

Bulletin

Child protection studies go global

Neuroscientists recognised for obesity research

**NEW MEDIA
SCHOLARSHIPS**

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Home theatre

The end of spaghetti junction?

ELECTRONICS GRADUATE Glenn Boardman has won the 2008 Victorian Institution of Engineering and Technology Student Prize for designing wireless speakers that can reproduce hi-fi sound good enough for home-theatre systems.

In the era of cordless, mobile, and infrared, Mr Boardman asked himself: why persist with meters of cords from the amplifier to the speakers of his surround-sound system?

His answer won the University's annual Hooper Awards – which showcase the Department of Electronic Engineering's most outstanding developments – and then so impressed his professional colleagues state-wide that he took out the Victorian prize.

'Glenn found a hole in the home theatre market,' says his supervisor, Darrell Elton, lecturer in Electronic Engineering. 'The only similar products available are wireless computer speakers, and they don't have hi-fi quality.'

Mr Boardman says his concept was more complex than just incorporating wireless sensors. 'The sensors had to be resistant to interference from other wireless signals, so I needed to source high-quality chips,' he says. 'I did some research and found a company in England that made high-quality wireless chips for streaming audio, and then built a circuit around the chip to make it work.'

He also had to figure out how to make it easy to use by developing intuitive controls, compatible with other hardware in the entertainment unit – and how to ensure it wouldn't 'overcook' itself.

'It also had to look good, so there were many elements I needed to figure out as I went along.'

Having ticked all those boxes, Mr Boardman had to find a reasonably priced, high-quality amplifier that could accept audio inputs from a range of audio-visual devices used in the home.

With the prototype now working beautifully in his lounge room, he intends to develop his project for the consumer market.

'There really aren't any Australian audio companies. My challenge is launching a high-end home theatre product to an audience other than the "in-the-know" audio market on the internet,' he says. ●

Mr Boardman and his new wireless speaker system.



Respect for diversity begins in our schools



The project team, from left, Merlyne Cruz from the Centre for Equity and Innovation in Early Childhood, La Trobe's Professor Wertheim and Jo Hutton and Elizabeth Freeman, University of Melbourne.

AN AWARD-WINNING PROJECT by La Trobe University psychologist Professor Eleanor Wertheim and her colleagues aims to help teachers 'build' schools that respect cultural diversity.

'If we are to continue to advance as a prosperous society, social cohesion is critical. It is therefore as important to boost the capabilities of our schools in respect for cultural diversity and ability to handle differences between people and groups, as it is to teach maths and sciences.'

Professor Wertheim is highly respected both as an educator and psychological researcher for her work on conflict resolution and health issues. She is among a select group which has won a coveted 'Australian Award for University Teaching' and the Australian Psychological Society's 'Excellence in Teaching Award'.

The new project – *Creating culturally respectful primary schools: Enhancing relationships through strategic professional learning* – has been supported by funds from the Federal Government's Australian Research Council.

It is based on earlier research for which Professor Wertheim and her collaborators won the Australian Psychological Society's Robin Winkler Community Psychology Award.

The new project extends to teachers, students and other members of primary school communities high-quality, long term professional development in the areas of cultural diversity and conflict resolution.

'This enables them to build strong school communities where diversity is embraced and valued,' Professor Wertheim says.

'Conflict and differences between people are a part of life, and offer rich opportunities for developing awareness and understanding the values, needs, interests and cultures of other people.'

'However, if handled badly, conflict can lead to damaged relationships, intolerance, racism, aggression – and this is often exacerbated between groups from different cultural backgrounds.'

'By beginning at an early age through schools, we can encourage a more peaceful society which embraces differences between people and cultural groups, one that has the skills to integrate differing values and interests in constructive ways.'

Professor Wertheim says the original project involved twelve Melbourne primary schools. It has now been extended to another ten schools and will be evaluated during 2008 to 2009 with the help of the new research grant.

- The project is being conducted with researchers from the University of Melbourne (Faculty of Education and Centre for Innovation and Equity in Early Childhood) in partnership with the Scanlon Foundation, Catholic Education Office Melbourne, Australian Psychological Society and two primary schools (Haig Street Primary School, Heidelberg, and St Anthony's Primary School, Alphington). ●



OUR WORLD IN CRISIS

La Trobe offers new media scholarships

KENYAN-BORN freelance photojournalist Kabir Dhanji and Megan Byrne from *The Age* newspaper have been awarded the La Trobe University Centre for Dialogue's first annual Media Scholarships.

The scholarships enable them to attend the Centre's ten-week *Our World in Crisis* course. Now in its seventh year, the course is led by Joseph Camilleri, Professor of International Relations and Director of the Centre for Dialogue.

The course comprises ten weekly evening sessions. It is held at the Fitzroy headquarters of Australian Volunteers International (AVI) and draws on the resources of supporting

Continued page 6



Dr Riady, right, receives his award from Australia's Ambassador to Indonesia, Mr Bill Farmer.

Alumni win inaugural awards

INTERNATIONAL business leader, banker and philanthropist Dr James Riady was one of two La Trobe University alumni who took out prizes at the recent inaugural Indonesian Australian Alumni Awards held by the Australian Government in Jakarta.

Dr Riady, recipient of an Honorary Doctorate of Letters from La Trobe in September 2007, won the Australian Alumni Award for Entrepreneurship which recognises innovative and entrepreneurial business people in Indonesia.

Dr Makmur Sunusi – Director General of Social Services and Rehabilitation in the Ministry of Social Affairs and a lecturer at the Department of Social Welfare at the University of Indonesia – who holds Masters and Doctorate degrees in social work from La Trobe University received a special Inspiration Award. Dr Sunusi was recognised for his influence on social welfare development in Indonesia.

La Trobe University nominated both men for the awards, which were presented by Australian Education International, the global arm of the Department of Education,

Employment and Workplace Relations. The awards recognise outstanding talent, achievements and contributions made to Indonesia by the 30,000 Indonesians who have studied in Australia.

Dr James Riady is Deputy Chairman of the Lippo Group which includes twenty listed companies in Asia as well as other businesses and partnerships in America and Europe.

He is also Chairman of AIG Life, Jakarta, Deputy Head of the Indonesian Chamber of Commerce and Industry, a former diplomat and ambassador for Indonesia, and a former non-political member of MPR (Indonesia's top Peoples' Consultative Body).



Dr Sunusi, right, accepts his award.

His Lippo Group employs some 35,000 people and generates more than US\$2.5 billion in annual revenue from ventures which include a network of banks and financial services – the original core business set up by Dr Riady's father, Mochtar Riady, in the 1960s – and today extends into a wide range of areas from property development, department stores and insurance to IT, multi-media, healthcare, hotels and tourism development.

Dr Riady is founder and chair of a non-profit education foundation which oversees three universities and eighteen schools, a teacher training college that provides scholarships to its 400 students, and aims eventually to establish 1,000 schools in the poorest parts of Indonesia.

Dr Riady has also set up Indonesia's largest non-government hospital group, four hospitals and a specialist clinic with plans for nine more hospitals, part of a US\$500 million expansion to create more than 4,000 new healthcare jobs in Indonesia.

