Colombian mission complete

A Monash academic has left his mark on South American history, sparking reform to Colombia’s strife-torn law enforcement agencies.

Dr Andrew Goldsmith is still reeling from his whirlwind trip to the drug-riddled country – a journey that started with the chance discovery of his “scribbles” in a book found on a bookshop shelf in England.

Colombian Government officials hand-picked Dr Goldsmith as a special adviser after reading his work in Complaints against the police: The trend to external review (Oxford, 1991).

Dr Goldsmith’s words were translated into Spanish and helped provide the rationale for major law reforms sealed by the Colombian Government in August.

Designed to counter international criticism against Colombian police, the reforms set a precedent in Latin America by introducing an external commissioner to handle civilian complaints.

Dr Goldsmith was the first Australian to be invited to changes to the Colombian police force. He played a key role in the reform, answering queries for the country’s top leaders.

Weeks after the extraordinary seven-day mission, Dr Goldsmith told Monash he was still dazed by the Colombian experience.

He recalled a sense of danger throughout the visit. Armed police bodyguards followed his every move, from the chauffeur-driven Mercedes to the high-security government offices.

Even the light plane used to ferry Dr Goldsmith and his hosts between cities had a drug background. Police seized the aircraft last year from a cocaine cartel hauling raw materials from Peru.

Returning to the daily ritual of fighting for a car park on Clayton campus was a “humbling experience” for Dr Goldsmith, who works from a fourth-floor office in the high-security government offices.

After six years with Monash, Dr Goldsmith admitted feeling apprehensive when the Colombian Government invited him on the official visit. He was understandably nervous about visiting a country renowned for its violence and the highest homicide rate in the world.

In one city he visited, Medellín, more than 250 police were assassinated by a powerful cocaine cartel in a four-month period two years ago. About 2.8 million people live in Medellín – a population comparable to Melbourne’s – but the city’s homicide rate remains 90 times greater than its Australian counterpart.

“As soon as I set foot in the country, I was cocooned by six policemen, four of them armed,” he said. “They walked me outside, and the first thing I see was a limo with two armed motorcycle escorts, an interpreter and an armed driver.

“It was a bit strange at first, but unfortunately it’s necessary. There are estimates that 70 per cent of the country’s population directly benefits from the cocaine industry. This creates some ruthless and violent people.”

Dr Goldsmith spent most of his Colombian visit providing examples of ways in which other countries handle complaints against police. He stressed the importance of independently investigating complaints as a means of improving community relations.

At the invitation of President Gaviria’s Counsellor on Security, Dr Ricardo Santamaría, Dr Goldsmith held talks with government ministers, police generals and city mayors in Medellín, Cali and the capital, Bogota.

“The more you find out about Colombia, the more complicated you realise the country is, with all its different layers and players,” Dr Goldsmith said.

“There’s a wide range of parties and groups that regularly threaten the public with violence, intimidation and corruption. These include cocaine cartel barons, vigilante groups, left-wing guerrilla groups and right-wing paramilitary groups, often supported by large landowners.

“Because of this, most Colombian leaders live under a real threat of danger. When I met the attorney-general, I had to go through metal scanners and body searches. These people live very threatened lives.

“But the government leaders agree that life is never dull in Colombia. Officials and their families must live on an adrenaline rush most of the time.”

continued page 2
25 YEARS AGO

A Dutch institute has given 1200 valuable books to the University Library. Most of the volumes are about Indonesia. Some are more than 100 years old.

The gift was made by the Koninklijk Instituut voor Taal, Land en Volkenkunde of Leiden, which has the world’s largest library on Indonesia. The institute decided to make the gift after a visit by a Monash staff member.

15 YEARS AGO

The abolition of fees in tertiary institutions has had, at best, a marginal effect on the accessibility of higher education to socially and economically disadvantaged groups.

This is the major finding of a study by a team of researchers of the composition of students in higher education in Australia and the effect of the abolition of fees in 1974 on it.

5 YEARS AGO

Following are some extracts from a review of the university’s Language Guidelines by the History Department’s Ian Mabbett.

There is no ducking or draking the fact: if any proponent of non-intellectual Oxford English tries to ignore the jargonfree of Non-discriminatory Language that is spreading inexorably towards him or her, this public servant will not hear the signal that before he or she can say Jill or Jack Robinon, he or she will find that his or her gorgeous glossier has been well and truly cooked for him or her.

