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NEWS FROM THE CAMPUSES OF MONASH UNIVERSITY

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MONASH

Monash a key player in new neuroscience research group

BY DAVID BRUCE

Neuroscientists at Monash University have joined with colleagues at other Victorian institutions to work on the debilitating effects of stroke and neurodegenerative diseases such as Parkinson's, Alzheimer's and schizophrenia.

The combined assault on this range of diseases has been brought about by the creation of Neurosciences Victoria (NSV), which was launched by Premier Mr Steve Bracks last month.

The four founding partners - Monash, the University of Melbourne,

the Howard Florey Institute, and the National Stroke Research Institute – plan to use NSV as a single point for negotiations with government, industry and potential investors.

The chief executive officer of NSV, Mr William Hart, said the research group would allow the many small and competing research groups currently scattered around Melbourne to draw on each other's strengths and use the NSV infrastructure for promotion and administration.

Mr Hart said that Monash, through its cross-campus Centre for Neuro-

science, was a key player in the formation of NSV.

"Monash has particular strengths and expertise in Parkinson's disease and other movement disorders, as well as in neuro-pharmacology and the behavioural sciences," Mr Hart said.

"It is very important for Neurosciences Victoria to build on these strengths and make them complement the work being done by other institutions in the group."

Monash would also benefit from additional funds flowing from the NSV group into its animal behaviour laboratories, which would become a resource for all the partners in the group.

NSV will assist several Monash research projects undertaken by Faculty of Medicine, Nursing and Health Sciences staff, including Professor Malcolm Horne, Professor Phil Beart, Dr Surindar Cheema, Professor Bevyn Jarrott and Professor Elsdon Storey.

In launching NSV, Mr Bracks announced that the German drug company Schering AG had pledged \$25 million over five years to fund research at NSV on a range of neurological conditions.



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New forensic institute launched

BY KAY ANSELL

Monash University is carving out a new niche of international expertise with the recent launch of its International Institute of Forensic Studies

Professor The Honourable George Hampel, QC, is the founder and president of the institute, the first of its kind in the world. It has a wide-ranging brief to examine all aspects of the court process and the professions connected with it – the true meaning of the term 'forensic'.

The institute has been running training programs since March, with forensic accountants and Australian Federal Police forensic scientists among its early clients. Professor Hampel, a former judge of the Supreme Court of Victoria, joined the Monash Law School earlier this year as the first professor of advocacy and trial practice.

The Honorable Justice Michael Kirby, AC, CMG, Justice of the High Court of Australia, launched the institute, of which he is patron, on 18 July at the chambers of law firm Mallesons Stephen Jaques.

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Playing around: Mr Andrew Iwaniuk with models of the brains of various animals. Picture: GREG FORD

Bigger brains mean more playtime: study

BY COREY NASSAU

Bigger-brained animals are more likely to play, according to Monash University research.

Scientists in the Department of Biological Sciences have published a paper supporting the theory that varying brain size appears related to the amount of play that each group does.

According to Mr Andrew Iwaniuk, a PhD researcher and co-author of the paper, 'Do big-brained animals play more? Comparative analyses of play and relative brain size in mammals', animals play as a means of practising behaviour that they will engage in later in life.

"There are a number of popular theories as to why animals play, but our data suggests that they are most likely practising behaviours for future events, much like a human infant does when playing 'house' or 'school'," Mr Iwaniuk said.

"Some scientists believe animals play as a means of expending excess energy and others see it as a process to assist muscle coordination and nervous system growth, but our paper disagrees with both of those theories." Mr Iwaniuk admits that one of the biggest problems people encounter when doing this type of research is defining 'play'.

"It is generally accepted that play is any kind of behaviour that doesn't appear to have an immediate function and is usually highly variable in its duration, complexity and frequency," he said.

"Play doesn't necessarily have an immediate value to the species engaged in the act, but it is likely to serve an ultimate goal within the animal's lifetime."

The study, which covered rodents, marsupials and primates, allowed the

researchers to make within-order comparisons rather than comparing highly varying species.

"The prevalence and complexity of play was significantly shown to be correlated with brain size, with the larger brained orders having more playful species," Mr Iwaniuk said.

However, while a certain brain size is needed to play, he said that just having a big brain doesn't mean that a species will play.

"Our findings suggest that how the brain develops may be more critical for the expression of play than simply how big the brain is," he said.

Monash showcases biomedical research on world stage

BY DAVID WARD AND JUNE YU

The Monash Institutes of Health (MIH) will hold a series of forums for selected Australian and international venture capital groups later this year to attract investors for its biomedical research.

The forums are the result of discussions at the recent Bio2001 international biotechnology conference in San Diego, California, and will enable potential investors to examine the breadth of research across the MIH biomedical spectrum.

The Bio2001 conference, attended by Victorian Premier Mr Steve Bracks and State and Regional Development Minister Mr John Brumby, attracted about 16,000 delegates, making it the largest biotechnology conference in the world.

Monash Faculty of Medicine, Nursing and Health Sciences dean Professor Nick Saunders said MIH wanted to compile a portfolio that would allow venture capitalists to invest across several areas of research.

"Traditionally, individual research groups working on specific projects have approached companies asking them to support their work. Holding the forums will enable us to showcase the range of our research and its potential for commercialisation," he said.

Bio2001 gave Monash an opportunity to launch its research on a global stage, build recognition and awareness of MIH, and promote Australian technology and capabilities.

"We wanted to capitalise on the major investments in biotechnology research, development and commercialisation that we are making at Monash," Professor Saunders said.

"This was an excellent opportunity for us to showcase our expertise and capabilities and to look for new partnerships and opportunities.

"The benefits that flow on include excellent education, research and training facilities for our students and staff and the ability to ensure that Australia reaps the rewards from its own research, with subsequent economic benefits and employment opportunities."

Other developments at Bio2001 included:

- the announcement that a national synchrotron facility would be built at Monash University;
- the announcement by Monash startup company ES Cells International that it was ready to provide stem cells for the international market through its collaboration with researchers in Singapore and Israel: and
- new opportunities for two Monash start-up businesses, CopyRat and IngenKo, to provide gene technology related to rats and mice to international companies, particularly in North America.

