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Philanthropy



FACULTY DEAN WINTHROP PROFESSOR IAN PUDDHEY WITH DR DAVID CHELVANAYAGAM AND HIS DAUGHTER DR SUNITA GILBY AT THE DEED OF GIFT SIGNING CEREMONY.

A hand up over financial hurdles to medicine

A family philosophy of giving and an unexpected meeting have sparked a heartfelt gift that will help financially strapped but outstanding students make their way through medicine.

Dr David Chelvanayagam, a retired urologist, and his daughter Dr Sunita Gilby, a general practitioner, have donated a sum to the Faculty to set up two annual scholarships in memory of the late Dr

Indran Chelvanayagam, who was their son and brother respectively.

The Indran Chelva Broadway Pathway Scholarship in Medicine and the Indran Chelva Rural Pathway Scholarship in Medicine will be for domestic students experiencing financial hardship who enter UWA on the Broadway or Rural Pathway to the Doctor of Medicine (MD) degree. The Broadway Pathway is for students

from disadvantaged schools and the Rural Pathway is for rural and remote students (see story page 4).

The recipients will receive \$5,000 each year of their three-year UWA undergraduate degree and \$10,000 every year of their four-year postgraduate MD degree. The scholarships, which are endowed in perpetuity, will be awarded on academic

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Work, sleep, breathe, sit, get physical - what Gen Y-ers look like

A unique profile of the work, sleep and activity patterns and lung health of WA Gen Y-ers is being drawn by researchers from the follow-up of 23-year-old Raine Study participants that finished in June.

It is the first time that information has been gathered on the work productivity and the physical activity and sedentary behaviour of

the cohort, which currently consists of more than 2000 West Australians born 23 years ago to mothers who were recruited when they were pregnant to the now world-famous Study.

Program Manager Ms Jenny Mountain said the prospective study, officially known as the Western Australian Pregnancy Cohort (Raine) Study, was unique because it involved such a large group of participants with information collected continuously for 23 years from before birth.

It is a gold mine of information - and one that the newly-appointed Scientific Director, Winthrop Professor Peter Eastwood, encourages researchers to utilise.

Professor Eastwood, who took over the role from Associate Professor Craig Pennell, said it was an extremely extensive set

of health data, including comprehensive lifestyle questionnaires and clinical measures, collected over 23 years.

The reason he and the new Associate Scientific Director, Professor Leon Straker, had taken on these roles was partly because the study had moved from the paediatric and adolescent research focus to the adult spectrum and they were both adult researchers.

"Our aim is to now get the Raine Study into the realm of adult researchers because we are starting to examine the onset of adult disease," Professor Eastwood said.

For the latest follow-up, more than 1000 of the 23-year-olds underwent extensive testing, including a lung function and asthma challenge test, and many measurements

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Previous editions of MeDeFacts can be viewed online at www.meddent.uwa.edu.au. Go to "News and events".

A step into fashion

A state-of-the-art optical scanner used to capture data to make custom-fitting shoes and boots for disabled patients has been installed at the new clinic run by the Faculty's Podiatric Medicine Unit and is improving compliance.

The scanner measurements are used for computer generated 3-D images of feet and lower legs. The end of the process is trendy custom-made shoes that look fashionable but cleverly hide their orthotic function.

Podiatric surgeon Associate Professor Burke Hugo, who heads the new clinic for people with disabilities which opened at the UWA Podiatry Clinic in March, said the scanner was a prototype and one of only four in Australia.

In the past in similar clinics in WA, custom-made orthotics and footwear were outsourced and paid for with WA Disability Services Commission (DSC) funding.

Associate Professor Hugo said he had seen merit in taking control of custom shoes for several reasons, including continuity and autonomy of care for each patient.

"We can go through the whole process of assessing the patient, designing footwear or inserts, taking control of the manufacturing process, and then doing the final fitting and follow-up," he said.

Moreover, Podiatric Medicine students were getting experience in not only assessing patients with disabilities but also taking it one step further and were playing a role in designing the orthotic device that would suit each individual.

The scanner uses a combination of infra-red and optical lenses to collect accurate data such as the diameter and volume of the leg and foot.

Associate Professor Hugo uses measurements from the scanner to design orthotic inserts and custom-made shoes and boots, which are produced in China with high-grade leather and other materials at highly competitive prices. "They are made in a three-week turnaround, which is unheard of," he said. "It used to take two to three months.

"I have got some stock pictures but I am asking people, before they come in for the scanning, to pick any shoe they like and then I will try to replicate it as precisely as I can. The trick is compliance because shoes are part of fashion."

He can design any type of shoe, from sports shoes, boots and sandals to children's shoes, out of any material and of any colour.

One young woman with cerebral palsy has had custom-made shoes in the past but has not worn them because they were unattractive and she was already self-conscious.

Associate Professor Hugo asked her what shoes she would like and she brought in a pair of trendy yellow leather boots she had bought but which did not fit her properly. She now has an almost identical orthotic pair - made thanks to the scanner and the custom design.

Another patient with severe disabilities was collapsing because his legs gave way when he was transferred out of his wheelchair. After assessing him and using data from the scanner, Associate Professor Hugo designed him an orthotic insert and shoes to support him.



ASSOCIATE PROFESSOR BURKE HUGO SETS UP THE NEW OPTICAL SCANNER TO TAKE IMAGES OF THE FOOT AND LEG OF HEIDI SCHLESNIAK, A SECOND-YEAR DOCTOR OF PODIATRIC MEDICINE STUDENT.

Some patients require a splint up the back of the leg which in the past has been independent of the shoe but with the new technology can be incorporated into a high boot.

Professor Alan Bryant, Head of Podiatric Medicine, said the scanner technology had several advantages.

"It is more accurate than the old technique of plaster casting," he said. "And the scan of the foot can be computer modified to whatever the patient's particular needs are."

Feedback from patients who had received shoes and boots was that they were really pleased. "They don't look like an orthopaedic shoe at all, they look like a shoe or boot that you have just bought from a fashion shoe store," Professor Bryant said.

"For some patients with a disability, it is really important to be able to dress like everybody else."

The patients' disabilities include Down's syndrome, autism, cerebral palsy and musculo-skeletal deformities. "If we can stabilise the foot and ankle, it helps with normal postural muscular development, ambulating and everything else," Associate Professor Hugo said.

He had been looking for innovative ways to raise money to put back into the clinic to make it at least cost neutral. For the first two years only, funding to cover the cost of the patients - who do not pay a fee - will come from the DSC.

He eventually would like the disability clinic to be able to offer a complete range of services, including surgery as well as assessment, treatment and custom-made orthotics and shoes. "I am aiming to make this the go-to place in two years' time," he said.

The disability clinic, which caters for all ages, is open Tuesday and Friday mornings and all day Wednesday.



ASSOCIATE PROFESSOR BURKE HUGO WITH SOME OF THE CUSTOM-MADE SHOES.

- By Cathy Saunders

Guest Editorial

Lessons from China

By Winthrop Professor Geoff Riley, Head of the Rural Clinical School of WA and Head of the School of Primary, Aboriginal and Rural Health Care

I hadn't aspired to go to China. It simply wasn't on my radar. But the Faculty's initiatives in Shanghai and Zhejiang Province meant that it was an expectation of my role. Why can't we develop interesting initiatives in Tuscany or Burgundy? Usually with the Dean, Winthrop Professor Ian Puddey, and Associate Dean International, Winthrop Professor Minghao Zheng, I have now been visiting for about three years with student exchanges and increasingly for discussions with Health Bureau leaders about the Chinese health care system. I have to admit I'm now enthralled.

In 2010 Chen Zhu, a physician and China's remarkable Minister of Health at the time, announced major reforms in China's health care system. China had lost its way on health after the Cultural Revolution but pressure for change and indeed actual change had been building for a decade and Chen Zhu had the understanding and clout to require implementation of reforms that had been rehearsed in reports by the bureaucrats and academics for most of the previous decade.