A Dutch institute has given 274 per cent of an Asian and 6.13 per cent of an African.

The fractions could be handled by having people name elegantly into the side of the picture, showing parts of their faces.

Further, I propose that every photograph should include a label (as representative of an endangered species), and in due course we should make a point of having an obligatory commentary in the background. This project could be monitored by a new unit to be set up by the Vice-Chancellor. The university will well afford to fund such meritorious programs, Q.E.D.

Dr Goldsmith’s overseas mission started when a Colombian Government adviser was sent to an Oxford University don, bought a copy of his book from an Oxford bookshop. The book had been edited and partially written by Dr Goldsmith, with expert accountability. His masters and doctoral theses focused on this area, drawn on his academic experience in Australian, English and Canada.

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Dr Goldsmith believed government concerns about the nation’s security forces were partly driven by the latest push for foreign investment.

The country’s deregulated economy and free trade policies had sparked considerable overseas business interest, but development was set back by an international backlash to human rights abuses by Colombia’s security forces.

According to Dr Goldsmith, the government realised that foreign investment would not improve without public confidence in the police force. But he was concerned by Colombia’s “impunity” problem—the state’s constant battle with organisational intimidation in the background.

While the community saw police as immune from the law, police saw criminals in the name of Dr Goldsmith said this problem tempted people to take the law into their own hands.

He said Brazil and Venezuela had made a similar legislation, but each failed after strong opposition from powerful groups such as the army.

“So many new initiatives fail because people are either frightened or paid off,” he said.

There is said to be a paper “Colombia’s and a real Colombia. The paper side is a very democratic country with many more modern human rights enshrined in the constitution than many other Western countries, including Australia. But the real Colombia runs on a high level of intimidation.”

“I was told that parts of my chapter were actually used in the president’s speech when he proclaimed the law.”

Dr Goldsmith was astounded by the publicity his book received throughout Australia since his trip to Colombia.

“Dr Goldsmith is the first Australian to advise the country on police accountability. Previous advisers hailed from France, Spain, Italy, the US and the UK.”

“Since returning from Colombia, Dr Goldsmith has been writing a special report for the Colombian Government. He also plans to submit articles to policing and human rights journals.”

Dr Goldsmith’s book followed several years of specialising in police accountability. His masters and doctoral theses focused on this area, drawn on his academic experience in Australian, English and Canada.

Dr Goldsmith is the first Australian to advise the country on police accountability. Previous advisers hailed from France, Spain, Italy, the US and the UK.

“It’s the first time the Colombian Government has offered to loan its book to us in return and we are overjoyed with the offer, which means that it may have a critical disease that could wipe out thousands of health benefits that by animals when it is re-released. It could also cause social disruption to the animal population which is in its released and disrupt the gene pool if it begins breeding with the established wildlife.”

(From this letter, Mr Targgurt has been put in charge of the Equine Zoo.)

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Teaming up with Myer

Monash clothing will be sold at Myer stores throughout Victoria next year in a joint venture involving the Monash Merchandising Company (MMC), Myer, and three other Melbourne universities.

An autumn collection of varsity clothing from Monash, Melbourne and RMIT universities, featuring T-shirts, track pants and shorts, windcheaters, socks and caps, will be available at Myer in February.

MMC’s Ms Alex Mead will help develop a new range of products for the launch. "The four universities will be working with Myer to develop the range of products available for sale," Ms Mead said. "Myer will actually purchase the stock, so there is no risk involved with the venture, and each university will receive a royalty.

"The spin-off will be a greater awareness of the clothing, but it will take some years before varsity collections in Australia have the same image and recognition as in America."

"In the US, clothing is centred on sporting teams like basketball and football, so every time a team steps out onto the field, they are marketing their clothes. There isn’t this trend in Australia."

The MMC has three equal partners: the university, the Clayton Union, and the Monash University Student Union Inc. The company, which was officially set up at the beginning of the year, now has shops at Clayton, Caulfield and Gippsland, and an outlet at Peninsula campus (Frankston).

According to Ms Mead, each outlet has developed its own trends peculiar to the geographic and demographic features of the area.

"Gippsland has high sales in windcheaters and track pants because of its climate, Caulfield’s main market is international students buying for friends and family back home, Peninsula buyers go for the surf designs, and Clayton’s sales of a range of products are higher because of the number of people on campus," she said.

