NEWS FROM THE CAMPUSES OF MONASH UNIVERSITY VOLUME 6 NUMBER 4 JUNE 2003

Finding the turn-off factor for rural GPs

MEDICINE

A Monash University researcher has found that lack of income, limited access to community facilities and restricted professional opportunities for their partners are the major issues dissuading medical students from taking up a rural career.

Dr George Somers, who is undertaking a PhD in

Monash's School of Rural Health, has been testing the effectiveness of programs designed to attract medical graduates to rural practice. He has been developing and evaluating a questionnaire to measure student intentions that can be used immediately before and after the program of interest.

For more than a decade, the Australian Government has funded programs designed to improve the attractiveness of rural practice to medical graduates. But up till now their effectiveness has only been assessed years after they have been put in place and according to how many doctors are actually working in rural areas.

Dr Somers' questionnaire includes items that probe respondents' intention to work in a rural setting, the furthest they believe they would work from a capital city and the percentage of their career likely to be spent in city and country

Dr Somers surveyed first, second and fourthyear medical students. "Intention to work in a rural area fluctuates throughout the students' medical course, but it seems that rural placements are an important factor in the decision-making process towards undertaking a rural career," he said

"This would support the current trend towards making longer rural attachments available for undergraduates. However, just as positive experiences increase rural intention, negative rural placements can be equally powerful in turning the student against a rural career. Forcing unwilling students to do rural rotations may be counter-productive.'

Dr Somers has worked as a GP in Emerald, on the outskirts of metropolitan Melbourne, for the past 20 years. Although this area is considered urban, he has had trouble attracting doctors to work in his practice. "The rural medical shortage has existed for some time but there is another aspect to this issue," he said. "The vast majority of rural doctors are general practitioners but fewer medical students want to be GPs. Rather, they are choosing to specialise, which requires only one extra year of study."

Dr Somers' survey of 127 first-year medical students found that the major issues turning them away from a rural career related to lack of income, limited access to community facilities, healthcare and childcare, and restricted professional opportunities for spouses or partners.

Dr Somers said a rotation with a rural GP might help students address or reduce these concerns. This belief was supported by his survey of fourth-year medical students, undertaken before they began their training to be specialists or GPs, which revealed that 70 per cent said they wanted to spend some time practising in the country after they completed their degree.

"What concerns me is that this percentage does not translate into real figures," Dr Somers said.

He said it was possible that what changed the students' intention was the extra year or two of postgraduate training they spent with specialist mentors in non-rural settings.

"It appears that, whether intentionally or not, these specialist mentors are dissuading students from practising in the country."

- Penny Fannin

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Serpin secrets: Dr James Whisstock and his colleagues in the Department of Biochemistry and Molecular Biology have found a group of proteins called serpins in heat-lowing bacteria. By understanding these serpins, new treatments for diseases such as emphysema, liver cirrhosis, certain dementias and thrombosis could be possible. See page 3 for details. **Photo: Peter Anikijenko**

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NEWS

More hours worked to pay off study debt

University students are working three times as many hours to pay off their studies as they were in 1984, a Monash survey has

NEWS

Therapy best way to treat teenage depression

Depressed teenagers respond faster to cognitive behavioural therapy than to anti-depressant medication, according to a groundbreaking study.

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OPINION

A challenge to the supermarket giants

The international supermarket chain, Aldi, is now in Australia and grocery shopping in this country may never be the same

Changes to the senior leadership

APPOINTMENTS

Monash's current dean of Law, Professor Stephen Parker, has been appointed a deputy vice-chancellor at the university.

The University Council has confirmed that Professor Parker will be a deputy to Professor Richard Larkins, who was appointed in March as the university's next vice-chancellor. Professor Parker's appointment is effective immediately, while Professor Larkins, who is currently dean of Medicine at the University

of Melbourne, will take up his position in September.

And in another senior appointment, Professor Liddell, a professor of general of general practice education at Monash, will take up the role of pro vice-chancellor Malaysia.

of Monash University New role: Professor

The current pro vice-chancellor of Monash Malaysia, Professor Bob Bignall, is returning to Australia after three years at the campus.

Monash chancellor Mr Jerry Ellis said that Professor Parker would strengthen the senior executive of the university with his widely acknowledged

administrator.

Malaysia bound: Proability as a distinguished academic, planner and

"Monash is indeed fortunate to have secured Professor Parker as a deputy vicechancellor," Mr Ellis said. "He will make an outstanding contribution to Monash as we address the next phase of its development."

Professor Parker will continue as dean of Law in the period until the new vicechancellor commences and a new Law dean is appointed. He will also work closely with current vice-chancellor Professor Peter Darvall to ensure a smooth change of leadership for the university.

Professor Darvall expressed his delight at welcoming Professor Parker to the senior leadership team.

Professor Parker said he was looking forward to working with all parts of the university. "My involvement with the university's Self Review, which was completed early last year, took me to all campuses of Monash," he said. "I saw a huge amount of interesting and valuable work being carried out by students and staff across all our campuses. One of my first priorities as deputy vice-chancellor will be to find out more about the campuses with which I am less familiar.

"Whether or not the Federal Budget proposals are implemented, there are significant challenges to be faced by all major universities in Australia. We have a senior management team at Monash well-equipped for these.'



Stephen Parker.



fessor Merilyn Liddell.

Echoes of the Italian Renaissance

HISTORY

The director of the Monash University Centre in Prato, Professor Bill Kent, has taken over as general editor of a major international project to publish 19 volumes of letters by the famous Renaissance Florence ruler Lorenzo de' Medici.

Professor Kent's job will be made easier by his ability to access a lifetime collection of academic papers from the estate of one of the 20th century's most eminent Italian Renaissance history scholars.

Former general editor of the project Professor Nicolai Rubinstein, who died last year at the age of 91 after completing nine volumes of the letters, left behind 43 boxes of working papers on Renaissance Florence under the Medici.

This rich source of reference material was presented recently to the Prato centre via Professor Kent, whose association with Professor Rubinstein goes back to the 1960s.

"I first met him in London in 1967, when his reputation was being established as the greatest scholar of his generation on Renaissance Florence," Professor Kent said. "He was the last of the great emigré Jewish scholars, and during his 30-year career as history lecturer, reader and professor at London University he inspired generations of younger scholars, including myself.

"It was an honour and a delight to accept the offer from the executors of Professor Rubinstein's estate to care for his academic papers. The collection includes correspondence and appointment diaries going back more than 50 years, and it was a very moving experience to examine some

Professor Kent said the papers would be a great resource for scholars of Renaissance Florence history and that he would consult them extensively while editing further volumes of Lorenzo de' Medici's letters.

International collaborators on the letters project include London University's Warburg Institute, Harvard University's Centre for Italian Renaissance Studies in Florence and the Renaissance Society of America.

- Michele Martin

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College directors get the 'Monash Experience'

NTERNATIONAL

Monash College directors were in a stronger position to deliver the 'Monash Experience' after a nine-day workshop on the university brought them together for the first time.

