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NEWS AND VIEWS FROM MONASH UNIVERSITY

Reproductive law outdated

Victoria's status as a world leader in medically assisted reproduction is threatened by "restrictive" and "outdated" state laws, according to two Monash researchers.

Dr Karen Dawson and Associate Professor John Leeton have called for national regulation, saying current laws have restricted options for infertile couples and stalled development of some new clinical procedures in this state.

Victorian work in the field has gained global attention since the birth of Australia's first, and the world's third, in-vitro fertilisation (IVF) baby in 1980, but the Monash doctors warn that Australian research is falling behind that of other countries.

"Although Victoria is one of the world leaders in assisted reproductive technology, it also has some of the most restrictive and outdated legislation," Dr Dawson said.

"We urgently need a flexible system of national regulation, like the one introduced in the UK five years ago," she said.

The British Government has established an authority to oversee any research or treatment involving creating, keeping or using human embryos outside the body.

The authority, which consists of experts and interested people from various fields (including scientists and medical researchers), also maintains a code of practice to give general guidance about research activities.

This, the Monash doctors say, is in stark contrast to the Standing Review and Advisory Committee on Infertility which oversees all Victorian research involving in-vitro human embryos.

"One can only wonder how this committee was constructed, given that none of its members are infertile couples or from the medical or scientific area of assisted reproductive technology," Dr Leeton said.

She said thorough embryo testing of new procedures was often prohibited by law because some ethics lobby groups believed embryos attained the right to life at very early stages of development.

"Thorough testing sought by scientists for the benefit of patients is compromised, and disproportionate representation is given to these ethics groups," she said.

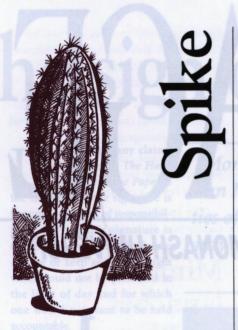
There was also confusion about how Victorian legislation applied to testing of embryos for genetic diseases. Because of the uncertainty, the then State Government placed a moratorium on these procedures in 1989, and an updated bill proposed to replace the Victorian Infertility Act in 1991 was never introduced into parliament.

The Act was finally updated this year by the Kennett Government, but Dr Dawson said the new law had failed to solve many problems identified by researchers, and legal restrictions on their work remained.

"While Victoria has been in the throes of legislative confusion over embryo biopsy, the necessary testing of its safety has been carried out overseas and the procedure is

Continued on Montage 2





Red-faced white males

The Herald Sun reported a small Monash squirm recently when covering David Williamson's latest play Dead White Males. The play, about aspects of academia, made one audience member chuckle to his unknown neighbour: "Any English lecturers in the audience must be squirming in their seats." He later learnt his neighbour was, in fact, the head of Monash University's English department.

A round of applause

We know it's all terribly serious and important, but it's easy to understand why some people wonder what actually happens inside universities when they see some degree nomenclatures. Just what does a Master of Venereology get up to?

For your information

The following definitions are reprinted from the University of Otago newsletter. Actually, they're reprints of reprints from an earlier Monash publication but they're still illuminating for the uninitiated.

Pro Vice-Chancellor: (1) A person in favour of vice-chancellors; (2) A vice-chancellor who has lost amateur status.

Committee: (1) A collection of familiar faces; (2) A body that receives submissions and makes decision in spite of them.

University Planning: (1) Deciding what we'd all do if we had the money; (2) Planning your life around the needs of the university.

Academic: (1) Describing staff, means untrained; (2) Describing dress, means unfashionable; (3) Describing a development committee, means unchallengeable.

Reproductive law outdated

From Montage 1

being practised in several countries," Dr Dawson said.

NEWS

There are also examples of how Victorian legislation outlaws new forms of assisted reproduction it was not designed to cover.

Surrogacy is not illegal in Victoria provided no advertising, payment or legal contracts are made, but IVF surrogacy is effectively prohibited by the Act.

IVF surrogacy can be used when a woman has no functional uterus but can provide eggs to form an in-vitro-fertilised embryo that will be transferred to a surrogate.

However, Victorian law stipulates that embryos are not to be transferred to a recipient unless she is "unlikely" to become pregnant by other means.

"This means that for legal purposes a potential surrogate must be infertile, although for clinical purposes she must be potentially fertile," Dr Dawson said.

Dr Dawson, who is a research fellow with Monash's Institute of Reproduction and Development, and Dr Leeton, an associate professor in the university's Department of Obstetrics and Gynaecology, argue that medical legislation should be based on the principle that all treatments and experiments carry some risks.

BY GARY SPINK

NOW & THEN

25 Years Ago

Monash University was host to about 400 delegates of the Australian Universities Language and Literature Association during their Thirteenth Congress in August.

The President of the Association is Professor Ivan Barko of the Monash Department of French. In a speech at the opening ceremony he said: "Although Australian Universities retain a large measure of autonomy, it is well known that as far as new developments are concerned this autonomy is more theoretical than real.

"No doubt, individual Universities still retain a negative form of autonomy, since they are not made to introduce subjects against their wishes. However, their freedom to initiate the introduction of new subjects against the recommendations of the Commission is dubious."

15 Years Ago

Within the next 20 years, another 40 to 50 Australian Aboriginal languages – from a total of some 230 – will most likely die out, according to a senior lecturer in Linguistics at Monash, Dr Barry Blake.

Dr Blake says that since the mid 60s, when he started research on Aboriginal languages, about 24 of them have become extinct.

5 Years Ago

The Minister for Foreign Affairs and Trade, Senator Gareth Evans, officially launched the university's Institute for Contemporary Asian Studies in July.

Speaking at the ceremony in the Alexander Theatre, Senator Evans, a graduate of Melbourne University, conceded that in Asian studies Monash was unrivalled in Victoria, if not in Australia.

This Month Last Year

Research groups in the Department of Biochemistry at Monash are leading an international breakthrough in eradicating one of the world's most widespread and potentially serious diseases – diabetes.

One Monash research group has developed an inexpensive blood test which can predict the onset of the more serious Type 1 diabetes up to 10 years before it occurs. And another group is working on drugs to treat, and even prevent, the more common Type 2 diabetes. One of these drugs might also help slim the chronically overweight.

MONTAGE NEWS AND VIEWS FROM MONASH UNIVERSITY

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Reclaiming lost culture

Betty Roland, who turned 92 this year, saw a play she wrote almost 70 years ago debut at Monash University recently.