The MIH delegation at Bio2001 included representatives from the Monash Institute of Reproduction and Development, the Monash Research Cluster for Biomedicine, the Baker Medical Research Institute, and Prince Henry's Institute of Medical Research.

For further information, contact Mr David Ward on + 61 3 9905 5971 or at david.ward@med.monash.edu.au or visit www.monashinstitutes.org.

Cloning world first for Australia

Australia has achieved another world first with the cloning of an elite dairy

The breakthrough provides new opportunities for the genetic improvement of livestock and the competitiveness of Australia's dairy and beef industries.

The same team that cloned two elite dairy calves last year produced the calf, Rameses II, born in early July. It is a joint project between the Monash Institute of Reproduction and Development (MIRD), Genetics Australia, the Dairy Research and Development Corporation, the Department of Natural Resources and Energy and Meat and Livestock Australia.

Deputy director of MIRD Professor Alan Trounson says the discoveries evolving from research in genomics and their application through new artificial breeding biotechnologies will underpin the competitiveness of Australia's agricultural industries.

"It is imperative that Australia recognises the importance of taking the leadership in animal biotechnology to create the new herds with high-valued products that are already in demand worldwide," Professor Trounson said.

"A new cloned bull calf may herald a change that will make our



Dr lan Lewis with Rameses II

agricultural industries efficient, productive and customised to the changing demands of the customer and consumer."

Rameses II is a clone of Rameses, a leading bull in the Australian dairy industry. The semen of Rameses is highly sought after by dairy farmers because of his proven ability to sire cows with high milk production and excellent milking behaviour.

He is third in the Australian Breeding Value system that ranks bulls for their ability to produce profitable dairy cows.

Mr Bernie Harford, chief executive of the artificial breeding cooperative Genetics Australia, says the birth of the cloned calf was significant for both the dairy and beef industries.

A clone of a once-elite Canadian bull was born last year. However, Rameses II is the first clone from a bull that is currently among the elite of dairy bulls in the country's population.

"This is ground-breaking technology which will provide new opportunities for the genetic improvement of livestock and help improve the competitiveness of our dairy and beef industries," Mr Harford said.

Dr Ian Lewis from Genetics Australia said that Rameses II was cloned using similar techniques used to create dairy calves Suzi and Mayzi last year.

"On this occasion, we used cells from the ear of Rameses to produce the clone," he said. "The gestation went according to plan, and Rameses II is a frisky, healthy bull calf. Rameses II was produced from only three embryo transfers – a high level of efficiency and comparable to the efficiency of artificial insemination."

Improving literacy online

BY JUNE YU

Researchers from Monash University and the Northern Melbourne Institute of TAFE (NMIT) are undertaking a \$300,000 study aimed at improving online literacy for people with disabilities.

Dr Kirsty Williamson, Dr Steve Wright and Ms Louise Stockfeld, from Monash's Information and Telecommunications Needs Research (ITNR) group, and Ms Fran O'Neill from NMIT are running the two-year study.

The study involves interviewing and working with 22 adults with disabilities who are currently studying at NMIT.

Ms Stockfeld said their disabilities ranged from physical ones such as deafness or cerebral palsy to mild and severe intellectual disabilities.

"We've focused on interests such as sport, art and recreation as these are interests shared by many people with disabilities, and people learn through

Professor Hampel's colleagues at

the new institute, including its vice-

president, Professor Ian Freckelton,

Associate Professor Bernadette

AcSherry and Mr Jonathan Clough,

Research comparing how sophisti-

cated legal systems handle expert

Continued from page 1

also attended the launch.

New forensic institute launched

topics that are of interest to them," she said.

She said the study would not only investigate literacy issues and barriers to accessing the internet for the target groups but also provide models of how to develop the literacy of people with disabilities who used the web.

It will include the development of templates for designing web pages, including content, organisation, navigation and structure, taking into consideration the World Wide Web Consortium (W3C) Web Accessibility Initiative guidelines.

Participants in the study were asked about ways to improve their access to online information, and their responses have been used to design prototype web pages that are currently being trialled.

"The prototype web pages include a browser add-on which links to an online dictionary," Ms Stockfeld said.

"This displays a syllable breakdown of the word, an audio file of the spoken word, a picture describing the word and an example of the correct use of the word."

She said people with disabilities or people for whom English is their second language, such as the deaf, often had a lower than average level of literacy.

This alienated them from the internet, which is increasingly reliant on users' ability to read and write English.

"We are learning that the literacy levels among people with disabilities vary greatly. We aim to create models of web design which meet literacy levels and encourage learning by our participants and the wider community," she said.

Titled 'Literacy Online for People with Physical and Intellectual Disabilities, and the Deaf: Through Sports, Arts and Recreation', the project is funded through the AccessAbility program, through the Federal Government.

For more information about the study, contact Ms Stockfeld on + 61 3 9903 2322.

Monash and Latrobe City announce deal to manage leisure centre

Monash University and Latrobe City Council will jointly manage the Monash Churchill Leisure Centre, with the existing three-year lease arrangement likely to continue.

Latrobe City Mayor Cr Brendan Jenkins described the deal as a "win-win" situation for both the university and the council.

"Having a leisure centre on the doorstep of a world-class university is an important additional attraction for students, who in this case are able to participate in a wide range of activities that would not otherwise be readily available," Cr Jenkins said.

"Additionally, Latrobe's citizens greatly benefit from the expertise of Monash Sport, which oversees the day-to-day operation of the centre on behalf of the council.

"The Gippsland campus of Monash University and Latrobe City have a number of plans for joint promotions and we expect to include the Churchill Centre as part of those plans."

Mr James Voght, director of Monash Sport, said the university was keen to build on their existing relationship with Latrobe City.

"We are eager to promote the use of these facilities to both students and residents and to help guarantee the comfort and safety of all users," he said.

The Monash Churchill Leisure Centre is open 6 am to 9 pm Mondays to Fridays, 9 am to 6 pm Saturdays, and 10 am to 5 pm Sundays. Inquiries can be made to Mr Rob Patterson on telephone +61 3 5122 6513.

evidence is among its early projects.