Directors from the three Monash Colleges in Qingdao, Guangzhou and Hangzhou in China joined those from Singapore and Perth for the training program, which focused on marketing guidelines, quality assurance, and

admissions and curricula issues.
"We wanted to take the directors out of their own environment and show them what Monash University was all about," said Mr Clive Vernon, director of Access Division at Monash International.

"Monash Colleges are regularly audited, and they must uphold the Monash reputation. Students expect to get the 'Monash Experience' - not a localised version of it," he added.

The program manager for Monash

College in Singapore, Mr Hassnain Sadiq, said the extra knowledge he gained from the program would help improve student intake as well as systems and procedures in Singapore.

"Monash programs are recognised globally and enhance employment prospects. The 'Monash Experience' is a total experience and extremely enriching for students," he said.

Mr Hansen Zhou, the program manager for Monash College in Qingdao, said that after visiting Melbourne, he was "very confident" about sharing his experience with current and prospective students and their families and answering

Mr Tony Pollock, executive director in the Office of International Development, told the college directors that Monash's partner programs were an essential part of the university's global vision.

The colleges provide prospective university students with an alternative

pathway to Monash degree studies. They can pursue a two-part diploma in a supportive environment, with part two being equivalent to first-year university studies. Successful completion of the diploma gives students guaranteed entry to the second year of selected

Monash degrees.

Monash College entry requirements fall just below university entry standards, and places are open to Australian and international students on a full-fee-paying basis.

The Monash faculties of Art and Design, Business and Economics, Engineering and Information Technology are closely involved in planning and organising courses and provide the curriculum and assessment materials.

- Richard Ewart

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Training for all eventualities



Monash University paramedic students treat a patient after an 'explosion' at the Bosch plant in Clayton. The mock emergency was one of four major exercises students take part in during their course.

The students are undertaking courses in the Centre for Ambulance and Paramedic Studies based in the Faculty of Medicine, Nursing and Health Sciences. Lecturer at the centre Ms Leanne Sheen said this type of training was "vital for paramedics, who had to be prepared to deal with multi-casualty disasters".

The Centre for Ambulance and Paramedic Studies provides academic programs primarily for the Metropolitan Ambulance Service and Rural Ambulance Victoria, leading to a Diploma of Ambulance Paramedic Studies, an Advanced Diploma of MICA Paramedic Studies or a Bachelor of Paramedic Studies (Degree Conversion).

Photo: Peter Anikijenko

Student Accommodation Av

Bayview Conference Centre

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Bayview facilities include:

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Vice-chancellor's debate tackles security

The ninth annual Vice-Chancellor's and Social Inquiry, said: "We have been has forfeited its freedom for security'.

The topic was chosen in the light of current discussions in the federal parliament over proposed amendments to Australia's amiterrorism legislation.

The key issue to emerge during the debate, chaired by Monash vice-chancellor Professor Peter Darvall, was how best to balance our rights and civil liberties with security measures in order to preserve our way of life.

Those arguing for the affirmative contended that Australia's involvement in the latest Gulf war put greater freedoms at risk through the pursuit of national security.

Dr David Wright-Neville, from Monash's School of Political Inquiry

Debate, organised by the Monash deliberately misled into believing that University Association of Debaters, the threat is much more significant and

Mr Chris Maxwell, QC, immediate past president of Liberty Victoria, who told the audience that much of the quest for security since 2001 had been "a case of severe acute overreaction syndrorne", supported his view.

There was also a claim that rights such as freedom of association were likely to be compromised under the proposed anti-terrorism bill.

But speaking for the negative, Victoria's Chief Magistrate Mr lan Gray said: "The legislation contains checks and balances, all are necessary, all are reasonable, and they serve to protect tights, liberties and freedoms within a framework of measures focused on protection."

- Jasmine Moseley

IN BRIEF -

New engineering course at Gippsland

A new undergraduate engineering course to be introduced at Monash University's Gippsland campus next year will address key regional issues. The Bachelor of Civil and

Environmental Engineering degree will be located within the School of Applied Sciences.

School head Professor Sam Adeloju said the course would not only cover the "nuts and bolts" of civil engineering, it would also focus on topics relevant to the local community such as water resource management, waste management and air quality.

"Engagement with industry and the local community is crucial to the success of the program, which has the potential to attract local students as well as students from elsewhere in Victoria, from other states and from overseas," he added.

\$250,000 research grant

Monash University researchers have received a \$250,000 grant from the Federal Government to aid their development of an anti-inflammatory drug with the potential to help millions of people.

Associate Professor Eric Morand, from the Department of Medicine at the Southern Clinical School at the Monash Medical Centre, and Dr Magdy Iskander, from Monash's Department of Medicinal Chemistry in the Victorian College of Pharmacy, have established a company to commercialise their research.

Dr Morand said the new drug, which will be developed through Cortical Pty Ltd, could benefit the many people around the world who suffer from rheumatoid arthritis and other inflammatory diseases.

Teaching excellence rewarded

The director of Monash's Australian Centre for the Study of Jewish Civilisation, Professor Andrew Markus, has received the Faculty of Arts 2002 Excellence in Research Supervision Award.

The award, presented by deputy chancellor Mr Paul Ramler at a recent graduation ceremony, recognised the success Professor Markus has achieved since 1998 in guiding six PhD candidates and four masters students to successful completion of their studies.

The Australian Centre for the Study of Jewish Civilisation was established in 1992 within the School of Historical Studies. Professor Markus was appointed the first full-time director of the centre in 2001.

European research opportunities

Monash researchers can now take advantage of significant funding opportunities available for collaborative projects in the UK and Europe.

One of the major funding sources is the South Framework for Research and Technological Development (FP6), launched last November.

FP6 is the European Union's main instrument for funding research in Europe up to 2006, with an overall budget of 17.5 billion euros.

Australian researchers are able: to access this funding; in partnership with European companies and research institutions.

Students working harder to pay for studies

EDUCATION

University students are working three times as many hours to pay off their studies as they were in 1984, a survey by the Monash Centre for the Economics of Education and Training (CEET) has found.

The study, 'Paying their way: results from a survey of Australian undergraduate student finances', was sponsored by the Australian Vice-Chancellors Committee and aimed

to provide a snapshot of the financial position of undergraduate students studying at Australian universities.

More than 34,000 students from 19 universities across Australia took part in the survey in 2000. The first such survey since 1984, it asked students about their income and expenditure, paid work, payment of fees and receipt

of government income support.

Researchers Mr Michael Long, from CEET in the Faculty of Education at Monash, and Professor Martin Hayden,

from Southern Cross University, found that 72 per cent of full-time students worked during semester - an increase of about one-half since 1984. At least 3 per cent of full-time students worked in full-time employment.

Mr Long said full-time students worked an average of 14.5 hours a week, a three-fold increase since 1984, and that one in 10 students took out a loan to continue studying. The average loan amount was \$4000.