Roland, who lives in Sydney, saw the production on video, as she was unable to travel to Melbourne. But she said she was "thrilled" to see her play performed for the first time.

Feet of Clay, written in the late 1920s, was recently retrieved from the Australian National Archives where it had been forgotten for the past six decades.

It was one of three plays performed as part of the inaugural season of the Australian Drama Project, an initiative of Monash's National Centre for Australian Studies and Centre for Drama and Theatre Studies.

Kerry Kilner from NCAS said that for too long many early Australian plays had been "unrecognised as an important part of our literary and theatrical history".

The aim of the project was to present plays written by people who had not had their contribution to Australia's theatre recognised and to give theatregoers "an opportunity to discover more about Australia's theatrical past".

In its inaugural season, the project focused on women playwrights whose plays had previously been lost in archives, libraries and private collections.

Delphiniums, by Tasmanian playwright Catherine Shepherd, has not been performed since its debut in 1942. And The Lighthouse Keeper's Wife by Mary Wilkinson, a Melbourne theosophist and suffragette active in literary circles at the beginning of the century, ran for a short season in 1922.

The Lighthouse Keeper's Wife is the only complete play that has so far been found of the six that Wilkinson wrote. She also edited three collections of Australian verse and won first prize for her poem Via Pacis at the Women's Work Exhibition in Melbourne in 1907.

Ms Kilner said "research and detective work" were currently under way to try and find Wilkinson's lost work. Because many theatre companies in the first half of the century were more interested in bringing overseas productions to Australia than producing local plays, many playwrights turned to writing soap operas and radio commercials.

Roland was so discouraged that she left Australia for England where she lived until the 1960s, writing for a girl's magazine.

She has also written children's stories, romance fiction, three volumes of an autobiography and, as a member of the communist party, agitational-propaganda plays.

Some of her work has also been lost, with one play, Are You Ready, Comrade?, stolen

from the boot of her car while she was travelling in Europe in the 1950s.

Ms Kilner said that Catherine Shepherd's work had been undervalued and ignored, leading to much of it being lost.

She died in 1976 leaving no heirs and, even though she was a prolific writer, her papers – apart from two scrapbooks held in the University of Tasmania archives – and most of her unpublished plays are missing.

"Australia's cultural history contains many such omissions, but with further research and the production of plays hitherto unknown or overlooked, the gaps in our dramatic heritage can gradually be filled in," Ms Kilner said.

The project's inaugural season was a major arts event for Monash's new



'Peggy' from Betty Roland's 1920s play, Feet of Clay, performed by Kylie Wright.

Performing Arts Centre with students performing live music at each performance, an exhibition of theatre memorabilia from the 1920s, a seminar on women and theatre, and the launch of a new book.

The book, *Playing the Past: Three plays* by Australian women, includes an introduction by Ms Kilner on Australian theatre in the early 19th century.

Currency Press will publish each series of plays performed as part of the annual project. Future series will focus on different aspects of Australia's early drama scene.

Those wishing to buy the book can do so at a special price of \$8 by contacting Ms Kilner on 9905 5239.

BY GEORGIE ALLEN

Female circumcision a challenge for social

workers

Social workers should be educated about the complex and sensitive issues surrounding the practice of female circumcision in Australia, according to Monash social work student Ms Brenda Burstal.

Ms Burstal was recently awarded the inaugural Bachelor of Social Work Practice Research Award for her honours thesis – the first Australian study of female circumcision from a social work perspective.

She began the study after working as a student social worker and, while suspecting some clients' problems may be related to female circumcision, she did not feel informed enough to raise the issue.

Ms Burstal said that because of their unfamiliarity with the practice, social workers could miss distress signals indicating associated health, marriage and sexuality problems.

"Knowledge of female circumcision and its effects and cultural context may lead to different and perhaps more appropriate responses to the client by welfare and health workers," Ms Burstal said.

The problem was compounded because sex was a taboo subject in many African communities, and social workers were afraid of alienating their clients by raising the issue of female circumcision and related problems.

The number of women affected by the practice in Australia has increased in the past five years with the migration of women from practising countries such as South Yemen, Oman, United Arab Emirates, Malaysia, Indonesia and more than 20 African countries.

There are three types of female circumcision: sunna, which involves cutting the prepuce of the clitoris and/or cutting the clitoris; excision, which is the removal of the prepuce,



the clitoris and part or all of the labia minora; and infibulation, which is removing the clitoris and labia minora and majora, and sewing the remaining tissues back together so that a hole "no larger than a corn kernel" is left to allow urine and menstrual blood to escape.

Health problems from infibulation can include severe pain, shock, damage to other organs, tetanus, urinary tract infections, sterility through infections, complications during childbirth, extremely painful periods and intercourse, and septicaemia.

Infibulation has also been linked with an increased risk of HIV/AIDS transmission because of repeated vaginal tearing and a resulting preference for anal sex.

Ms Burstal said many African communities continued the practice as a way of expressing cultural identity and resisting perceived paternalism and cultural imperialism from the West.

"Because the practice has been entrenched in notions of culture, religion and nationalism, care needs to be taken that the anti female circumcision message is not seen as an anti African message," she said.

Many Muslim women also believed the practice was a religious requirement and

suffered great shock when they realised there was no mention of female circumcision in the Koran.

Ms Burstal said control of female sexual desire and the prevention of promiscuity were other reasons African communities continued the practice.

In some communities, virginity was highly regarded and considered a physical state which could be regained by reinfibulation. After childbirth, or when divorced or widowed, women were often circumcised again to regain their virgin status.

Australian community workers are currently working with African women who have initiated and are running education programs about female circumcision for women in their own communities.

But Ms Burstal said African women had experienced additional problems when raising concerns about the practice.

Some women had been accused of betraying their community, daughters had been angry with mothers who had put them through the procedure, and there had been concerns about sexual relations with men of other cultures.

BY GEORGIE ALLEN

Will the Nationals come to the party?

he National Party should develop broad-based policies on issues such as the environment to ensure its survival into the 21st century, according to Monash politics lecturer Associate Professor Brian Costar.

On the 75th anniversary of the National Party and amid continuing speculation of its demise, Dr Costar said the party should broaden its ideological stance to meet the needs of a society far less homogeneous than the traditional farming community.