He says a milestone next year, for his Group and Indonesia, will be a new comprehensive cancer centre named after his father, the first such private centre in Indonesia. It will be assisted in its work by the Mochtar Riady Institute for Nanotechnology, a cancer research institute established in 2006.

Dr Makmur Sunusi directs the Indonesian Government's efforts to fight poverty, protect children and people with disabilities, the elderly and those with HIV Aids and narcotic problems, in order to strengthen families and communities across the country's thirty-three provinces.

An Indonesian delegate to the UN High Commission on Human Rights, Dr Sunusi has been recognised by the President of Indonesia for his work with vulnerable children.

Indonesia has 68,532 orphanages and thirty-eight high-level institutions under the care of his Ministry. He has formulated a new child adoption policy to prevent international misuse of adoption and a program to monitor all orphanages to help stop exploitation of children.

His programs for street children have set up 'open houses' in twelve cities, funded by the Asian Development Bank. After the 2004 tsunami, Dr Sunusi issued an emergency policy to prevent trafficking of child victims and set up fifty-four children's centres for child victims in Aceh.

At his initiative, a memorandum of understanding has been signed between La Trobe University and the Indonesian Ministry of Social Affairs, to deliver social work higher degrees and research for the Ministry and Indonesia. ●

National superannuation

REFLECTIONS ON THE BIRTH OF AN IDEA

FOR SEVENTEEN YEARS until February 2000 Bill Kelty – then Secretary of the Australian Council of Trade Unions – strode the national stage, a key player in industrial relations, re-shaping economic policy and superannuation reform.

As a prologue and coda he appeared on stage at La Trobe University; first briefly as a graduate in Economics in 1969 and then, in April this year, when he returned to deliver the occasional address to some 230 graduates at their award ceremony.

‘I have in essence three things to say,’ he told the graduates, their families and friends. ‘First, the significance to

unions interesting for me because I was interested for some time, but he gave me a greater dimension to their activities: understand their history, analyse the reasons for the decisions, and know the conflicts, their purposes, their ideals.’

Mr Kelty said Donald Whitehead was ‘the very last person I would have expected to be in awe of, as he was an adviser to the Liberal Party and the Employers’ Association. I was on the opposite side, Labor Party since 16, with a burning ambition to work for the trade unions’.

‘He taught me the fundamental process of applying logic to the process of analysis

the world’s best and worth emulating in the USA. The Chinese are keen on it.

‘People have been kind enough to suggest that it is the result of the partnership between the ACTU and government – and particularly Paul Keating and me.

‘Let me take you to Donald Whitehead’s *Stagflation and Wages Policy in Australia*, published in 1973, but first discussed between 1967 and 1969.

‘It is not by chance that Gary Weaven (former assistant ACTU secretary now executive chair of Industry Fund Services), Ian Court (chair of the Australian Institute of Superannuation Trustees) and myself all went to La Trobe – all were involved in the creation and maintenance of superannuation.

‘We merely set alight the fire. The idea had been stoked. This is an idea that



Bill Kelty at the graduation ceremony; an idea that this University can rightfully own.

me of this University and its teachers; second, the case for bravery and the cost of meekness; third, never give up the enthusiasm and spirit of youth.’

Mr Kelty said he came to La Trobe not just because it was close to his home ‘but because I believed that it could give greater opportunity to working class kids, of which I was proudly one’.

‘This University gave to me the greatest gift of all – access to the two finest teachers of my life – Professor Donald Whitehead in Economics and Professor Ross Martin in Politics.

He described Professor Martin, who taught at La Trobe for nearly forty years and is now a friend, as ‘Australia’s best student and teacher of trade unions, recognised for his expertise in many countries’.

‘Ross did not have to make trade

(to) think about each issue from a number of perspectives. However, at no stage did he discourage me from having a passionate belief and an ideal.’

Mr Kelty said Donald Whitehead was ‘an important figure, even in this University a little understated and understood’.

‘All ideas have a genesis – someone stokes up the genesis of an idea. There are others who set it alight.’

FOURTH LARGEST FUND MANAGEMENT BUSINESS

‘Today Australia has a national superannuation system – nine per cent of people’s earnings as a minimum go into superannuation. It has meant that we have spawned the fourth largest fund management business in the world. Some commentators would regard it as one of



Professor Whitehead

this University can rightfully own. Some own a literary masterpiece, others own a scientific discovery. This University owns superannuation.’

• Mr Kelty has also been a member of the National Labour Consultative Council, Director of the Reserve Bank and a Director of the Superannuation Trust of Australia. He is a Director of Hotel Leisure Tourism Trust of Australia and of Linfox, an AFL Commissioner and a member of Australians for Just Refugee Programs.

Professor Donald Whitehead’s memory lives on at the main Melbourne campus at Bundoora where a building named in his honour houses the School of Business. ●

Colleges connect with the world

COMMUNITY awareness is one of the major aims of college life at La Trobe University – not just among students on campus, but in the global community as well.

Last year ninety-five La Trobe students living in residential colleges travelled overseas in small groups to assist in development work. This year the numbers will swell to 150.

Projects in Thailand, India, Cambodia, Nepal, Kenya and Bosnia have included raising funds for building a school, work in orphanages, setting up a handicrafts shop and teaching English. Students have raised \$30,000 for Cambodia alone.

‘These programs develop employability skills for students,’ says Deputy Director of Residential Services, Dr Michael Shortland.

‘The students keep journals during their trips and tasks are assessed. Our aim is to build on students’ needs. They like to get involved in down-to-earth developmental programs.’

Last year students made a presentation at a genocide conference in Bosnia. They spent three days at a village that had been ‘ethnically cleansed’. The former population of 300 had been reduced to just 13.

The students went with the idea of building a new school. Instead, villagers requested a monument to their dead. The students raised \$8,500 for its construction.

Dr Ron Adams, Director of Residential Services, led the group to Bosnia. He was moved by the experience, particularly when the villagers asked that the names of the

La Trobe visitors be inscribed on the monument with their deceased relatives.

‘We are helping our students connect with the world,’ says Dr Adams. ‘We are also demonstrating an ethical framework for good corporate citizenship that will help them and the University in the years ahead.’

More than one thousand students live in three colleges on the Bundoora campus – Menzies, Chisholm and Glenn – as well as Graduate House, University Lodge and Waterdale Apartments. About 15 per cent are international students and most of the rest come from rural Victoria or interstate.

The culture of volunteering crosses all of the University’s campuses. Bendigo students have formed a community volunteering group called Ressie Angels. They kicked off the year by shaving their heads to raise money for the Leukaemia Foundation. ●

Dubai women show their art

AN ART EXHIBITION

featuring works by twenty students from Dubai Women’s College recently provided the people of north-west Victoria with rare glimpses into the richly diverse lives of people from another culture.

The week-long exhibition at Stefano’s Gallery resulted from an educational relationship between La Trobe University and Dubai Women’s College, part of the Higher Colleges of Technology in the United Arab Emirates (UAE).