One in 10 students frequently

missed classes because of their work, and two in every 10 students reported that their study was adversely affected by work "a great deal"

The researchers also found that one in 10 students missed classes sometimes or frequently because they could not afford to travel to university. "One in every 10 students translates to a national estimate of about 48,000 university students missing classes," Mr Long said. "This study shows that being a university student in Australia

is tough financially speaking.
"Overall the survey provides strong evidence supporting concerns that the financial circumstances of undergraduate students are having a substantial impact on their studies, so much so that they are not always gaining optimum value from their enrolment."

- Diane Squires

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Designing drugs to beat diabetes

PHARMACOLOGY

A drug that could prevent or delay the complications experienced by Type I and Type II diabetes sufferers is being tested for its effectiveness by Monash University researcher Dr Ossama El-Kabbani.

His research group has been examining how well the drug binds to an enzyme called aldose reductase, which converts glucose into a sugar alcohol called sorbitol. In people with diabetes, the breakdown of glucose by aldose reductase leads to high sorbitol levels.

"Sorbitol is thought to damage cells and, after about 15 years, can lead to diabetic complications such as retinopathy (eye disease), nephropathy (kidney disease) and neuropathy (nerve disease)," said Dr El-Kabbani, a senior lecturer in the Department of Medicinal Chemistry.

To prevent glucose being converted

into sorbitol, the reductase enzyme must be prevented from binding to glucose. There are no aldose reductase inhibitors on the market in Australia or the US but there is one - called fidarestat - in phase three clinical trials in Japan.

Dr El-Kabbani, in collaboration with Professor Alberto Podjarny of the French National Scientific Research Centre, has been using synchrotrons in the US, France and Switzerland to test how effectively fidarestat, a drug developed by the Sanwa Kagaku Kenkyusyo Company in Japan, binds to aldose reductase. Construction of Australia's first synchrotron is to begin at Monash University later this year.

"By using synchrotron light, we can gain an understanding of how the drug works," Dr El-Kabbani said. "If we know how it works and how it is binding to its target, we can modify the drug and make it more specific."

Dr El-Kabbani's research team is

one of only a few groups worldwide to have used synchrotron light to view protein structures down to the level of individual hydrogen atoms. "By using this method, we can actually see some of the chemical reactions that are taking place as the drug binds," he said.

Dr El-Kabbani will present the results of his synchrotron research in July in the US, where he will give a keynote address at the American

Crystallographic Association meeting. His research has been funded by Diabetes Australia, the Australian Kidney Foundation, the Australian Research Council and the National Health and Medical Research Council.

- Penny Fannin

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> hope for diabetes sufferers:

> > El-Kabbani. Photo: Anikijenko

Researcher

Dr Ossama



Unfolding the serpin mystery

BIOCHEMISTRY

The discovery by Monash University researchers of a group of proteins in bacteria called 'serpins' has exposed a new mechanism for preventing a range of human diseases.

Using X-ray crystallography and synchrotron radiation at the Advanced Photon Source in Chicago, a team led by Dr James Whisstock, a research fellow at Monash and director of the Victorian Bioinformatics Consortium (VBC), has solved the structure of a bacterial serpin.

The protein structure was published in the international journal Structure in April and was the first to be solved by the VBC in collaboration with the Protein Crystallography Unit at Monash.

When human serpins are exposed prevent aggregation of bacterial serpins, to high temperatures, their normal folding process is disrupted, and they can also form inactive clumps. But the bacterial serpin identified by the team of Dr Whisstock, Dr James Irving, Ms Lisa Cabrita, Dr Jamie Rossjohn, Dr Robert Pike and Dr Steve Bottomley, all from the Department of Biochemistry and Molecular Biology, is not affected by heat in this way.

The serpins, found in a bacterium called Thermobifida fusca that lives at high temperatures of around 55 degrees Celsius, are able to withstand the misfolding and aggregation that occurs in human serpins," Dr Whisstock said.

"Now we want to know how they have managed to do that. If we can see how nature has developed a strategy to perhaps we can transfer that information across to the human system and use it to devise treatments for disease."

When serpins in humans mutate, they misfold and aggregate, setting off a process that leads to the development of disease. For example, the human serpin a antitrypsin is involved in the development of emphysema and liver cirrhosis. Mutations in this serpin affect one in 2000 Europeans.

Certain dementias and thrombosis are also linked to serpin misfolding, which is inherited.

- Penny Fannin

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Birdwatching: Ms Martine Maron and the Buloke woodlands, below, that are the habitat for the disappearing Red-tailed Black Cockatoo.

Trees the key to saving woodland birds

BIOLOGICAL SCIENCE

Endangered Red-tailed Black Cockatoos could disappear from western Victoria, unless steps are taken to preserve the Buloke woodlands where they feed in summer, according to Monash University researchers.

There are estimated to be fewer than 1000 south-eastern Red-tailed Black Cockatoos remaining in Australia, and land clearance has reduced the woodlands of Buloke trees by 98 per cent.

PhD researcher Ms Martine Maron and Associate Professor Alan Lill from the School of Biological Sciences have been studying the foraging ecology of Red-tailed Black Cockatoos.

'The major factor limiting the size of their population is lack of food," Ms Maron said. "These birds are very picky eaters - they feed only on the seeds of two types of stringybark and, in the summer months, the seeds of Bulokes."

Ms Maron's research has revealed that the cockatoos prefer to feed in Buloke trees that produce larger seeds, as well as more seeds per cone.

"We thought we might be able to identify the trees that were the most important to protect for the cockatoo, but it's not that simple because each year different trees seem to produce the best quality food," she said.

"This makes the conservation issue even more difficult, because we have to try to preserve everything that's left. Much of the Buloke woodland that remains consists of scattered trees on private land, which poses a particular problem in trying to preserve it."

The research was financially supported by Birds Australia's Victorian branch, the Holsworth Wildlife Research Fund and the Stuart Leslie Bird Research Award.



In light of recent studies that show an alarming decline in woodland bird populations across southern Australia, Ms Maron is now studying other birds that live in the Buloke woodlands to find out how important the habitat is to them.

'Fourteen bird species thought to be in decline in southern Australia still occur in small patches of Buloke down to 2.5 hectares in size," Ms Maron said. "These patches are pretty degraded - sometimes with no understorey at all - yet species such as Brown Treecreepers and Hooded Robins are common.

"It appears that in Victorian Buloke woodlands, these birds don't rely on corridors for dispersal - nor do they seem to require large areas of intact vegetation to survive.

One reason why so many smaller bird species persist in these remnant woodlands may be the absence of the Noisy Miner – an aggressive native honeyeater known to exclude smaller

birds from other woodland remnants.
"These small patches of Buloke
are obviously highly important to the
conservation of these woodland birds. To ignore them and not protect them would have a great impact."

- Penny Fannin

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Disappearing: The Red-tailed Black Cockatoos.