He did not believe the party would lose its traditional voters by developing broader social policies.

"There is no inherent reason why farmers cannot also be conservationists – and many of them are. If the National Party has an image of being insensitive to environmental issues then, for electoral reasons alone, it should lose this image," he said.

"The dogs continue to bark that the party's days are numbered and, while a long way from extinction, the federal party must change to survive."

He pointed to the stance of the federal leader, Mr Tim Fisher, on racial vilification and homosexual discrimination as evidence that the Nationals remained profoundly conservative on social issues.

While Dr Costar believes rumours of the party's death are greatly exaggerated, he cites evidence that the party is on a down-

This is

Brian Costar: "The National Party has had to contend with predictions of its demise from the day its representatives first entered the federal parliament in 1919."

hill slide and argues that it must introduce substantial change to recover.

"The dogs continue to bark that the party's days are numbered and, while a long way from extinction, the federal party must change to survive."

In the 20 years since the great conservative triumph which swept the Whitlam Government from office in 1975, the number of Nationals on the floor of the House of Representatives has dropped from 23 to 16. The party's share of seats in the House has declined from 18.1 per cent to 10.8 per cent, and its share of the popular vote is down from 11.3 per cent to 7.2 per cent.

Even the party's trumpeting that it was on the ascendant following the addition of two seats in the 1993 federal election was actually a triumph of optimism over political substance.

Dr Costar said that while the National Party managed to win the Queensland seats of Kennedy and Hinkler in 1993, it failed to retake Richmond and Page – shock losses to the ALP in 1990 – and did not gain expected victories in its traditional NSW north-coast heartland.

The party also came perilously close to losing three more seats in the 1993 election, all of which were held with minute majorities.

It was easy for the Nationals to blame its long-term decline on the shrinking rural population, but Dr Costar said it was the party's inability to change that was at the heart of its problems.

In the federal sphere he pointed to the rapidly developing coastal regions of New South Wales and Queensland where the Nationals were not winning seats, and said the party was failing to sell itself to the new residents of regional Australia.

To end the slide in support, let alone grow, the party must change, but Dr Costar said there were no obvious or easy ways to improve the party's position.

The possibility of merging with the Liberals would not be popular with the party's rank-and-file loyalists and would not increase the overall conservative vote. Nor would ending the coalition with the Liberals be likely to increase the National vote.

The options might not be easy, but Dr Costar argues that without change Australia may lose its own rare political species, a mass agrarian-based popular political party.

BY STEPHEN MATCHETT

Migrants speak the language of success

The children of migrants from non-English-speaking backgrounds are more successful both at school and at work than other Australians, according to a study by Monash academic Dr Bob Birrell.

The study was conducted by Dr Birrell in conjunction with the Bureau of Immigration, Multicultural and Population Research.

It found that children from non-English-speaking backgrounds were more likely to complete secondary school and gain higher education qualifications and professional jobs.

"The cultural conflicts and difficulties with the English language which many scholars in the 1980s predicted would disadvantage people from non-English-speaking backgrounds do not appear to have harmed their progress," Dr Birrell said.

"The main arguments in the 70s and 80s were that (1) second-generation Australians would be devalued in the school system because of their origins, thus causing identity problems and an associated lack of confidence; (2) their parents lacked the cultural background to help their children cope with the school curriculum; (3) they would have language difficulties; and (4) they would be streamed out of subjects that provided access to higher education," Professor Birrell explained.

But it seems the opposite has occurred. Children from southern and eastern European-origin migrant families, where English is not the first language, have outperformed the children of migrants from English-speaking countries and those whose parents were born in Australia, both in educational and employment status.

In the 25–34 age group, the study found that of the men and women whose fathers were born in Australia, 55 per cent left school aged 16 or younger. Figures for second-generation British migrants were similar, with 55 per cent of males and 53 per cent of females leaving school aged 16 or younger.

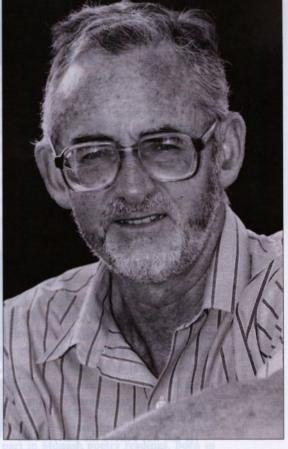
By comparison, only 26 per cent of those whose fathers were born in Greece left school at age 16 or younger while children whose fathers were born in China, Lebanon, Egypt, Czechoslovakia and Cyprus also stayed at school longer.

This trend continued with higher education. For example 18.8 per cent of second-generation Greek males and 13.1 per cent of Italian males aged between 25 and 34 hold degrees, compared with 10.8 per cent of those with Australian-born fathers and 11.8 per cent of those with German-born fathers.

Professor Birrell said that while arguments presented during the 70s and 80s predicting problems for students from non-English-speaking backgrounds were plausible, the actual outcome indicates they were incorrect. The census data shows "it was actually an advantage to come from a non-English-speaking background".

One of the most significant factors expected to disadvantage children of migrants from non-English-speaking backgrounds was that their parents lacked the cultural 'know-how' needed to help their children succeed within the Australian system.

But Professor Birrell said that in fact the opposite was true and that the attitudes of migrant parents had been a major factor in their children's success.



"It is clear that migrant parents have high aspirations for their children," Professor Birrell said. "They are very anxious that their children succeed after the trauma they themselves went through in moving to Australia."

Professor Birrell found that the children of migrants were also anxious to prove themselves because they were aware of the sacrifices their parents had made.

He said the strong cultural identity of many second-generation migrant children was also an advantage. "The strength of commitment and pride that some of these people have in their origins actually stimulates them to prove they can succeed in Australia."

Professor Birrell also suggests that the children of migrant parents are shielded from the "corrosive Australian juvenile peer culture which distracts some teenagers from the discipline of school work".

While he believes that increasing educational competitiveness has led to a change in the attitudes of Australian youth, he said there was little doubt there was a much stronger emphasis on achievement and upward mobility in migrant communities than in the mainstream Australian community.

BY JULIET RYAN

The fruits of research

hy would a PhD student get up each morning at 2 am and sneak out of the house in a long black coat?

In Hermoine Parsons' case it was to learn more about Victoria's changing fruit and vegetable industry. And in this industry, 2 am is when everything happens.