The relationship was forged by La Trobe Mildura campus executive director, Kent Farrell, who spent seven years teaching in the Emirates. Head of Graphic Arts and Design, Neil Fettingling worked closely with Dubai Women’s College to bring the exhibition to Victoria. ●

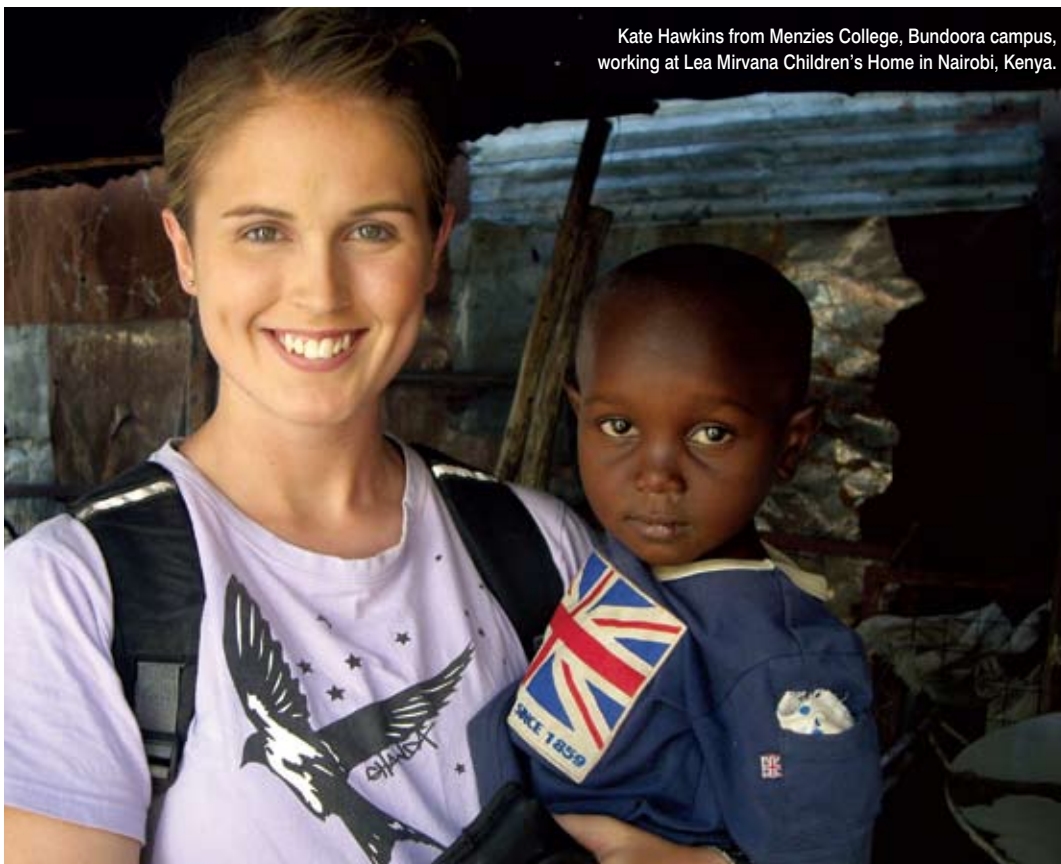
New media scholarships

Continued from page 3

organisations including AVI, Oxfam Australia, Pax Christi, Psychologists for Peace, the Asia Education Foundation, the Islamic Council of Victoria, World Vision and the Victorian Council of Social Service.

Professor Camilleri says the scholarships are offered annually, both as a learning experience and an opportunity to participate in a cross-fertilisation of ideas on world affairs with the wider community.

The winners were selected from Australian and Australian-based foreign correspondents, through media organisations and the Sydney-based Foreign Correspondents Association, of which La Trobe University is a key sponsor.



Kate Hawkins from Menzies College, Bundoora campus, working at Lea Mirvana Children’s Home in Nairobi, Kenya.

Soil test for safer nuclear waste

Australian know-how is being used in a French laboratory, part of a European Union funded project dealing with the long-term stability of nuclear waste in underground storages.

The work, at Grenoble University, is based on a process for measuring the redox reactivity of soils developed by Associate Professor Ewen Silvester, a chemist at La Trobe University's Albury-Wodonga campus.

Dr Silvester, right, has proven the concept on synthetic iron oxide minerals in laboratories of the Department of Environmental Management and Ecology, and the technique is now being tested on iron-containing clay minerals in France.

'Decisions on the location of nuclear waste storage are largely based on geological considerations,' Dr Silvester says. 'This work deals with the geochemical stability of the storage environment, particularly the mobility of radionuclides in soils. Better understanding of geochemical conditions will lead to safer storage.'

'Our work was originally focused only on the geochemistry of iron in these systems, and the role of iron in controlling radionuclide speciation and mobility.'

'Instead, what we have developed is a generic technique, and ultimately a device, which aims to provide information about the redox potential of many other soils.'

Redox potential, he explains, is tendency of a soil to accept (oxidise) or donate (reduce) electrons.

'To measure this in soils and sediments is notoriously difficult due to the poor electrical contact between soil particles and the sensing electrode,' says Dr Silvester. So he came up with the idea of using a "shuttle molecule" to transfer electrons between the soil particles and an electrode, amplifying the signal so that it can be measured.

'The principle may sound simple, but it has taken three years of laboratory work to get a result that could help the European



Union in its bid to solve the potential environmental problems associated with nuclear waste.'

The next phase of the project, he says, will be the development of a prototype device that could be used in any soil or sediment system.

The European connection with La Trobe was established by Dr Silvester during the early nineties when he spent three years at Grenoble University on a post-doctoral fellowship.

MAINTAINING THE FRENCH CONNECTION

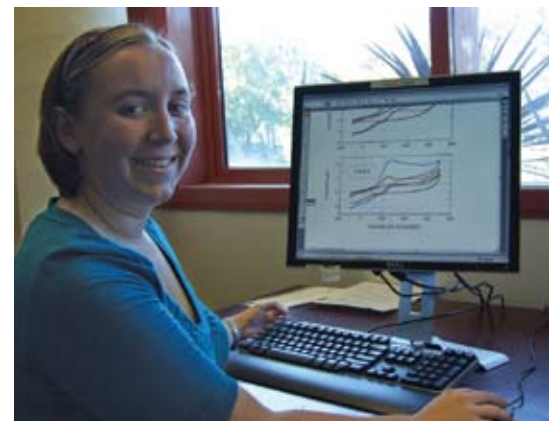
This connection has been maintained, with funding from the *Agence Nationale pour la Gestion des Dechets Radioactifs* – and by the visit of Annaleise Klein, a La Trobe BSc student working on the project, who spent February in Grenoble.

'This was a fantastic opportunity for Annaleise who worked in the laboratory of Professor Laurent Charlet, an expert in

clay mineral chemistry,' Dr Silvester says.

'The experience will develop her skills in chemistry, and will no doubt inspire and motivate her for the future – and they will be used here at the Albury-Wodonga campus to further the study of clay mineral systems.'