New Monash research focuses on ecotouri

MANAGEMENT

A thesis on tour guiding in Australia's ecotourism industry has earned Rosemary Black the distinction of being the first PhD student to graduate from Monash University's

Berwick campus.
Dr Black's thesis, 'Towards a model for tour guide certification: an analysis of the Australian Ecoguide Program', proposes a general model for tour guide certification in the industry, with the aim of improving the overall quality of the ecotourism experience.

"The natural beauty of Australia attracts many thousands of visitors each year, but the quality of their experience relies heavily on the calibre of their ecotour guide," she said. "With no certification system, the experience

Dr Black's work directly contributed to the development of a National Nature and Ecotour Guide Certification Program. Her PhD research, undertaken in the Department of Management in the Faculty of Business and Economics, improved the certification program as it evolved and

provided valuable feedback to the program manager for its use in longterm strategies.

Dr Black also

tracked ecotourism guides through the certification process and responded to their feedback. working on issues guide certification.



while Black.

such as how to achieve best practice in

"The remote location of some of Australia's ecotourism attractions makes reaching some guides a huge challenge. The certification program will allow guides to present their work on video, attend a regional guide school or have a qualified assessor visit their workplace," she said.

"Ecotourism can be an amorphous term, because anyone can label a service 'ecotourism'. Certification will improve the industry by recognising and rewarding qualified guides. It will also benefit the environment by minimising the impact of visitors and provide tourists with a more meaningful experience through interpretation and education."

Dr Black developed an interest in ecotourism training after she spent seven years as a tour guide conducting treks through the Himalayas, cross-country skiing trips in Kosciusko National Park and cycling holidays in Tasmania.

- Robyn Anns

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Depression gets a lift

A total of seven Monash research projects examining different aspects of depression will benefit from grants totalling more than \$900,000 awarded by the Victorian Centre of Excellence in

The centre is a collaborative project between Victoria's Department of Human Services and beyondblue, the national depression initiative.

The major beneficiaries were the study to evaluate psychological treatments for teenagers with depression, headed by Professor Bruce Tonge (\$369,628), and the use of internet-based treatment for panic disorder in general medical practice, headed by Professor Jeff Richards (\$264,000).

Other grants involving Monash University academics and researchers are: ■ 'An interdisciplinary approach to recognising and treating depression among older Australians in residential care' - \$75,000;

■ 'Finding out what experienced GPs mean by "depression": towards a meaningful taxonomy of depression in primary care' - \$50,000;

Depression in farmers and farming families' - \$50,000;

"National study into the management of depression in general practice: extension and follow-up' - \$48,983;

"Diagnosis and treatment of depression in adults with intellectual disability through GP and psychiatric collaboration' - \$43,380.

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Depression research grant recipients, from left, Professor Merilyn Liddell and Professor Jeff Richards (Monash Department of General Practice); Dr Jennifer Torr (Centre for **Developmental Disability** Health Victoria); Dr Michael Gordon (Frankston Child and Adolescent Mental Health); and Associate Professor David Clarke (Monash Department of Psychological Medicine) meet with beyondblue chairman Mr Jeff

The best way to treat teenage depression

PSYCHOLOGY

Depressed teenagers respond faster to cognitive behavioural therapy than to anti-depressant medication, according to a groundbreaking Monash University study.

The results of the study - 'Time for a future: effective treatment of depressed youth in urban and rural primary care settings' - surprised the researchers, who were expecting a combined treatment of cognitive behavioural therapy and antidepressant medication to be superior.

The community-based adolescent depression treatment program studied 73 teenagers aged between 12 and 18. They were divided into three groups. One group received cognitive behaviour therapy during the course of the study, another was given a modern antidepressant medication, and the third a combination of the two treatments.

The program involved three clinics, covering the Melbourne regions of Frankston and Dandenong and the city and rural areas of Geelong.

The cognitive behaviour therapy took the form of a 12-session program for the adolescents and their parents or carers. The teenagers were taught helpful ways of thinking and reacting to situations, relaxation techniques and social skills. They were also encouraged to become involved in more activities.

The second group was treated with a well-tolerated antidepressant drug for between three and six months. The program also involved working with GPs to encourage longer-than-usual consultations to assess the drug's impact.

The third group received the anti-depressant medication and underwent cognitive behaviour therapy.

"We expected the combined treatment would

be superior, but we found the cognitive behavioural therapy alone led to a more rapid treatment response," said project coordinator and psychologist Mr Glenn Melvin, from Monash's Centre for Developmental Psychiatry and Psychology.

"After three months, there was a more rapid improvement in depression in the cognitive behavioural therapy group. However, after six months, all three methods were found to be equally effective.'

The study is set to continue for another three years with the aid of a \$369,628 grant from the Victorian Centre of Excellence in Depression. Researchers will be able to gather a larger sample size and investigate how to best manage the 20 to 30 per cent of teenagers who don't respond to any form of treatment.

- Allison Harding

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SCHOOLS

Explore Monash

The next school holiday campus visit program for regional and interstate students will be held on 4 July at Monash's Clayton campus.

The program provides an excellent opportunity for prospective students and their families to visit the campus during the holiday break. Sessions provide a brief introduction to Monash as well as information on courses, fees, scholarships and accommodation options.

Students will also have the opportunity to speak with faculty representatives and take a tour of the campus with current students. Participants may choose to visit another Monash campus in the afternoon.

For more information and to book online, visit www.monash.edu.au/pso/ events/explore.html.

Chemical Engineering Experience

This annual program offers Year 10 to 12 students interested in careers in science, chemistry or engineering the chance to learn about chemical engineering.

The two-day holiday program includes hands-on activities, laboratory time, an industrial site visit and an opportunity to

interact with practising chemical engineers.

Due to overwhelming demand for this year's program, to be held on 1 and 2 July, a second program is now being offered on Tuesday 8 and Wednesday 9 July. Places are strictly limited, so book early to avoid disappointment.

The program will run from 9 am to 4 pm in the Department of Chemical Engineering at Clayton campus. Morning tea and lunch will be provided each day. There is a registration fee for participants.

For further information and bookings, contact Ms Claire Hartnett on +61 3 9905 1872 or email claire.hartnett@eng.monash.edu.au.

New Monash courses 2004 applications through VTAC

Bachelor of Information Technology, Gippsland

Students can choose from three majors,

■ system development – analysis of computer-based information systems and applications;

■ internet technology – the use and development of internet technologies for industry, business and government;

■ business systems — solving complex problems in business with computers and

For information, contact +61 3 9902 6835 or email gsci@inforech.monash.edu.au.

Bachelor of Multimedia Systems, Berwick The course focuses on multimedia/digital and interactive technologies with four optional majors:

■ap plications - the application of these

technologies; ■ programming – systems dévelopment via

programming; ■ enterptise - electronic commerce and busin ess computing;

■ games development – game creation and coding principles.