One of the catalysts for the institut

One of the catalysts for the institute was the result of a survey of Australia's judiciary in which significant criticisms were made of expert witnesses and the way advocates dealt with such experts, Professor Hampel said.

The training of advocates is another of Professor Hampel's main priorities in his role as chairman of the Australian Advocacy Institute, which was founded in 1991 by the Law Council of Australia.

"In trials where much depends on expert evidence, the independence,

the clarity and the ability of experts to present their evidence is crucial, particularly if you have competing experts. The tribunal can then make a better determination," he said.

In future years, Professor Hampel hopes the International Institute of Forensic Studies will help streamline court processes by improving presentations by expert witnesses.

This would result in more reliable evidence, which in turn could reduce the overall length of complex trials.

The institute's activities are already well advanced. Its first international conference is planned at Monash's centre in Prato, Italy, next year and it is developing a Postgraduate Certificate in Forensic Studies for accountants.

Professor Hampel already has his sights set on future research such as the functioning of juries and the development of practical judicial training.



Professor George Hampel, QC

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Women disadvantaged in family law decisions

BY KAY ANSEL

Family law decisions often shortchange women – and not just in property distribution, according to Monash law researcher Dr Renata Alexander.

A senior lecturer in Monash's Law faculty and a deputy registrar at the Family Court, Dr Alexander said her PhD thesis, 'Reflections on gender in family law decision-making in Australia', examined the dispute resolution processes in court through litigation as well as in mediation.

She discovered that women are disadvantaged by a reinforcement of traditional gender stereotypes in both contexts.

Dr Alexander said women surrendered much for the gains they appeared to make from family law decisions – typically being awarded more than half in a property settlement as well as custody of children in most cases.

Her research found that women are disadvantaged in a range of ways under the in-built inequities that reflect and reinforce traditional roles for women.

"In family law cases, women are more likely to win custody of their kids if they comply with the traditional gender-determined role of being a good mother and a good wife," Dr Alexander said.

"But if they deviate in terms of leaving the family or trying to juggle work and home or forming a new relationship or changing their sexual preference, they're more likely to lose."

If a man seeking custody also has a full-time job that means his children need to be in childcare, a court may view his situation favourably, as he attempts to maintain a standard of living. But a woman in the same situation could be seen as "dumping the kids" for a career, Dr Alexander said.

In about two-thirds of cases, women win custody: "But they win for what I

say are the wrong reasons - only if they come up to scratch on what 'a good mother' should be."

Similarly, when it comes to property, women's unpaid work as mothers and the employment opportunities (and income) they forego are not factored into the settlement, she says. Nor is the impact on women of domestic violence, which can restrict future ability to work. Dr Alexander suggests the Act be changed to take account of these factors.

For custody of children, the interpretation of the law needs to be examined, she believes, because while the Act gives wide judicial discretion, judges need to be made aware of gender issues in exercising that discretion.

As well, she proposes mandatory training for judges "as a strategy, not a solution", and a watchdog to provide greater overall scrutiny of judges.

- BRIEFS -

Pre-implantation test for Down syndrome

Monash Institute of Reproduction and Development scientists have developed a reliable DNA test to detect Down syndrome in embryos before they are implanted in a woman's womb during IVF treatment.

This DNA fingerprinting test can be combined with existing tests for inherited disorders involving defects in single genes, such as cystic fibrosis.

The test will help women who are trying to have children, particularly those in their late 30s and older who have an increased risk of producing embryos with genetic abnormalities.

Hampel heads review of Constitution

The Constitution Commission of Victoria, chaired by Monash Law professor of advocacy The Honourable George Hampel QC, is due to release its discussion paper in a few weeks.

The commission was appointed by Premier Steve Bracks to review the constitution as well as the role and function of the Legislative Council.

The discussion paper, 'A House of Review: The Role of the Victorian Legislative Council in the Democratic Process', will be launched on 7 August.

It is part of the consultation process that will include seminars and public hearings examining the issue of whether constitutional reform is needed and, if so, what measures could be taken.

The broad consultation program will culminate in a final report to the Premier by 30 June 2002.

Green chemistry initiative launched

The Monash Centre for Green Chemistry will help Australian and international industries create a cleaner and more sustainable future. Launched by Senator Kay Patterson, the centre is funded by the Australian Research Council to aid research at the cutting edge of green chemistry.

Green chemistry uses hazard-free methods to produce safe, clean and energy-efficient products, often through redesigning the processes involved.

Centre director Professor Roy Jackson said there was a pressing need to develop products and processes that required less energy, generated fewer waste by-products, used fewer or more benign solvents, or used none at all.

"They should also have no associated environmental or health problems, and should allow for recycling or environmental degradation," he said.

Eminent QC appointed adjunct professor

Eminent barrister Felicity Hampel QC has been appointed adjunct professor of Monash's Law School. Ms Hampel, a graduate of the Law School, will teach in the school's new postgraduate specialisation in tribunal procedures.

She is a member of the school's Castan Centre for Human Rights Law and is on the steering committee of Monash's new International Institute of Forensic Studies.

Dean of Law Professor Stephen Parker said Ms Hampel's appointment as adjunct professor recognised the assistance in teaching and research she has provided to the Law School and the relationships she has facilitated with members of the profession on behalf of the school.

Highly respected in both the legal profession and academia, Ms Hampel has an international reputation as an advocacy teacher and is actively involved in a variety of community organisations.

Female killers more coldblooded by necessity: study

BY ALLISON HARDING

Women killers are often seen as more "cold-blooded" than their male counterparts, according to research from Monash's School of Political and Social Inquiry.

In her PhD research, Ms Deborah Kirkwood found that women who killed tended to be seen as highly deviant because they departed from stereotyped notions of women and femininity.

Her thesis, 'Women who kill: A study of female perpetrated homicide 1985–1995', investigated 77 cases of murder or manslaughter in Victoria.

Ms Kirkwood said the popular view was that partners were the main victims of women murderers. But her research revealed significant numbers of women killed their children or friends and acquaintances.

"It's often presumed that women don't kill, or when they do, they kill their partners, so I was quite surprised there was such a large number of women who killed a person outside their family," she said. "And I also found that when women did kill their partners it was almost always in response to abuse."