Develop primary health care

One important recommendation was to develop the still very basic primary health care system and in particular to ramp up the quality, and thus the training, of GPs. China has a highly developed, technology-based tertiary health care system but virtually no effective primary system to complement it. You need both and China has half a health system. The literature is now unequivocal that having in place a primary system with highly trained GPs with a gatekeeping mandate saves nations money and produces better outcomes for patients. In summary, a primary system, depending on a range of variables such as rurality and access, deals with approximately 90 - 95% of patients locally and refers to secondary or tertiary care only those who need it. From a total system perspective, the primary system through gatekeeping, triage and referral can be usefully understood as an orderly way of delivering the right patient to the right specialist at the right time. This uses the tertiary system and specialists' time and skills optimally and saves the nation money. Our secondary system can be seen as another more specialised level of filtration in the hierarchy.

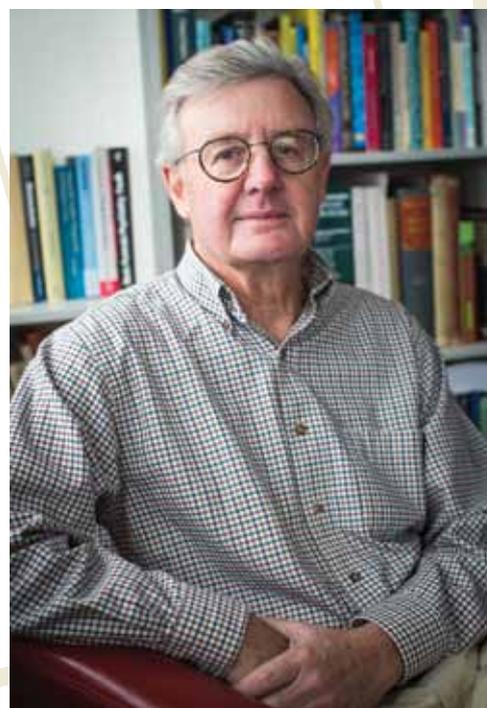
Chen Zhu called for tens of thousands of GPs to be trained in the next decade. China has made a start in vocational training but of course they lack the teachers of the first generation just as we did. The solution now, as it was then, will be a combination of emerging local leaders and teachers from nations with established vocational training structures. Accordingly our GP teachers will be invited to spend short blocks of time in China to train the trainers and also to teach the emerging generation of graduates who are choosing generalism.

Obviously it will take a generation for anything approaching adequate numbers of GPs to be in place such that gatekeeping legislation can be "switched on" but referral lines and processes will be established sooner. And just as it did here in the early 90s, gatekeeping when it is eventually introduced will simply formalise existing habits of referral. It may also take a generation for the citizenry to accept these new doctors and systems but experiences of better outcomes should ensure that the majority at least is soon persuaded.

China style

What is so impressive about the Chinese is that they are very well informed and when they decide to act, they do so incisively. In developing their new systems they will do it "China style" - they will innovate and adapt and I have no doubt that some of those ideas will feed back to the West and indeed provide more lessons from China.

You can learn a lot about both by comparing two wines at the same tasting. So it is here - comparing their system with ours not only helps the Chinese to imagine alternatives but helps us to appreciate through sharper focus what we have in Australia. And here is the lesson from China: imagine not having our primary and secondary systems in place. In China, particularly outside the major cities, patients mill around the ground floor of hospitals hoping to be seen by untrained GPs who spend about three minutes with the patient or see perhaps a specialist, most likely of the wrong variety. Of course there are issues and problems in our system but in international terms it is an excellent system. It reminds us that we must, when dealing with policy-makers in particular, put aside our internecine criticisms and strongly advocate for a system which is serving our nation well and which appears even now to be under threat.



New Century Campaign - Create the future

The road here

When the Rural Pathway was developed in 2000 to help country students enter medicine and dentistry, the rural intake was only about 4%, despite an allocation of 25%.

The new scheme involved visits to rural schools to highlight these two career options to students and included workshops and talks by medical and dentistry students.

Faculty Student Support Coordinator Ms Sue Pougnault said there were challenges but she set a goal of achieving a 25% intake by 2005, which was reached.

That was the year that Winthrop Professor Ian Puddey took over the reins as Faculty Dean and he fixed the intake at 25% for thereafter.

The next move was to initiate a pathway for students from schools that were under-represented in the intake and were in lower socio-economic areas and in 2008 the Outer Metropolitan Program began with three schools - from the government, independent and Catholic sectors. "They were schools with refugees where English is their second language," Ms Pougnault said.

"We developed the program on the Rural Pathway program but we always knew there would be different things that they needed. Some of the students we pick up in Year 10 and we see them in Years 10, 11 and 12 and then we see them once they are in the course. We are always there for them. And often if there is a problem, we are the ones they come to first."

Rebadged the Broadway Pathway last year, it has grown to now include about 70 schools. The first cohort of Broadway students will graduate this year.

Professor Puddey said when the program was first broadened to 10 schools, all interested students were invited to a morning tea at the University rowing club in Crawley. One school principal remarked that not one of his students had ever been to the suburb or ever walked on the University campus. They were open-eyed, he said.

Great expectations

A growing number of school students from disadvantaged and rural backgrounds who never expected to be able to study medicine or dentistry are walking that route, thanks to a combination of new scholarships, dedicated pathways, and loads of support.

Two new annual scholarships were set up in July as the result of an extremely generous donation from two doctors, a father and daughter, to remember their son and brother (see story page 1).

And earlier this year, the specialist cardiology practice Western Cardiology set up a scholarship for an aspiring medical student (see story in the June issue of MeDeFacts).

The scholarships are to lend a strong financial hand to students who are academically talented but struggling financially and who embark on the three-year road to an undergraduate degree and the four-year road to medicine via a dedicated pathway.

These assured pathways, the Broadway Pathway for students from disadvantaged schools and the Rural Pathway for rural and remote students, are among several set up by the Faculty.

Faculty staff, particularly Student Support Coordinator Ms Sue Pougnault, support the students in numerous ways, often beginning in Year 10.

Faculty Dean Winthrop Professor Ian Puddey said when the Faculty switched to a new selection system, using an aptitude test and an interview in addition to the Year 12 academic score, it was anticipated that it would lead to a broader range of people entering the Medical School.

"But it didn't," he said. "What the Rural Pathway (initiated in 2000) demonstrated very clearly was that if you want to get an increased diversity for your student cohort, you need to have a specific pathway with quarantined spaces.

"So essentially what we did in 2008 was set

up quarantined places in the course for people from disadvantaged schools. And two years ago we set a 10% quota so now 24 students will get into the medical course from schools that in the past never sent students into medicine."

Professor Puddey said once a mechanism was provided, families and teachers looked at the students differently.

"The students rise to the standard you set," he said. "And they have to reach the same thresholds as everybody else."

Faculty Manager Dr Jan Dunphy said students who had entered through the pathway scheme became strong advocates and gave back a lot, including going out to schools to talk to students. "They are real, live examples of what the outcomes can be and that inspires the students," she said. "It is quite powerful."

The number of students graduating in medicine has doubled since Professor Puddey began his role as Dean and this year's intake was 240.

"But what we have also learnt is that you can't just set up places, you have to support individuals," he said. "People who come from areas of disadvantage are disadvantaged across a very broad spectrum. And so scholarships are, I think, the difference between students who come in and struggle and students who come in, are supported and do well."

UWA Associate Director, Development, Pamela Stephenson said some students at the University had two part-time jobs to support their studies. "This is why scholarships like the Indran Chelva Scholarships are so important," she said. "Students need financial assistance to allow more time to focus on their studies.

"The Development and Alumni Relations Office continues to share this message with our alumni as establishing scholarships is a key priority of our New Century Campaign."

- Stories by Cathy Saunders



WINTHROP PROFESSOR TONY CELENZA WITH A GROUP OF THIRD YEAR RURAL AND BROADWAY SCHOOL LEAVER ASSURED PATHWAY STUDENTS WHO ATTENDED A TALK ON THE DOCTOR OF MEDICINE DEGREE ON CAMPUS IN AUGUST.

New Century Campaign - Create the future

Aboriginal children are focus of centre

A collaborative research centre dedicated to bettering the health of Aboriginal children in rural and metropolitan areas is up and running with several key targets.

The NHMRC Centre of Research Excellence in improving health services for Aboriginal and Torres Strait Islander children (ISAC) aims to improve the following: access to care for the most disadvantaged children, quality care of service providers, and primary care services for pre-term infants.

Broadening the coverage of immunisation is another target of the centre, which is led by Winthrop Professor Karen Edmond.

"Despite Australia's capacity, it is a major concern that we are unable to deliver effective health services to many vulnerable Aboriginal and Torres Strait Islander children," she said.

