban which will result in there being no commercial solariums in NSW by the end of 2014.

It has long been known that genetic make-up affects melanoma risk quite substantially. If you are fair, and have skin which burns easily, then you are a melanoma target.

“We’ve been systematically looking across all genes, and there seem to be two different types associated with melanoma. The first group are the genes involved in skin colour, and many of these have a connection to melanoma risk.

The second group has nothing to do with skin colour. They relate to repair of DNA and how sensitive a cell is to ‘death’ orders. In other words, it’s about the accumulation of damage.

“There is also a clear genetic effect sitting over a bunch of other genes, but we are not sure which specific genes are the culprits.”

The group recently published a paper in Nature which used advanced sequencing technology to unpick one cause of a strong family history of melanoma.

“We looked at some genes suspected of being involved in melanoma but not yet implicated. We were able to show that the MITF gene had a variation in one per cent of people. The protein is made more sensitive by it and boosts the risk of melanoma. One hope in this is that we may be able to dampen down this sensitivity with medication,” says Mann.
TIC-ING AWAY

“I remember being on a train journey when a very smartly dressed gentleman entered the carriage. He had on a suit and tie, was carrying a briefcase, and all of a sudden he started saying ‘fuck, fuck, fuck, fuck …’. “I thought to myself, I’ve got to go. I’m going to catch this. I could feel myself wanting to do the same thing,” says Tim Usherwood, Professor of General Practice at Westmead Clinical School.

Usherwood’s travelling companion had Tourette Syndrome, something he was able to easily recognise because it is a condition that he shares. However, unlike the dapper man, Usherwood has never suffered from coprolalia – the uncontrolled use of scatological words – and didn’t want to become ‘infected’.

“Interestingly, with Tourette’s, you can catch tics. As a child, my father once made a face at me, wrinkling up his nose, and I copied him. Once you have developed a tic it can last months, sometimes years.”

Typical of Tourette’s, which develops in early to mid-childhood, Usherwood has lived with the syndrome since he was seven or eight years of age. “Once you have it, it tends to persist throughout adult life. The features vary over time, with some tics disappearing and new ones replacing them.” He’s now 58 and, even though the tics have become less marked in the past 10-15 years, he still has them.

Usherwood’s first memory of the condition is sitting in his school classroom and grunting. “The feeling is a bit like a sneeze. You can suppress it for a while but in the end you have to do it. When you are on your own, it’s easier just to do it. I would be grunting 30 . . . 40 . . . 50 times a day and wrinkling my nose with similar frequency.”

“I didn’t like it growing up because I didn’t understand it. It used to annoy my school mates, especially as exams would exacerbate the grunting, and I was known as ‘Twitch’.

“When I first developed the tics, my parents took me to the family doctor. At the time, Tourette’s was seen as a psychiatric illness and I was shunted off to see a psychotherapist. I learnt about a lot of things, including sex, but the sessions did nothing for my tics.

“When I got to uni, I spoke with a professor of psychiatry about it and, by this time, Tourette’s was recognised as a neurological disorder. It’s interesting to see how the framing of the condition changed around my teens. Typical of Tourette’s, which develops in early to mid-childhood, Usherwood has lived with the syndrome since he was seven or eight years of age. “Once you have it, it tends to persist throughout adult life. The features vary over time, with some tics disappearing and new ones replacing them.”

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“For the experience of living with a chronic health problem that is fairly obvious to other people has also taught me valuable lessons for my development as a clinician. It has highlighted to me that patients are far more than a ‘case of diabetes’ or whatever, and often have an interesting story about their illness experiences and how they have responded to them. Understanding this background can be of considerable value when developing a management plan with a patient.”

Usherwood says that the condition is exacerbated in situations that cause anxiety, such as giving presentations, examinations and social functions.

“If it’s a bit obvious when I’m with someone, I might mention that I have it. When I tell people, they sometimes reply, ‘I thought you probably did.’ Awareness of the condition has certainly increased, especially with the writings of Oliver Sacks. He talks about one fellow called Witty Ticky Ray who has an intolerance to light touch. I realised that I have that, too. I hate wearing a watch and haven’t for many years. I don’t like things lightly touching and caressing my skin.”

Just as there are times when the tics are worse, Usherwood has found that situations of intense concentration can be virtually tic-free. “I used to be a serious rock climber and did it quite well. I would have no problems with tics while balancing my way on a cliff face. At the end of the climb, if it was really challenging, I'd spend time releasing all the tics from my body that I hadn't even been aware of while climbing. I also do some minor surgery in my practice, such as taking out skin cancers, and there are no problems there either.”

Tourette’s can be associated with ADHD and OCD, and though Usherwood says he has neither, he does own up to being slightly obsessive, something which he feels is not a bad thing in clinical practice, saying that it’s good to double check details.

“My kids tease me, asking if I’ve remembered to turn the iron off when I’m leaving home. And I’ll go and check the iron, even if I hadn’t turned it on in the first place, just to be sure it hasn’t somehow turned itself on!”

Tim Usherwood spoke about living with the condition at the Tourette Syndrome Association of Australia’s annual conference in May. He wants to share his experience with children who have Tourette’s, and their parents, believing that accepting the condition as part of oneself is key to reducing its impact.
Global Health

The Office of Global Health, established in 2007, has been almost too successful, according to its new Director, Merrilyn Walton.

“When I came to the role in February this year, the office had been in terrific hands with Lyndal Trevena, the previous Associate Dean. The Office was well-organised and had got lots of runs on the board. It was so successful, in some ways, that it was getting pulled in many directions,” says Walton.

“Initially, I undertook a review of the Office just to get my head around it all because international work is quite different to anything else in the university or anything I’ve done as a manager. I’ve done a lot of work internationally with the WHO in China and Vietnam, but only as an individual in my specific area of patient safety.”

The review clearly showed Walton that the Office needed to be more strategic with its limited resources and establish priority countries. To the existing focus of Asia and India, the Office is adding a new area of development: the Pacific region.