Before MMC was established, the Clayton Union shop stocked a range of products that were distributed to Caulfield and Clayton on request. In the past two years, sales of logo products were more than $300,000.

"This year we have been redefining our product mix and making sure their quality is right for the price. Quality is important because we are trying to enhance the name of Monash, not only within the community but also in the business sector," Ms Mead said.

"We are also introducing a corporate business range aimed at guests of the university and academics going overseas on business trips."

Over the next few years, MMC will focus on off-campus retail sales and merchandise for export. "This year, information was mailed to overseas students graduating in Hong Kong, Singapore and Kuala Lumpur," Ms Mead said. "Next year, we will have displays set up overseas, featuring a sample range of stock."

University institutes a housing and urban coup

Monash is now playing a key role in the development of Australia’s housing and urban policies and education.

The university, a member of the new Australian Housing and Urban Research Institute (AHURI), a national organisation whose membership includes the Royal Melbourne Institute of Technology (RMIT), Queensland University of Technology, and the CSIRO, AHURI will receive $1.5 million in federal and state funding over the next three years.

Associate Professor Chris Maher, of the Department of Geography and Environmental Science, has been seconded to AHURI as its interim associate director of research.

Monash is noted for its expertise in housing studies and urban geography, Dr Maher believes the university’s contribution to AHURI will play a vital part in improving the quality of housing and urban life into the next century.

He said the recent National Housing Strategy had shown that one of the greatest barriers to developing effective housing and urban policies was the lack of relevant data and research.

"It will be AHURI’s task to develop a comprehensive integrated research program into the social, economic, demographic and environmental factors that set housing policies and urban development," he said.

"We will investigate issues such as the affordability, accessibility and appropriateness of Australian housing, the impact of economic restructuring on housing demand, urban development, and our housing regulations."

To achieve this goal, AHURI will reach out to as many groups involved in the housing and urban industry as possible, including the private sector, state and federal housing authorities and planning agencies, and non-government community services organisations.

Dr Maher said such extensive networking would not only provide data for policy reforms, but also establish a wide-reaching database and communications system that would be available to relevant industry throughout the nation and Asia-Pacific region.

"We want to establish a national and international network exchange where relevant industry can contribute or draw from a central information source," Dr Maher said.

He believed the consortium was successful in winning the tender because of its ability to draw expertise from four institutions, as well as its proposal to network extensively with outside groups.

The institute will also concentrate heavily on education and training in the housing and urban fields.

Dr Maher said that although the current education programs were of a high standard, there was a need to improve the overall knowledge and understanding of all those associated with housing and urban issues.

"AHURI is keen to provide more education in relation to the management of housing in the urban context," he said.

By 1995 we hope to develop a masters degree in housing and urban policy, as well as graduate diplomas and associate diplomas in the management of housing in the public, community and private sectors.

"The move will offer a lot of opportunities to students, allowing them to broaden their research and improve their job prospects."

The institute is based in Melbourne's CBD and has an office at the Queensland University of Technology in Brisbane.

Dr Maher is one of 10 Monash academics who will contribute to the institute's activities. Other part-time Monash participants are Dr John Clarke, Professor Gordon Clark, and Dr Kathy Gibson (director of the Women's Studies Centre of the Department of Geography and Environmental Science), Dr Anne Edwards, Dr Chris Chamberlain, Dr Bill Fody and Dr Len Eastop of the Department of Anthropology and Sociology; Professor Peter Spearritt of the Australian Studies Centre; and Associate Professor Bill Young of the Department of Civil Engineering.

Students focus on new vision

Clayton campus came to life with the announcement that the University of Melbourne had awarded the title of "Vision of the Year" to the "Vision" team for proposals and campaigning during the last month of the student elections.

"Vision," an independent group, worked a landslide victory, winning the majority of positions up for election.

Ms Janoel Liddy has been elected the 1994 chairperson of the Monash Association of Students (MAS), and becomes the fourth female in successive years to hold the position.

"The high voter and campaign roll-up shows that more and more students are interested in student politics, and hopefully apathy will give way to action," Ms Liddy said.

"Students must have a say in student affairs.

"Vision will focus on improving the graduate review program, managing the overcrowded facilities, recycling, and improving security, public transport and intercampus transport."