Ms Kirkwood said that women who killed their children were usually in high-stress circumstances with no support. Nearly 40 per cent of the homicides were of partners, and nearly 20 per cent of children.

Ms Kirkwood said that while killings by men are often seen as crimes of passion (where there is a loss of control), women might need to plan a killing or enlist the support of others, such as family members, to kill a violent husband and father. The legal system then viewed the voman's crime as more "cold-blooded".

"The leg al system needs to consider the context in which women's violent actions occur. Because women have less physical strength and experience with using violence, they may not be able to act immediately to threat or provocation," she said.

"In the situation where women kill violent partners, the courts need to consider the history of the relationship and its impact on the woman.

"Our laws are modelled on male behaviour, and it is expected that there are some situations in which men will be violent. The research shows that women clearly have the capacity for violence.

"However, women's violence occurs much less often than men's because it is less socially acceptable and therefore it is highly stigmatised."



Female victims of domestic violence might have to enlist the support of others to kill a violent partner. Picture: GETTYIMAGES

Monash Open Day

Monash Open Day 2001 will offer prospective students and visitors to the university the opportunity to explore Monash's six Victorian campuses.

Held on the weekend of 4 and 5 August, Monash Open Day will highlight facilities and courses on offer at the university.

For dates, times and locations, visit the Monash website on www.monash.edu.au/openday/ or call + 61 3 9905 1320.



Schools



Experience Monash Peninsula

A one-day school holiday program for Year 10 students is being held at Monash's Peninsula campus on Thursday 27 September. The program will include hands-on activities in the courses available at the campus, including arts, business and economics, education, information technology and nursing. Library activities and tours by current students will provide a general introduction to university life. Lunch will be included. For more information, contact Ms Julie Ryan on + 61 3 9904 4015.

Explore Monash

Explore Monash is a school holiday family visit program for students from regional or interstate areas. The program includes an introduction to Monash and extensive campus tours. Students will also have the opportunity to speak to faculty staff about courses of interest. The Melbourne Metro session will take place on Monday 24 September and the Gippsland session will be held on Tuesday 25 September. For more information, contact the Prospective Students Office on + 61 3 9905 4164.

Parents Information Evening

An information session will be held for parents of Year 12 students on Tuesday 4 September. Parents will find out about all they need to know about their children's transition from secondary to tertiary study, as well as information about course applications, selection, fees and costs, scholarships, accommodation and student life.

For more information, contact the Prospective Students Office on + 61 3 9905 4164.

Bachelor of Behavioural Neuroscience Information Night

Students interested in biomedical sciences and/or psychology are advised to attend this information evening to find out about this exciting new course. The information evening will be held on Tuesday 4 September. For more information, contact + 61 3 9905 3968 or email psychology.enquiries@sci.monash.edu.au.

Chemical Engineering Open Day Information Session and Luncheon

Prospective students interested in pursuing a career in the processing, chemical, minerals or food industry are invited to an information session on Sunday 5 August from 11.30 am to 12.30 pm. The session will be followed by a luncheon with the staff of the department. Interested parents and teachers are encouraged to attend both the session and the luncheon

Company representatives from processing and consultancy companies will be available to describe their activities and career opportunities after the session.

Places are strictly limited to 80 and reservations are essential. To book, contact Lilyanne Price at lilyanne.price@eng.monash.edu.au or fax + 61 3 9905 5686 by 19 July.

Boy in a bubble

Monash's recent Science School Holiday Program captured the imagination of aspiring maths and science students, including bubble-dweller Matthew Boys. The aim of the program, held in July, was to show youngsters that maths and science can be fun. Although the bubbles were far from ordinary, they were created using ordinary soap. For more information on programs at the Monash Science Centre, contact + 61 3 9905 1370. Picture: GREG FORD

Students look to their mobiles for results

BY DEREK BROWN

A group of Monash students received their results in the form of a text message on their mobile phones last month

The revolutionary system was tested on 1000 students, who responded to an advertisement for the trial on the my.monash portal, the Monash intranet system available to students. The quota was filled within two days of its announcement.

Deputy vice-chancellor (Resources)
Ms Alison Crook said the new system
gave students more choice in service
delivery.

"It's one of a range of initiatives we are introducing," she said.

Project manager of Flexible Learning and Teaching in ITS Mr Ron Sawyer said the system increased convenience for students.

"Listening to our students, we realised how important their results were to them. This trial is a step towards delivering this information in a way that is relevant to students and that is more efficient for the university," he said.

Students were posting feedback about the trial through the my.monash portal within an hour of results being sent to their mobile phones.

Although formal evaluation is yet to be undertaken, students' comments so far have been overwhelmingly supportive.

Mr Alan McMeekin, executive director of IT Services, said the project was a leading example of innovation at the university.

"Monash prides itself on being a cutting-edge innovator, and our IT division is happy to collaborate with other university service areas to experiment and push the technical boundaries if it can help our students and staff," he said.



Monash students were last month the first university students in Australia to receive their results by mobile phones. Picture: GREG FORD

Monash hi-tech equipment for Japanese synchrotron

BY SUE MCALISTER

A low-pressure vacuum chamber, designed and built by Monash University, is being installed at the world's most powerful synchrotron.

Dr Andrei Nikulin from Monash's School of Physics and Materials Engineering says the chamber, which he is taking to Japan this month, will bear an engraved logo stating that it was developed and built by Monash.

When installed at the Super Photon Ring-8 synchrotron, the chamber will sit among cutting-edge equipment created and used by the giants of Japanese industry, along with government and private scientific and technological research institutions from Japan and elsewhere around the globe.

Japan's prestigious Institute for Physical and Chemical Research, RIKEN, runs the facility jointly with the Japanese Synchrotron Radiation Institute, JASRI.

Synchrotrons are circular particle accelerators that function essentially as microscopes billions of times more powerful than conventional ones. They

permit scientists to see things down to the atomic and sub-atomic level.

"The Monash-built chamber will permit much better quality data to be collected from photons being accelerated by the SPring-8 synchrotron," Dr Nikulin said.

"Air is removed from the chamber as it's a gas and therefore scatters photons passing through it, making measurements inaccurate. The effect of the air and hence the inaccuracy of measurements increases along with the size of the synchrotron, according to what's called the signal-to-noise ratio.