The black coat provided some protection for the Monash student as she launched herself into a marketplace dominated by men and filled with the tension and drama that has seen the murder of several greengrocers and a supermarket manager in recent months.

Ms Parsons said much of the tension had resulted from changes in the industry which led to many small market gardeners and wholesalers being cut out of the supply cycle as supermarkets increasingly purchased directly from 'preferred suppliers'.

She said supermarket chains were taking control of more and more of the supply chain: "They do everything short of buying the farm."

Ms Parsons is looking at ways the distri-

bution patterns in the industry are changing as supermarkets establish relationships with 'preferred suppliers' who are able to produce supplies quicker and cheaper with advanced technology and equipment.

According to Ms Parsons, many market gardeners, several of whom travel from as far away as South Australia twice a week to sell their produce at Footscray market, are having a hard time coming to terms with the changes.

She said they did not have the capital or the transport and storage technology to compete with the 'preferred suppliers'.

"The small growers are really battling the odds and will eventually be unable to continue." They were suffering from an oversupply of goods and could not work out why they were bringing home much of the produce they took to market each week.

Wholesalers were also being bypassed as retailers were using them less frequently to purchase products for them, and greengrocers were closing as supermarkets took over more and more of the market share.

With advanced technology, 'preferred suppliers' are able to produce goods all year, rather than in particular seasons, and can meet specific requirements of shape, colour and ripeness.

Ms Parsons said supermarkets analysed consumers needs and knew, for example, that a certain percentage of customers bought slightly green bananas, a certain percentage yellow bananas, and a certain percentage slightly brown bananas, and they ordered their produce accordingly.

As there has previously been no comprehensive data on the movements of fruit and vegetables in Victoria, Ms Parsons tracked produce from growers' farms to consumers' homes.

She followed the movements of tomatoes, beans, capsicums and potatoes for one month each in winter and in summer.

The process involved following the fruit from the markets from 2-4 am, to the wholesalers from 4-7 am, and through the distribution centres in the later morning.

She said she became familiar with every supplier's produce as she stood on the back of trucks counting boxes as they were unloaded.

Her research also took her to Queensland and around the Victorian countryside to interview the 'preferred suppliers'. For many interviews, she needed letters of introduction and references because of the tensions that have made many growers suspicious and tense.

Ms Parson will share her results with the State Government's Market Authority as well as with the growers, wholesalers, large suppliers and supermarkets that helped her in her study.

"They are all desperately interested because the industry is so tense and competitive right now."

BY GEORGIE ALLEN



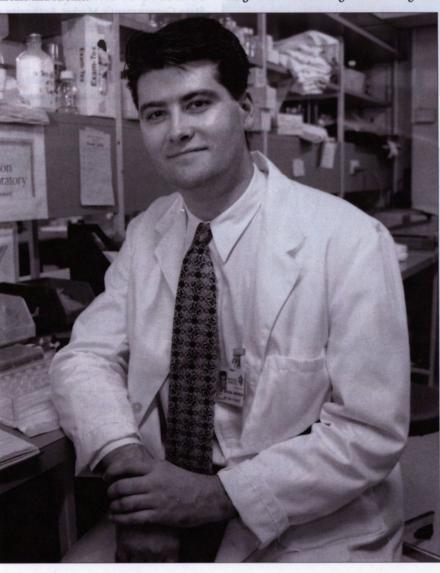
Researcher finds clues to clotting

A Monash researcher is looking for a commercial partner to develop a compound to help fight circulatory diseases. Tim Thwaites reports.

hat started as a student investigation of an unusual patient has led a researcher from Monash's Box Hill Department of Medicine to a discovery which could help prevent heart disease and strokes.

Dr Shaun Jackson has detected a previously unknown molecule in the blood which plays a central role in the overall control of clotting.

The work could lead to more effective drugs which would regulate clotting and



refine treatment for clotting-related conditions, the leading causes of death in the developed world. (It is the development of clots in blood vessels – thrombosis – which triggers heart attacks and strokes.)

For his efforts, Dr Jackson recently won the inaugural Victorian Premier's Award for Medical Research worth \$10,000.

The trail began more than six years ago with a woman who had a thrombosis in her leg. Clotting depends on a specialised blood cell, known as a platelet. This cell is sticky and prevents bleeding by attaching to the wall of a damaged blood vessel. When excessive numbers of platelets clump to the wall, they can cause a clot which blocks blood flow to a vital organ such as the heart or brain, leading to a heart attack or stroke.

What was interesting about this patient was that the clotting occurred despite a low platelet count in her blood. Low numbers of platelets are more commonly associated with bleeding problems.

The woman was referred to Dr Hatem Salem, an authority on clotting, who was Dr Jackson's tutor at the time and is now professor of medicine at Box Hill Hospital. As a student Dr Jackson was set the task of finding out why this patient was developing blood clots.

While it was known that platelets were capable of becoming hyperactive and clumping spontaneously under certain circumstances, it was assumed the condition was a malfunction of the platelet itself. But when Dr Jackson took plasma from the woman and exposed normal platelets to it, the platelets became hyperactive, demonstrating that an external factor could induce such a condition in platelets.

Excited at his discovery, Dr Jackson decided to investigate further by devising a sensitivity test for platelet hyperactivity. Using this test he found a platelet-activating factor, a small molecule commonly present in blood plasma, which could induce platelets to become hyperactive.

Even more tantalising was a follow-up study which showed that Dr Jackson's platelet-activating factor was present in the plasma of more than half the patients with a history of clotting diseases, but in only one in 10 patients who did not have such a history, and in only one in 36 healthy people.

A research group in Amsterdam has recently supported these results by finding that hyperactive platelets are a good predictor of heart attacks. Dr Jackson and his colleagues at Box Hill have extracted and purified the molecule and, with the help of Dr Graeme Currie from the Botany department at the University of Melbourne, have determined its structure.

"We assumed it was a known molecule, but we found it was a new factor altogether. It is a very small, simple molecule which is not an amino acid but is about the same size," Dr Jackson said.

The group is making a synthetic version of the molecule and building similar molecules or analogues which could interfere with the action of the platelet-activating factor.

The researchers have already found the analogues to be potent inhibitors of blood clotting with the potential to be used in preventive therapy against heart attacks and strokes.