Ms Liddy is well qualified for her new role. She has been a host and camp leader, host scheme coordinator, open day guide and coordinator, Junior University Program coordinator, tutor leader for Course and Careers, and vice-president of the French Club.

She also works in the hospitality industry, and is a supervisor for AVS Catering at Flemington. She is completing a bachelor of arts, studying English literature, French, and Italian.

"Emotion gave way to relief when the returning officer announced the results — everyone had put so much effort and energy into the campaign," Ms Liddy said.

"The Vision team is working towards greater student participation in MAS."

The largest-ever voter turnout was recorded this year with 3500 students voting.
A new age of ethics

Is anything worth pursuing, apart from money, love, and caring for one's own family? This is the central question in Professor Peter Singer's new book, *How are we to live? Ethics in an age of self-interest*.

Professor Singer suggests that people in Western society should look beyond their materialistic self-interests and seek a life that offers more meaning and fulfillment. This, he believes, can be achieved by living ethically.

The theme of his new book is considerably broader than his internationally acclaimed *Animal liberation: A new ethics for treatment of animals.* In his new book, Professor Singer, who is deputy director of Monash University's Centre for Human Bioethics, asks whether ethics and self-interest are in conflict.

He argues that because we construe self-interest internally as money and material goods, we assume that acting ethically is often contrary to our self-interest. "Looked at historically and cross-culturally, modern Western society has given the great element much more prominence and respectability than other societies. It is time to question this and ask whether becoming wealthier really makes us happier," Professor Singer said.

"We also need to consider the effect of the drive for material wealth on the environment; and on the nature of the community in which we live. We end up with affluent people who need to spend much of their wealth protecting their own security from others who have been taught to have the same goals, but can only achieve them through crime."

"And the economic imperative is leading us to create a society that is not ecologically sustainable."

More food follies

*from page 1*

As the weather cools down, pasta becomes popular. The 25 trays made each day can feed more than 1000 people. But that's not all. Every day, the Union sells:

- 450 kilograms of chips and 100 kilograms of rice
- about 1000 pies and other pastries
- 100 fresh chickens and hundreds more fillers
- 60 kilograms of onions
- 50 kilograms of rice
- 3 kilos of fish
- about 100 lettuce
- 40 dozen samosas
- 10 dozen spring rolls
- 8 dozen doughnuts
- 60 kilograms of cheese
- about 1000 salads
- 40 kilos of grapes
- 40 kilos of coleslaw
- 10 per cent of dozens of souffles and
- 25 dozen coffee rolls.

Several specialist chefs work on campus, creating Asian, vegetarian, and pasta dishes, along with cocktails, muffins, pies and a wide variety of pastries.

Mrs Beegan was obviously proud of her friendly band of catering employees, from the red-faced chefs to the smiling workers with the plastic wrap. Since starting work in the university catering area almost 13 years ago, Mrs Beegan has seen many changes to the Union.

"It was a totally different place back then," she said. "We've made many changes.

"We're trying to offer as much variety as possible so that everyone gets a wide selection. People use a lot more health-conscious these days and we try to satisfy their needs."

The Los Angeles riots are testimony to what can happen when a community loses sight of all ethical values other than the individual pursuit of happiness," he said.

"On the other hand, there are other smaller, less prosperous places in the world where there is less emphasis on the individual, and as a result a more successful community exists."

Included in the book is a chapter on Japan, which Professor Singer says is both large and prosperous, but at the same time shows individualism and esteem for harmony and concurs for the one group.

"Adversely, Japanese attitudes to what is outside the group— including the environment—are not better, and sometimes worse, then those in Western societies," he said.

Professor Singer argues that we need to think more about what we are living for. His book does not offer hard and fast rules about what you should or should not do, but does suggest that finding a purpose in life can help to make one's life more meaningful and satisfying, especially if the purpose is an ethical one.

"An ethical approach to life does not forbid having fun or enjoying food and wine, but it leads us to having different priorities. We must reestablish the idea of living an ethical life as a realistic alternative to the present dominance of materialist self-interest," he said.

The book concludes with examples of people who have worked towards larger goals, achieving greater fulfilment and meaning by doing something they believe to be right.