Ms Klein, below, describes it as a 'fascinating field of research'. 'There is definitely a future there for me,' she says. 'There is a lot to be done.' ●





SWEETNESS & LIGHT

Neuroscience illuminates new ways of tackling the obesity epidemic

LA TROBE University neuroscientist Richard Weisinger's decade-long research into nutrition and body weight found itself in the glare of world-wide media attention recently suggesting that popular blood pressure drugs may one day be re-badged to combat obesity.

And waiting in the wings of his first-floor laboratory on the main Melbourne campus at Bundoora is a new project that takes a 'hair of the dog' approach to the same problem – probing by-products from sugar refining in the quest for a 'natural' anti-obesity drug.

The reports of a 'promising miracle weigh-loss pill' based on blood pressure drugs followed publication of his research in the prestigious journal *Proceedings of the National Academy of Sciences (PNAS)* in the US. So far the drugs – called ACE (angiotensin converting enzyme) inhibitors – have been primarily tested on laboratory mice and rats for their weight loss effects.

Experiments by Dr Weisinger, an associate professor in psychology, and other scientists from La Trobe, Deakin University and the Howard Florey Institute found that mice lacking angiotensin II weighed twenty per cent less than their normal counterparts and had fifty to sixty percent less body fat, particularly in the abdomen. They also processed sugar more quickly, suggesting they were at lower risk of diabetes.

Dr Weisinger – who worked with La Trobe colleagues Dr Mark Jois from Agricultural Sciences and Denovan Begg from the School of Psychological Science – told leading science writer Leigh Dayton from *The Australian* that the link between weight loss and ACE came about purely by chance in earlier experiments.

'Our group was using an ACE inhibitor with animals to study the

effects on blood pressure of a complex biochemical pathway called the “renin-angiotensin system”. Unexpectedly, the mice and rats got skinnier. When I saw the body weight was down I said that’s phenomenal. We should get right into that. And that’s what we did.’

Angiotensin II is a very potent chemical that cause muscles around blood vessels to contract, thereby narrowing them which leads to high blood pressure.

Dr Weisinger explains that fat cells store excess energy for times when food is scarce, which is rarely an issue in modern western society. They also contain the renin-angiotensin system that helps regulate formation of fat cells and the ability of fat cells to store fat, in addition to their well-known influence on blood pressure and blood volume. Drugs that block a key step in this system can cause weight loss, but how they do this is unclear.

Various experiments by Dr Weisinger and colleagues over many years have explored this question in laboratory mice engineered to lack the gene that encodes the key angiotensin converting enzyme.

The results, published in *PNAS*, confirm the critical role of this system on the growth of fat tissue and suggest a mechanism by which drugs that interfere with the system might spark weight loss.

Given widespread concerns in much of the developed world about body weight and health, Dr Weisinger expects that human trials based on these results may well start within a year. But he is quick to caution that pressing this existing class of blood pressure drugs into service against obesity is unlikely to be a panacea, or lead to a ‘miracle’ pill.

‘I don’t think we’ll see it added to the water supply any time soon. There are issues of not inconsiderable possible side effects that doctors have to weigh up today when they prescribe these drugs for high blood pressure.’

SECOND ‘ACE’

But Dr Weisinger reveals he may well have a second ‘ace’ up his sleeve. He has applied for a research grant to probe by-products from sugar refining – polyphenols found in molasses – and, perhaps, use these to develop a ‘natural’ drug.

He says molasses are a significant waste stream of the sugarcane industry and very rich source polyphenols, different from those found in tea, cocoa or red wine which are often touted for their

ant-oxidant qualities in keeping our blood-vessels healthy. Several different extracts have been produced from molasses, each containing their own unique combination of polyphenols.

‘We are hoping to show that these polyphenols in waste products from sugar refining can be used to improve body weight and insulin sensitivity.

‘Our aim is to determine the influence of each of these extracts on body composition and insulin sensitivity and their mechanisms of action and to gather basic scientific information that may make the sugar industry more health-oriented and productive.’

This, he says, ultimately would have enormous implications for human health and disease. It would also be of great national benefit for a billion

Waste products from sugar refining may help improve body weight and insulin sensitivity

dollar industry whose main product, refined sugar, is calorie rich but nutrition poor – and a major contributor to the ever increasing problem of obesity and metabolic syndrome which has huge costs for the Australian health system.

FATTY ACIDS IN DIET

Dr Weisinger came to La Trobe’s School of Psychological Sciences in 2005 from the Howard Florey Institute, where he maintains an honorary appointment. He also continues research ties with the Southwest Foundation for Biomedical Research, San Antonio, Texas. His studies examine links between the progression of disease and early diet, particularly the

‘Western Diet’ and the benefits of Omega-3 fatty acids, as well as the neural pathways that mediate disease and how they are altered by diet. He and members of his laboratory are also probing how biological systems influence eating patterns, cardiovascular and neural function. They are interested in the neural pathways that control a person’s ‘body weight set point’ and factors that influence it.

For the last three years Dr Weisinger has also led an international team in a \$277,000 National Health and Medical Research Council study that has helped establish the benefits from consuming Omega-3 fatty acids. These are found in fish such as mackerel, herring, sardines, certain types of tuna and salmon and in the oils of soybeans, canola, walnut and flaxseed.

For example, Dr Weisinger’s work with laboratory rats has helped establish that Omega-3 fatty acids are important to pregnant and nursing mothers. He has shown that putting a pregnant healthy female rat on a low Omega-3 fatty acid diet resulted in poorer milk and less healthy offspring who develop high blood pressure as adults.

‘Humans evolved as hunter-gatherers with a fatty acid diet in which Omega-3 and Omega-6 fatty acids (found in animal fats and oils, most vegetable fats and oils and dairy fats) existed in roughly equivalent amounts,’ says Dr Weisinger.

‘But in modern Western society we now consume between ten and twenty-five times more Omega-6 than Omega-3 fatty acid. This becomes a major problem because both Omega-6 and Omega-3 fatty acids compete for the same metabolic enzymes.’

The Omega-3 and body weight studies also involve collaborations with scientists from Deakin University, the University of Melbourne, the Hungarian Academy of Sciences and the University of Peradeniya, Sri Lanka. ●



Dr Weisinger, rear, with colleagues Denovan Begg, left, and Lauren Stahl demonstrating equipment used to measure body fat.

Social maps

strengthen support for abused children

WHEN ASKED to draw a ‘map’ of the important people in his life, eleven-year-old ‘Shane’ did not mention friends, and put his mother on the outer as someone who had failed to provide him with emotional and practical support.

Two years later – after regular and intensive help to deal with trauma caused by abuse – Shane’s ‘social network map’ was radically different, reflecting that he had been able to return home to live with his mother, and had begun to control his anger to the point where he could make, and keep, supportive friends.

Shane (not his real name) is one of 102 children at the Victorian Government-funded ‘Take Two’ program providing therapy for children traumatised by abuse, to benefit from the trial of social mapping as a new evaluation method.

Associate Professor Margarita Frederico, Head of the School of Social Work and Social Policy and the principal research and evaluation consultant to Take Two, says social network mapping is beginning to prove its value for assessing formal and informal support networks for traumatised children and young people and whether they can draw on these relationships for emotional and practical support.