For information, conaca + 61 3 9904 7070, enail multimedia@infotech.monash.edu.au or visittwww.multimedia.monash.edu.au.



A challenge to the supermarket giants



The challenge grows: The opening of a new Aldi supermarket in Melbourne's Heidelberg West on 15 May. **Photo: Newspix**

s an international chain of cheap supermarkets, Aldi is already very successful in Europe and the United States. The stores are now in Australia.

Aldi opened supermarkets in West Heidelberg and Chirnside Park last month. They signal the beginning of a push into Victoria by the international company that already operates hundreds of stores worldwide, including 37 in New South Wales and one in Canberra. Stores

are also planned for Queensland.

The presence of the two new Melbourne outlets will allow shoppers to compare the way they currently shop with the Aldi experience. Will they decide they like the no-frills approach, and therefore switch their buying loyalty from Coles and Safeway? Aldi promises to provide real competition for the Coles and Safeway duopoly that currently dominates with 80 per cent of the national market share. The shake-up will make consumers the real winners. Judging by experience, wherever Aldi operates, customers will switch to and a significant percentage will stay with – Aldi.
 First, what is Aldi, and how is it different from

other supermarkets?

Aldi is a private, family-owned business with a network of more than 5000 stores in Europe, the UK, the United States and Australia. It opened its first store in 1948 in the German town of Essen. The company grew strongly and, during the 1960s, the self-service concept was developed and adapted to fit its no-frills philosophy.

Today, the company operates as two separate groups – Aldi North, which covers the northern region of Germany, Belgium, Denmark, France, Luxembourg and the Netherlands, and Aldi South, which operates in southern Germany, Austria, the UK, Ireland, the United States and Australia. opened in New South Wales. Aldi Australia has its headquarters in the Sydney suburb of Baulkham Hills, from where it is rolling out a nationwide expansion program.

Aldi is different because it looks different, and acts differently, from other supermarkets. An Aldi supermarket looks more like a warehouse, with pallets in rows instead of aisles of shelves stocked with thousands of brightly packaged goods arranged to attract the consumer. This format is matched throughout all of its stores around the globe.

The company's stated policy is to offer customers good-quality products at the lowest possible prices. This is achieved by focusing strictly on the essentials - Aldi supermarkets usually stock just 600 items compared with about 2000 items generally carried by other supermarkets. Although they are cheap, the goods on sale are always first

The international supermarket chain Aldi is now in Australia and grocery shopping in this country may never be the same again, according to the new director of the Australian Centre for Retail Studies at Monash University, Ms Amanda Young.

quality. Aldi contracts leading manufacturers to produce products that are then labelled generically for sale. Significantly, local manufacturers make about 80 per cent of the goods manufactured for Aldi. Consistency is important to the chain. Every store in a state or country has exactly the same prices, no matter what suburb they are in. Aldi stores use very small numbers of staff, and those people are multi-skilled. The store manager may also move stock and work on the check-out. The stores have unlisted phone numbers so staff are not distracted from serving. Plastic shopping bags are not free, and customers are encouraged

to use available cardboard boxes or their own

shopping bags. They pack their own purchases.

Aldi offices also have unlisted phone numbers, and their executives do not speak to the media. The company uses very little advertising and mainly spreads its message through word-of-mouth, using the novelty of Aldi to promote itself. However, the opening in Melbourne recently signalled a change in its communications policy for Australia. For its Victorian launch, Aldi employed an advertising agency and promoted the opening of the West Heidelberg store through radio and print advertising. It hosted a grand opening gala for the store, complete with entertainment, including a media in tow

The West Heidelberg store, like other Aldi supermarkets, attracted customers like bees to honey with its deep discounts called 'surprise





buys'. These are items that are changed each week and are only available while stocks last. Advertised and promoted in-store, 'surprise buys' may include hardware, electrical items, clothing, sports equipment, manchester and toys. For the opening of the two Melbourne stores, television sets were offered at \$199 each. Thirty-five were sold within the first half-hour.

Although Aldi offers low prices, is this enough to make it a real competitor? After the novelty wears off, isn't it likely that its minimalist approach and slender range will turn shoppers off? History suggests this will not be the case.

Aldi works because it understands that shoppers

have varying perceptions of value.

Some shoppers are very loyal to brand and are swayed by image and advertising. These people usually have a high disposable income and they buy the products they want, no matter what the price.

There is a second group of consumers who seek value for money alone. For these people, price is primary. They don't have much, if any, brand loyalty and they don't care about image. Aldi appeals to this group.

But there is a third group -- a middle ground of shoppers who could be described as the 'swinging voters' of retailing.

Professor Stev Worthington, from the Department of Marketing within Monash's Faculty of Business and Economics, describes these customers as the 'schizophrenic consumer'.

They are comparative shoppers who are interested in how products compare in quality and price. They like to save money, but not if quality is sacrificed. These shoppers stick to regular, more expensive brands for some items, but they may also buy cheaper, plain label brands for many commodity items on their shopping list.

They are somewhat influenced by advertising and image where they may require a brand name to have social acceptance, but do not worry about brand names for their basic food items. This group could use Aldi for basic weekly shopping of staples and regular items such as bread, milk, eggs and canned goods.

Observations of Aldi's UK operations, for instance, indicare that it has the biggest effect

on competitors' house brands. By selling generic house brands, Aldi takes the fight right up to its competitors in this area. To compete successfully with Aldi, supermarket chains have to introduce new budget house brands.

Of course, this strategy hurts their profit margins, since Australian chains have traditionally enjoyed very solid margins on house brands.

In just two years, Aldi has built 37 stores in New South Wales – 19 in Sydney and 18 in country areas. Queensland stores will be opening later this year. Aldi has already captured 2.6 per cent of the New South Wales supermarket share in just 18 months, indicating that in the supermarket sector, it is a true competitor.

Everywhere an Aldi store has opened, Coles and

Safeway have slashed prices. The two market leaders are also looking into opportunities such as petrol and pharmacy as a way to add value to their retail offer.

"Aldi promises to provide real competition for the Coles and Safeway duopoly . . . The shake-up will make consumers the real winners."

More Aldi stores are planned for Melbourne in Sunbury, Melton and possibly Ferntree Gully or Preston. Other stores may open in Beaconsfield, Abbotsford and Brandon Park.

Aldi absolutely guarantees it will never exit a country it has entered. This means that, as its supermarkets spring up around the country, Australian shoppers will have consistent access to good-quality groceries at cheap prices. Our other grocery retailers need to remember that.

Ms Amanda Young has more than two decades of retail experience. Her career has included 17 years with Myer - now Coles Myer - where she started on the shop floor. She studied for her masters in management at Monash's Caulfield campus. The ACRS is part of the Department of Marketing, within the Faculty of Business and Economics.

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Word in the ear could reap rich rewards

A chance remark from world-famous inventor James Dyson could lead to great things for a Monash art and design graduate.