“That’s a matter of being aware that we are in the Pacific and we have some obligation to the 23 countries that surround us. More importantly, in the 21st century, Australia is in the middle of the explosion of knowledge with China and India that we have no choice; we are obligated to focus on that area.”

While the Pacific has been added to the mix, countries in Europe and Africa will no longer be priority areas.

“That’s not to say that there isn’t great need in Africa, but we have decided to support Bob Cummings who is doing leading work in Africa, rather than ourselves have to develop the country-specific intelligence and capacity. We are reducing what we do and being more effective with our existing partners, deepening relationships.

Walton says that the Office will be working around three themes: teaching and learning, capacity building, and student exchange.

“With research and student exchange, we’d like to broaden these areas to include nursing students, because the division really is Medicine, Pharmacy, Dentistry and Nursing. My policy is that we have to have representatives from all those faculties to develop an interdisciplinary project, and the first interdisciplinary project will take place in the Pacific.

“In low-income countries, using a multidisciplinary approach is really the way to go because they don’t have the medical workforce to either develop the infrastructure or deliver the service. As we have the knowledge and skills of these combined faculties, it just makes sense for us to work in this way.

“We are also going to undertake a multidisciplinary project in Timor. We are going up there and looking for opportunities for dentistry through their preventative program which doesn’t depend on dentist chairs and high technology. In Makassar, Indonesia we have a project with vet science, agriculture and marine science, from the University of Sydney and the University of Makassar, to look at introducing health messages to the cocoa farmers.

“We are trying to be really big in our thinking, not just in terms of the faculties involved, but thinking big because we have to look at developing things which are sustainable and low resource, light touch.”

Walton is also delighted to have found in the Office an appropriate ‘home’ for her own research in patient safety.

“Patient safety is a leveller because there is no difference between high and low-income countries: they both have high incidence of patient harm. It’s because of the complexity of health care. Even with the best will, you still get medication errors. Team work and accurate and timely communication – what we call the non-technical competencies – are very important to patient safety. Adverse events to patients are not usually caused by incompetent people. It’s because they don’t know how to practise in a complex environment.”

Walton was the lead writer on the WHO curriculum on patient safety, so being able to go to low-income countries and introduce the curriculum is, she says, “Wonderful! It’s mainly the low and middle-income countries that have adopted the curriculum because they can see they can actually do something which doesn’t depend on lots of money or high technology. They just have to change their behaviour and that’s something they can control.”

Walton has just received an AusAID public sector linkage grant to develop a hospital death certificate system for Vietnam with her colleagues in Hanoi.

“Vietnam has no data at the moment to tell you what people in hospital die from. Now, it could be infection, it could be adverse events, cancers, road accidents, and so forth, but there is no data. Without that information, you can’t even start to look at policies. They have medical records but they don’t create a specific form which records the cause of death and then feeds into a data system which can be interrogated. And these are huge hospitals with thousands of beds.

“Added to that, a death certificate is a really important piece of information to give to families. If you are not even required to think about the cause of death, families don’t learn why someone has died.”

radius
Foster has been working as one of the Hoc Mai Foundation maternal and child health team in Vietnam’s Dien Bien province (DBP) in the north west of the country for the past six years. Her team recently received an AusAID grant of $242,000* to improve health literacy in the area. She will be collaborating with the DBP Provincial Hospital, Centre for Reproductive Care, and the Vietnamese Women’s Union.

Part of that ‘literacy’ is the simple understanding that if you are pregnant, you should be accessing antenatal care. However, a number of factors militate against pregnant women seeking such attention.

“Access to healthcare is a challenge for women in DBP. The area is mountainous, and though there has been some improvement, the roads are in bad condition and difficult to negotiate. There is great poverty and the women who work hard in the fields are reluctant to forgo income and spend time going to antenatal clinics. There are several ethnic minorities, including Hmong speaking different dialects, so communication is also a big problem,” says Foster.

If that wasn’t bad enough, the other major issue is the network of skilled health workers who service the outlying villages in the large, sprawling province: they are mostly male. Foster says that one of the reasons for this is the criterion that health workers must be literate, and men are more likely to be literate than women.

This has a significant impact because these women want to have their babies at home and they particularly don’t want men involved with the birth.

“We are working towards the WHO recommendation that there is a skilled birth attendant at every delivery.”

It’s hard to get data for this very poor rural population, unlike in Hanoi or Ho Chi Minh City, but a recent UNICEF analysis suggested that 75% of births here are unregistered. Dien Bien has a maternal mortality rate of more than 400 per 100,000 births, which compares with a national rate of 80 per 100,000 for Vietnam.

Some of the ways to improve the terrible statistics are simple, cheap and low-tech, which is just as well, because the main provincial hospital with its operating theatres for caesarean sections, labs for blood testing, and neonatal care facilities, is inaccessible for most. The second-line of smaller district hospitals are often without these facilities. Dien Bien Phu city, with a quarter of the province’s population, has one district hospital. Opened only last August, it is not yet fully operational and is 10km from the city centre, in the middle of paddy fields.

“A lot of post-partum haemorrhaging is preventable with simple interventions. Women need to get iron tablets and they need to take them. Their staple diet is rice, which has no iron, and malaria is endemic. A severely anaemic woman who loses two or three hundred mls of blood at birth can die. Also, a skilled birth attendant can rub up the fundus to make the uterus contract and stop bleeding.

“We met with one family whose success demonstrated that the health messages are spreading. A Hmong woman who had an accident which ruptured her membranes, was told by the local health post to go to the district hospital. She travelled the distance of 60km on the back of her husband’s motorbike. Fortunately, the sister in charge of the ward could speak her language and, after she delivered her baby safely, the three went home on the motorbike together.”

* The team have been funded to run a series of six workshops in DBP over the next two years. The first ‘Healthy Mothers Workshop’ took place in May and the next one, a ‘Healthy Babies’ workshop in October, is eagerly awaited by local doctors nurses and midwives.
THE INTERNSHIP DEBACLE CONTINUES

The internship situation in Australia for international graduates remains dire. Though the School continues its support and advocacy for international students, not much has actually changed. Australian medical schools are continuing to take money from often poorly informed medical students without offering them the chance to be registered and practise.