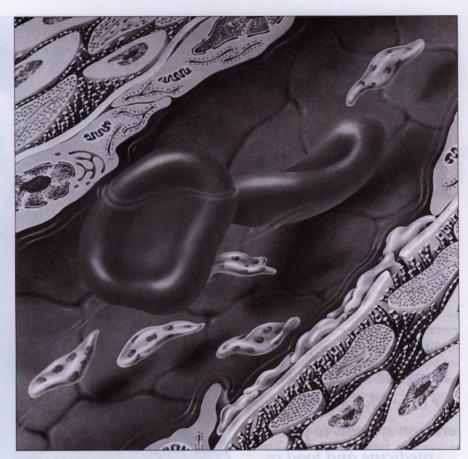
Dr Jackson and his colleagues are currently trying to patent clinical use of the compound and interest drug companies in supporting further research.

The commercial possibilities of their work has put the researchers in the curious situation of being unable to publish the bulk of their findings. Potential investors are unwilling to put money into developing knowledge which is freely available to their competitors.

"There are a lot of scientific issues we still want to investigate," Dr Jackson said. "Where does the factor come from? Where is it made in the body? Does it increase or decrease in concentration in the blood at certain times of the day? (Heart attacks are more common between 6 am and 9 am.) How does it activate platelets? What is the mechanism? And does it only act on platelets, or does it affect other cells?

"I believe in this work and think it's exciting. I want to push ahead as fast as I can. I also want to continue work in Victoria, to produce a commercial product, so we are looking for investment from a major Australian-owned venture."

He said that to crack world markets, the product may eventually have to be taken offshore. "But we can do a lot of work here before that stage is reached. There's been a lot of interest. We've had approaches but we are still looking for the right partner."



Above: Normal platelet response to blood vessel injury – when damage to the lining of blood vessels occurs, circulating platelets stick to the injured vessel wall forming a plug. This platelet plug stops bleeding and allows the vessel wall to heal.

Below: Excessive platelet clumping at sites of blood vessel injury – this exaggerated platelet response (hyperactive platelets) leads to the formation of a clot, which occludes the blood vessel and prevents blood flow to the heart or brain.





Monash researchers are using the sun to make ice for urgently-needed refrigeration systems to preserve medicine and food in remote parts of the world.

Tim Thwaites reports.

research group from Monash University's Gippsland School of Engineering has received a \$223,000 grant from the Australian Government to develop solar-powered refrigerators commercially.

The group's leader, Dr Eric Hu, said the solar ice-maker would be used to help preserve vaccines and other medical products in remote and underdeveloped areas.

With the World Health Organisation estimating demand for the product at several thousand a year, the group hopes to have a prototype of a small ice-maker working by the end of 1995.

Solar refrigeration is suited to remote areas in the Middle East, Africa, India, China and even outback Australia. The fridges would need no external electricity supply, would be durable as there are few moving parts to wear out, would be fairly easy to manufacture, relatively inexpensive (if mass produced), and would not use environmentally damaging chemicals such as CFCs.

The grant was made to the Monash team in partnership with researchers from the South China University of Technology (SCUT) in Guangzhou under the Department of Employment, Education and Training's Targeted Institutional Links Scheme. It covers a three-year collaborative research and development program and includes a \$90,000 three-year scholarship for a student from China to participate in the research at Monash.

The sun's energy can be applied to refrigeration in two ways. Photovoltaic cells can be used to produce electricity to power a conventional low-energy domestic fridge, or heat from the sun can be used directly to drive a refrigeration system based on evaporative cooling – a more sophisticated version of the Coolgardie Safe. The Monash research is based on the second system, as it is simpler and more efficient as well as robust and inexpensive.

Based on two years' preliminary work, Dr Hu has determined that the most practical, cheapest and least toxic chemicals to use in the system are methyl alcohol (or methanol) and a form of charcoal known as activated carbon.

The process is simple. During daylight hours, sunlight falls on a solar collector

which contains activated carbon saturated with methanol under a vacuum.

The heat drives the methanol out of the pores of the carbon as a vapour. Pressure in the system rises and pushes the vapour through a condenser where it cools back to liquid and falls into a container within the refrigerator.

At night the collector cools and the pressure in the system drops. The liquid methanol evaporates, extracting heat from the refrigerator, and passes back to the activated carbon ready for the next day. Such a system, using a collector area of less than two square metres, can produce more than two kilograms of ice overnight.

During the days the ice would be transferred into a separate cabinet to keep medicines or perishable food products cool. The solar ice-maker should be compact enough to use in caravans and boats.

Dr Hu said that while there was little difficulty constructing such a refrigeration system, keeping it operating was a bigger problem and the reason solar fridges were not currently available. The problem is that as the methanol comes into repeated contact with the metals from which refrigerators are built, there is a chemical reaction and the system slowly decomposes.

"After two years of decreasing performance, you would eventually not be able to get ice out of the system. If this happened in a remote area, it would be very difficult to fix because of the lack of electrical power," Dr Hu said. "One aim of the project will therefore be to search for metal alloys which will not affect methanol."

Another significant challenge is to develop a system which can be transported over rough tracks to arrive undamaged in remote areas. In particular, the vacuum seal must be protected so that it does not leak by the time the fridge is installed.

In related work the research group is studying the microstructure of activated carbon to find characteristics that are best suited to the carbon-methanol system.

Activated carbon can be produced in many different forms from many different source materials, including brown coal from the Latrobe Valley where Monash's Gippsland campus is located.

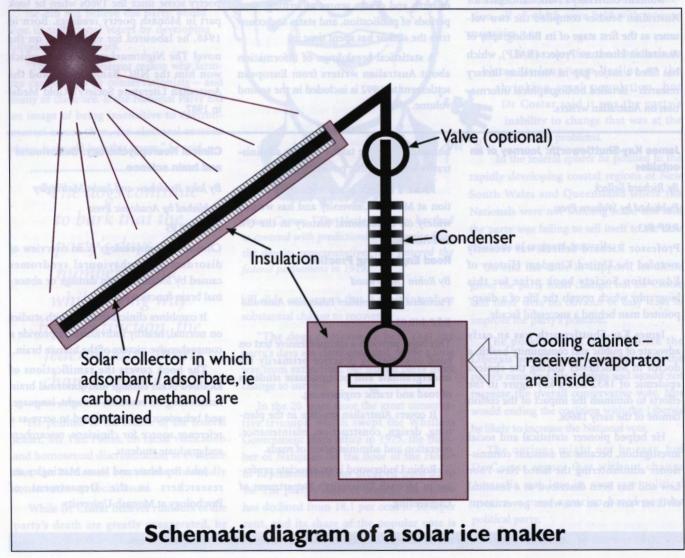
At night the collector cools and the pressure in the system drops. The liquid methanol evaporates, extracting heat from the refrigerator, and passes back to the activated carbon ready for the next day.