"Consequently, for an accelerator as powerful as the SPring-8, the removal of air is exceptionally important. It allows sample detectors and other equipment in the chamber to take measurements which are many orders of magnitude more precise than would otherwise be possible, permitting almost error-free analysis."

In addition to the chamber "flying the flag" for Monash, Dr Nikulin says having Australian-designed and constructed hi-tech equipment in use at such a world-class research facility is a

milestone for Australian science as a whole.

Dr Nikulin says the experience gained from this and other projects Monash is involved in with RIKEN at the SPring-8 will be of great benefit in developing Australia's first synchrotron. It was recently announced that this would be built at Monash at a cost of \$157 million

Synchotrons are being used increasingly for pure and applied science, in particular for the development of pharmaceuticals and in information technology and biotechnology.

The SPring-8 synchrotron is a oneand-a-half kilometre ring girdling a mountain top near Osaka, in which photons are accelerated almost to the speed of light. It is a big version of the synchrotron to be build at Monash. "The Japanese have lots of synchrotrons," Dr Nikulin said. "But this one is what you might call top-of-the-range the biggest there is. It functions as a huge national laboratory."

The low-pressure vacuum chamber project was funded by a Monash University Small Grant.

Brotherly love

Just what was it about 'Big Brother' that so captured the attention of the Australian television viewing public? DR SUSAN YELL and DR KWAMENA KWANSAH-AIDOO investigate the phenomenon

OPINION

HE 'Big Brother' reality television show, recently aired by Network 10, has become one of the most talked-about phenomena in the history of Australian media.

For the past three months, our television screens have been filled with images from the 'Big Brother' house, while the internet has provided minute details of the daily lives of its occupants.

'Big Brother' has become ubiquitous – a topic of conversation in homes, workplaces, university lecture theatres, the gym and a host of other places – and newspapers, radio and television programs have all paid attention to it.

What lay behind the phenomenal success of a television program that so blatantly thumbed its nose at the social taboo of voyeurism?

The answer lies partly in the wide publicity given to the show through different promotion strategies. But more importantly, the show's success can be traced to the kind of interpretations and associations that members of the audience were invited to make.

'Big Brother' appeared to hold up a mirror to everyday life, allowing us to become spectators at a human zoo. Self-proclaimed addicts of the show said it was compelling because the participants were 'real' people.

Unlike fictional characters, who may be more predictable because they can be expected to function according to their character or to the constraints of the genre, we never quite knew what the 'Big Brother' house occupants would do next.

'Big Brother' was seen not only as entertainment but also as a scientific experiment, where the participants are the lab rats and the audience wields the clipboard and wears the white lab coat.



'Big Brother' contestants have become mega-stars with huge followings, while (below) the German version of the game show was also a huge hit.

The show seemed to invite us to make our own moral judgements about Sara-Marie, Johnnie and the rest – to analyse, judge, psychoanalyse and make comparisons; in short, to function as active audience members.

But 'Big Brother' did not present us with unlimited access to the behaviour of these 'real' people – the television audience of 'Big Brother' didn't get to 'perv' unrestrictedly at the household members, making the zoo analogy in this respect misleading.

Instead, we were served up edited highlights, selected by the producers, from the mass of footage gained through 24-hour, seven-day-a-week surveillance using multiple cameras covering except room in the house.

The selection of highlights was based on what the producers believed constituted a storyline out of the banality that makes up much of daily life.

What was screened then had a narrative imposed upon it which was lifted out of the jumble and minutiae of lived experience. Add to this the element of 'performing to the gallery', and the participants' complicity in the

people became de facto members of the audience's peer group.

One addict said she "felt like she knew them", never missing an episode. Her friends all watched it, and they talked about it among themselves.

'Big Brother' also owed its success to its investment of power in the audience to act as judge and jury. 'Big Brother' therefore did not present us with a morally or ideologically neutral set of values.

Backstabbing and two-faced behaviour by the participants was *de rigueur* in the name of winning in the hothouse Darwinian environment of the show, according to some critics.

Others cite incidents like the 'chicken kicking' episode in 'Big

'Big Brother' appears to hold up a mirror to everyday life, allowing us to become spectators at a human zoo ... addicts say it is compelling.

voyeuristic relationship which the a udience entered into i spolarily visible.

Like Nicole Ki dn and character in To Die For, the 'Big | Brofner' participants were paradoxically driven by the belief that you're not a 'real persor' until you've been on television. Their beliaviour was not spontaneous but self-script et — they were inevitably awar of themselves as characters on a stage. 'Big Brother' was therefore two-parts soap opera, one part med 'ife.

The banalty of much of the dialogue and the (in)action – long sequences of people sprawled on beds, doin givery little – was an artifice which fueled the illustion of real life.

In 'Big Brother', the audience was invited into an intimate relationship with the occupants – one which was more intense than an encounter with stapie characters, becau sethese 'rea'.

The weekly plebiscite allowed viewers direct participation, affecting the outcome of the show.

Viewers were invited to lodge a vote against a participant, on the internet or by telephone, resulting in the expulsion of one member from the 'Big Brother' house each week.

It could be argued that this weekly election was functioning to train audience members in the literacies relevant to citizens in a participatory democracy.

But FAR from advancing the common good, the 'Big Brother' election air net to successively eliminate participants until the last person remaining won the prize morner, promoting the values of competition and the interests of the inhividual over the se of the community.

Brother' and the pig slaughter in "Survivor III to suggest that these shows provide a platform for exessively macho or brutal behaviour, but no moral inflexior with which to temper this.

What 'Big Brother' affered to addience members then, was not only permission to 'be voyeurs but also the apportunity to play the roller of social observer, moral arbiter, judge and jury, and to belong to a new social peer group.

It also offered, at least, the illusion that these relationships were more 'real' than the ones we enter into with the characters of, say 'Dawson's Greek' – and that what they do, and what we say and think about what they do, somehow matters

■ Dr Susen Yell and Dr Kwamena Kwansah-Aidovare ilecturers in Monastis Department of Communications and Writing.



Elegance and balance the hallmark of artist's work

BY JOHN CLARK

In late 1981, artist Fred Williams turned over one of his works and inscribed carefully on its back 'My Best Painting'.