HISTORY
In an attempt to deal with the shortage of doctors, the Australian government opened new medical schools and increased class sizes. This has resulted in a huge increase in the number of graduating medical students across the country, from just over 1600 in 2006 to more than 3500 this year.

THE PROBLEM
NSW has a priority listing for allocating internships. International students fall into category 3.1 and the NSW Health Education Training Institute (HETI) has warned that it is unlikely that all of the graduates in category 3 will receive an offer this year. This has never happened before. Last year all applicants to NSW in category 3.1 and 3.2 received offers.

The NSW Health Education Training Institute (HETI) announced preliminary internship numbers: (www.heti.nsw.gov.au/intern-allocation/w1/i1001211/) which can be found under ‘Additional Information for Applicants’. If these numbers do not change it is likely that the majority of the international students graduating in NSW this year will not receive job offers.

SO WHAT?
International students are as well equipped to work in Australia as their domestic counterparts. Australia currently relies on its ability to import doctors to fill its health workforce shortages; losing over 150 medical graduates would be a tragedy.

WHAT ELSE?
International students are more likely to spend time working in an area of need. They are subject to the 10-year moratorium, which requires them to work in an area of need in order to be eligible for a medicare provider number. This means that the international students that may miss out on jobs this year could help fill one of the greatest voids in the Australian health workforce.

NOT ENOUGH?
Training medical students is expensive, estimated at $80,000-85,000 per year. International students pay very large fees but are still subsidised by Australia to the tune of about $20,000 per year. Losing 152 medical graduates represents a lost investment of over $12 million.

FAST FACTS
- 3,512 medical students graduating in Australia this year, up from 3,028 in 2011
  - 1,043 from NSW medical schools
  - 891 domestic students
  - 152 international students
- 894 HETI’s projected 2013 NSW internships
- Only NSW, SA and QLD will have enough internships to accommodate all of their domestic graduates this year
- 17,000 temporary work visas to International Medical Graduates (IMGs) from 2005-2010
- Approximately 90% of IMGs will leave within 4 years.
- 87% of international students stay if given employment (domestic graduates was 91.5%)
- International students are more likely to work in regional areas (24% compared to 22%)
- $25,000 approximate per year investment to train international students (up to $100,000 for a 4 year program)
- There is enough work for all medical graduates in Australia. It is a matter of funding
  - $8 million to provide additional internships for all NSW graduates this year
  - $12 million the Australian investment in the 152 international students graduating this year in addition to the time invested in teaching them.
- Health Workforce Australia published a report that predicts a shortage of doctors in Australia by 2025
- This assumes that all medical students currently in the pipeline are able to train in Australia.
A healthy drop

Robert Lusby with son James, winemaker at Tintilla Estate, racking wine to barrels.
For Robert Lusby, Professor of Surgery at Concord Hospital and a wine producer, there’s no question that wine is good for you.

By Aviva Lowy

“It breaks down barriers, it aids relaxation and it’s integral to the social fabric. There would be a lot of conversations never started, and marriages never made without it,” he says.

In terms of medicinal value, he’s a little more reluctant to stake claims. “As a vascular surgeon, I say that I’ve gone into wine as a preventative treatment, but that’s a bit of a joke. I think there would be a conflict of interest if I was to really push the health benefits of wine. Wine has merit on its own without needing to be justified in that way.”

Lusby became interested in establishing his own vineyard when he was working in San Francisco. “I had a neighbour who was a paediatrician and had a vineyard in the Napa Valley. I thought, I could do that too.”

Usually when asked why he got into wine making, his response is jocular. “I couldn’t afford to buy wine. Prices were going through the roof, so I had to make it myself!” But the real reason is that he wanted an opportunity to do something with the family.

“My wife and four children have all been involved with the development of the vineyard. Our eldest son did a winemaking and viticulture course and worked in Washington State. He’s our winemaker and runs the vineyard. Our second eldest son does the marketing and book-keeping, and our youngest son works on the weekends at the cellar door. Our daughter has a pub and she sells our wine.”

The family’s vineyard, Tintilla Estate, is based in Pokolbin in the Hunter Valley, the oldest wine region in Australia. “We cleared the land, planted the vines and built the tasting rooms,” says Lusby with pride.

He believes our current obsession with the health value of wine was sparked by the French Paradox. “Having been to the South of France and enjoyed foie gras, cheeses and wine, you can see that they have a really good lifestyle without the consequences. The challenge is to see what it is in wine that makes the difference: the alcohol or other elements, such as resveratrol and phenolics involved in the complex chemical nature of wine. These chemicals make a positive difference to cardio-vascular disease and inflammatory diseases of ageing such as Alzheimer’s, though there have been reservations about wine and breast cancer.

“In the Hunter, which is a summer rainfall-challenged area – as in Bordeaux and Tuscanny – when it rains, the vines produce more of these protective chemicals which are then present in the grape. It is said that Kerry Packer knew of this and would only drink clarets from Bordeaux.

“Anyway, it’s probably the wine, as opposed to the alcohol, which has some benefits. You only have to look at the level of wine consumed by Southern Europeans and they are healthier than the Scottish whiskey drinkers.”

But Lusby believes that wine is just part of the whole picture and that lifestyle contributes as well. Those wine drinkers are eating vegetables and garlic and olive oil as well. “In Crete they eat lots of olives and olive oil and they hardly get any vascular disease, the same as the Eskimos with their high consumption of fish and Omega-3. We are what we eat … and what we drink.

“The overall message is to drink wine in moderation; two glasses of wine a day, but not every day.”

However, Lusby concedes that nobody opens a bottle of wine and leaves a portion undrunk when they’ve had their second glass. Also, rather than glasses consumed, you need to look at alcohol level. A Semillon may have 9% alcohol content, while a Barossa Shiraz could be almost double that.