Roughly half the collaborators for the centre are from Aboriginal medical services. "They are made up of national and international academics, program and policy makers, and on-the-ground clinicians," Professor Edmond said.

Research ranges from looking at the barriers to the uptake of health services from the perspective of families and service providers to testing new models of care of clinical governance and precall systems.

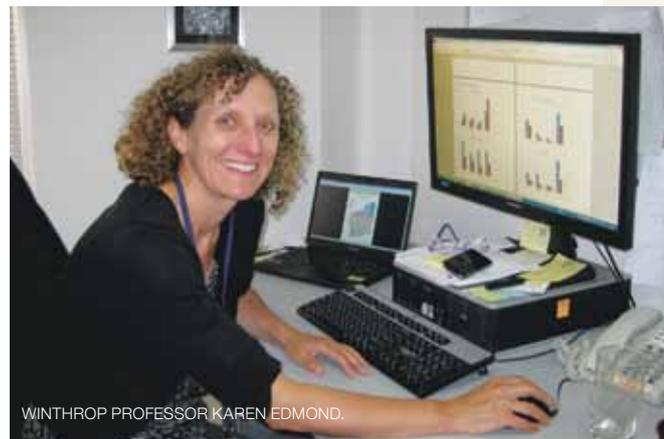
"We will be able to look at some of the existing data that have been collected in Aboriginal medical services and non-Aboriginal medical services and understand where the gaps are and how they can be improved," Professor Edmond said. "This will lead to the implementation of new models of care."

After five months in operation, ISAC has seven active projects and several applications for further funding which are pending.

The centre will also have a strong focus on improving the clinical base behind preventative clinical practice guidelines in hospitals and primary care.

"Probably our other biggest chunk of work is going to be around training and capacity building of health service research," Professor Edmond said. "This will include training pathways, scholarships, fellowships, mentorship programs and supervision programs."

An expression of interest for capacity building and training for young Aboriginal researchers was circulated recently for activities in 2015. The closing date is September 29, 2014.



WINTHROP PROFESSOR KAREN EDMOND.

The National Health and Medical Research Council has funded the centre with almost \$2.5 million while the University of WA has provided academic support and Princess Margaret Hospital for Children has provided infrastructure.

Research is conducted by researchers in WA, Northern Territory and Queensland, which have large Aboriginal and Torres Strait Islander populations with complex health needs. The central base is in WA and will eventually move to the new Perth Children's Hospital.

Collaboration across the Faculty is strong and includes the School of Paediatrics and Child Health, the Rural Clinical School, the Telethon Kids Institute and the Centre for Aboriginal Medical and Dental Health.

Over 12 years, Professor Edmond had worked and conducted research in the Northern Territory, Ghana, Vietnam and the United Kingdom with a dedicated focus on improving health services for disadvantaged children. "It is such an area of need because there has been so much duplication and actually very little priority given to this important area," she said.



THE TEAM AT PRINCESS MARGARET HOSPITAL ASSISTING THE NHMRC CENTRE OF RESEARCH EXCELLENCE IN IMPROVING HEALTH SERVICES FOR ABORIGINAL AND TORRES STRAIT ISLANDER CHILDREN.

A hand up over financial hurdles to medicine *Continued from page 1*

achievement.

David said he, his late wife, Kamala Navaratnam, who was also a general practitioner, and his children had always wanted to help, not just students but also poor and disadvantaged people and did so through various charities.

Sunita said her brother, who was an ophthalmologist in Bunbury, was very passionate about helping others and had given up some of his time every year for five years to work in clinics in the north-west of WA in the Kimberley region and in Tamil Nadu in India.

"As a family we were brought up to be very

aware of helping disadvantaged people," she said. "We felt, when we were left this money from Indran's estate, that we wanted to do something significant with it."

The idea for the Pathway scholarships arose when Faculty Development Officer Ms Lauren Hubbard visited the two to thank them for another scholarship to which they had contributed, the Indran Chelva Memorial Travel Scholarship. This scholarship was established shortly after Indran's passing in 2008, aged 36. Along with Dr Andrew Lovegrove and other classmates of Indran's, the scholarship was established to assist medical students who wish to focus on rural ophthalmology.

David said he would not have known about the Pathway scheme except for hearing about it from Ms Hubbard and the personal touch of a visit from her had made all the difference.

He and Sunita were very happy with the idea of giving through scholarships because they could see the results of their gift. They both said they would like to keep in touch with the scholarship recipients.

Ms Hubbard said the fact that the donors were both doctors would be of great help to the students. "You will be able to give them a great insight," she said.

- By Cathy Saunders

Profile

A painter of public health stows a bright palette

D'Arcy Holman is a medical doctor, medal-winning law graduate, world-renowned epidemiologist, public health researcher and advocate, with qualifications also in business, and recently retired Winthrop Professor and Chair in Public Health at The University of WA. He is also a grandfather - with a sense of humour.

"My grandfather name is OB," he says. "Everyone believes it's because I like to think of myself as an ageing Jedi knight but its true origin is a very Australian 'Old Bugger'."

However, he has indeed fought for improvements in public health for decades and so passionate was he about one aspect - data linkage - that he completed a law degree to navigate the legal minefield surrounding one aspect of it.

He was chosen as the Faculty's Foundation Professor of Public Health 20 years ago and a report chronicling those years covers some of his key achievements. During his tenure, he was awarded grants valued at almost \$70 million, named as chief investigator for numerous research projects, and authored hundreds of peer-reviewed journal articles, conference papers, and other publications. Citations of his works are passing the 12,000 mark and he was first author of the highest-cited journal article ever to appear in the Australian and New Zealand Journal of Public Health.

He also supported and mentored numerous students, including PhD students and colleagues. His teaching workload was consistently about twice that of the average in the UWA School of Population Health and was the highest load in the School every



THE THREE AGES OF WINTHROP PROFESSOR D'ARCY HOLMAN.

year for six years from 2006-2011.

He was a popular lecturer with students, reflected in the fact that his average SPOT (Student Perceptions Of Teaching) score for overall effectiveness of postgraduate teaching was 4.75 out of a possible 5.00, with the UWA average sitting at 3.7 at the time. His student satisfaction rating - at the University from which he graduated in medicine - is 99.1%.

He designed many training and professional development curricula, workshops, and academic units and programs and sat on or chaired scores of expert health policy groups, boards and councils at university, state, national and international levels.

Professor Holman has won countless academic prizes, awards, honorary professorships and other honours. For example, in 2006, he was awarded the Sidney Sax Public Health Medal, Australia's highest professional peer award for lifetime achievement in Public Health. Only one is awarded each year in Australia. The citation for his award includes "the hallmarks of the Holman approach have been visionary innovation; an exceptional commitment to multidisciplinary principles ... and always the guiding light of 'what's best for the community'."

In 2010 he received the Francis Burt Chambers Law Medal in 2010 from Murdoch University for the most outstanding graduate in law, not to mention nine other major academic prizes during his law degree and this year was made a Member of the Order of Australia for "services to medicine in the fields of epidemiology and public health".

One of the high points of his career was being handed responsibility in 1995, via a WA Lotteries Commission grant, to create the now iconic WA Data Linkage System

(WADLS). It was "waddles", as it was dubbed, which was the centrepiece of his valedictory speech on July 29.

In the speech, titled "Health, Political Arithmetic and Public Accountability: Bringing Down the Great Commonwealth-State Data Divide", Professor Holman described the public health benefits that flowed from the introduction of linked data via WADLS and the even more compelling benefits that resulted when, for a few years, Commonwealth data could be linked to State data.

"For a brief period in history the health agenda was served by political arithmetic that had the potential to achieve public accountability of the likes we'd never seen before," he said.

"It took me over 15 years to broker and derive some public good from this arrangement. So dense was the purported legal minefield that during this period I even completed a law degree, won Murdoch University's law medal, and wrote Australia's only text on data linkage law, because I became so disenchanted with public officers citing legal barriers, which on closer scrutiny, I discovered not to exist."

His speech brought the house down. The packed auditorium rose as one to their feet to applaud him. Making it all the more poignant for him was the fact that his children and grandchildren had travelled all the way from the UK and New Zealand to attend the event.