For more on Professor Singer's beliefs, see "Savant" on page 12. "How are we to live? Ethics in an age of self interest" is published by Text Media and is available from the University Bookshop for $24.95.
The fitness of primary school students is being assessed in a soon-to-be-released Monash study.

The study, carried out by Dr Chris Browne, a senior lecturer in Physiology, and honours students, Ms Wendy Devine and Ms Dale Pruser, assesses the health and fitness of children during adolescence.

Nearly 200 primary school students from Years 3 to 6 at Presbyterian Ladies College (PLC) have taken part in health and fitness tests during the past five months.

According to Dr Browne, the project combines two forms of assessment. "The tests combine a cross-sectional study that looks at a group of children over a wide range of ages and a longitudinal study that highlights trends over an extended period of time," Dr Browne said.

"We have combined both methods for an accurate chart of child's fitness over a period of time. Our intention is to follow up at two-yearly intervals as the children age. For instance, we will survey the youngest students again at nine, 11, and 13 years of age."

"We will see how the individual children actually change in fitness and activity as they age, rather than infer changes from just a single cross-sectional study."

Ms Pruser and Ms Devine, who have been visiting PLC three times a week for five months, conducted a range of simple tests, including monitoring heart rates and cycle exercises designed to assess the fitness of students.

"We rotate the children out of their regular physical education classes to ensure that we complete the tests, so there has been minimal disruption to classes," Ms Pruser said.

According to Dr Browne, PLC was chosen because the school has a high retention rate from primary to secondary school age, and it forms a relatively narrow socioeconomic group.

"We used an all-girls school where students share physical education resources, which may not be available in a coeducational school," he said.

Mrs Sallie Norworth, headmistress of the junior school, said the school was pleased to be involved with the project.

"The girls participated in the project with great enthusiasm and interest," she said. "I am sure their awareness of fitness and diet has been heightened and will be an ongoing benefit to them.

"Parents have also appreciated the health focus of the program. Family discussion about lifestyle, and in some cases even a review of activity and dietary habits, has been promoted by the activities."

"A survey published in Australia several years ago showed a decline in fitness in teenage girls, due in part to their relative inactivity. The report found that girls reached peak fitness at 10 or 11 years and declined from there, while boys reached peak fitness at 16 years."

"We were interested in coming up with ways of monitoring fitness of children," Dr Browne said. "Numerous studies in Australia and overseas have failed to agree on an appropriate assessment of children's fitness, so we were mindful that the tests needed to be geared to children, not to adults or elite athletes."

"Testing in the school place has encouraged the children to regard the project as an extension of their school activities. By keeping the tests simple, any participating school can maintain its own health and fitness program after we have finished our project."

Dr Browne said the interest and encouragement the project received from the teaching staff at PLC was excellent. "Everyone goes beyond the project, but without the cooperation of the two physical education specialists, Ms Michelle Hawkins and Mrs Sarah Jenboy, the project would not have been as successful."

In addition to the practical tests, students completed two questionnaires that documented their level of physical activity and nutrition.

The findings were then compared with results of the practical tests to provide an independent estimate of daily activity. The project is looking for trends, Ms Pruser said. "And girls that are active and involved in sport the one that have the highest fitness level, we see there other factors?"

Dr Browne said the project will continue and may be extended to include children who have grown and medical problems, as well as those from coeducational schools.

"I believe we shouldn't be in an ivory tower at the university, and we should be doing things that involve the community," he said.

Alumni latest

A college of current and post-Monasht life has been put together in a new publication by Alumni Relations and Fundraising.

The quarterly booklet called Mosaic, which has been sent to every Monash graduate, highlights recent news from the university and provides information about various alumni members and groups.

It includes an alumni round-up, a political index of Monash graduates, a run-down of Monash alumni in the news, and a calendar of forthcoming events.

For further information, contact Alumni Relations and Fundraising on ext 75007.

Dr Terry Stokes research flames

Monash University's quest for a larger slice of the research funding pie was boosted recently with the appointment of a manager to head the newly created Research Services.

Dr Terry Stokes, who is responsible for the Office for Research and PhD and Scholarships branch, will coordinate the university's efforts to raise awareness of research opportunities and attract more funding for research projects.

"The University performs very well in some areas of research funding and poorly in others," Dr Stokes said.

"I think the Office for Research has a role to publicise research opportunities, particularly in those areas where we are not performing."