Mr Nick Tozer's 'fold-away café' took out the gold award that bears the Dyson name at the recent Australian Design Awards ceremony in Melbourne.

When I went up to collect my award, Mr Dyson mentioned he could put me in touch with a company that would be interested in developing my idea," said Mr Tozer, who graduated in industrial design last November.

There's been a lot of interest in my work since the awards ceremony. Several firms have expressed interest in the fold-away café, and others have offered me the chance to design new furniture.

His award-winning design addresses the problem of café owners and staff having to move heavy furniture outside at opening time each day and back inside at closing time. "I worked as a waiter while studying for my degree and realised there was a need for lighter, more portable furniture. Eventually I came up with the idea of the fold-away system," Mr Tozer said.

The table and umbrella can be packed away into a steel bollard, while the lightweight chairs are

easily stacked. The chairs are made of weatherproof polyurethane, which provides cushioning and means that not only are they easily portable, they are also very comfortable.

Industrial design course coordinator Mr Selby Coxon said Mr Tozer had come up with an accessible and practical design from an engineering viewpoint. "It would have appealed to Mr Dyson because he is very keen on finding answers to specific problems. He's not a fan of superficial styling.

Monash industrial design students have won the Dyson Award three years running since its inception in 2001. Honours student Mr Dimitrious Scoutas won the inaugural award with 'Skipee', a threewheeled, eco-friendly motorcycle. Last year, Mr Paul Manczak took out the gold award with 'Goldie', a lightweight surf rescue craft.

"All our students are encouraged to enter the competition and we have no intention of letting anyone else win this prestigious award in future years," Mr Coxon said. "It's part of the Art and Design faculty's philosophy to encourage our students to enter contests both in Australia and overseas."



Mr Tozer estimates that if mass-produced, each café setting would cost around \$700. The \$7000 cash prize that goes with the Dyson Award will allow him to further develop his design and deal with related intellectual property issues.

- Richard Ewart

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Depth of field

In the late 1950s, with the explosion of mass media and popular culture, artists began creating work that blurred the distinctions between traditional media.

The traditional labels of 'painter', 'sculptor' and 'photographer' for artists were called into question as they moved between several media or combined media into hybrid forms.

The immediacy of photography was recognised as having enormous physical and conceptual capacities that could touch on and expand the potential of the other media, in particular the medium

of painting.

The Depth of Field exhibition, on show at Monash University Museum of Art until 19 July, explores the integration and expansion of the photographic medium into







Cinematic language: 'Flight 2002', 'Lost 2002', Limbo 2002, 'Myriad 2002'. Four works by Tony Lloyd on view at Monash University Museum of Art.

contemporary art, as well as the interest shown in early photographic methods by Australian impressionist

It brings together a series of paintings both emerging contemporary and established traditional artists to investigate the nature of the human experience, using landscape painting as a metaphor.

Each artist approaches the influence of photography on landscape painting from a unique perspective. Artists including Kirrily Hammond and Andrew Browne paint directly from specific photographed locations, while

others like Chris Langlois, Helen Kennedy and Phillip Wolfhagen employ the technique of soft focus to examine the spatial dynamics of

The power of cinematic language is also strongly expressed in the works of Tony Lloyd, who uses the widescreen format in a series of monochromatic, nocturnal images, and Kate Stevens, who uses manipulated, related shots from the same viewpoint to conjure moments in time.

- Nicola Vance

SHOW NOTES What: Depth of Field When: Until 19 July Where: Monash University Museum of Art, building 55, Clayton campus Who: For information, contact Ms Samantha Vawdrey on +61 3 9905 1644 or email samantha.

vawdrey@admi.mon/ash.edu.au he aberrance of genetics on show



A festival of photographic and sculptural work by Melbourne digital artist Patricia Piccinini is currently being celebrated in Italy with exhibitions in two major centres.

Piccinini's recent photographic work from 1995 to 2002, entitled Love Me Love My Lump, is on display at the Monash Centre in Prato until 25 July and provides a composite picture of the artist's ceuvre.

Seventeen digitally manipulated photographs represent a major aspect of her practice and are intimately connected to her obsession with genetic engineering. For example, 'Protein Lattice' shows a close-up of an attractive model holding a ratt growing an enlarged human ear on its back. The image refers to the first example

of successful tissue engineering.

Informed by current scientific research projects, the works show an imaginative and open approach to the issues raised that is insightful and

Patricia Piccinini was also selected as Australia's representative at this year's 50th Vertice Biennale with her computer-generated 'designer family' sculptures currently adorning the domestic interior of the Australian

- Nicola Vance

What: Love Me Love My Lump When: 24 May to 25 .July 2003

Where: Monash Centre in Prato. Palazzo Vaj, via Pugliesi 26, Prato, Italy, and Dryphoto Arte Contemporanea, via Pugliesi 23, Prato, Italy

Who: For more information, contact Monash University Museum of Art, Clayton campus, telephone +61 3 9905 1644, or Professor Bill Kent, director, Monash Centre in Prato, email bill.kent@arts.monash.edu.au

IN BRIEF

Winning design



mobilise: futurise: manufacture

Dimitri Kalagas, a second-year student in the Faculty of Art and Design at Monash, has won a competition organised by the Victorian Government's Department of Innovation, Industry and Regional Development.

He was one of 60 visual communication students who responded to the challenge of designing a logo



encourage Year 9 to 12 students to take up a career in manufacturing.

"The brief was complex in its aims and requirements, but the students rose to the challenge, producing quirky, innovative and considered design solutions," said course coordinator Ms Sarah Jones.

Sponsorship

IKEA has agreed to sponsor Monash's Bachelor of Industrial Design furniture show, Flat Pack With A Twist.

As many as 15 third-year students who took an elective subject in furniture design will have their work on display.

Course coordinator Mr Selby Coxon said: "The special nature of the industrial design program has been to look at industrial processes in furniture design, rather than craft techniques.

The show opens on 17 June and runs until 27 June in the main concourse of the Art and Design Faculty building on the Caulfield campus.

It's all in the process

The Monash University Museum of Art presents In the Making, an exhibition of works by four emerging artists that explores their production methods as a continuous personal journey.

Curated by Liza Vasiliou, the exhibition has been reconfigured from an earlier show at the First Floor gallery in Fitzroy and comprises works by Bianca Hester, Sunshine Bertrand, Matt Hinkley and Nick Mangan.

It is on display at the Switchback Gallery, Faculty of Art and Design, Gippsland campus, from 16 June until 11 July. Artists' floor talks will be held on Monday 16 June.

For further inquiries, contact +61 3 5122 6261.

Humart zoo on show

Andrew Sibley, artist and former lecturer in Monash's Faculty of Art and Design at Caulfield campus, has a solo exhibition, Beautiful Human Zoo, at the Faculty Gallery, which runs until 4 July.

Mr Sibley's figurative art practice has spanned three decades and is represented by works that explore the human condition using unorthodox techniques and methods of experimentation in a range of media including layered perspex and bas-relief.