"Selecting the right form will be critical to the success of the project," Dr Hu said. "Activated carbon from coconut fibre is currently considered the best alternative." Dr Hu will use the project to refine a computer model of solar refrigeration which he developed as a PhD student. The model will simulate the operation of the solar ice-maker under different conditions and help ensure that the design works in a range of environments.

Other members of the Monash team include Professor Brendon Parker, who will work on materials and manufacturing techniques, Associate Professor Ian Spark, who will oversee the design and construction of the Australian prototypes, and Mr Geoff Vains, who will help design the refrigeration system.

Professor Yin-Ke Tan and Dr Dong-Sheng Zhu from SCUT will use their knowledge of heat transfer to design a new and efficient solar collector.

A visiting academic from China will also arrive to work with the Monash team next month and the scholarship student will begin at Gippsland next year. Their participation will ensure that the project not only has a practical outcome, but also serves as a cultural exchange program.



Easy access to Australia's literary talent

The wealth of Australia's literary talent has been brought together in a double-volume reference guide, List of Australian Writers: 1788–1992.

Poets, novelists, short story writers, children's authors and dramatists make up the 9500 Australian writers listed in the guide.

Monash University's National Centre for Australian Studies compiled the two volumes as the first stage of its Bibliography of Australian Literature Project (BALP), which has filled a major gap in Australian literary research – detailed bibliographical information on Australian writers. Project coordinator Ms Sally Batten said this was the first time this sort of information has been brought together in one place.

"Previously, researchers and readers would have had to consult a variety of databases and reference books to piece together biographical and bibliographical information about any one particular writer," she explained.

"The List of Australian Writers will guide them

directly to relevant sources and provide specific information on each writer."

The guide includes every Australian author of creative writing, ranging from the best sellers to those who have single self-published works.

Each entry includes the author's alternative names and pseudonyms, gender, dates of birth and death, genres of writing, time periods of publication, and states and countries the author has spent time in.

A statistical breakdown of information about Australian writers from European settlement to 1992 is included in the second volume. Many notable authors attended the launch of the book, including:

Don Charlwood

Charlwood's published works include memoirs of his experiences during the Second World War, a novel set in the Melbourne suburb of Frankston and a book of short stories. He won the 1982 NSW Premier's Ethnic Literary Award for *The Long Farewell* (1981) based on the diaries kept by early 19th-century emigrants on their sea voyage to Australia.

Chester Eagle

Born in Bendigo, Victoria, in 1933, Eagle is a versatile talent. His work includes five novels, his autobiography, Mapping the Paddocks, which won the 1985 Age Book of the Year award for non-fiction, and Play Together, Dark Blue Twenty, which recreates his experiences at Melbourne Grammar School.

Alan Wearne

Wearne has been part of the Australian poetry scene since the 1960s when he took part in Monash poetry readings. Born in 1948, he laboured for eight years on the novel *The Nightmarkets*, an effort which won him the NBC Banjo Award and the Australian Literature Society's Gold Medal in 1987.

James Kay-Shuttleworth: Journey of an outsider

By Richard Selleck

Published by Woburn Press

RRP \$43

Professor Richard Selleck was recently awarded the United Kingdom History of Education Society book prize for this biography which reveals the life of a disappointed man behind a successful facade.

James Kay-Shuttleworth was an early advocate of public and community health, a doctor in Manchester during the cholera epidemic of 1832 and a key figure in the efforts to diminish the impact of the cotton famine of the early 1860s.

He helped pioneer statistical and social investigation, became an assistant commissioner administering the hated New Poor Law and has been described as a fanatical civil servant in an era when government bureaucracies were taking on new administrative and economic powers.

Richard Selleck is a professor of education at Monash University and has written widely on educational history in the UK and Australia.

Road Engineering Practice

By Robin Underwood

Published by Macmillan Education Australia RRP \$69.95

This book provides a comprehensive text on road engineering practice primarily for undergraduate and postgraduate students of road and traffic engineering.

It covers Australian practice in the planning, design, construction, maintenance, operation and administration of roads.

Robin Underwood is an associate professor in Monash University's Department of Engineering.

Clinical Neuropsychology: Behavioural and brain science

By John Bradshaw and Jason Mattingley

Published by Academic Press

RRP \$89.95

Clinical Neuropsychology is an overview of disorders and behavioural syndromes caused by localised brain damage or abnormal brain functioning.

It combines clinical findings with studies on normal, healthy individuals to provide a comprehensive picture of the human brain.

The book covers the ramifications of localised brain damage and abnormal brain functioning on emotion, thought, language, and behaviour and is designed to serve as a reference source for clinicians, researchers and graduate students.

John Bradshaw and Jason Mattingley are researchers in the Department of Psychology at Monash University.

LA lessons: unfounded fears for Australia

Australia's rich are getting richer while its poor are becoming less understood, according to a Monash historian.

Dr Mark Peel said the nation's economic growth since the 1970s had coincided with increased inequality in incomes, greater social division and less empathy for the disadvantaged.

He believed unfounded fears of a developing social 'underclass' made it harder to bridge the gap between the 'haves' and the 'have nots'.

Dr Peel, who is writing a book based on discussions with 350 residents and workers in Melbourne, Sydney, Adelaide and Brisbane working-class suburbs, said media debate during the 1992 Los Angeles riots highlighted ignorance of social inequality in Australia.

"We will never be the nightmare Los Angeles fantasy where the disadvantaged become threatening masses waiting to unleash revenge.

He said there had been much ill-informed debate about a US-style underclass in Australia.

"We will never be the nightmare Los Angeles fantasy where the disadvantaged become threatening masses waiting to unleash revenge.

"Joan Kirner's post-riot warnings of alienated underclasses were translated into 'Dole queue riot fears' by the *Herald Sun*. Racy headlines outweighed sensible commentary on the racial aspects of American inequality and attempts to seek meaning from LA's suffering."