The elegant and finely balanced work, 'Forest of Gum Trees III' (pictured), is one of 15 paintings featured in *Fred Williams: Landscapes* 1959–1981, a forthcoming exhibition at the university's Faculty of Art and Design Gallery.

It is typical of many of the works on show, says catalogue author Ms Julie Roberts, a former senior lecturer in the faculty's Department of Theory of Art and Design.

"It works not only as a landscape image – in this case, a forest of gum trees – but also as a purely abstract painting in which the subject matter is almost irrelevant," she said.

According to Ms Roberts, Williams created some of the most powerful and intuitively accurate images of the Australian landscape.

"Along with artists such as Arthur Streeton and Sidney Nolan, he is one of Australia's great landscape painters," she said.

"He took landscape painting at a time when it was becoming hackneyed and reinvigorated the whole tradition. He invented a new way of looking at the landscape."

All the works in the exhibition have been selected by the artist's widow, Lyn Williams, in conjunction with the gallery, from both his estate and his family's private collection.

They cover the period from his return to Australia after a five-year stay in London, up until 1981, a year before his death at the age of 55.



Williams's Forest of Gum Trees III, 1968-69

"From the beginning, Williams was absolutely dedicated to being an artist. This exhibition of works offers a rare insight into the development of his work and his exploration of the Australian landscape," Ms Roberts said.

"In a sense he took a scientific approach – he kept an elaborate diary containing extensive notes, little sketches and occasionally photographs to remind him of a scene.

"Sometimes the margin notes contained diagrams indicating changing weather conditions – information that would help him when he worked up the image in the studio."

Faculty of Art and Design Gallery manager Mr Malcom Bywaters said he

was delighted to be able to present the work of such a major figure in Australian art.

What: Fred Williams: Landscapes

Who:

1959-1981

When: 24 August to 22 September (open 11 am to 5 pm

Mondays to Fridays, 2 pm to 5 pm Saturdays)

here: Faculty of Art and Design

Gallery (building G),

Caulfield campus
For more information,

contact gallery manager
Malcom Bywaters on

+ 61 3 9903 2882.



Monash Graduate Players to tour the UK

The newly formed Monash Graduate Players are taking their first production to this month's Edinburgh Fringe Festival.

The group, which includes current students and graduates of performing arts at Monash, performed *Pandora's Box* at the Clayton campus in July before heading to Edinburgh and then to the Monash Centre in London.

Written by Monash graduate Ms Sally Faraday, Pandora's Box looks at the licentious world of Restoration theatre in England through the eyes of writer Aphra Behn.

Aphra Behn was a playwright in 17th-century England who began writing plays as a way of escaping poverty. Her work, which features witty and courageous women, was popular with audiences of the era but looked down upon by the maledominated literary establishment.

Ms Faraday said she felt compelled to write about Aphra Behn because the writer's work had often gone unnoticed.

"She was writing plays to support herself at a time when it was thought obscene for any woman to be doing this. As a result, much of her work has been lost. With *Pandora's Box*, I hope to create a celebration of her life," she said.

ARTS SCENE -

Pianist honoured with exclusive award

Monash pianist adjunct Professor Max Cooke has been awarded a distinguished German government award.

Professor Cooke was awarded the Officer's Cross of the Order of Merit of the Federal Republic of Germany by German President Johannes Rau, based on his reputation as a senior professor, recognised musician and artist, and expert in German language and culture.

The award was presented last month by German Consul-General Mr Hans-Michael Schwandt.

Professor Cooke said he was delighted and proud to receive the honour: "When I became involved in music and language in Germany, I felt I wanted to become part of the German culture. This award makes me feel as if I have achieved that goal."

Fine Arts building revamp

Redevelopment of the signature 1930s building at the Caulfield campus on the corner of Dandenong Road and Sir John Monash Drive will begin later this year.

The building, which currently houses the campus's Fine Arts facilities, will be revamped by award-winning Melbourne architects Lyons to provide purpose-built studios for painting, drawing, printmaking and photomedia as well as a new office centre.

Highlights of the design include a spectacular new entry, a light-filled atrium and a lift.

Work on the building is scheduled to be completed by first semester

Monash artists taste the Boyd influence

Two Monash Art and Design staff have been awarded artist residencies at the late Arthur Boyd's Bundanon properties in New South Wales.

Under the Bundanon Trust's artistin-residence program, photomedia coordinator Ms Danielle Thompson and printmaking studio technician Mr David Frazer are both spending five weeks on the 1000-hectare Bundanon properties.

Ms Thompson, whose past works have featured large seascapes, will spend her time at Bundanon photographing the Shoalhaven River that Boyd himself painted numerous times.

Mr Frazer intends to use his residency to further develop his drawing and painting techniques.

Children of Eden musical

Tickets are selling fast for the Monash Drama Theatre's production of *Children* of *Eden* which will run from 5 to 15 September.

Centre of Drama and Theatre Studies head Associate Professor Peter Fitzpatrick is directing the Stephen Schwartz musical featuring a cast of Monash performing arts students.

Showcasing 36 contemporary songs written for the stage, the musical is a modern retelling of the Bible stories of Adam and Eve and Noah's Ark.

It highlights the trials and struggles of parenting and the relationship between the older and younger generations.

Tickets are \$22 (full), \$12 (concession) and \$10 (group). Bookings: +613

New book honours Melbourne's PMs

BY DEREK BROWN

For more than 26 years at the beginning of the last century, Melbourne was the seat of government and the capital city of Australia.

In a new book commissioned by the Victorian Parliament, Professor Brian Costar, from Monash University's School of Political and Social Inquiry, has profiled each of the eight prime ministers who were in office when the Federal Parliament sat in Melbourne.

According to Professor Costar, the book, From Barton to Bruce: The Melbourne Prime Ministers 1901–1927, reveals strong links between the leaders, despite their political and philosophical differences.

"In writing the entries, it struck me that there was a characteristic common to all the early prime ministers – although they were all Empire men, they weren't prepared to let England lord it over them, particularly in relation to defence and foreign postcy," he said.

"All the Melbourne prime ministers saw themselves as Australians and wanted the newly formed ration to be completely independent."