Professor Holman told MeDeFacts a highlight of his career was helping other people to grow professionally, through teaching, mentoring and especially research supervision. "I've supervised 98 research students and post-docs and watching what these superb people have achieved whilst working with me, and then going on independently to do much more, has been



WINTHROP PROFESSOR D'ARCY HOLMAN WITH HIS GRANDCHILDREN (FROM LEFT), KAITLIN, LUCIE AND ALANNAH.

Men in nursing - how to recruit them

An on-line survey has lifted the lid on the profile and perceptions of men in nursing in WA and resulted in suggestions for ways to attract more men to the profession.

A collaborative research project involving academics from The University of WA, The University of Notre Dame, Murdoch, Edith Cowan and Curtin universities and the WA Health Department of Health through the office of the chief nurse and midwife gathered information via the survey that was sent to a wide range of nurses and midwives in the state.

A total of 1,055 registered and enrolled nurses, midwives and nurse practitioners responded. In WA men make up only about 9% of nurses.

The respondents worked in a wide range of professional areas, with men employed mainly in critical care, emergency care, mental health and management.

Suggested strategies for recruiting more men into nursing included promoting the following advantages: nursing and midwifery is a challenging and responsible profession that offers stable employment, nurses and midwives are highly skilled professionals, they have the ability to make a difference, there are wide areas of professional diversity, and opportunities are there to work in or lead a team. Other reported upsides included job security, good pay, good working conditions such as flexible working hours, and geographic mobility.

Respondents also suggested offering better

career guidance in schools, having more male nurses visit schools, producing TV shows with male nurse role models, offering work shadow programs, and placing strategic advertisements on TV, the internet, billboards, radio or in the cinema. An effort should also be made to eliminate negative stereotypes, the respondents said.

Some of the perceptions about nursing for men included the notion that it was not seen as a very masculine or "macho-type" career, that society thought female nurses were more caring and nurturing than male nurses, and that the current portrayal of male nurses as being gay or effeminate by the mass media discouraged men from choosing a career in nursing.

Despite this, participants said they would encourage a male family member to pursue nursing as a challenging and rewarding career choice.

Respondents were asked "what was the biggest single influence on them choosing a career in nursing or midwifery". Both male and female nurses said it was related to helping others, being a people focused career, that it offered secure employment, travel opportunities and flexible work, because of the influence of family and friends and because they had been exposed to caring through a relative (mother or sister) or by being a patient. Altruistic or personal reasons dominated over economic reasons or issues of employment conditions.

Some of the challenges that male nurses said they had faced during their careers included being seen as "muscle" by female colleagues, being considered inappropriate to work in some practice areas (e.g. midwifery), being bullied by female nursing colleagues, experiencing care demands in a time poor environment, difficulty being a minority gender, reluctance by some female patients to be cared for by males, being considered less of a professional than some other professionals, and perceptions of a poor salary.

Adjunct Associate Professor David Stanley, of the Faculty's School of Population Health, said the study met its aim and highlighted a number of differences in the profile of men in the nursing and midwifery professions.

It also reinforced assumptions about many of the challenges men face in their nursing careers and the negative perceptions that pervade society's perception of men in nursing.

"The survey found men started their nursing/midwifery careers later than their female colleagues so that men were more likely to come to nursing after other careers or life experience, suggesting that recruitment strategies for increasing male nurse numbers may need to be reconsidered," he said.

"The next step is the publication of a report outlining the research results and recommendations and the possibility of a wider national study."

my single greatest source of career satisfaction," he said.

Another memorable aspect was working with industry, particularly with health industry leaders who had the courage and conviction to join with him in a partnership to provide a strong evidence base for their programs and to evaluate their organisation's performance.

And he also singled out having an area of special expertise as important to him. Despite the breadth of his qualifications and the span of his work across the academic, government, community and private sectors, he had never relinquished his love for his core speciality of epidemiology.

"Like many career epidemiologists, there was a transition many years ago, when I acquired a deeper theoretical understanding of the principles of my discipline," he said. "This gave me the freedom to become a methodological 'artist', rather than rely on predictable approaches to research."

Professor Holman said retirement would mean being a grandfather, supporting his wife as a home husband, doing voluntary work for UWA and continuing to chair the UWA animal ethics committee.

"But I'm also looking forward to relatively less structure and more spontaneity in the way I live," he said. "I've always been a junkie for the new opportunities that come with change. I find the thought of a step into this unknown world of retirement tantalising and something I want to 'study' first hand."

- By Cathy Saunders



ADJUNCT ASSOCIATE PROFESSOR DAVID STANLEY

Raine Study

Sleeping for a cause

Sleep apnoea is a disease of middle-aged males - right? Maybe not right.

The answer to whether it is now increasingly also the domain of young adults in their early twenties is to be found in the sleep science arm of the Raine Study.

Winthrop Professor Peter Eastwood, Director of the University of WA Centre for Sleep Science, said the data from 970 sleep studies with the 23-year-old Raine participants had not been crunched yet.

However, the expectation was that they would show an increase in the rate of sleep apnoea, commensurate with a rise in obesity, which is a major risk factor.

"We know this obesity epidemic is resulting in younger and younger people being overweight and obese," Professor Eastwood said. Data from a Raine Study follow-up three years ago revealed that 21% of 20-year-olds were overweight and 14 % were obese.

The sleep studies for the 23-year follow up were concluded in June.

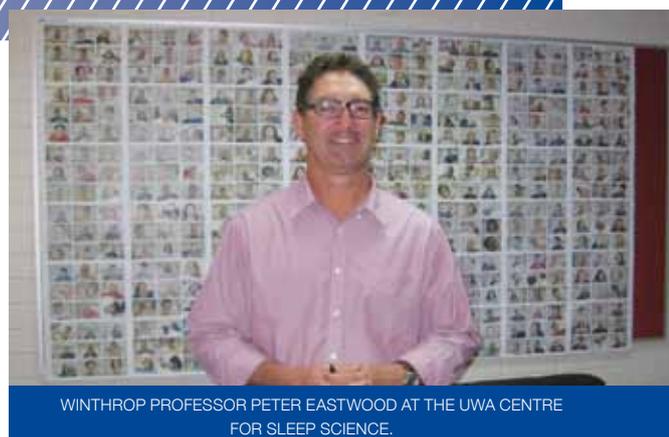
Among the sleep disorders, which number about 90 in all, the research team was primarily interested in the most common three - sleep apnoea, insomnia, and restless legs syndrome or periodic leg movement syndrome during sleep (PLMS).

The studies are unique because of the age group involved.

"We have no idea how common any of these sleep disorders are in young adults," Professor Eastwood said. "But, at least for restless legs syndrome and sleep apnoea, there are treatments."

In order to help the sleep team determine the sleep pattern of 23-year-olds, the participants wore an activity monitor for a week as well as undergoing an overnight sleep study.

The task is to quantify how many of the participants have true insomnia and how many have poor sleep due to their lifestyle, use of sleep-disrupting blue-light devices



WINTHROP PROFESSOR PETER EASTWOOD AT THE UWA CENTRE FOR SLEEP SCIENCE.

such as smart phones and iPads, playing computer games before trying to fall asleep, or other factors.

"The beauty about the Raine Study is that if we find sleep disorders or problems, we can look at the measurements we made in the past and see if there are things that can predict who will get a sleep disorder as a young adult," Professor Eastwood said. The ultimate aim is awareness and prevention.

The sleep studies were conducted at the state-of-the-art, five-bed Centre for Sleep Science at UWA.

Work, sleep, breathe, sit, get physical - what Gen Y-ers look like

continued from page 1

such as height, weight, blood pressure, and provided fasting blood and urine samples. They also filled out four questionnaires, on sleep habits and dreaming; food frequency and diet; medical history; and socio-economic, work, income, study, physical health, and mood and mental health information.

Almost 1000 of them participated in an overnight sleep study at the University of WA Centre for Sleep Science, five at a time. Information was also gathered on their work productivity and activity, including from activity monitors they wore for a week.

Since the study was initiated in 1989 by Winthrop Professor John Newnham, Head of the School of Infants' and Women's Health, and colleagues who recruited more than 3000 pregnant women, there have been 12 cohort assessments of the children.

The 20-year follow-up which has yielded many important findings focused on the eye health of more than 1300 participants, who underwent 27 different eye tests. Their bone health was also measured by DXA scans, and other measurements of height, weight, liver health and blood pressure were recorded.