Other newspapers' commentators lamented the breakdown of families and social order, and suggested that what the poor of Los Angeles and Australia needed was less welfare.

"It puzzles me how free health care or social security benefits might destroy family structures. From talking to disadvantaged people, it seems to me that a bit of extra cash gives families more chance of staying together and keeps kids in school or at home," Dr Peel said.

And he said images of riots ignored the resilience and initiative of the poor while creating barriers between them and the rest of society.

"There is a danger in this urge to define the 'underclass' as something different and less rational than ourselves. Fear without compassion only makes the response to disadvantage more punitive."

Dr Peel said his discussions with people in Melbourne's Broadmeadows, Sydney's Mount Druitt, Adelaide's Elizabeth and Brisbane's Inala revealed a belief that the security that had resulted from the general prosperity of the 1960s and 1970s was being destroyed.

"I heard about the return of insecurity and poverty that many people thought had gone forever," he said.

"The hopes for the next generation, which have always sustained working-class people through hard times, have turned into fears."

Dr Peel believed the changing global economy, including rapid deregulation and the dismantling of tariffs, had left the future of many people in the hands of credit agencies, multinational companies and stock markets:

He acknowledged that Australia could not have stood apart from global changes, but said the ways governments adjusted economies were not inevitable.

"It is important to see that 'restructuring', 'downsizing' and 'rationalisation' have real effects on real people in real places.

"Money and opportunities have been retreating up the social ladder for over a decade. Social wage measures have helped the poorest, but most ordinary people have seen their wages buy less and less, their skills and assets devalued and their children struggle in a suddenly harsher world."

"The hopes for the next generation, which have always sustained working-class people through hard times, have turned into fears."

Dr Peel also feared the privatisation push would lead to "substandard" public services for the poor and encourage desertion by people who could afford to pay for better private alternatives.

"Encouraging people to vote for lower taxes so they can spend more on private education, security, transport and health is a peculiar kind of economic efficiency. America's health system should be proof enough of that," he said.

Such a system also meant less mixing of the social classes and less chance to share "common objectives".

"When people on the 'right' side of the line can no longer imagine those on the other side as fellow citizens, then it becomes easy to pretend that the poor live in another country and are not part of this one. It was so in the nineteenth century, it is so again now."

Dr Peel said listening to the people suffering the downside of a new Australia would promote a different approach to solutions.

"The task is to realise that investments in the future of our disadvantaged neighbours are investments in a common future."

BY GARY SPINK.

A picture of life on the move

Monash artist Euan Heng helps Australia celebrate 50 years of post-war immigration and cultural diversity. Georgie Allen reports.

E sioned to develop and produce a limited edition lithograph print to celebrate 50 years of immigration to Australia.

The print will be used as gifts for senior Australian and foreign government officials and has been part of an exhibition of immigration art at Sydney's Australian National Maritime Museum.

Senior lecturer and head of Printmaking and Photography at Monash's Gippsland campus, Euan Heng was a fitting choice for the job.

As well as being a renowned artist he is also an immigrant, originally from Scotland, and spent his early years escorting migrants to Australia as a merchant seaman aboard the Orient Line Orsova.

The lithograph is typical of Heng's work which features bold figures, often in a bland landscape and usually on the move.

His commissioned lithograph, 'Landfall', inspired by one of his oil paintings of the same name, depicts a family on the move, travelling to a new home across land and sea.

The lithograph is typical of Heng's work which features bold figures, often in a bland landscape and usually on the move. As one critic suggested, his work is often "about the



Euan Heng's oil painting 'Landfall' inspired his commissioned lithograph.

experience of leaving one's country and crossing a border to somewhere else".

The exhibition, sponsored by the Department of Immigration and Ethnic Affairs, features the work of 10 artists associated with the Australian Print Workshop in Melbourne who are either immigrants or the children of immigrants.

It is one of a series of events sponsored by the department to celebrate "the social, economic and cultural contributions that all migrants and their families have made to Australia" since the end of the Second World War.

"The cultural diversity which is evident in this country is exciting and indeed a tribute to the people of many backgrounds who now call Australia home," a department spokesperson said.

The works demonstrate a variety of printmaking mediums including etching, lithography, linocut and wood engraving.

One of Heng's colleagues, art critic Dr Robert Nelson, said Heng used printmaking to portray an image in a more essential form than is allowed by other mediums.

"The images are not necessarily fragments which will be reconstituted in a painting but simply ideas which feel their way to meaning," Dr Nelson said.

Heng said his work was inspired by books, music and other art he had recently seen. "It's more of an intellectual response than most people realise."

He is attempting to engage the viewer in visual dialogue. "I'd like to think that those who respond positively to my art would describe it as visually poetic," he said.

This year Heng has contributed to several other exhibitions including Major Solo Exhibition, Australian Galleries; Project Solo Exhibition, McClelland Art Gallery and Sculpture Park; Works on Paper, La Trobe Street Gallery; and International Works on Paper Fair.

Composing past glory

John Tallis, one of Australia's renowned musicians from the 1940s and 50s, was 'composer of honour' at Monash University's third annual composer series in early September.

The series is designed to recognise eminent composers with a presentation of academic papers on their contribution to the music scene and performances from their life's work.

Series convenor Joel Crotty said the project was part of ongoing research by the Music department into the life and work of composers born before 1925.

He said this generation of musicians had been largely ignored after young composers of the 1960s appeared on the scene with avant-garde music and strong marketing and promotional skills.

The concert featured the first performance of Tallis's most recent piece Four Pieces for Piano Duet by Monash artists-inresidence, Team of Pianists, as well as Suite for Harpsichord, Jig for Three Recorders, Seven Miniatures for Piano, Fantasy for Violin and Piano and Edward II Suite for Mezzo-soprano and Piano.

Mr Crotty presented the seminar paper, 'John Tallis, composer: A case study in Australian music history'.

Malaria research grant

Monash University scientist Dr Mark von Itzstein will share part of a \$2.5 million grant to research protozoa, one of the world's most destructive parasites and the cause of malaria, African sleeping sickness and Chagas' heart disease.

Dr von Itzstein shares the four-year National Institute of Health (USA) award with scientists from the UK and US.

His groundbreaking research and subsequent design and synthesis of the compound GG167, which prevents the influenza virus from spreading in humans, has led to his expertise being sought to research antiprotozoal agents.