Used with other measures, social mapping helps therapists evaluate the most effective methods for rehabilitation, taking into account the children’s own perspectives.

Of 1,232 young people up to eighteen years of age who have been assisted by the Take Two program since its inception in 2004, Shane and the other children in this pilot group are the first invited to contribute to their rehabilitation with the help of social mapping.

The social map was developed in the United States and has been used there for more than eighteen years to evaluate social and emotional supports, primarily for adults.

It was introduced to Take Two in 2004 for young people. The La Trobe researchers believe they are the first to use the technique so extensively with children,

some as young as six years of age.

Ms Frederico says children in Shane’s group were asked to draw maps when they first entered the program. These were then used as a baseline for six-monthly progress reviews.

‘We can use these maps,’ she says, ‘to see what the children’s support networks are at one stage, and then re-evaluate them later. In Shane’s case, we are now

although only eight per cent of those were living with one or both parents. Ninety per cent listed one or more siblings.

- For a small percentage, parents are not even on the social radar. They did not list either parent, although all had at least one living parent. More than half did not mention their fathers.

- Friends are often described as being unsupportive, with only twenty-six per cent of children describing one or more friends as providing practical support.

Ms Frederico says more extensive trialling is needed before the usefulness of social maps as an assessment tool can be fully determined. However, anecdotal evidence from clinicians has been overwhelmingly positive about its role in providing base-line evaluation of young



Demonstrating the mapping technique: La Trobe’s Margarita Frederico, left, and Berry Street’s Carly Black, research officer of ‘Take Two’.

seeing a young person who is doing much better. He is stable at school, has friends, is no longer moving from placement to placement – and his social network maps reflect these changes through his own eyes.’

Ms Frederico says Take Two only uses mapping with children deemed likely to benefit. Therapists use the map to talk about what the young person is going through.

THE CHILDREN’S SOCIAL MAPS HAVE REVEALED:

- Family members are highly significant to a child’s view of the world, even to children who do not live with their families. Sixty-eight per cent included their mothers in their social maps,

people’s social supports and allowing them to open up about relationships that are important to them.

Ms Frederico says a separate project is underway in partnership with the Victorian Aboriginal Child Care Agency and Take Two to determine culturally-appropriate ways to assess the social and emotional well-being of Aboriginal children.

The Take Two program is funded by the State Government under the auspices of Berry Street, in partnership with La Trobe University, the Austin Hospital, Mindful (Centre for Training and Research in Developmental Health) and the Victorian Aboriginal Child Care Agency. ●



At the Padua conference, from left, Carlina Black, Annette Jackson, Robyn Miller, Minister Lisa Neville, Dr McNamara, Jane Harrison, Gill Callister (Executive Director, Mental Health and Drugs Division, Department of Human Services) and Margarita Frederico.

Child and family welfare studies go global

NEW and stronger links between policy-makers and researchers around the world were forged at an international research conference on child, youth and family services held in Padua, Italy in March.

Lecturer in Social Work, Dr Patricia McNamara, says the conference identified an area of unmet need in international child and family research and provided a springboard for greater cross-national collaborations.

Researchers and policy-makers in the UK and US especially, she says, are keen to forge links with researchers in Victoria following the dissemination of their findings in studies of preventative child protection programs and a range of therapies.

Dr McNamara, a key organiser of the four-day conference, said La Trobe's participation capitalised on the University's involvement in cross-national research collaborations over the past five years.

This work received strong support from practitioners and policy-makers, especially her colleagues at Berry Street Victoria, Dr McNamara's partners in the Melbourne component of a recent seven-

country study of intervention outcomes in community-based family centres.

The La Trobe-Berry Street partnership also paved the way for the University's role in a cross-national study of parenting programs, launched at the conference.

Victoria's Minister for Community Services, Lisa Neville, attended the conference. She said she had been heartened to hear the positive comments made about reforms under way in Victoria. While no system was ever perfect, she said other Australian and international jurisdictions were looking at what was happening in Victoria.

'If we continue our focus on earlier intervention, on meeting the therapeutic needs of children, on improving the way we maintain linkages for Aboriginal children with their community and culture – all of which feature in our new legislation – and if we continue to do this in partnership between Government and community services, then we will achieve a system that is doing its best for vulnerable children, young people and families in Victoria.

'The lessons I have learnt from this opportunity to meet

experts in out-of-home care from around the world, will greatly help the review I am leading into Victoria's out-of-home care system.'

Dr McNamara says the conference was so successful its first target of 350 participants had to be extended to 480.

'Attendees included researchers from emerging Eastern block countries such as Slovakia, Slovenia, Hungary and Armenia. Also represented were China, Nepal and other Asian nations, who are often left out of the international research loop.'

La Trobe's role in the Padua conference goes back five years when Dr McNamara was asked to become a foundation board member of a new organisation for advancing knowledge in residential care, foster care and their alternatives for children and youth with psycho-social problems – the International Association for Outcome Based Evaluation and Research in Family and Children's Services.

SHARING THEIR RESEARCH

Eight staff and postgraduate students from the School of Social Work and Social Policy gave papers at the conference.

PhD student Robyn Miller, Principal Practitioner, Child Protection and Family Services Branch in the Department of Human Services, made a keynote presentation outlining Victoria's success in arresting the growth in demand for child protection services.

Head of the School, Associate Professor Margarita Frederico, and her team, reported on the Victorian-Government-funded 'Take Two' therapeutic intervention program for children and young people under observation or care within the State's child protection system (*see also previous page*).

'Take Two' research manager, Annette Jackson, senior researcher Carlina Black, Aboriginal research officer, Jane Harrison and area manager, Trish McClusky, all presented findings related to the 'Take Two' program.

Dr Lloyd Owen presented his doctoral research on interventions with adolescents in the welfare system. ●

New dig probes Ned Kelly drama

SITES relating to one of Australia's best-known historical events – Ned Kelly's last stand at Glenrowan in north-eastern Victoria – have been excavated by a team of archaeologists including forty La Trobe University students.

The widely-publicised dig, by Adam Ford of Dig International Pty Ltd and Professor Tim Murray, Head of the University's Archaeology Program, was carried out in May for the Rural City of Wangaratta.

The archaeologists excavated by hand the most significant sites from the 1880 Glenrowan Siege, including the Ann Jones Inn, where police and the Kelly gang faced off in a ten-hour shoot-out, looking for burnt or buried relics and other artefacts.

Although tourists are believed to have scavenged any likely surface artefacts, a bullet cartridge case believed to date from the time of the siege had been found previously – and remnants of bullets were dug up on the first day of the month-long excavation.

With the help of local volunteers, the team used state-of-the-art technology including

3D laser imagery, geophysics and photogrammetry to record the site and its contents. All artefacts are being catalogued and analysed in La Trobe's Archaeology laboratories on the main Melbourne campus at Bundoora. After this they will be conserved and stored by Heritage Victoria.

Professor Murray says the dig is as much about



re-examining the drama and historiography of Australia's Ned Kelly story as it is about the archaeology.