Dr Stokes will be seeking an active role in counselling unsuccessful grant applicants and offering induction training to new staff and graduate students about effective strategies for obtaining grants.

"Some projects miss out on funding by the smallest of margins. Counselling will help refocus researchers and adjust their grant applications for next time," he said.

Dr Stokes will also provide advice on research policy to the deputy vice-chancellor (research) and associate deans (research).

"One of my early tasks will be to develop a management information system (MIS) for research managers to provide information about the performance of research activities in their units. They can then compare their units' work with prior performance and identified targets, as well as with other units elsewhere in the country," Dr Stokes said.

"MIS will tell managers how many people are applying for grants, where the grants are coming from, the number of successful grants in the department, other avenues to source grants, and so on."

"The system will be flexible because many people at different levels will need to use the program and will want different information."

With the university's increased emphasis on improving research management, Dr Stokes now fills a unique position in Australian higher education.

"Staff development has focused on teaching, but we also need to raise the profile of staff development in research," he said.

Another area under Dr Stokes' direction is the renamed Ethics and Integrity in Research Office (formerly Animal Ethics), which has been established to look at the broader issue of ethical conduct in research, including research training.

"I expect Monash will be adopting a code of practice in research, which includes procedures for dealing with misconduct such as fraud and plagiarism," Dr Stokes said.

"We will talk to staff and graduate students to explore university policy on proper conduct of research, the steps you have to go through to use experimental evidence, and how long research evidence needs to be retained."

Dr Stokes was the first counsellor to the National Board of Employment, Education and Training, with responsibility to the Australian Research Council (ARC). His portfolio at the ARC was to develop a program of evaluation for research and performance indicators.

Dr Stokes is no stranger to higher education. He has studied at Macquarie University and the University of Melbourne, tutored at Deakin University, and spent four years with the University of Wollongong.

He has also completed a postdoctoral fellowship in the Walter and Eliza Hall Institute of Medical Research, which culminated in a bony, life among the scientists.
The new Monash phone system will have everyone talking

From 1 January 1994, Monash University will have a new phone system across all campuses which will affect all internal and external telephone and fax lines. The following examples illustrate how the internal system will operate in the new year.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Existing extensions</th>
<th>New extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clayton</td>
<td>(75) 300X</td>
<td>5 XXXX</td>
</tr>
<tr>
<td>Caulfield</td>
<td>(73) 200X</td>
<td>32 XXX</td>
</tr>
<tr>
<td>Frankston</td>
<td>(74) 400X</td>
<td>44 XXX</td>
</tr>
<tr>
<td>Churchhill</td>
<td>(72) 800X</td>
<td>26 XXX</td>
</tr>
<tr>
<td>Pharmacy</td>
<td></td>
<td>39 XXX</td>
</tr>
<tr>
<td>Monash Central</td>
<td></td>
<td>38 XXX</td>
</tr>
<tr>
<td>(30 Collins St)</td>
<td></td>
<td>(03) 90 000</td>
</tr>
</tbody>
</table>

The new external numbers will be (03) 90 and then followed by the five digit extension number.

Other features of the new system:
- Both the old and the new external numbers will be operational for an initial period of six months.
- Churchill campus will have a permanent system of two numbers:
  - Local callers: (051) 22 600X
  - National callers: (03) 80 600X
- All extension numbers become five digit numbers from 1/1/94. No numbers will be repeated across campuses.
- The current four digit form of extension numbers finishes on 31/12/93.

The new main numbers:
- Clayton (03) 905 4000
- Caulfield (03) 903 2000
- Frankston (03) 904 4000
- Churchhill (03) 22 6000
- Pharmacy College (03) 903 9000
- Monash Central (03) 903 8000
- All operator inquiries: dial 9

Female academic numbers up

The proportion of female academic staff at Monash University is higher than the national average of 31.9 per cent, according to a study recently released by the Department of Employment, Education and Training (DEET).

Between 1987 and 1992 the percentage of female academics at Monash increased from 27.3 to 33.3, but women academics are still concentrated in the lower echelons of academia. On a national scale, women occupy 5 per cent of positions above lecturer level. At Monash, the representation of women at this level is almost twice as high.

Ms Renate Singer, of the university’s Equal Opportunity office, says that while the increases are welcome, there is still much room for improvement.