He also thinks that we should think of wine and food together, as complementary elements of a meal. On the debate around parents introducing wine at the dinner table to their children, he says that a little watered-down wine with the meal puts it in its right perspective and demystifies it, making later binge drinking less likely.

Ironically, while Lusby sings the praises of wine, he’s not much of a drinker himself, needing to remain sober during his working week when he performs surgery. And yet, it seems, just being involved with wine and retreating to the vineyard on weekends provides him with a health boost.

“You can appreciate the seasons on the estate. It’s very refreshing and you relish your return to work more. Wine is a medium for bringing people together; it’s an interesting starting point for a conversation; it’s about family, friends and conviviality.”

Colleagues of Robert Lusby are usually lucky enough to sample his wines. He donates them regularly for university functions and fundraising events.
The most vivid personality of the Anatomy Department was Louis Schaeffer, the laboratory attendant. He appeared to be ageless. A round-headed parchment-faced man he was, with a shaven scalp and he always had a pipe in his mouth...

By Lise Mellor and Vanessa Witton

He prepared the slides for the magic lantern, preserved the bodies and specimens, allotted the parts, procured and sold the articulated skeletons indeed, there was no activity except that of lecturing in which he did not take part. But above all he was the guardian of the helpless inmates, and the Curator of their home, the dissecting room. – Dr Herbert Moran, ‘Beyond the Hill Lies China’

Louis Schaeffer, who came to work at the Sydney Medical School as a laboratory attendant in 1886 and remained for 53 years, still holds the record today for the longest standing employee of the University. But he almost didn’t get the job.

At the age of 15, he vied with 117 other boys hopeful for the position, only managing to make the short-list at the last minute when he demonstrated curiosity about a medical diagram posted on the wall. At interview a week later with Anderson Stuart, Professor of Anatomy and Physiology, Schaeffer was asked, “Are you afraid of dead bodies?” to which he replied, “I don’t think I am!”

The medical school at this time was housed in a four-roomed cottage which was later demolished and replaced with the Edgeworth David Building. This tiny medical school consisted of a single dissecting room, leading to an injection room and an anatomy lecture theatre, with a fourth room serving as Stuart’s workshop.

Right from the start, Schaeffer was trained in the “preservation of the material of practical anatomy.” Many of the photographs and specimens in the Wilson Museum and the Museum of Pathology are the result of his painstaking work.

In 1890, the medical school moved from the cottage to the Anderson Stuart Building. Schaeffer was charged with moving everything, including cadavers, on the old University cart:

“...it fell to the lot of the caretaker (Mr McLean) and me to bring the coffins across. So we arranged to take them one night. Old Mac and I had one on our shoulders. A chap and a girl were walking across the paddock. The girl let out a scream and the pair fled!

Schaeffer confessed that even he could be a little spooked by the dissection room at night:

“I always liked my work but I had a little fear at being left alone, particularly at nightfall. I used to like getting out of that bally dissecting room! I’ll never forget one night… it was a moonlight night. Six corpses were there bathed in moonlight. I raced through, got what I was sent for, and bolted out, not staying to lock up. I was properly frightened!”

All accounts portray Schaeffer as deeply respectful towards the corpses that came under his care. Moran wrote: “Louis always handled the hardened, blackened, almost unrecognisable specimens with something of a loving caress.”

When the Department of Anatomy was subsequently divided in two, Schaeffer remained with the Department of Anatomy under Professor James Thomas Wilson. Wilson trained him in photography, photomicrography and plate-making. Wilson’s key interests at the time were in the embryological development of marsupials and monotremes, and also the central nervous system and human neurology.

Aside from his general departmental duties and checking the attendance roll at the door of the Vesalian lecture theatre, Schaeffer was trained by Wilson to mount and preserve specimens for conversion into slides for the epididiascope. During the mid-1890s, the two made slides of every kind of nerve cell that could be seen in the mammalian body.

In her book ‘J’T Wilson and the Fraternity of Duckmaloi’, Patricia Morison wrote:

“...In the shade of Wilson’s increasing stature, Louis grew into ‘the prince of technicians’ and a skilled photographer and photomicrographer. With a perfect understanding of Wilson’s exacting requirements he presided over the dissecting room, gave ‘unwearied assistance’ to his research, operated the epididiascope in lectures, punctuated with the urgent whisper...
focus, Louis, focus, and at other times remained on the alert for the louder whisper, “Lou-ee,” resounding down the corridor. Generations of students were said to parody this whispering.

When Professor Wilson left Australia to accept the chair of anatomy at Cambridge in 1920, Schaeffer reported to Professor John Irvine Hunter. In an interview in 1933, he remarked that, “John Hunter was a genius”, then boldly stated that he felt he had influenced Hunter’s career by bringing him to the attention of Wilson. He also said that Hunter used to give demonstrations to rooms packed with students whilst he was still in second year.

Many deceased bodies came into Schaeffer’s care, but none as notorious as ‘the pyjama girl’. For the 10 years she remained unidentified, she was housed in a zinc-lined bath and displayed in the basement of the medical school. Schaeffer was responsible for embalming and preserving the body until his retirement.

The mystery began on September 1, 1934 when a farmer found the brutally bashed and partially burnt body of a young woman in a culvert off one of the main roads in Albury. The woman had suffered a bullet wound to the face and multiple injuries to her skull before being hidden in a hessian sack, still dressed in her Chinese-style yellow silk pyjamas.

Initially, she was identified as Linda Agostini, a British migrant, but the local dental records did not match those of the murdered woman. A decade later, it was found that the original dental records had been misrepresented and that she was in fact Agostini after all. Her husband was charged with murder and her body was released from the Medical School and buried in Preston Cemetery.

During her years of anonymity, a death mask made of the pyjama girl represented the first serious attempt at forensic reconstruction in Australian history and the original is still housed in the Shellshear Museum.

Schaeffer’s length of service gave him an unmatched perspective on the Professors.

Summing up, students stood in awe of Professor Stuart, but took their troubles to Dr Wilson. Dr Wilson and Dr MacCormick used to give picnics to students of their years. They were good oh – I used to go!