About 1600 participants have been genotyped and the analysed information is shared with many other genetic consortia in genome-wide association studies (GWAS) to generate valuable findings.

The key Raine Study researchers in this field are Associate Professor Pennell and Winthrop Professor David Mackey.

Professor Eastwood said it was hoped there will be a 25-year cohort follow up next year. Fifteen grant funding applications have been submitted, including research studies on liver, gastro-intestinal disorders, nutrition, breast density, cardiovascular disease, eye health, work disability and hearing.

And in a branching out from the present format, it is hoped various studies of the parents of the Raine participants will be possible. "We collected information about the parents when their children were born," Professor Eastwood said. "We've have DNA from them and we've collected their measurements intermittently as they were the ones who brought their children in over the first 17 years."

Grant applications have been submitted to conduct eye studies and sleep studies of about 1800 parents which will furnish, amongst other things, information on the genetics of sleep disorders and eye problems. "This will provide an internationally unique opportunity to study the two generations," Professor Eastwood said.

The researchers are also keen to follow up the children of the Raine participants and are seeking philanthropic funding to do this.

More than \$22 million has been invested in the renowned study since its inception. The Raine Study generates about 50

publications every year and there are more than 150 researchers with expertise in over 25 specialist areas utilising it. The current phenotypic dataset contains more than 85,000 measures as well as 31 million genetic variants on each cohort participant.

The chairman of the Executive Committee, which has overall responsibility for the Raine Study, is Winthrop Professor Ian Puddey, Dean of the Faculty of Medicine, Dentistry and Health Sciences.

The Raine Study is a collaborative project between The University of WA, Telethon Kids Institute, Women and Infants Research Foundation, Curtin University and Edith Cowan University and is supported by the Raine Medical Research Foundation.

- Stories by Cathy Saunders



MS JENNY MOUNTAIN, RAINE STUDY PROGRAM MANAGER.

Raine Study

Predicting joggers and sitters

The first detailed description of how active - or not - young adults are is being compiled by Raine researchers from new data.

Professor Leon Straker, Raine Study Associate Scientific Director, said about 1,000 Raine participants, now 23 years old, wore activity monitors on their wrist and hip for 24 hours a day for a week to measure how active and how sedentary they were.

"The reason we want to do this is that both these things are modifiable behaviours," Professor Straker said. "We want to know what exactly their patterns are so we can work out what to target with interventions.

"And because it is the Raine Study and we

have all this wonderful historical information on them, we are also going to be looking at what is it about their early life that predicts whether they are a sedentary young adult."

There were some clues as to the predictors of who was more likely to take part in moderate to vigorous physical activity in young adulthood. "They are probably children who had good motor control when they were young and whose parents signed them up for school sporting activities and got them involved in a community club," Professor Straker said. "Being active was a part of who they were growing up.

"On the flip side, the sedentary adults we are expecting to be children who were allowed to watch more television, for

example."

If these predictors proved to be correct, it would reinforce the importance of getting messages about too little physical activity and too much sitting early to parents and children because of the life-long impact on activity levels, he said.

A dearth of vigorous activity and an excessive amount of sedentary behaviour were linked to major chronic diseases such as heart disease, diabetes, obesity and some cancers.

While many people were aware of the need to get 30 minutes of activity each day, there was growing evidence that if they then sat down the rest of the day, it was a health risk. "For people who don't feel they can go for a run or a walk, if they can reduce and break up how much they are sitting all day, they will get some health benefit," Professor Straker said.

The optimal time between breaks from sitting was not yet known. "But we are saying that people should get up every half hour to hour," he said. "And the breaks can be quite short. Some of the strongest laboratory studies have shown that just a two-minute break is long enough to change how your metabolism is working.

"That can be walking to the printer, walking to the water fountain, that sort of thing."

The physical activity and sedentary behaviour project was funded by a National Health and Medical Research Council grant of \$300,000 over three years.

WINTHROP PROFESSOR PETER EASTWOOD (LEFT) AND PROFESSOR LEON STRAKER SPORT ACTIVITY MONITORS USED TO MEASURE ACTIVITY AND SLEEP-WAKE PATTERNS.



Health problems impact on productivity

Raine researchers have provided an insight into absenteeism and presenteeism among the Millennial Generation in another first for the study.

In the lost work productivity project involving more than 1,000 23-year-olds, participants reported absenteeism, when they did not go to work in the previous month, and presenteeism, when they were at work but not working at 100% capacity for any reason.

Preliminary data from the first 500 participants reveal 85% were working, for an average of 29.6 hours each week.

An estimated 168 hours were lost per worker each year due to absenteeism for any reason, at a cost of \$6,036 and an estimated 280 hours were lost per worker annually due to presenteeism for any reason, at a cost of \$9,725.

The study shows 14.7% of young workers

had current diagnosed back pain and 7.8% had neck pain, 9% had depression and 10.3% had anxiety.

Moreover, 3.7% had comorbid back/neck pain and anxiety/depression. These young workers were found to have 2.26 times higher rate of absenteeism for health reasons than young workers without these health problems.

Lead researcher Professor Leon Straker, Raine Study Associate Scientific Director, said the researchers believed health had a major impact on people's ability to work.

"The literature estimates are that health has just as big an impact on young people's work productivity as their education level and yet it does not get talked about in that context," he said.

Young workers are a reasonably large proportion of the workforce. Their productivity is important because as the

population ages, there will be fewer workers and more retirees.

"For Australia to succeed as a nation, we need to make sure all the current young workers are productive now and for the next couple of decades," Professor Straker said.

Most people thought of young people as being healthy and not affected in their work by health issues. "In fact, there are several health and behavioural issues common in young adults which are known to impact substantially on work productivity and they are mental health, back and neck pain, and alcohol and other drug use," he said.

By combining data from the Raine sleep studies, it will be possible also to measure the impact of loss of sleep on work productivity, Professor Straker said.

- Stories by Cathy Saunders

Raine Study

A full stop at the end of childhood

The latest asthma study undertaken as part of the broader Raine Study is the full stop at the end of the childhood asthma story, says one of the key researchers.

Professor Graham Hall, Head of Paediatric Respiratory Physiology at Telethon Kids Institute, said early measurements were carried out in about 500 of the participants - now aged 23 years - when they were under 12 months of age.

Emeritus Professor Lou Landau, who was one of the initiators of the Raine Study, and Clinical Professor Stephen Stick, of the Telethon Kids Institute, undertook that research.

"Every follow up we ask them (the Raine Study participants) questions about whether they have asthma or asthma symptoms but we have also had cohort follow-ups where we did tests for asthma and lung function, at six and 14 years of age," Professor Hall said.

About 1,000 23-year-olds participated in the latest cohort follow-up, which included lung function measurements and asthma challenge tests, skin prick testing for allergies, and blood sample collection.

"We were really keen to do an asthma assessment in the cohort when they were young adults because we know the lungs grow and develop and around 20-25 years they reach their plateau phase," Professor Hall said. "So really that gives us the end

of the story about childhood asthma and, importantly, the start of the story about asthma in adults."

One of the main questions on the lips of parents of children with asthma is, "Is my child going to grow out of asthma?" The Raine study will attempt to answer this.

It is known from Australian and overseas studies that most, but not all, adults with asthma had symptoms as children and the reasons for this are unclear. In adult-onset asthma, the symptoms usually start to appear after puberty. More boys than girls have asthma up to the age of puberty but thereafter it is more prevalent in females.

Data from all the Raine follow-ups will be used to try to tease out some of the pathways leading to adult asthma.

The researchers will examine how lung function tracks throughout life and its relationship to the development of asthma, and the impact of early exposures to viruses, including the common cold, on the development of the disease.

"If we can understand the pathways, we can provide advice to governments, physicians, and organisations like the Asthma Foundation and Asthma Australia to be able to provide public health information to the community," Professor Hall said. "It gives you windows for prevention and potentially for treatments."

Professor Hall, Professor Pat Holt, also

of the Telethon Kids Institute, and other researchers received key funding for the study from the National Health and Medical Research Council.

Together with Dr Anthony Bosco, also of the Telethon Kids Institute, they were given extra funding from the Asthma Foundation of WA for a sub-study to look at 23-year-olds with or without asthma and allergies.