Australia's early leaders pushed, sometimes unsuccessfully, to be consulted on matters of foreign policy and defended the role of the then recently established Federal Parliament, according to Professor Costar.

"In 1903, Barton (caricature by Chris Kelly, above), Australia's first prime minister, rebuked the then governor-general Lord Tennyson for communicating in secret with the Colonial Office, telling him that it was his duty to accept the advice of his ministers," he said.



Professor Costar argues it was the sense of being Australian that prevented interstate rivalries between members of the early Federal Parliament from causing too much friction.

"The 'leaders of the Parliament came from positions high up in colonial politics and the federation movement. They made a large personal and political investment in federation and were flerefore more likely to put aside state issues to make it work," he said.

"It's amazing to study the careers of these prime ministers and see the way they made the shift from the politics of individual colonies to those of a nation. The change was dramatic."

Ilimited free copies of The Melboursie Prime Ministers are available from the Parliament of Victoria. To obtain a copy, contact Ms Karen Dowling on + 61 3 9651 8624.

21 years ago - 1980

Dinosaur delivery

Monash took delivery of its first dinosaur last week.

About six metres from snout to tip of tail, the dinosaur is considered medium-sized and now occupies pride of place in the foyer of the mathematics building.

The specimen is an exact replica of a recently discovered genus of dinosaur unveiled by a joint Polish and Mongolian expedition in the Gobi desert, Mongolia in 1970-1971.

■ Monash's Professor Pat Vickers-Rich, in collaboration with Dr Tom Rich from Museum Victoria, has spent 30 years unravelling Victoria's ancient past at many sites along the Victorian coastline. Recent discoveries include the dinosaur Qantassarus, named after Australian airline Qantas, and a jawbone from what is thought to be the oldest placental mammal ever found.

10 years ago - 1991

Praise for Monash from Malaysia

Malaysia's Minister for Education has described Monash as one of the world's great universities.

The minister, Datuk Dr Haji Sulaiman Daud, presented a speech at a recent Monash graduation ceremony for 95 Malaysian students in Kuala Lumpur.

He said Monash had developed an in-depth knowledge of the Malaysian culture and commercial environment. MONASH UNIVERSITY

40

YEARS
1961–2001

In 1961, 363 students arrived at a new university in Melbourne's south-east.
Today, more than 44,000 people are studying at Monash University. We look back through the years.

"This knowledge not only facilitates the integration of Malaysian students into the university community, it is also being used by Australian businesses seeking to create ties with Malaysia," he said.

■ In July 1998, Monash University's Malaysia campus was established in partnership with the SungeiWay Group. With a current student body of 1400, the campus offers students the chance to earn a Monash qualification in their own region.

6 years ago - 1995

Driving home privacy on the superhighway

A Monash expert has called for the development of international regulations to protect the security of information on the much-touted information superhighway.



Flashback: Leading Chinese scientists work with Mr Ron Savage of the Japanese Department on a Chinese/English computer translation system in 1982.

Professor Greg Tucker, acting head of the Syme Business School on the Peninsula campus, has warned that the superhighway may not reach its full potential unless privacy issues are adequately addressed.

It is envisaged that the information superhighway, or global information infrastructure, will include high-speed interactive networks connecting businesses, governments and individuals.

Professor Tucker said the challenge for international bodies was to determine whether governments, corporations or individuals should be responsible to monitor this flood of information.

■ Monash offers a range of online learning methods to those studying on campus or by off-campus distributed learning – from tutorials conducted in an internet chatroom and lectures delivered through home computers to the my.monash portal, which gives students access to library catalogues and university facilities through the web.

Compiled by DEREK BROWN. Telephone: + 61 3 9905 5329 email: derek.brown@adm.monash.edu.au

Prize for environmentally responsible investment

BY JUNE YU

Monash's Centre for Environmental Management has won a prestigious award for an eco-friendly investment product offered through Westpac.

Centre director Mr Doug Holmes said the Banksia Award for Socially Responsible Investment was awarded to Monash and Westpac for developing the Australian Eco-Share Fund. He said the fund invested in companies that scored favourably on criteria including their environmental strategy, management practices, operational and product performance, and stakeholder relations.

Monash and Westpac have also jointly created the first index to track sector-leading companies using environmental performance criteria (called the Westpac Monash-Eco Index).



The National Boy's Choir performs to a captivated audience in the Robert Blackwood Concert Hall at Monash last month. The performance, titled '100 voices for 100 years' commemorated the centenary of Australia federation. The choir performed four items during the evening including Songs of the Sea by Colin Brumby and selections from Les Miserables. Picture: JOE MANN

"So far, the fund has attracted \$50 million in investments from leading superannuation funds HESTA, UniSuper and Australia's largest master fund, ASGARD," Mr Holmes said.

The fund also holds undisclosed contributions from other private investors.

Monash Environment Institute director Professor Chris Cocklin said companies would have to take environmental issues more seriously as products such as the Eco-Share Fund started to grow.

"Businesses need to see there is no long-term penalty in pursuing environmental agendas – they don't perform worse than other companies on the share market and the evidence would suggest that they perform better," he said.

"One explanation for this is that environmental sustainability is both a major risk and an opportunity for companies, just like any other risk and opportunity, and those who manage it best will prosper.

'Banks in future will also be less willing to lend to companies with a poor 'green' record because of possible environmental legal liabilities."

Professor Cocklin said a sustainability fund was about to be released, also through Westpac, which takes into account companies' records on social justice and employee relations, including issues related to sweatshop labour.

Also in the pipeline is an occupational health and safety fund, involving the Monash University Accident Research Centre, which will rank the performance of business in workplace health and safety issues.





Magistrates' Decision-Making in Child Protection Cases

By Rosemary Sheehan Published by Ashgate RRP: \$121

In making decisions about the care and protection of children who appear before the courts, magistrates have considerable influence on the lives of those children, their families and the wider community.

With a central role in defining and executing the community's response to child abuse, magistrates often have to balance the state's duty to protect the interests of a child with the right of parents to raise their children without state interference.

Yet there has been little research into how these decisions are made or an analysis of the factors and processes which magistrates use or take into account.