He also worked for Professors F A Maguire, Claude Witherington Stump, and Arthur Burkitt, who was Dean at the time of Schaeffer’s retirement in 1939 aged 69. He had risen to the rank of Chief Laboratory Technician with three attendants working under him, and was able to claim: “I have met and spoken with every person that has graduated from the Sydney Medical School.

I have had a wonderful time in the department. We have had such a succession of gentlemen that you couldn’t help liking them. In a sense I am married to the department ... I have really lived for it ... hours have meant nothing to me ... they have let me run around, sweet willed, and a fellow just couldn’t help doing his best.

On his death, two years after his retirement, Burkitt wrote an obituary which appeared in the Medical Journal of Australia and Sydney University Medical Journal in 1942.

One of the outstanding features of his life was the complete devotion to the medical school and the department of anatomy. It was said that “Louis”, as he was known to the many generations of students, lived, worked for and thought only of the department.

Schaeffer was a foundation member of the University Welfare Association and a foundation and life member of the Society of Laboratory Attendants of Australasia.
Since the inauguration of the medical school over 150 years ago, graduates of the Faculty have played an important role in providing first class medicine locally, nationally and internationally. Many alumni have become very prominent figures in their respective medical fields, or in quite a diverse range of activities from the arts to politics. However, many alumni do the most extraordinary things, which the rest of us never hear about.

For some years, Sydney University has acknowledged its alumni with awards that recognise outstanding community, international and professional achievements, as well as a special award for those alumni who have made considerable achievements within a few short years of graduation.

This year the Medical Alumni Association decided to present its own awards, and the three winners appear here. All nominations received for our awards will also be entered into the University-wide alumni awards.

Unfortunately, we did not receive any nominations for the Young Alumni Achievement award. I know that many of our young graduates are doing some remarkable work in remarkable places and I would encourage all alumni to consider these nominations when called for next year.

We also recognised all of these amazing alumni who for many years have worked so hard to organise their respective year’s alumni functions. The Medical Alumni Association owes its strength to their tireless efforts to maintain these vital links.

If any alumni (with a particular call for our younger alumni) would like to participate in the affairs of the Alumni Association, may I suggest that you consider nominating for council?

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**ALUMNI AWARD FOR COMMUNITY ACHIEVEMENT**

**ARCHIE KALOKERINOS - MBBS 1951**

Dr Kalokerinos, who had a lifelong commitment to improving the health of Aboriginal children and to rural Australia more generally, receives this award posthumously.

In the opening pages of his book, Every Second Child (1974), Kalokerinos states: ‘For years I worked among them (Aborigines) with care but without knowledge. Rows upon rows of tiny graves in the Aboriginal cemetery at Collarenebri bear silent testimony to the inefficiency of my early efforts. Then, in December 1967, I discovered the truth. The death rate fell and has since remained at a figure that rivals the lowest in the Western World.’

The ‘truth’ for Kalokerinos was the controversial idea that daily vitamin C supplements could reduce disease and improve health.

Nobel Prizewinner, Linus Pauling, threw his weight behind Kalokerinos’s theory and contributed a foreword to the book, in which he wrote: ‘This book presents the engrossing account of the attack, in large part ultimately successful, made by Dr Archie Kalokerinos on the problem of the very high death rate of Aboriginal children . . . The problem of obtaining a suitable amount of vitamin C is, of course, a far more serious one for the Australian Aborigines than for other people. I believe that the conclusion reached by Dr Kalokerinos that the high infant mortality and generally high incidence of disease among the Aboriginal infants is to be attributed in considerable part to a low body content of vitamin C is correct.’

Kalokerinos took up the theme again in his 1993 self-published book Viatmin C. Nature’s Healing Missile and he was the subject of the documentary film God Knows Why But It Works, directed by Phil Noyce and shown at the 1976 Sydney Film Festival.

From 1965-67, Kalokerinos took an unusual break from medicine to become an opal miner at Coober Pedy. This experience prompted him to write two books on the topic, In Search of Opal (1967) and Australian Precious Opal (1971).

He retired from full-time practice in 1992 and was named Greek Australian of the Century in 2000.

Sadly, he passed away in March (?) this year before learning that his nomination for this award had been successful.
WILLIAM MAINA – MIPH 2007  
ALUMNI AWARD FOR INTERNATIONAL ACHIEVEMENT

Since completing his Masters in International Public Health at Sydney University, Dr Maina returned to Kenya where he heads the Non-Communicable Diseases (NCD) division of the Ministry of Public Health and Sanitation in Nairobi.

Under his direction, NCD, once a neglected area of the Ministry of Health, has become a vibrant unit with dedicated funding and work plans to achieve the many initiatives he has introduced. Maina and his colleagues are currently running projects worth over two million euros.

Maina’s main achievements have been in the areas of tobacco control, diabetes, cancer, and road safety.

He spearheaded tobacco control legislation and, as a result, smoking in public places is banned and cigarette packets have to carry health warnings. Today, Kenya has one of the most comprehensive tobacco control laws in the continent and complies with the WHO requirements.

Maina’s National Diabetes Control Program has seen the development of a national diabetes strategy, national clinical guidelines for the management of diabetes and a diabetes’ educators manual. His work has been recognised by the World Diabetes Foundation and the International Diabetes Federation. He also founded the Kenya Diabetes Summit.

His road safety initiative, a three year project funded by Bloomberg Philanthropies, introduced the use of speed video cameras and is establishing the first public emergency rescue service in the country with fully-equipped ambulances to respond to traffic accidents.

In the past four years, Maina has helped build partnerships and collaborations with local and international partners to support NCD in Kenya. One of these collaborations involves the University of Sydney and the University of Nairobi.

In 2011 he was awarded the Presidential Order of Grand Warrior of Kenya for his exemplary contribution to public health.