For more information on the research, go to www.telethonkids.org.au and for more information on asthma, go to www.asthmawa.org.au

- *Stories by Cathy Saunders*



RAINE STUDY ASTHMA RESEARCHER PROFESSOR GRAHAM HALL.

How the future will look

Tapping on an app will open up a lifetime of comprehensive personal health information for the Raine participants, if the newly-appointed Scientific Director has his way.

Winthrop Professor Peter Eastwood said there was an enormous dataset on the Raine Study participants and the researchers would like to make each individual's information readily available to them for personal use.

It would furnish them with valuable information when they visited their GP, who might ask them how long they had had a health problem, such as high blood pressure.

"We'd like to be able to give them the opportunity to pull out their smart phone and dial in with their secret ID and say 'This

is my blood pressure since I was born', " he said.

"We've got those data. And that is the way telehealth is going - an individual's data are going to be accessible safely in that way. "So this is almost an exemplar of how the future will look."

The Raine researchers are planning to apply to Lotterywest for funding to develop the software for such an app.

However, each of the Raine kids already can contact the study researchers for their personal health information. "But we think it will become more relevant as they get older and they become more interested in their own health so we would like to have something in place to fill that need," Professor Eastwood said.

Talking about suicide prevention

The best solutions for suicide prevention among Aboriginal people are going to come from the Aboriginal community and be enacted by them, according to two professors.

Winthrop Professor Jill Milroy, Dean of the School of Indigenous Studies and Acting Director of the UWA Poche Centre for Indigenous Health, said this approach was identified at a summit held in Perth to address the unacceptably high rates of Aboriginal and Torres Strait Islander suicide.

"One of the key messages from the forum was the need for Elders and young people to talk together to come up with solutions," Professor Milroy said. In fact, many eminent Elders attended the two-day roundtable at which more than 60 leaders, youth leaders, academics, health professionals, government representatives and social justice campaigners met for a third time with Professor Michael Chandler, a well-known expert in suicide prevention in Canada.

Professor Milroy said she saw from the summit, known as The Third Conversation: has anything changed? Aboriginal and Torres Strait Islander Mental Health and Suicide Prevention roundtable, that the community was already trying to do a lot to address the problem.

Aboriginal and Torres Strait Islander people are dying at twice the rate of other Australians from suicide. Among younger age groups the rate can be six times higher and in some communities, suicide clusters can involve up to 20 or more deaths, prompting Professor Pat Dudgeon, of the School of Indigenous Studies and a summit convenor, to say it is time that this terrible "gap" is closed.

Professor Dudgeon said a key message was that priority needed to be given to Aboriginal

and Torres Strait Islander cultural ways of working and to community-led healing programs. "Cultural methods are central to any program aimed at supporting individual and community social and emotional wellbeing," she said. "And Aboriginal and Torres Strait Islander people need to be involved at every level in planning, developing and implementing programs."

She said a Call to Action, which includes four strategies, was developed at the summit. The strategies focus on Aboriginal and Torres Strait Islander cultural ways of working, a youth forum and report, research evidence, and cultural frameworks to guide government strategies on suicide prevention.

Professor Milroy said the Poche Centre was well placed to be able to help by supporting practical solutions and initiating projects that deliver services directly to Aboriginal people to improve health outcomes. "Our Poche Centre at UWA also recognises the importance of culture to the well-being and mental health of Aboriginal people."

The Centre, which works with the School of Indigenous Studies, the Faculty's Centre for Aboriginal Medical and Dental Health and the Rural Clinical School as well as the WA Centre for Rural Health, played a large part in bringing the summit to fruition. It also brought Elder Lorna Hudson from Derby to attend the summit.

During the roundtable, the second edition of the book *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing, Principles and Practice* was



WORKING TOGETHER: PARTICIPANTS AT THE POCHE KEY THINKERS FORUM, HELD AT CHARLES DARWIN UNIVERSITY IN DARWIN IN JULY ON THE TOPIC: "ALCOHOL, TOBACCO, DRUGS AND OTHER SUBSTANCE USE: WHAT'S THE EVIDENCE, WHAT'S WORKING, WHAT'S NOT, WHAT ARE THE ISSUES AND OPPORTUNITIES FOR THE FUTURE?"

launched. This resource for those working in mental health and suicide prevention is edited by Professor Dudgeon, Winthrop Professor Helen Milroy, Director of the Centre for Aboriginal Medical and Dental Health and currently on secondment, and Associate Professor Rosalyn Walker, from Telethon Kids Institute.



(FROM LEFT) SUMMIT FACILITATOR GREGORY PHILLIPS, PROFESSOR MICHAEL CHANDLER, DERBY ELDER LORNA HUDSON AND PROFESSOR PAT DUDGEON.



DELEGATES TO THE POCHE CENTRES FOR INDIGENOUS HEALTH ANNUAL NATIONAL NETWORK MEETING IN DARWIN IN JULY INCLUDED (FROM LEFT) DR KERRY TAYLOR, DEPUTY DIRECTOR OF THE POCHE CENTRE IN ALICE SPRINGS, WINTHROP PROFESSOR JILL MILROY, DEAN OF UWA'S SCHOOL OF INDIGENOUS STUDIES AND ACTING DIRECTOR OF THE POCHE CENTRE AT UWA, DR TOM CALMA, OF THE FEDERAL HEALTH DEPARTMENT, MRS KAY POCHE WHO, WITH HER HUSBAND GREG, DONATED THE FUNDING FOR ALL POCHE CENTRES, POCHE FAMILY FRIEND MR REG RICHARDSON, MS KYLIE GWYNNE, DIRECTOR OF THE POCHE CENTRE IN SYDNEY, PROFESSOR DENNIS MODERMOTT, DIRECTOR OF THE POCHE CENTRE IN ADELAIDE, AND ASSOCIATE PROFESSOR SHAUN EWEN, ASSOCIATE DEAN, INDIGENOUS DEVELOPMENT, AT THE UNIVERSITY OF MELBOURNE. OTHER DELEGATES INCLUDED MEDICAL DEANS AND SENIOR UNIVERSITY REPRESENTATIVES, STAFF AND STUDENTS. AMONG THE UWA DELEGATES WERE THE SENIOR DEPUTY VICE-CHANCELLOR PROFESSOR DAWN FRESHWATER, THE PRO VICE-CHANCELLOR (HEALTH AND MEDICAL RESEARCH) PROFESSOR JOHN CHALLIS, AND DIRECTOR OF THE CENTRE FOR ABORIGINAL, MEDICAL AND DENTAL HEALTH PROFESSOR DAWN BESSARAB. PROFESSOR MILROY SAID THE MEETING WAS A FANTASTIC OPPORTUNITY FOR DELEGATES TO SHARE THEIR WORK AND IDEAS AND DISCUSS KEY STRATEGIES FOR IMPROVING ABORIGINAL HEALTH THROUGH THE POCHE CENTRES.

Mentoring Matters

By Associate Professor Paul McGurgan, Personal and Professional Development Co-ordinator.

Mentoring has a long tradition in medicine but it often occurs ad hoc.

The Australian Medical Association in 2011 released a position statement for post graduate doctors, noting that “doctors see it as a professional duty to mentor their newly appointed and less experienced colleagues and to be available informally as sources of advice, tutoring and support”

(ama.com.au/position-statement/role-doctor-2011).

The Faculty of Medicine is unique among Australian medical schools in that it has for many years had a one on one, longitudinal mentoring program for medical students to be mentored by clinicians during their clinical years 4-6.

This program was recently the subject of an article on mentoring in MJA Careers (MJA June 2, 2014), which said the Faculty was leading the way in Australia with its innovative program for all medical students. The article said the vast majority of on-campus mentoring programs were overseen by student medical societies and were opt-in arrangements.

In preparation for the new postgraduate Doctor of Medicine (MD) course that began this year, the Personal and Professional Development team performed an evaluation survey of student mentees and clinical mentors in 2012. The feedback was very positive, with 80% of students rating the mentor program as being either “moderate”, “very” or “extremely” beneficial to their professional development (McGurgan, PM. Med J Aust 2014; 200 (1): 20-22).

Based on feedback from students and Faculty, a decision was made to extend the Student-Clinician Mentor Program to

facilitate senior medical students mentoring their junior colleagues. This new program is called the Student MeDMentor Program and builds on the very successful UWA UniMentor program.