Dr Rosemary Sheehan, from Monash's Department of Social Work and Human Services, uses findings of a study undertaken at the Melbourne Children's Court to produce an informative insight into magistrates' decision-making process. The text offers practical assistance to professionals working with children in the legal process.



Infectious Diseases:

A Clinical Approach

Edited by Allen Yung, Malcolm McDonald, Denis Spelman, Alan Street and Paul Johnson Published by Cherry Print RRP: \$74.25

As we enter the 21st century, the greatest threat to human health and our species is the same as it was a century ago – infectious diseases.

Written with contributions from 42 infectious diseases experts, this book covers the essential knowledge of infectious diseases necessary for medical students, junior doctors and general practitioners.

The text includes chapters written by a number of Monash academics including Associate Professor John Spicer, Associate Professor Denis Spelman, Professor Steven Wesselingh, Dr Olga Vujovic and Dr Andrew Fuller from the Department of Microbiology, Dr Tony Korman, Dr Michael Oldmeadow and Dr Alexander Padiglione from the Monash Medical Centre, and Associate Professor Jennifer Hoy, Professor Suzanne Crowe and Dr Hugh Newton-John from the Department of Medicine.



Writings on an Ethical Life

By Peter Singer Published by Fourth Estate RRP: \$26.96

For the past 25 years, philosopher, professor of bioethics and former Monash academic Professor Peter Singer has challenged our most closely held beliefs.

Looking at issues ranging from animal rights and environmental accountability to abortion and euthanasia, Writings on an Ethical Life is a collection of Singer's

best and most controversial essays.

Chosen by the author himself, the collection provides an indepth insight into Singer's philosophy. Professor Singer is the author of *Animal Liberation*, *Practical Ethics*, and *Rethinking Life and Death*. He is currently professor of bioethics at Princeton University.

POSTSCript

The Lost Love Letters of Heloise and Abeland: Perceptions of Dialogue in Twelfth-Century France, by Dr Constant Mews, senior lecturer in Monash's Department of History, has been published by Palgrave.

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

Books featured in 'Inprint' are available or can be ordered at Monash's four on-campus bookshops.

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Gippsland wildlife efforts rewarded

By MARK EDMONDSON

The Department of Natural Resources and Environment (NRE) has awarded Monash Gippsland 'Land for Wildife' status in recognition of the university's efforts in revegetating areas of the campus over the past four years.

'Land for Wildlife' is a voluntary program that recognises efforts being made to conserve biodiversity on pri-

Gippsland pro vice-chancellor Professor Brian Mackenzie was presented last month with a special sign to acknowledge the university's provision of a range of habitats for native wildlife.

Sponsored by Edison Mission Energy, the revegetation project has involved the planting of more than 12,000 trees, shrubs and plants across the main campus and adjoining land.

Native vegetation has been used to rehabilitate a degraded stream, create windbreaks, construct wildlife corridors and delineate new golf course

Grounds coordinator Mr Anton Wray said the university identified four distinct habitat types that probably grew in the area and planted different areas with appropriate species to try and represent the vegetation.

"We have tried to re-establish vegetation communities, which may have



Monash Gippsland has been awarded 'Land for Wildlife' status.

once been present. For example, in our swampy area, plantings range from canopy trees such as Eucalyptus ovata, down to understorey sedges such as Gahnia radula."

One area on campus adjacent to an established koala corridor along Lawless Road has been revegetated to encourage wildlife into the campus. And native species have been planted on golf course fairways to facilitate the movement of animals through the

Windbreaks have been established along fencelines and an 800 metre section of Bennetts Creek has been revegetated on land neighbouring the

In addition, a narrow 1.5 kilometre corridor of vegetation has been established along the northern boundary to link Bennetts Creek to Matheson Park and Lake Hyland. Additional plantings designed to complement the existing works will occur over the next two years.

For more information about the 'Land for Wildlife' scheme, contact Mr Bruce Atkin on + 61 3 51839103.

Saturday 4 August Gippsland, Parkville

Sunday

and Peninsula

5 August Berwick, Caulfield and Clayton

Times: 10 am to 4 pm

<u>MONASH</u>

Australian crisis in 'knowledge investment' jeopardises future growth

BY STUART HEATHER

Australia is failing to invest adequately in education, research and development and innovation - with immediate negative economic effects and great risks for the nation's future.

These are the findings of a hardhitting report prepared by a group of leading academics including Professor Simon Marginson, director of the Monash Centre for Research in International Education.

The study found that Australia's position as a knowledge economy is declining relative to the OECD average and that it is falling further behind the world's major economies in the development of knowledge-based technologies, products and services.

"Since about 1995, Australia has been investing more heavily in fixed assets than in knowledge," Professor Marginson said. "That marks us as an obsolete economy, and it means we have squandered the opportunities presented by a long period of growth.

"Australia's national capacity in knowledge will determine how we fare in the global economy, but we have a crisis of investment in the factors that produce a knowledge economy."

The report predicts that if the 'investment crisis' continues unabated. Australia will become increasingly dependent on other more advanced economies and international trade will suffer, with adverse consequences for Australian employment opportunities and for wealth generation and distribution.

Already, Australia's information and communications industries make the least contribution to the national economy of any comparable OECD nation and "the trade deficit in knowledge-intensive goods is growing rapidly".

Professor Marginson lays much of the blame on a declining commitment to public education.

"Education policy is dominated by a desire to reduce outlays. Universities have been forced to look to short-term funding needs, which has distorted educational priorities," he said.

"Science and engineering are vital to generating knowledge-based prod-

ucts and services but are now being under-funded because they do not attract large numbers of fee-paying

"Meanwhile school and pre-school funding is lamentably inadequate and skewed in favour of the private sector, which educates only one in three Australian children."

The report argues that while Australia has a range of inherent advantages to help it become a leader in the global knowledge economy, it has been slow to respond to the challenge - or has responded inappropriately.

"The emphasis on cost-cutting in recent years has reversed earlier positive trends," Professor Marginson

"Internationally, there has been a change in thinking, with a resurgence in both public and private investment, but Australia seems to be stuck in the old cost-cutting orthodoxy."

The report, titled 'The Comparative Performance of Australia as a Knowledge Nation', was prepared for the Chifley Research Centre.

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