CHRISTINA STEFFEN – MBBS 1982  
ALUMNI AWARD FOR PROFESSIONAL ACHIEVEMENT

Dr Steffen is a vascular and general surgeon with the Cairns Base hospital. She was the driver of a multi-disciplinary outreach program to provide care to isolated communities in tropical North Queensland, particularly indigenous communities, that would otherwise be denied such good coordinated care for vascular problems. The program has resulted in a significant reduction in the incidence of major limb amputation.

The logistics for patients to travel to Cairns for treatment are often insurmountable. A service provided at home is extremely valuable, and the scope of surgical procedures that can be conducted in rural and remote areas is extensive, ranging from gall-bladder surgery to minor foot surgery. Without the outreach service, these patients would swell the surgical waiting list of the overstretched hub hospital and patients would experience lengthy delays.

In 1997, Steffen was instrumental in founding a high risk foot service to address diabetic foot disease which is a major problem for Tropical North Queensland. It is particularly prevalent in indigenous groups with up to 50% of Torres Strait Islanders over 35 suffering from the disease. The service is an excellent model of evidence-based management of this chronic disease and Steffen has presented and published widely on the topic.

She is also recognised as a local expert on the diagnosis and treatment of Buruli ulcer, a WHO notifiable disease which is found in the rain-forested Daintree River area, and is a major public health problem in West Africa. She presents on this topic to the local general practice group and recently authored an article on the ‘Daintree Ulcer’.
A PIECE OF MY MIND: A PSYCHIATRIST ON THE COUCH

Professor Gordon Parker is a much respected, albeit sometimes controversial, academic and clinical psychiatrist, teacher, medical author and the founder of the successful Black Dog Institute in Sydney.

His passion is for accurate classification and identification of psychiatric illnesses, using pattern recognition skills to allow targeted management strategies. His area of major interest is in mood disorders and he admits that his main reason for writing this book is to elucidate his views on different subtypes of depression, which he believes to be a condition encompassing several different entities, each of which requires a different management strategy, rather than being a single condition with varying levels of severity. He makes a strong plea for the reinstatement of melancholia as a diagnostic category.

Happily for the reader he sandwiches this rather scholarly segment between an autobiographical section and a section on his exposition of the ideal qualities of a clinical psychiatrist. These sections allow us to see the man behind the burning convictions and better understand his perseverance, tenacity and self-confessed bloody mindedness in pushing his agenda.

Parker’s facility for communication in the medical realm is demonstrated by his extensive output of scientific papers and books based on his protean research endeavours and his many years of assessment and management of psychiatric patients in the public hospital system. The magnificent clarity of the information on the Black Dog Institute website clearly bears his mark.

One of his main joys in psychiatry is hearing people’s stories and in this book he often uses the patient’s own words to illuminate the clinical features of psychiatric illness; the pain of living with such a disorder; the extraordinary resilience shown by some; and the benefit to the patient of sensitive care as opposed to poorly-chosen or poorly-delivered management strategies.

Parker is himself a story teller par excellence. He has written a novel, a play and scripts for television and radio programs in both Australia and the UK. However this skill comes to the fore in the autobiographical section of the book which is full of colourful stories of people, places and events. There are wonderful stories of his family; his elderly grandfather run over by a bus on the way to a romantic assignation; his father who ‘garaged’ his beloved Jaguar in the lounge room; and his delightful mother who preferred alternative therapies to seeking professional medical advice, believing these would prevent almost all illness. He pays a sincere tribute to his wife who has provided him over their long years together with both support and space.

I am a contemporary of Parker’s and reading this book, many memories surfaced: I re-experienced the tentative first steps, both in dance and relationships, which we took at the Misses Kay dancing classes; the Lindfield milk bar where we congregated; and the long lazy days at the beach. I chilled again at the predicted, and then actual, cull of medical students as the course progressed, the horrors of biochemistry, and the rote learning of anatomy and later the extraordinary responsibilities loaded on junior doctors.

Serendipity played a large part in Parker’s career choices. Showing much more facility for the humanities than science in his school years, a period of incapacity after a surfing accident allowed him to reflect on his future studies and opt for medicine. He flirted with the idea of specializing in surgery, but became disillusioned with that path just as two friends announced over a pleasant lunch that he should become a psychiatrist. And when asked why he had chosen psychiatry at his first interview for a registrar’s position, he answered he was ‘basically a voyeur’. He was shuttled out immediately. Thankfully the next interview proceeded better. His decision to become an academic psychiatrist occurred as the result of a suggestion by a senior colleague during a brief conversation in a hospital car park.

Many colleagues and patients will be grateful that the dice rolled as they did. Maureen Rogers.

RESTRUCTURING MEDICAL PRACTICE

This book is a very digestible presentation of the findings of Dr Jorm’s doctoral thesis, reporting a qualitative study looking at the alienation of specialist doctors from the system in which they play a major role.

The book will engage readers from different backgrounds for different reasons.

• Doctors will be reassured by the thoughts of fellow doctors; reassured that they’re not alone in their attitudes, concerns and, perhaps increasingly, their disenchantment

• Health planners, bureaucrats and governments will gain priceless insight into doctors’ thinking, and possible ways of reengaging these key players in the health system

• Those working in quality and safety will realise that a ‘myhospital’ website may not be a good way to re-engage doctors

• Medical students will learn about the values and behaviours of their mentors

Jorm tested scenarios that explore: how specialists see the health system and their place in it, why they remain in medicine and why they are limited in their ability to lead change in the current system.

And this is one of the strengths of the book: the scenarios are commonplace. Doctors spoke openly and honestly to her as their colleague. She respected their trust and has used their thoughts skilfully with intelligent use of the existing literature. Their responses will resonate with the doctor reader.

Some scenarios and their responses will touch a nerve with many doctors and their families, such as this one:

Almost 2/3 of doctors were prepared to abandon a special weekend away celebrating a 10th wedding anniversary to deal with an unexpected complication in a patient, even though a close professional colleague was covering and willing to deal with it.