The aim of both the Clinician and MeDMentoring programs are to act as frameworks which provide support for professional skills and relationships to develop for the medical students as they experience the trials and tribulations in their journey to becoming doctors and ensure that they are developing appropriate professional behaviours.

To recognise the contributions made by mentors to student development, Faculty Dean Winthrop Professor Ian Puddey has kindly agreed to award an annual Dean's Letter of Commendation to those student MeDMentors and clinical mentors who have been nominated by their mentees and demonstrated exemplary mentoring skills.

Mentoring Matters will be a forum in MeDeFacts for providing information on mentoring to interested parties and showcasing the positives in the mentoring program.

Please go to www.meddent.uwa.edu.au/students/prof-degree/mentoring for more information on the Faculty's two medical mentoring programs.



ASSOCIATE PROFESSOR PAUL MCGURGAN.

Mentoring means being part of a medical community

By Kiran Narula, fifth-year medical student and mentor

The first MD cohort of students are very lucky. Among many other developments in this new medical course they have what I believe is the first formal peer-to-peer mentoring program.

It's excellent timing too. I recall my own entry into medicine, entering what is frankly an entirely different world with its own language. For some this year, it is made

even tougher by an orientation to a new university, the shift to a new state, or even a complete lack of science background! Mentors, no matter the scenario, are a boon.

The mentoring program began right from week 2 and I believe that this early introduction has been extremely positive for many students. In the early weeks it allowed

students to settle in and ask those “silly” questions before shifting into their academic routine. It was also a great mechanism for networking with fellow classmates.

Seeking to be a good mentor, I've tried to emulate attributes that I admire in my own mentors. This has involved regular contact to see how each is faring and, when needed, offer advice. For myself, mentoring has been a great way to create new friendships and help instill the culture of medical student life. That is, to be a community and gladly help each other out.

Overall, mentoring is a highly positive experience - both as a mentor and as a mentee. I would highly encourage all my peers to actively seek mentors if they haven't already done so.



STUDENTS IN THE NEW MD PROGRAM (FROM LEFT) JESSICA ASHBURNER, GAYESHIKA LEANAGE, ANIKA MITTAL, BURT WILSON AND JOHN SHIN HAVE A MENTOR, FIFTH-YEAR MEDICAL STUDENT KIRAN NARULA (SECOND FROM RIGHT).

Western Australia Centre for Rural Health (WACRH)

Back to the Country

Amy Forrester and Fiona Lucey didn't hesitate to take up the offer to complete their final-year placement outside the metro area. The fourth-year Health Science students signed up for a three-month stint with the WA Centre for Rural Health in Geraldton.

Amy spent the majority of her childhood on a station, four hours east of Kalgoorlie, while Fiona grew up in the South West town of Bridgetown.

"We both ultimately see ourselves working in rural settings after we graduate and the WA Centre for Rural Health was the perfect opportunity for us to develop the professional skills we will need to work in the country," Amy Forrester said.

"This is our chance of giving back. We want to take our skills back to regional Australia, where we are most needed, and make sure our rural communities continue to have access to the programs and health services they need."

Fiona Lucey said everything in the placement differed from what they would have experienced in the city. "From little things

like not having to wear corporate attire and feeling like we are part of the team to getting the chance of a direct insight into Indigenous health in Mt Magnet and working to make a difference in people's lives and health outcomes - all this is what makes this placement a true, unique experience for us," she said.

The placement, supervised by Assistant Professor Sandy Hamilton and Winthrop Professor Sandra Thompson, involves a series of mini-projects designed to encourage students to participate in a multitude of aspects relevant to working as a health professional in the country.

Professor Thompson said the students would contribute to the development and establishment of a wellness clinic to help people, who have or are at high risk of chronic conditions, adopt healthier lifestyles. They will also assist with an assessment of cardiac rehabilitation services across the state, undertake literature reviews and engage with the Mt Magnet Indigenous community to determine health care gaps and needs.



FIONA LUCEY (LEFT) AND AMY FORRESTER TAKE TIME OUT FROM THEIR RURAL PLACEMENT.

"We have put together an innovative framework around our placement models to make them rich, challenging and provide the students with the chance to really soak in the rural health experience, Professor Thompson said.

"Our placements are not a second-best option that students choose if they can't get a placement in the city. They focus on encouraging and providing opportunities for students to practise in a wider range of expanded health workforce roles, and combine inter-professional learning with high-quality mentorship."

Health Program Evaluation unit gears up

A newly developed Health Program Evaluation elective proved so popular with Perth-based students that it was presented as a five-day intensive short course at the University of WA's Nedlands campus in July.

Associate Professor Barbara Nattabi, a researcher with the WA Centre for Rural Health, developed the program for the Masters of Public Health and postgraduate

courses in Health Professional Education and gained Faculty endorsement last year.

The unit covers a range of methods commonly used to generate evidence of the impact and outcome of health programs and also focuses on the importance of integrating evaluation methods into program design and planning.

Associate Professor Nattabi said the unit

stressed the importance of choosing the most appropriate methods for evaluating programs in rural and remote settings as well as metro areas.

"We often hear about situations where people only remember to request for their project to be evaluated when it has come to an end - to determine whether it was successful or not - but evaluation really starts at the beginning of a project, sometimes even before the project starts," she said. "It plays a key role from the beginning to the end."

The short course also featured guest lecturer Mr John Scougall, an experienced policy and program evaluator who has worked with Aboriginal people for three decades.

He said a good evaluator should have the capacity to initiate action beyond theory and the ability to shape and influence project outcomes.

The Health Program Evaluation unit will continue to be delivered as part of the School of Population Health's winter school program annually.



ASSOCIATE PROFESSOR BARBARA NATTABI (FAR RIGHT) WITH COURSE PARTICIPANTS AT THE UNIVERSITY OF WA'S NEDLANDS CAMPUS.

the word is out - Faculty in the news

Quoted as Saying

Australian Doctor

Winthrop Professor Gerald Watts, Deputy Head of the School of Medicine and Pharmacology, is QAS a non-fasting test could be used with caution for screening and monitoring of LDL-cholesterol levels, but he still believed in using a fasting LDL-cholesterol measure for diagnosis. "The concept has been around for a while and it makes sense as we spend most of life in a post-prandial state," he said. "I do it all the time, but the problem is some laboratories still insist that patients go away and fast before having a test." He was commenting on a US study that showed non-fasting LDL-C levels provide equally good cardiovascular risk prediction. Based on a 14-year follow-up of more than 16,000 middle-aged men, New York researchers found that both non-fasting and fasting (eight hours) LDL-cholesterol levels had similar prognostic value for increased all-cause and cardiovascular mortality.

The West Australian

Clinical Associate Professor Richard Loh, of the School of Paediatrics and Child Health, is QAS he is aware of cases of children allergic to egg being denied vaccines for measles, mumps and rubella, and the flu. "We're getting referrals at clinics from health professionals like doctors and nurses that this child is allergic and can't be given their MMR and it can take five or six months until the child can be seen," he said. "I would be devastated if somebody got measles in the interim because my department couldn't see them in time." Long public waiting lists at allergy clinics around the country meant people had to live with bad eczema and allergic rhinitis when there were good treatments available. Most children with allergies could be safely vaccinated but there was a lot of misinformation about the risks, even among health professionals.

Assistant Professor Hayley Christian, of the Telethon Kids Institute and School of Population Health, is QAS a new study is important because it is not known how physically active WA children are at child care or the contribution child care may be making to their overall physical activity levels. "When children come home they may have only accumulated 30 minutes of physical activity while at child care," she said. "It then makes that home time really important for having opportunity for active play and physical activity." For the Preschooler Activity Levels pilot study, about 100 children at 10 child care centres are being fitted with accelerometers and

GPS devices by the Telethon Kids Institute to identify "subtle effective cues" for movement. These may be as simple as the type and variety of playground equipment, length of paths, layout of furniture and distance to the dress-up box. The study is being conducted with The University of WA Centre for the Built Environment and Health, and School of Sport Science, Exercise and Health. Assistant Professor Christian said mothers were returning to work earlier and recent statistics showed about 85% of preschoolers attended some type of childcare or early learning centre. Objectively measured studies revealed as few as 32% of preschoolers might be meeting the recommended physical activity level of three hours a day.