'What we're really pursuing is new information about the place that can be integrated with more traditional historical sources to enhance our understanding

of what happened during the siege.'

Project historian, author and Kelly specialist Alex McDermott – who is writing his PhD thesis at La Trobe on Melbourne's founding myths – expects that finds from the Glenrowan dig will help give Australians a better understanding of themselves, through differentiating truth

mystery around this ever since they died in that hotel – we can at least put to rest the enduring myth that they escaped the fire and lived out their lives as drovers in Queensland,' he says.

Mr McDermott has also studied closely Ned Kelly's Jerilderie Letter and published a book on the subject. He says the events at Glenrowan reveal a man 'pushed by two years of outlawry to an extreme edge, shown by the attempt to derail an entire police train, and the elaborate yet impracticable armour'.

'When the plan went wrong and the train was forewarned, Kelly refused to turn back. Confrontation ensued, and we now have the chance of taking apart – piece by piece – the moment to moment realities of that event.'

The Glenrowan dig follows efforts by Melbourne forensic scientists to identify remains recovered from a mass grave at the former Pentridge Gaol to establish the hanged bush-ranger's final resting place. ●



Illustration: Basil Pardo

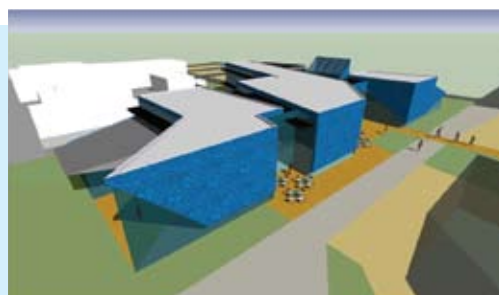
from legend in critical events of history.

MYSTERY AND SPECULATION

'If we find out irrevocably what happened to Steve Hart and Dan Kelly, for instance – and there's been a shroud of

Plans for Goulburn Valley unveiled

VICE-CHANCELLOR Paul Johnson and Greater Shepparton City Council Mayor Eric Bott have signed a memorandum of understanding for both organisations to



maximise higher education opportunities, enrolments and research prospects in Shepparton.

Professor Johnson said the move was an important step towards establishing better access to higher education for

the people of the Goulburn Valley. He said La Trobe would contribute two million dollars to Federal and State funds for a new campus building.

'There are many more important elements to the development of Shepparton as a learning city, and these all have "partnership" as their bedrock – and I look forward to seeing the partnership between La Trobe

and Shepparton grow,' said Professor Johnson.

Mayor Eric Bott said: 'It is fantastic to see La Trobe shares our vision. Council has a long-term strategy for tertiary education in Shepparton and the University's presence in our city is a major part of that.'

He said it would help bring people into the area and keep young people in the country by providing more extensive study options locally. ●

Widely quoted, top economist joins La Trobe



Professor Harding

PROFESSOR DON HARDING has won an award for having the most citations for economics research in Australia, reflecting the impact and influence of his work.

The recognition – part of the latest Thompson Scientific Citation Awards presented at the National Press Club in Canberra in April – places Professor Harding in the top ten ‘most cited’ researchers in Australia.

Thompson Scientific is one of the world largest publishers of academic research. Each year it measures the number of times a researcher is cited, or quoted, by peers in the pages of its journals. According to this data Australia ranks among the top ten nations for the influence of its scientific papers.

Professor Harding’s five research papers were cited sixty-four times, with 12.8 citations per paper, making him the leader in his field of economics.

A regular commentator on economic issues, Professor Harding is co-creator of a widely-used monthly measure of Australian inflation. He joined La Trobe earlier this year, further boosting the capacities of the Department of Economics and Finance and its already internationally renowned group of research staff.

Founded forty years ago, the Department has a broad range of strengths, including macroeconomics, microeconomics, economic modelling, economic methodology, economic policy, development, and agricultural and resource economics. Its research has gained international prominence and helped build a strong reputation for the University. For example, the ORANI model – the first computable general

equilibrium model of an entire economy with direct policy applications – was developed at La Trobe.

Professor Harding says the breadth of the Department’s research and policy interests is one of its great strengths and makes it a very attractive working environment for applied economists.

A graduate from Yale in 2003, Professor Harding came to La Trobe from the University of Melbourne. Before that he was a senior research fellow at the Melbourne Institute and Director of its Centre for Business Cycle Research.

Prior to becoming an academic, Professor Harding gained policy experience as head of policy research in the Australian Treasury, the Industry Assistance Commission (now Productivity Commission) and the Australian Bureau of Statistics.

His main research interests are in macroeconomics and applied econometrics, with a strong focus on the business cycle.

Professor Harding is a fellow of the European Area Business Cycle Network and, with Professor Heather Anderson, a director of the macro-econometric models and methods program in the Centre for Applied Macroeconomic Analysis.

Much of his work investigating the measurement and analysis of business cycles has been concerned with how to provide turning-point-based measures of the cycle with an econometric foundation. He has applied this econometric framework to test various explanations of the business cycle.

Professor Harding has considerable experience with survey techniques, gained at the Australian Bureau of Statistics (ABS) and at the Melbourne Institute

where he managed the Consumer Sentiment Survey for eight years.

He uses survey data to study issues where data from official sources is unavailable or inadequate. This includes areas as diverse as the effect of petrol prices on consumer spending, the effects of unfair dismissal laws and the effects of minimum wages.

The most notable example of his innovative use of survey data in macroeconomic analysis and policy is the TD Securities-Melbourne Institute Inflation Gauge which he jointly created with Stephen Koukoulas of TD Securities and Dr Lei Lei Song of the Melbourne Institute.

‘This seeks to fill the gap that occurs because the ABS produces quarterly measures of inflation only. The Inflation Gauge provides a monthly measure of consumer price inflation using an innovative web-based survey of prices,’ he says.

The Gauge also provides data-based forecasts of ABS inflation which are available eight weeks in advance of the ABS measure. Over the past five years, these have had an average error of one thousandth of one per cent and a standard deviation of thirty hundredths of one per cent. Because of its accuracy and timeliness, the Inflation Gauge is closely watched by the finance sector and policy makers. ●

GLOBAL PUSH FOR SUSTAINABLE BUSINESS EDUCATION

LA TROBE UNIVERSITY is one of the first two universities in Australia – and among 100 world-wide – that has responded to a United Nations backed global initiative promoting corporate responsibility and sustainability in business education.

The University’s Graduate School of Management has agreed to a set of principles for responsible management education unveiled by scholars and leading academic organisation at last year’s UN Global Compact Leaders Summit. The list of participating universities –

those that have endorsed the principles – were announced in New York in April. UN Secretary-General Ban Ki-moon said the principles had ‘the capacity to take the case for universal values and business into classrooms on every continent.’

Dr Manuel Escudero, head of academic initiatives at the UN Global Compact, stressed that from this base of 100 institutions, the plan was ‘to scale and truly embed the sustainability agenda in the training of future business leaders’.