For further information, contact

+61 3 9903 2707.

Recreating beauty in the ancient beast

A dinosaur discovered late last century in the Transantarctic Mountains in Antarctica was recently reconstructed at Monash University by a team of specialist technicians.

Now *Cryolophosaurus*, or 'frozencrested reptile', will have a starring role in *Dinosaurs of Darkness* — a major exhibition being held in Japan from July to September 2003, to which the Monash Science Centre at Clayton is contributing more than 75 specimens, including some other complete dinosaurs.

Cryolophosaurus was a carnivorous dinosaur that lived in the early Jurassic period, about 196 to 190 million years ago. Its skull was about 65cm long, and its body about seven to eight metres in length.

The meticulous reconstruction of *Cryolophosaurus* took six weeks and was completed late last month in Monash's School of Geosciences' workshop on Clayton campus.

The team was headed by Mr Raul Vacca from the Museo Palenotologico Egidio Feruglio in Argentina, regarded as one of world's best construction technicians. Other members were Mr Dave Pickering, a fossil preparatory and reconstruction technician working with Monash's Professor Pat Vickers-Rich and Dr Tom Rich (an honorary research associate of the School of Geosciences and curator at Museum Victoria), and Geosciences' workshop manager Mr Chris Pierson.

The reconstruction process began with a detailed drawing of *Cryolophosaurus* by artist Peter Trusler. The casts made of urethane, a two-part plastic resin, were produced in Canada.

"The challenge for the team was to assemble, shape and articulate more than 100 pieces to recreate a life-like and life-size construction within a tight time-frame," Mr Pierson said. "Although the process normally takes at least eight weeks with a four-person team, the project was completed in six weeks with a team of three."

Beginning with the sacrum (hip area), which was mounted on a frame at about the right height, the team then added the tail section, ribs, arms, neck and head. The arms were attached once the ribs were assembled. The leg assemblies were the last to be constructed.

Mr Pierson, a fitter-and-turner by trade and with a background in engineering, had the task of constructing the inner framework to support the



Working with dinosaurs. From left Mr Raul Vacca, Museo Paleontologico Egidio Feruglio, Argentina; Mr Dave Pickering, Museum Victoria; Professor James Cull, head, School of Geosciences; and (back) Mr Chris Pierson, workshop manager, School of Geosciences.

Photo: Peter Anikijenk

bones and making sure the tools and machinery were used correctly.

"My prime concern was to construct a steel framework for the bones to enable it to be freestanding without any external support. The idea is that the observer sees only the skeleton and not the inner framework. This requires consideration of material thickness, type and structure, so the dinosaur doesn't collapse when finished," Mr Pierson said.

"The material used for the construction was shaped through heating, cutting, welding, bending, bracing, grinding, turning and milling on the specialist pieces of equipment housed in the workshop. Glues such as araldite and plastibond, as well as fibreglass resin and urethene foam, were also relied upon."

Mr Pickering had the task of carefully sculpting and fitting the hand-and-feet sections so they would articulate smoothly and correspond with the artist's original drawing. This time-intensive process was not unlike Mr Pickering's role at Monash University and Museum Victoria, where he works as a preparator, carefully extracting fossils out of rocks found at the Flat Rocks site at Inverloch, Victoria (a Monash project supported by an Australian Research Council grant).

Monash Science Centre director Professor Vickers-Rich, who oversaw the reconstruction project, was delighted with the result.

"The project is an excellent example of the extent of international cooperation between Monash and other major institutions around the world and highlights the diverse skills of people working at this university," Professor Vickers-Rich said.

The final stage involved painting the completed skeleton and turning it into a museum showpiece. The task was entrusted to Year 10 student Reuben Trusler, a veteran of several reconstruction projects for the Monash Science Centre, including a giant lizard featured in the Wildlife of Gondwana exhibition now on show at the centre

To create the desired effect, Mr Trusler used enamel sprays in colours of orange, mission brown, black and claytone. After drying, the 'antiquing' effect was achieved by applying a wash of claytoned paint and removing the excess with a rag. The bones were finally presented in a matt finish to give the dinosaur an old, weathered look.

Within five days, the dinosaur was transformed from an ordinary looking grey structure to a skeleton of colour and even beauty, ready to be dismantled in sections and shipped to Japan.

"There is a tremendous sense of achievement in completing the project," Mr Pierson said. "It is something that will be there forever and will go on being displayed and viewed around the world."

- Karen Stichtenoth

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Women Philosophers of the Seventeenth Century

By Jacqueline Broad Published by Cambridge University Press RRP: \$99

In this book on early modern women's thought,
Dr Jacqueline Broad explores the complexity of
women's responses to Cartesian philosophy and its intellectual legacy in

England and Europe.

She examines the work of Mary Astell, Elisabeth of Bohemia, Margaret Cavendish, Anne Conway and Damaris Masham, who were all active in the intellectual life of their time and were respected colleagues of philosophers such as Descartes, Leibniz and Locke. The book will appeal to students and scholars in the history of philosophy, women's studies and the history of ideas.

Dr Broad is a research associate in the School of Philosophy and Bioethics at Monash University.



Economic Development and Division of Labor

By Xiaokal Yang Published by Blackwell Publishing RRP: \$88

This book introduces development economics through the lens of infra-marginal and marginal analysis and shows how this way of thinking has influenced a shift back to classical economic theory

within the field of economic development.

Author Professor Xiaokai Yang provides a thorough analysis of trade and macroeconomics. He focuses on institutional and transaction cost issues of critical interest to development economists.

Professor Yang holds a personal chair in the Department of Economics at Monash University and is a fellow of the Academy of Social Sciences in Australia.



The Cult of Health and Beauty in Germany:

A Social History

By Michael Hau Published by University of Chicago Press RRP: \$48

From the 1890s to the 1930s, a growing number of Germans began scrutinising and disciplining their

bodies in a utopian search for perfect health and beauty.

In this book, Dr Michael Hau demonstrates why so many men and women were drawn to reforming their lives for physical perfection and

examines the impact of such reforms on German society and medicine.

He argues that the obsession with personal health and fitness was often rooted in anxieties over professional and economic success, as well as fears that modern industrialised civilisation was causing Germany and its people to deconomic.

Dr Hau is a lecturer in the School of Historical Studies at Monash University.

POSTSCript

Scholars and Entrepreneurs, edited by Simon Cooper, John Hinkson and Geoff Sharp, looks at the transformation of universities through a series of essays by leading writers in the field, including Professor Simon Marginson from Monash. It examines universities and the nature of the society in which they are embedded. It also looks at the basic debates and provides a critical assessment of contemporary developments. The book, published by Arena (RRP \$27.50), will be of interest to those concerned about social change.

If you are a member of the Monash community and have a forthcoming book, contact monashnews@adm.monash.edu.au.

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From drawings to museum showpiece: The completed reconstruction of Cryolophosaurus.