ScienceNetwork Western Australia

Winthrop Professor Jeffrey Keelan, of the School of Women's and Infants' Health, is QAS a new generation antibiotic - solithromycin - is "unprecedented" in its ability in trials to reach the amniotic cavity and potentially eradicate all preterm birth-associated bacteria from the reproductive tract and foetus. "In theory we think we can prevent up to 30 per cent of preterm births using solithromycin with the most benefits for the very early pretermers," he said. "We've done some measurements in sheep and human placentas and estimate the crossover is about 50 per cent compared to just two to four per cent for the older macrolides (antibiotics) and it's 10 to 100 times stronger. Our next step is to confirm in pregnant women that the antibiotic crosses the placenta and eradicates harmful bacteria in the reproductive tract." Professor Keelan said current antibiotics were largely ineffective in reducing the number of preterm births because they either failed to kill the particular bacteria or did not cross the placenta at effective levels. It is estimated one in 12 Australian babies is born preterm and almost 15 million born worldwide annually. In Australia the cost for their care is estimated at \$500 million a year. The role of intrauterine infection and inflammation is well recognised. Researchers hypothesise vaginal microorganisms break the cervical barrier, colonise the fetal membranes and eventually infect the amniotic cavity. The vigorous inflammatory response that follows ultimately results in preterm birth.

Border Mail, Albury-Wodonga

Winthrop Professor Graeme Hankey, of the School of Medicine and Pharmacology, is

WITS ABOUT YOU

(Answers page 16)

Our medical quiz is kindly supplied by Emeritus Professor Bernard Catchpole, the second Professor of Surgery appointed to the Faculty.

1. What percentage of available food is estimated to be wasted in the U.S.A.?
2. The pleasure of music seems to activate a nucleus in the brain. Which?
3. What is a lithotrite?
4. What does the Trendelenburg sign indicate?
5. What is the longest period recorded that a person has stayed awake?

POINTS TO PONDER

Does your grey matter need a kick start each day? Emeritus Professor Bernard Catchpole has posed a series of points to ponder that he suggests readers may like to contemplate as they clean their teeth in the morning.

We have developed skills on one side of the body rather than on the other. This is referred to as "handedness". Why is this facility not on both sides and why predominantly on the right?

QAS we should be incredibly worried. He was referring to the fact that Australians and New Zealanders, when grouped together, are becoming obese at a faster rate than any other region. Australia and New Zealand are ranked the 30th and 23rd most overweight countries in the world, not far behind the US (20th). Apart from the burden of diabetes, heart disease and stroke, people were buckling under the strain. "It causes wear and tear on the knees, hips and spine from having to carry the weight around," Professor Hankey said. He was a co-author of a report on global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013 published in The Lancet in May. The 188-country report shows Australia's problem is ballooning out of control. Overall 63 per cent of adults are overweight, up from 49 per cent in 1980. Five million, one third of the adult population, are obese. One in four children are overweight. Professor Hankey said the problem needed an effort along the lines of the anti-smoking campaign.

Task-shifting to increase health access

A World Health Organisation project to enable auxiliary midwives in developing countries to take on more responsibility for essential perinatal care is among several that a Faculty medical student helped develop.

Final year student Sebastian Leathersich chose to spend his three month summer vacation, after completing his fifth year exams last year, in Geneva on an elective placement. The placements are usually only for six weeks and are typically a clinical experience.

“I was very lucky that the Faculty supported my request to undertake my elective in a non-clinical environment working with the Maternal and Perinatal Health and Preventing Unsafe Abortions (MPA) team, even providing me with financial assistance to travel to Geneva and subsidising my living costs once there,” Mr Leathersich said.

He produced an evidence-based guideline to assist health administrators in task-shifting to auxiliary nurse midwives (ANMs), who have some midwifery competencies but are not fully qualified as midwives.

“Task-shifting is a way of increasing access to healthcare, particularly in resource-restricted environments, as well as improving efficiency and reducing costs,” he said.

“The principle is to identify roles that are typically performed by highly qualified individuals but that might be safely and effectively performed by those with less training. For example, in many countries there may only be one doctor servicing a number of communities but in each of

those communities you might find a number of ANMs.

“If you can show that ANMs can safely and effectively insert and remove contraceptive implants, then you have the potential to drastically and rapidly increase the uptake of this health intervention within the community with little or no increase in cost.”

The task-shifting guideline Mr Leathersich composed is intended to be applicable globally.

He also worked on developing the research protocol for a large-scale project on simplifying the treatment and prevention of eclampsia in low- and middle-income countries. He has continued his involvement with the WHO this year, working on the protocol which was recently submitted.

“This is a work in progress and we expect it to translate into real healthcare changes in a few years’ time,” he said.

“In terms of where maternal and perinatal care fits in, there is a reason that improving maternal health is one of the United Nations Millennium Development Goals. In 2013 close to 300,000 women died during pregnancy and childbirth and most of these deaths were due to poor access to skilled health care.

“Much of the care required is not groundbreakingly technical or novel. By providing established routine care, there is the potential to make a huge difference to maternal and newborn health worldwide, which will also have positive flow-on effects for the local communities.”

Mr Leathersich is now working on a project that encompasses over 300 hospitals



SEBASTIAN LEATHERSICH SKIING WITH A FRIEND IN CHAMONIX ON A WEEKEND TRIP.

across 29 countries, 27 of which are low- or middle-income countries. “These are countries in which women die every day from complications of pregnancy and labour that we would consider to be completely preventable,” he said.

Mr Leathersich said the final year elective was an incredibly valuable opportunity for students to explore an area of interest, particularly in a course that, for the most part, followed quite a strictly prescribed path.

“I would strongly encourage everyone, whatever their specific area of interest, to make the most of the chance to explore health care outside of the constraints of their coursework in a context that really interests them,” he said.



THE WORLD HEALTH ORGANISATION HEADQUARTERS IN GENEVA, SWITZERLAND.

Hotfooting around the States for podiatry expertise

Mendel Baba, a podiatrist and postgraduate research student enrolled in a Doctor of Podiatry, recently returned from a study-related trip to the US. Here is her account.

More than 17,000 delegates from 121 countries attended this year's American Diabetes Association (ADA) Annual Scientific Sessions, one of the largest diabetes meetings in the US, held in San Francisco, California.

I had the opportunity to present a poster of some of my doctoral research, investigating diabetic foot care education. Our research team compared written and verbal foot care education and found that a combination of both methods was likely to be most beneficial in improving foot health among patients with type 2 diabetes.

Other Australian researchers also presented research on the diabetic foot and its complications during the five day schedule.

I also spent some time at the New York College of Podiatric Medicine (NYCPM), which was established in 1911 and is

one of the leading podiatric medicine institutions in the US, with more than 25% of active US podiatrists graduating from its four year program.

In recent years, UWA has developed links with NYCPM to offer students of both institutions international educational opportunities. During my week there I took part in clinical and surgical podiatry clinics and attended hospital rounds at the Metropolitan Hospital Centre.

I was also fortunate to spend a week at the Southern Arizona Limb Salvage Alliance (SALSA), in Tucson, Arizona, which is under the direction of eminent podiatric surgeon and diabetic foot researcher Professor David Armstrong. SALSA, part of the University Medical Centre at the University of Arizona, offers expert clinical and surgical care of the diabetic foot and during my visit I was able to participate in podiatry clinics and hospital rounds, attend

case conferences, watch complex surgical cases, and hear about current research activities.

SALSA is a global leader in the care of the diabetic foot and produces innovative research, so spending a week in such an enriching environment was professionally significant and further consolidated my interest in this important field of research.

I would like to express my appreciation to The University of Western Australia for its financial assistance to attend the ADA conference, as well as to Professor Alan Bryant, Head of Podiatric Medicine at UWA, Professor Robert Eckles of NYCPM and Professor David Armstrong of SALSA for their assistance in making this trip possible.

I also thank my supervisors, Winthrop Professor Timothy Davis, Research Associate Professor Wendy Davis and Associate Professor Laurie Foley.

Answers to the quiz on page 14

1. 40% in 2009, up from 28% in 1974.
2. The nucleus accumbens.
3. A device for crushing bladder stones in situ.
4. The function of the glutei muscles.
5. Eleven days and 24 minutes.

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MENDEL BABA WITH PROFESSOR DAVID ARMSTRONG IN HIS OFFICE AT THE SALSA CLINIC IN TUCSON, ARIZONA.