Continued next page

Continued from page 13

SUSTAINABLE BUSINESS EDUCATION

Dean of Law and Management, Professor Raymond Harbridge, said the principles were designed as a framework to improve curricula and research on issues of corporate citizenship and sustainability, but were not a substitute for existing accreditation and quality assurance systems.

He said the initiative gives academic institutions which have become signatories the opportunity to help define and implement the principles in preparation for the Global Forum of Responsible Management Education to be held at UN Headquarters in New York in December. Dr Suzanne Young, from the Graduate School of Management, will be attending the meeting in New York as a member of three working parties.

Apart from curriculum development for corporate responsibility and research into sustainable management systems, Professor Harbridge said the initiative focused on public advocacy and opinion leadership to advance responsible business practices. La Trobe – which is also a member of the Globally Responsible Leaders Initiative, linked to the UN Global Compact Leaders Summit – has a strong emphasis on teaching led by the Faculty's extensive multi-disciplinary research in corporate sustainability and responsibility (CSR).

For example, the Graduate School of Management has been running a unit in CSR as part of both its Master of International Business and MBA programs since 2005 and is embarking on a new, broader program on CSR for 2009. The School of Business is also finalising new undergraduate sustainability units. ●

FORGET ME NOT

Keeping memory in good order

Baby boomers like new challenges so they are unlikely to accept any risk of weakening in memory as they age.

La Trobe psychologist, Associate Professor Glynda Kinsella does not have a cure for memory decline, but she is optimistic that a training program could at least keep ageing memories well-served.

Two memory functions that are vulnerable to age are the abilities to learn new tasks and to retrieve information swiftly. Any difficulties in these areas are often compensated by other cognitive skills yet many people become concerned. Some people, she says, pride themselves on their memories, particularly their ability to remember names. They might play key social roles such as secretary of a club or personal assistant in a business.

'The frequency of the memory lapses can become particularly challenging for them,' she says.

Dr Kinsella is part of a team with an NH&MRC grant to investigate if memory can be improved with training. They hope the training will also guard against further decay into dementia.

The study will be the first that focuses on improving memory in everyday life situations rather than on tests. It will ask people to remember tasks rather than lists of words.

Many people, for example,

have trouble remembering names. They also forget to carry out planned activities. These lapses occur even though their fund of knowledge about the world remains robust.

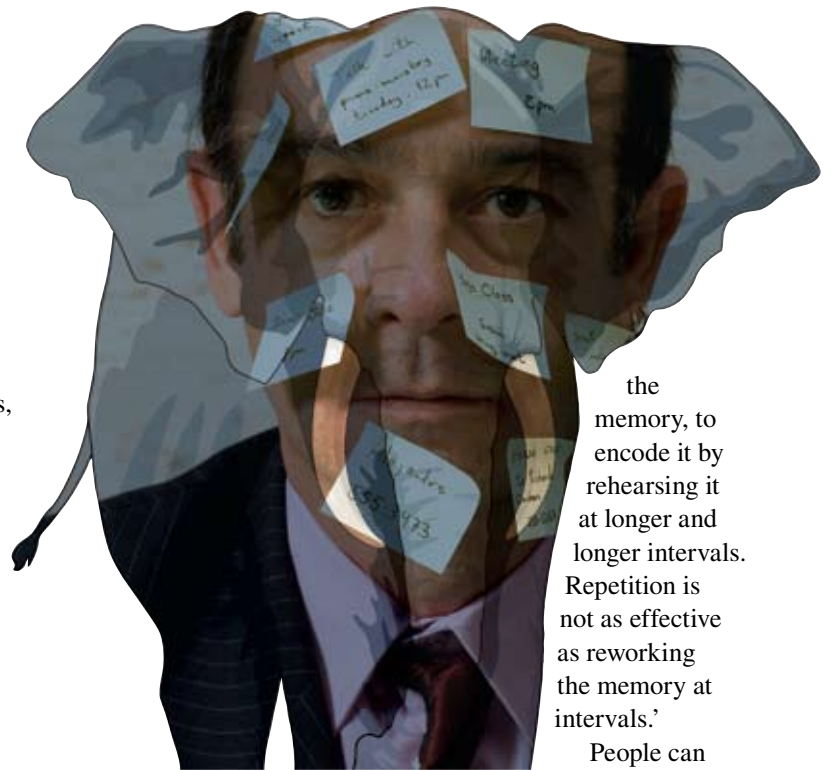
'A lot of people are fiercely independent and they don't want to relinquish their position in the social structure by delegating memory tasks to others in their work or home group,' says the psychologist.

'People very often do

the intent of tasks.

'This needs to be elaborated in our minds,' Dr Kinsella says. 'It helps to add more information about the task to be remembered and to associate the task with other features of the environment such as locality. These act as additional prompts. We hope that the specifics of forgotten tasks are captured in a cascade of memories.'

'If the task is very specific then we need to strengthen



the memory, to encode it by rehearsing it at longer and longer intervals. Repetition is not as effective as reworking the memory at intervals.'

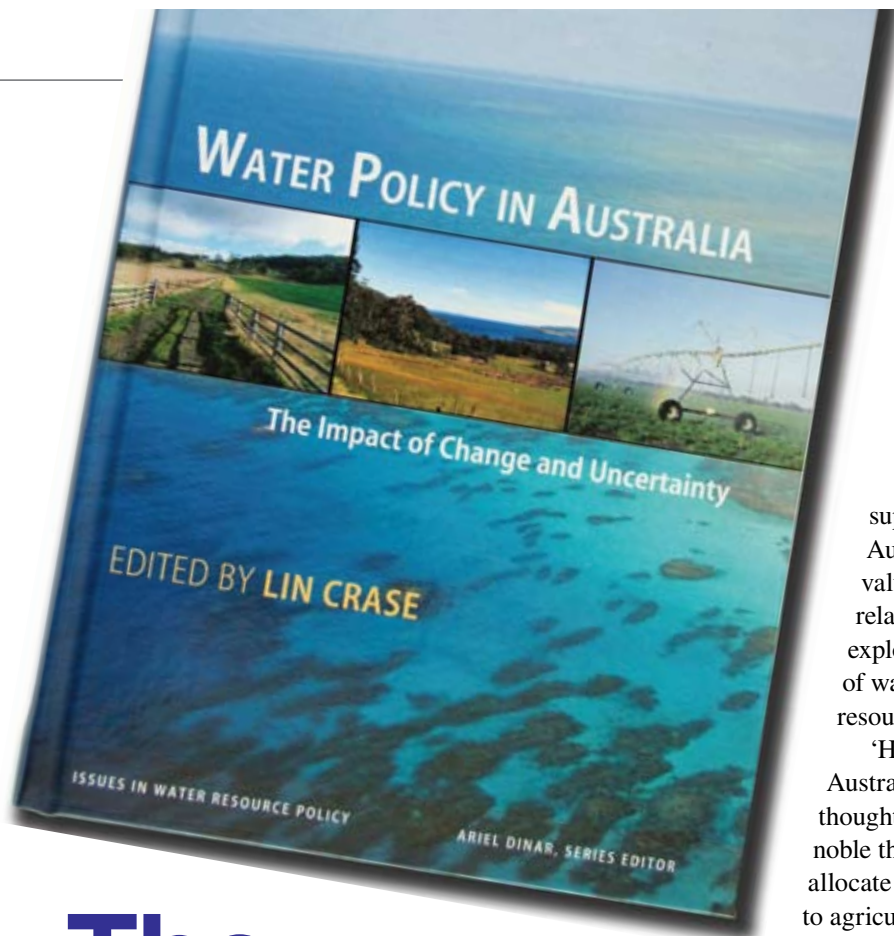
People can have memory

want to keep on top of dealing with the tough tasks such as managing financial affairs or moving house.'