What comes across very strongly is the dedication of doctors to their individual patients, even at considerable cost to their family and personal lives. Yet despite this commitment, doctors feel alienated from the health system, not valued by it, and unable to influence it. Here’s what some had to say:
In Good Hands: The Life of Doctor Sam Stening, POW

In 2009, radius asked its readers if they could assist the author with his research on Dr Sam Stening’s life as a paediatrician in Sydney from the 50s to the 70s, after his return from captivity in Japan. Those responses are included in this book. Here the author talks about Dr Stening’s earlier POW experience which he was able to base on the subject’s diaries and extensive case notes . . .

Often these notes make grim reading. In the very cold winter of 1943 on the north-west coast of Honshu, the combination of extreme cold, poor diet, and inadequate clothing saw several men literally freeze to death. There was little that Stening could do to save them, but without his devoted care and dogged determination to try every means available, many more would have perished. He was dealing with patients who had already spent two years in Japanese captivity, mostly in Hong Kong, and their medical condition was already poor. These POWs brought with them to Japan endemic diseases of dysentery and beriberi, despite having been screened before being shipped from Hong Kong. Their diet had not helped. Boiled rice and a few vegetable scraps each day was insufficient to maintain the Allied POWs in good physical health and their poor condition did not aid the recovery from the diseases to which they are exposed.

The Japanese view was that people who worked should draw full rations while those who did not should get less. This rule was applied to POWs too, and Stening had the difficult task of determining whether the interests of the men still working should come ahead of those who were sick and needed appropriate food to assist their recovery. With evident anguish, he decided that the workers needed the sustenance and put the sick on reduced rations.

As the rations issued by the Japanese declined in quality and quantity, and as their captors helped themselves to food from the prisoners’ Red Cross parcels, men resorted to desperate measures to feed themselves. Stening tried to stop them eating leaves, flowers, acorns, and anything else that they found along the way which would aggravate their already stressed digestive systems. However, in the springtime, prisoners were able to supplement their rations with delicacies such as frogs’ legs, sparrows and snakes - all valuable sources of protein in a diet very short on this.

Stening also experimented with a series of treatments using the very few pharmaceutical supplies available to him. Certainly, after that first terrible winter of 1943, Sam’s record in keeping prisoners alive and available for work is remarkable.

Being able to work was important for survival. The businesses which employed POW labour in the camps, typically the Japanese industrial conglomerates, would provide workers with lunch, maybe soup or bread. The work site also offered opportunities for prisoners to pilfer food or be given some by sympathetic Japanese workers. In any case, the Japanese Army’s POW administration had contracted a level of labour to the employers and intended to keep its side of the bargain regardless of the readiness or ability of prisoners to perform the work required. Sick or not, the numbers had to be supplied and Sam had a daily battle to prevent the Japanese guards hauling sick men out of their beds to make the quota.

Many POW doctors were confronted with an unusual condition termed ‘painful feet’ or ‘electric feet’ which was a side effect of malnutrition. Prisoners took extreme measures to relieve the pain, including immersing their feet in freezing water or leaving their feet out from under the covers in winter. Unchecked, these practices could lead to the onset of gangrene and the need for amputation – without anaesthetics. After the war, Stening wrote an article on the subject for the MJA.

Stening’s POW experiences were a journey of self-discovery. What he went on to become is a matter of record: my book tries to show that he had already achieved much by August 1945. Ian Pfenningwerth.

“T’m detest the term system. It depersonalises the whole process of health... The thing that really irritates me is that I look after patients and systems focus on clients.”

“Blow up the Department of Health, get rid of the quality branch... and give us extra nursing staff and extra doctors who do their job properly in the first place, instead of making up all these bullshit committees and stuff.”

“Planes don’t take off unless they have a full crew, the pilot being rested and the plane fixed. Here we haven’t got a full crew, everybody is tired and the machine is breaking down.”

Jorm addresses the essential question: how can doctors be re-engaged in the health system to improve its efficiency and effectiveness?

A surgeon quoted in the book offers this insight:

“The system doesn’t allow doctors to make contributions... we can all run our private practices and make them hum... but when we step outside of that and try to do something similar in, say, the Emergency Department, it’s impossible... we aren’t given the authority or power to do that.”

Initially practising as an anaesthetist, Jorm’s interest in quality assurance in anaesthesia led to full-time cross disciplinary work on patient safety and quality. She became Lead Medical Clinician in quality and safety at St George Hospital, then Senior Medical Advisor to the Australian Commission on Safety and Quality in Health Care, developing policy and strategy. She is currently an Associate Professor at Sydney University, coordinating the professionalism theme of the Sydney Medical Program. She has become passionate about finding ways to enable the doctors of the future to engage with and influence the healthcare system.

This is an extract of the speech given by Dr Annette Katelaris, editor of The Medical Journal of Australia, at the launch of the book.
reunion reports

There was so much reunion activity that we didn’t have space to include full reports. Please go to the alumni page on our website for all the details and photo coverage. http://sydney.edu.au/medicine/alumni/reunions/
Does your graduating year have an important anniversary in 2011-2012?
Let us help you contact your fellow graduates, issue invitations and promote your event. Contact Diana Lovegrove, on 02 9114 1163 or at diana.lovegrove@sydney.edu.au.

REUNIONS 2012

GRADUATING YEAR OF 1972
When: Weekend of Saturday 29 September 2012
Where: Canberra
Contact: Harry Merkur hmerkur@bigpond.net.au

GRADUATING YEAR OF 2002
When: Saturday 20 October 2012 at 6.30pm
Where: Nicholson Museum, University of Sydney
Contact: Helen Benham helenh1@med.usyd.edu.au or Luke Murtagh ljmg@gmp.usyd.edu.au

GRADUATING YEAR OF 1982
When: Saturday 27 October 2012 at 6.30pm
Where: Refectory, Holme Building, University of Sydney
Contact: David Kinchington med82@iinet.net.au

GRADUATING YEAR OF 1977
When: Saturday 3 November 2012
Where: The Great Hall, University of Sydney
Contact: Tony Joseph tjoseph@med.usyd.edu.au

GRADUATING YEAR OF 1987
When: Saturday 10 November 2012
Where: Sydney Harbour Marriott Hotel
Contact: Michelle Crockett macrockett1@mac.com