“We’re disappointed that there are still so few women above the professorial level at Monash. At the moment we are looking at how appointments at this level have been made so that we can perhaps initiate some affirmative action,” she said.

Of the 166 professors currently employed at Monash, only 13 are female. But there is at least one reason why the proportion of women in the higher academic positions could increase in the future. A rising female student population will produce a larger pool from which female academic staff may be drawn.

The Minister for Employment, Education and Training, Mr Kim Beazley, said: “With the retirement of senior male academics throughout the next decade, the number of female academics filling these positions will accelerate.”

Close correlation

The DEET study also found that women academic staff are concentrated in traditionally female fields such as health, education, arts, humanities and social sciences. At the same time, women are under-represented in engineering, science, architecture and agriculture.

“There is a close correlation between the number of female students and the number of female staff in each of these subjects,” Mr Beazley said.

At Monash, women make up 6.9 per cent of teaching and research staff in engineering, 21.1 per cent in science, 37 per cent in arts, and 43.8 per cent in the education faculty. The 1993 figures, supplied by the university’s Planning and Analysis Branch, include full-time and fractional full-time teaching and research staff.

Between 1988 and 1992, the proportion of tenured academic positions fell from 66 per cent to 57 per cent. But the proportion of female academics on tenure rose in this period.

The DEET study reviewed developments in tertiary education since 1984, when the then Commonwealth Tertiary Education Commission introduced measures to improve opportunities for female academic staff.

Artful approach to health

Melbourne’s Royal Children’s Hospital has received an artistic facelift from a talented group of Monash University students.

Four ceramic design students from the Caulfield campus have created innovative murals to brighten previously dull walls in the hospital’s day care centre.

Ms Melody Forrester, Ms Catherine Henderson, Mr David Hoffman and Ms Maddi Seidel revealed their work to hospital staff and visitors at a special opening last month.

All ceramic design students at Caulfield were invited to come up with mural ideas for several rooms in the centre.

Water was the theme of the art project, as chosen by the day care centre’s charge nurse, Ms Kim Lee.

In setting the theme, Ms Lee challenged participating students to create a cheerful and contemporary atmosphere for the centre. She was delighted with the results.

Ceramic design lecturer Ms Andrea Hylands was also impressed with the standard of the students’ work.

She said the project was a challenging and stimulating experience for all participating students.

“They’re proud that their work now decorates the hospital and will give pleasure to children who visit the day care centre,” she said.

Ms Forrester designed and made low relief tiles in bright colours, depicting an arctic scene of penguins and whales, while Ms Seidel created an exquisitely framed panel in relief plaster showing a sailing boat at sea, inspired by The Owl and the Pussycat.

Ms Henderson’s work gives the ward a bright and contemporary atmosphere. Each clay module is “flanged” with a recessed relief and gives pleasure to all patients.

Mr Hoffman used glass panels to create an underwater scene in the entrance area of the day care centre. The scene, in rich shades of blue, incorporates swimming fish and a leaping dolphin.

The students were able to take part in the project through sponsorship by Multiplex Constructions (Victoria) Pty Ltd.
Reducing the risk of aircraft disasters

Investigating the hormone regulator

New theory explains muscle mystery

Did Lisa Ondieki's final days of endurance training for the Olympic Games marathon in Barcelona, reportedly a series of repetitions on a rising section of the course, cost her an Olympic medal? Two Monash researchers believe they have the answer to the runner's unexpected failure.

A new model of muscle behaviour developed by two Monash academics neatly explains an enduring mystery of muscle behaviour.

To illustrate the model, Dr David Morgan of the Department of Electrical Engineering and Dr Uwe Prokske of the Department of Physiology point to Lisa Ondieki's sensational failure to complete the women's 10,000 metres. Ondieki, who was already in trouble halfway through the supposedly easier first half, followed by an ascending leg back to the stadium, was already in trouble halfway through the supposedly easier first half, later blamed her disappointing performance on somebody spiking her formulated drink.

But a new theory developed by Dr Morgan on how muscles adapt to specific types of exercise possibly offers a more scientific explanation to Ondieki's problem.

They have studied the effect of a particular kind of muscle exercise called eccentric exercise. This is where the contracting muscle is made to stretch rather than shorten. It has been known for decades that muscles adapt to the kinds of exercise to which they are subjected. This explains how athletes can employ specialised training regimes to "tune" their muscles for their chosen sports.