The memory training begins with a discussion about general strategies such as organisation, the role of prompts and cues and paying attention in busy environments. It then moves on to deal more directly with particular memory issues by focusing on

issues at all ages, Professor Kinsella says. Lapses can be affected by anxiety, illness, stress and a host of other physical factors. It's just that the wear and tear of age is of particular concern to baby boomers about to enter their sixties.

Training will be held weekly over six weeks and comparisons made between those who are reporting memory problems and those who are not. ●



The great water debate

When Australian agricultural values can be a pain in the environment

SEVERE water restrictions are being imposed on our communities because we haven't come to grips with how we reallocate water away from agriculture, says La Trobe economist Dr Lin Crase.

Dr Crase, Head of the University's Albury-Wodonga campus, is the editor and major contributor to a new book, *Water policy in Australia: The impact of change and uncertainty*.

Following a decade researching the implications of different water property rights and commenting on the economic implications of water policy, Dr Crase argues the environment can no longer

support Australia's values relating to the exploitation of water resources.

'Historically Australians thought it a noble thing to allocate water to agriculture, to relocate people inland and develop

an irrigation sector,' he says.

'We think that "high-value" agriculture is fruit trees and grape vines. That may be the case now, but what is it going to be like in an era of climate change when we have thirty per cent less stream flow? Vines or trees that need water every year face the real prospect of not having any water some years.

'I'd suggest high-value agriculture is more likely to be a system that you can turn off in a really dry year, sell the water to places like Melbourne, and then in a wet year turn the agriculture back on.'

Dr Crase says structural adjustment is a fact of life. Resources will never stay the same year in year out.

'Water is a resource – and if you think about it in those terms it's going to move around; some industries will contract and others will expand. That's how a vibrant economy is supposed to respond to change.'

People will protest, he concedes, but often the most vocal are those involved in agriculture who have something to lose.

'The farmer who's really struggling, who wants to get out and sell his water rights and get the best price he can, is obviously a clear contender for selling. What the protesters are really advocating is to lock that person into poverty.

'To me a rational policy response is to help the market better allocate the resource and then, if that generates wealth

and you're concerned about adjustment, you redistribute the wealth, and not the resource.'

Dr Crase says while the Victorian Government's north-south pipeline is creating a lot of controversy, he thinks it is a great idea.

'But the government is pacifying country voters by saying "we're going to rejuvenate your irrigation district" to help offset this. I think that's nonsense. Investing a lot of money in infrastructure is not going to count for much if you have thirty per cent less streamflow.

'We have a national water plan which was cobbled together by the former Howard government at the last minute, without the gaze of Treasury, and to many people it's a significant waste of public money. We're spending three billion dollars to buy back entitlements and seven billion dollars on infrastructure.

'So we need to be careful. We are spending a lot of public money to line channels or even worse, to actually underpin and subsidise investments by farmers in their farms, which ultimately they'll appropriate when they sell their farms.

'So this is money that is being spent to create quite spurious water savings. I think it's not a very wise use of public money.'

Dr Crase says until the 1980s, the engineer was 'king' and policymakers viewed water as an endless resource for driving economic growth, but over the last twenty years, policymakers have been forced to acknowledge that it is not possible to perpetually supply more water at a low cost.

Water policy in Australia: The impact of change and uncertainty is published by RFF (Resources for the Future) Press, based in Washington DC, part of a series on water resource policy edited by Dr Ariel Dinar of the World Bank.

The book provides insight into the challenges of institutional change, as well as lessons on the design of property rights for complex resources. It looks beyond recent reform, and examines hydrological, biophysical, economic and social factors as well as specific issues, such as irrigation in the Murray-Darling Basin.

Dr Crase discusses the book, and his views on water policy, in an online interview, www.latrobe.edu.au/news ●



Keeping Olympic triathletes in top form

For the past eighteen months La Trobe University sports physiotherapist Mark Alexander has been helping boost the gold medal chances of Australia's Olympic triathlon team – and prevent injuries to team members.

Mr Alexander, a lecturer in physiotherapy, heads to Beijing with the team in August. As sports

physio to the team, he has so far kept all six members free of major injuries during their pre-Games training.

An injury, according to the coach's blueprint for the team, is a 'muscular or skeletal symptom' that puts the contestant out of training for one to two weeks or more. Mr Alexander's role is to ensure minor weaknesses are rectified with massage, manipulation, acupuncture and exercise.

For training camps, Mr Alexander assesses all athletes from head to toe and puts programs in place to deal with such things as tight muscles, stiff backs and stiff joints.

He says the triathlon team has a few good medal chances. In events scheduled for 18 and 19 August, Emma Snowsill is one of the gold medal favourites for the women. She won gold at the Commonwealth Games in Melbourne in 2006 and has been world champion three times.

'She's a world-class athlete,' says the physiotherapist. 'She's had a great injury-free run.' Brad Kahlefeldt was also a gold medallist in Melbourne. He came third in the world championships and is also a medal favourite for Beijing. 'If we don't get a medal the team will be disappointed.'

Mr Alexander runs La Trobe's popular Master of Sports Physiotherapy program, most of which is done off-campus in clinical placements to suit busy professionals.

One of his ex-students is a physio with the English Olympic team while others work for the AFL and have followed him into the Australian Olympic team.

'My main roles are injury prevention and performance enhancement,' he says. 'If an athlete sprains an ankle I treat it and try and prevent further injury. Unless it is treated properly the athlete won't perform at a high level.'

A sprained ankle may mean just one or two days off training with proper care. A stress fracture is more serious.

'One of our athletes got a stress fracture and they're out for three months. We performed our role but sometimes it comes down to training decisions made by the coach and athlete.'

Mr Alexander likens an Olympic performer to a thoroughbred. 'You are treading a tight line between hard training and tipping over the edge into injury.'

A triathlete must swim 1.5 kilometres, ride 40 kilometres and run 10 kilometres. This takes women about two hours and men an hour and fifty minutes.

'Athletes of this calibre are a different breed of people,' he says. 'Their specific psychology allows them to get to this level and sustain it. They are very dedicated, over-achieving, persevering and sometimes can be obsessive and self-driven.'

Mr Alexander comes out of the competitive sports tradition himself. He ran in track events at State level as a teenager and wanted to be an Olympic athlete, but came up against what he calls his 'genetic limitations'.

Now, instead of pushing his own sports career, he is keen to put his expertise to good use, not just for top athletes but for the public as well. He is writing a book on back pain for the general public – an ailment that affects ninety per cent of people. ●