REUNIONS 2013

GRADUATING YEAR OF 1958
When: Saturday 9 February 2013
Where: The Great Hall, University of Sydney
Contact: Brian Parker dr-brian@bigpond.net.au

GRADUATING YEAR OF 1978
When: Saturday 23 February 2013 (January Graduation)
Where: Roseville Golf Club
Contact: Andrew Byrne ajbyrne@ozemail.com.au

GRADUATING YEAR OF 1993
When: Saturday 9 March 2013
Where: The Great Hall, University of Sydney
Contact: Chris Jones zen343@gmail.com

GRADUATING YEAR OF 1963
When: Saturday 16 March 2013, dinner
Where: The Great Hall, University of Sydney
Contact: Sydney Nade platypusyd@hotmail.com

GRADUATING YEAR OF 1973
When: Saturday 6 April 2013, dinner
Where: The Great Hall, University of Sydney
Contact: Phil Cocks pcocks@ozemail.com.au

GRADUATING YEAR OF 1978
When: Saturday 9 November 2013, dinner (October Graduation)
Where: The Great Hall, University of Sydney
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ALUMNI NEWS
IAN JOHNSTON
Neurosurgeon & translator

BA (St Andrews)
MBChB (St Andrews)
FRCS (Glasgow)
MID (Huddersfield)
DA (Classical Greek, UNE)
MA (Latin, Sydney)
BSc (Hons) Justice (Sydney)
MPhil (Philosophy, Sydney)
PhD (Classical Greek, UNE)

A lover of language

As a student at St Andrews, Ian Johnston found he had time on his hands. One of the things he did to while away the hours was to bury himself in Chinese literature.

“I was constantly reading in introductions and prefaces that, while the translation was fine, you didn’t really get the measure of the literature unless you read it in the original,” says Johnston.

So he rather boldly undertook to learn the language, a rashness which he now puts down to “the exuberance of youth.”

“I started studying Chinese after graduating in Medicine. I taught myself and went to a few adult education courses, later enrolling at Sydney University in 1980, completing a BA Hons as a non-degree student and then a PhD. I also went to China several times between 1975 and 1984.

‘A teacher I had at tech said, ‘you must find this a bit lightweight. You are obviously more committed to the language than the other students,’ and he introduced me to a Chinese woman who had been a tertiary level teacher of Chinese in China and Taiwan. I learnt with her for the next 25 years.”

Since he retired as a neurosurgeon, Johnston has spent the past 12 years at Cloudy Bay, a remote spot on Tasmania’s Bruny Island. He says that he is probably no longer fluent in colloquial Chinese because he hardly speaks to anyone, even in English. However, his refuge provides him with the solitude to translate classical literary Chinese, a language which he describes as being quite different to that in common usage.

“Chinese literature is exceptional in its beauty, its philosophy and its timeless relevance. I became interested in Zen Buddhism, which started in China, and found that I had an affinity for the culture.”

When renowned theatre director Robyn Archer organised the first ‘ten days on the island’ arts festival for Tasmania, she’d heard that Johnston was translating Chinese poems and asked if he would give a presentation. “After that, a woman living on Bruny Island who was a noted painter in the Chan or Zen style, sent me a letter to see if I would be interested in learning the art of Zen painting. I can’t paint to save my life, so I asked my partner Susie (Collis), who was a talented amateur painter in watercolours, whether she was interested. She was, and so joined the Forest of Brushes school and has devoted herself to Chan painting.”

Since then, Johnston has published two books of translation of early Chinese poetry, Singing of Scented Grass and Waiting for the Owl, and two translations of ancient Chinese philosophy texts (in collaboration with UNSW academic, Wang Ping). Collis has provided translations for both.

Johnston’s passion for language did not stop short at Chinese. In 1980, he decided to learn classical Greek and Latin; the latter he’d studied at school, the former was completely new to him. So how did the busy neurosurgeon find the time to reach a level of expertise in a number of foreign languages, such that he is able to publish translations in them? The answer is: he doesn’t sleep.

“I sleep very little. I have had ankylosing spondylitis since adolescence and, for many years, sleeping and lying in a bed was a real problem. I got into the habit of having small sleeps,” says Johnston, who says that he might have a one hour nap after dinner and then two to three hours late at night before getting up to work. He would also have five to 10 minute naps which he found very efficient. “I was constantly sleep deprived.”

A new treatment for his chronic inflammatory disease has meant that, for the past five or so years, Johnston has been pain-free for the first time in nearly 50 years. But he still sleeps very little because the habit has become so deeply ingrained and “because it’s so useful”, allowing him valuable time to pursue his work.

Johnston has devoted so much of his life to language because, “for me it seemed to be the case that language is valuable. I was really interested in literature, I have an aptitude, and it was a pleasure. I told my children that they should learn a language and I gave them the choice as to what they would learn. My son picked Greek, my older daughter Chinese and my second daughter Latin, and I was their teacher in that language for the HSC.” While none of his children have continued with their language studies, he believes that it was all education and, he jokes, “at least we still speak to each other.”

The irony of Johnston’s journey into translation is that the impetus to learn languages in the first place was to enjoy literature in its original form. Have his translations managed to transcend the problem of ‘lost in translation’ for his readership?

“I wouldn’t privilege my translation above others. Some is better and some is worse than mine. What I am trying to do is stuff that hasn’t been done before. There is a Chinese philosophy book, The Mozi, that had not been translated and it is agreed that it is a seminal ancient text. And there is Galen’s Greek magnum opus The Method of Medicine, and nobody had done that completely in English. These are really major books in the intellectual history of the world.”

While Johnston’s translations of these books are a significant accomplishment and an important cultural contribution, he says that people mainly like the poetry. “I don’t know if many people read the others,” he says modestly.
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Tour leader Darryl Collins in an acknowledged expert in the art and history of South East Asia. He was a curator at the National Gallery of Australia before playing a major role in the rehabilitation of Cambodia’s National Museum. He has been resident in Cambodia for more than 10 years.

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