Transporter may aid disabled Privatisation:

ENGINEERING

The Monash Rehabilitation Technology Research Unit (REHAB Tech) is planning to commence full-scale trials with a battery-driven, two-wheeled 'human transporter' which they believe could revolutionise the lives of many people with disabilities.

The device, developed in the US and known as 'the Segway', is self-balancing and has no accelerator or brakes. If the standing rider leans forward or back, it moves forward or back; if the rider stands up straight,

To maintain balance, the device uses solid-state gyroscopes, tilt sensors, high-speed microprocessors and powerful electric motors.

"A whole range of people could achieve greater mobility and independence by using the Segway, from those with mild arthritis through to amputees and even muscular dystrophy sufferers," said REHAB Tech manager Mr Bill Contoyannis.

The unit is part of the Centre for Biomedical Engineering in the Faculty of Engineering. Based at the Caulfield General Medical Centre, REHAB Tech develops and assesses a range of new technologies in the field of medical rehabilitation.

Mr Contoyannis said REHAB Tech already had the facilities to test the

Segway.

"An automated overhead harnesstracking system, which we developed to aid patients who are learning to walk again, would allow us to test the Segway in a safe environment," he said.

REHAB Tech would also be able to offer an environment where people with disabilities could trial the Segway. "We want people to be able to make an informed decision about buying one, without putting the onus on the sellers or the distributors," he said.

Former mechanical engineer Mr Tony Bartlett, who lost his left leg after an industrial accident in 1996, said the Segway could change his life. After trialling one loaned to REHAB Tech, he is prepared to buy one for his own use and make it available for

ongoing assessments.
"When my right (non-prosthetic) leg eventually gives out, I will be confined to a wheelchair. If I use the Segway, I will be more mobile and for longer. My doctors are very keen on the idea," he added.

Under the strict trial conditions, Mr Bartlett found that with the support afforded by the overhead harness and the Segway's inherent stability, his learning curve was very rapid.

Currently unavailable outside the United States, the sample device has been brought into Australia by Melbourne-based businessman Mr Michael Mote, who gave a detailed demonstration to REHAB Tech staff.

"It's an elegant product which is easy to use. It can stand still, remain stable and turn on a five-cent piece. I believe it could make a real difference to people with mobility issues, " Mr

REHAB Tech is seeking funding to purchase its own Segway for use in extended trials. A single unit costs around A\$8500.

- Richard Ewart

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Test drive: Amputee Mr Tony Bartlett tries out the 'Segway' under the watchful eye of Mr Bill Contoyannis, manager REHAB Tech (left), and the vehicle's owner Mr Michael Mote.

Evolution of digital TV not going to plan

INFORMATION SYSTEMS

The Federal Government's strategic plans for digital broadcasting services in Australia need to be urgently reviewed, according to a Monash

Ms Cate Dowd, who has been investigating digitisation as part of her research masters in information management systems, says Australia's free-to-air networks are already struggling to comply with government legislation compelling them to broadcast at least 20 hours of high-

definition programs each week.

As well, Ms Dowd says, most consumers cannot afford to buy the new technology – either a set-top box or a television set – required for digital

"There is only one in regrated digital TV set which meets Australian standar as currently available. The cheaper option of buying a digital settop box is still an expense that most people are not willing to pay for," Ms Dowd said.

"As yet, digital services are not vastly different from existing services, so there's no real incentive for people to upgrade.'

Digital technology allows individual broadcasters to transmit multiple TV channels, but so far only the ABC and SBS have been granted the opportunity to experiment with this format.

The ABC responded by launching the free-to-air channels ABC Kids and Fly TV, aimed at a youth market, but the organisation recently announced plans to scrap both channels because of lack of funds.

The fact that no extra money to fund those services was made available to the ABC in the Federal Budget has persuaded some that the broadcaster could be en route to privatisation by default

'Witho ut government support, the ABC cannot be guaranteed a place iri the digital lundscape," Ms Dowd said.

digital TV poses a dilemma. Going down the multi-channel road will lead inevitably to audience fragmentation and raise questions about its appeal as an advertising medium.

"In order to reap the benefits of digital TV, the broadcasters need large volumes of content, but quantity doesn't equate to diversity," Ms Dowd said. This could create a further problem for broadcasters wrestling with Australian con tert quiota i ssues that impract on cultural production, representation and For the commercial channels, identity at a community level."

Digital TV: The set-top boxes are proving hard to sell. **Photo: Newspix**

Further complicating the digital picture is the prospect of new commercial channels being allowed to enter the market in five years time when deregulation is complete.

In 2000 the Federal Government set up digital transmitters, but at the end of that year Australia's transmission network was sold to the international company ntl for \$650 million.

Barely six months later, ntl was reported to have "crippling debts" of almost \$40 billion. By the end of 2001, cost-cutting initiatives were announced, and in February 2002, the company broke a 15-year contract and sold its Australian broadcast business to Macquarie Bank for \$850 million.

- Relard | Ewart

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study looks at its links to corruption

Monash University Malaysia is joining forces with Transparency International Malaysia to investigate the likely impact of privatisation on five of the 10 countries in the Association of South-East Asian Nations (ASEAN).

Singapore, Thailand, Indonesia, the Philippines and Malaysia have been chosen for the study, as they are similar in terms of their socioeconomic environment.

Professor Bala Shanmugam, chair of accounting and finance at Monash Malaysia, will supervise the study, which will focus on trying to establish whether there is a link between privatisation

and corruption. There have been widespread accusations in many countries, especially from opposition parties, claiming that political favours have been granted to certain private owners of exnationalised firms. This study seeks to establish the truth," Professor Bala said.

When national wealth is being sold to the private sector, there is opportunity for allocation to occur in a less-than-optimum manner, especially when the procedures involved are not transparent to the general public."

Transparency International Malaysia president Tunku Abdul Aziz Ibrahim said no-one could deny the material benefits of privatisation if it was implemented with the people's interests in mind.

"Unfortunately, we have seen far too many cases of what the former British prime minister Margaret Thatcher once referred to as 'the family silver' being given away with abandon to the well-connected few against the interests of the many."

Tunku Abdul said he hoped

the academic research would lead to practical recommendations in dealing with privatisation projects to ensure the whole process was fair, transparent and conducted on a level playing field.

"This is part of good governance, and ASEAN countries will have a lot to gain if privatisation is carried out in an accountable manner," he added.

The study will examine the costs and potential benefits of privatisation in the five chosen countries and is expected to take 18 months to complete, with the findings being made

After signing a Memorandum of Understanding with Transparency International on behalf of Monash Malaysia, pre vice-chancellor Professor Robert Bignell said the joint initiative would provide a firm basis and open up exciting opportunities for both institutions to work together on a wide range of mutually beneficial research projects in the future.

Transparency International which has its headquarters in. Berlin, describes itself as the only international more governmental organisation devoted to combating corruption.

- Richard Ewart

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