Through the lens

How has the world changed over the past three decades?

Photographer Sue Ford, at her exhibition titled A Survey 1960–1995, brings together photography, film, video, drawing and painting to document social and political issues over the past 35 years.

Photographic works include early fantasy fashion images, the candid lifestyle portrait series 'Time and self-portrait' (1960s to 1980) and documentation of Gerry Hand, Bob Hawke and Galarrwuy Yunupingu at the 1988 Aboriginal land treaty announcement.

The exhibition illustrates Ford's contribution to a broad range of visual art beyond the field of photography.

An illustrated catalogue, with essays by Ms Ford, guest curator Helen Ennis and Virginia Fraser, accompanies the exhibition.

The exhibition runs at the Monash Gallery from 12 September to 21 October.

Minister launches rural health report

Regional MP and state minister Mr Alan Brown launched a Monash University study on rural health at the university's Gippsland campus recently.

The study, 'Health Service Needs of Small Rural Communities', examines the health problems of those living in rural communities and makes a series of recommendations about improving services in regional areas.

The study was funded by grants from Monash University and the Commonwealth Department of Human Services.

The launch was attended by authors of the report and representatives of local community health agencies.

New union building

The official opening of the community centre at Monash's Peninsula campus symbolised strengthening links between the university and the local area, according to campus director Professor Peter Chandler.

Facilities offered for public use at the new Monash University Student Union building include a gymnasium, 60-seat conference room with audio-visual equipment, bookshop, cafe, bar, bistro and amusement centre.

In a speech to open the centre, Professor Chandler described it as the best equipped student union facility on a campus this size anywhere in Australia, and said it represented a watershed in relations between the campus and the Mornington Peninsula.

The sign of responsibility

syst in my place

and history is reduced to the singular name by which it can be held accountable.

In this exact way some comment on this affair has named the literary community, post-modernism, or the academy as responsible, implicitly reducing the great variety of opinion, interest and belief in those named communities to the singularity of a name. It is a reduction supported by the belief that only the particular, or unique, signature operates as the mark of genuine responsibility, and that only those whose signature has been denied are free of responsibility.

While this general naming is not one and the same with the racist ideology behind genocide, it is a way of holding the other responsible by a signature which is always, necessarily, reductive. No author, whether of history, editorial, fiction or faction, can afford to ignore the violence done to the other in any attempt to hold a signature responsible. In seeking to expose another's name, to call the name of the other to account, one always risks savagery.

In the most forthright of attacks on the novel, we have not yet seen an attempt to take responsibility for this kind of thinking about language, history and responsibility. Ironically, it has been in the name of postmodernism or post-structuralism that an attempt to rethink the intimacy of responsibility and the signature has been engaged. It can only be hoped that this thinking might take its place in the current debate.

The sign of responsibility

nderlying many claims made against The Hand that Signed the Paper is the notion that the signature is the one true mark of responsibility. Falsifying this signature is taken as a sign of a desire to deceive or keep secret a thought which could not be presented in the light of day and for which one would not want to be held accountable.

The shifting positions, or the silence, of those who have supported the novel have done little to suspend this process. It is as if the void of responsibility exposed with the exposure of the author's true identity demands to be filled. Everyone with a conscience or some stake in literature, history and the truth is, silently or vocally, asked to give an account of events — to sign, re-sign, countersign, the history of this scandal with an authorising signature.

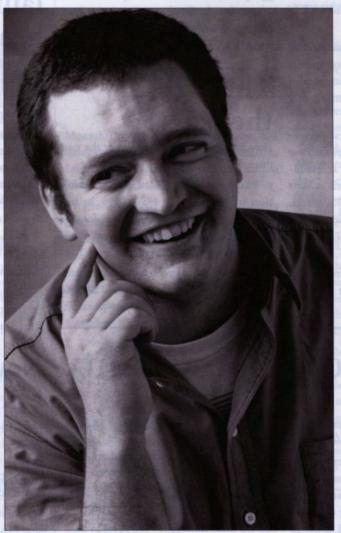
Against the boldly signed names of those who want to bring the novel to account, any silence begins to look like the mark of complicity, if not with the novel's content, then at least with the relativistic, pseudo-historical or post-modern ideology which, it is argued, masks the book's true intent.

In one move the defenders of good conscience and responsibility expose the names of those to be held accountable: a naive, pathological liar and historical revisionist; the literary commu-

nity, whose blind adherence to certain values allowed an exploitative and morally specious work to be published and promoted; and the literary and cultural theorists whose perceived belief in the relativity of all values and authority is said to be silently affirmed in the book and the subsequent controversy.

What these accounts do not, however, take responsibility for is the very thinking about responsibility which sustains their

Monash University English student John Morris examines the responsibilities of the author, the literary community and commentators in light of the recent 'Demidenko affair'.



attack just as it underlines the entire argument of *The Hand that Signed the Paper*. Importantly, what the novel says about responsibility, violent and disturbing as it is, it said before any revelations about its author demanded public response.

The novel argues that the truth of history and the identity of a people can only be spoken in a particular language as rooted to the unique place where that language is spoken by the racially different tongues of its subjects. Furthermore, it proposes that a person can be held accountable only in the place and language which is one's own. Repeatedly the novel mentions the loss of language and place which transformed the simple and peaceful folk of the Ukraine into murderers.

Far from any question about whether this is an accurate portrait of the Ukrainian psyche, or the ideological and political forces at work during the dark period portrayed in the book, is its specious claim that people need not be accountable, peaceful or tolerant when displaced from an intimacy with their land, blood and language: a rhetoric of belonging. The book's fraud does not lie in the false identity of the author, the historical inaccuracy of its tale, nor in the now dismissed charges of plagiarism, but in the claim that peace and understanding are impossible unless people have a separate place, home or language in which to express their unique

The narrator's uncle, the book's focal character, says: "In my place I wanted peace. Just peace. Just to be left alone. If you leave people alone they don't do bad things" (p. 154). What he says is fraudulent because it masks an implicit ideology of racial segregation and purity with a claim for tolerance, justice and peace.

The same argument which excuses the Ukrainian community from accounting for a past in which its own signature is lost, also names, under the general signature of the Russians, the Communists, the Jews, the Nazis, those who are truly responsible for the violent behaviour of the Ukrainians. By this logic, the difference necessary and inevitable within any community, language

Continued on Montage 15