But this means that athletes with the same high level of cardiovascular fitness can respond in very different ways to uncustomised exercise. Very fit swimmers and cyclists can scale mountains as rapidly as elite runners, without significant muscle soreness the day after. But if the swimmers or cyclists spend several hours climbing downhill, they may be almost incapacitated by leg muscle soreness the next day.

Dr Morgan has developed a new model of muscle adaptation that may explain this puzzling effect. It focuses on the microstructure of the very long, thin contractile filaments that make up muscles. Each muscle fibre is actually a linear community of thousands of units called sarcomeres, arranged end-to-end like the links of a chain.

For the past half-century, muscle physiologists have regarded muscle fibres as behaving uniformly. When the muscle contracts, a muscle fibre's change in length is the product of thousands of individual contractile units - the sarcomeres - acting in concert.

"It has been assumed that the muscle acts like a scaled-up sarcomere, so that whatever happens to the muscle happens uniformly to every sarcomere," Dr Morgan said. "It has been known since the 1960s that this is not always true, but nobody has appreciated the importance of non-uniform behaviour of sarcomeres."

"With what we now know about individual sarcomeres, we would argue that the model of uniform behaviour doesn't apply when the muscle is stretched while generating force at long length."

Generating force

Dr Morgan says muscles generate force by having two overlapping lots of filaments, which ratchet past each other by forming transient bonds. At long muscle length, the ends of the filaments have actually moved some distance past each other in opposite directions. There is less overlap between them, and fewer bonds to generate tension.

"Under these circumstances, if the muscle is now stretched, some of the sarcomeres will be stretched more than others. Those that stretch more become weaker and stretch faster. At that limit, the weakest sarcomeres will "pop," pulling the filaments completely apart and allowing the muscle fibre to lengthen."

Sarcomeres pop at random along the muscle fibre so that the microscopic weaknesses resulting from their failure are not focused at one site and are not immediately visible.

"Dr Morgan has developed a simple physical model to simulate this process, consisting of a chain of small magnets held together by mutual attraction and linked by rubber bands. By pulling on the ends of the apparatus, he demonstrates how stress overcomes magnetic attraction, causing the individual magnets to pop apart, so that the chain at that point is secured only by the rubber bands. This random pulling apart of the magnets resembles the process of popping sarcomeres."

The inflammation of the damaged muscle fibres leads to stimulation of pain nerve endings in the muscle, and this may account for the stiffness and pain felt by the athlete.

"Meanwhile, the damaged sarcomeres are being broken down and removed, a process that releases large quantities of a protein called creatine kinase into the bloodstream. The kidneys filter out creatine kinase, and it is excreted in the urine. Dr Prokske and Dr Morgan believe it may be significant that Lisa Ondieki had unusually high levels of serum creatine kinase after her run in Barcelona, indicating that she had suffered an unusual episode of muscle damage."

"Training effect"

Overstretching of sarcomeres may eventually lead to damage in whole muscle fibres. The damage also triggers a repair process that protects the muscle against further bouts of such exercise. Dr Morgan hypothesised that this process consists of adding extra sarcomeres to the fibre, avoiding the long sarcomere lengths that led to the instability.

Dr Prokske and Dr Morgan believe that by concentrating on running only uphill to enhance her endurance, Ondieki subjected her leg muscles to repeated shortening contractions (concentric exercise) and to up/down training, which involves lengthening contractions (eccentric exercise) to balance this.

"Dr Prokske says the training effect works very rapidly to remodel muscles - a single episode of exercise can trigger the remodelling within a few hours. After a few days of running uphill, Ondieki may have ended up with shortened muscle fibres in her leg muscles. In the first half of the marathon, which was largely downhill, Ondieki's shortened muscles were subjected to severe stretching, causing thousands of sarcomeres to "pop." By mid-marathon, the cumulative damage had weakened her leg muscles and caused them to become extremely painful."

The new model developed by Dr Morgan neatly explains an enduring mystery of muscle behaviour.

Once the local damage has occurred, the repair process not only rebuilds the previously damaged sarcomeres, but adds new ones to the muscle fibres. It means that the repaired fibres end up with up to 20 per cent more sarcomeres than they had at the outset. This in turn means that when the contracting fibre is stretched again, the stretch is distributed over more sarcomeres, so fewer of them are likely to pop.

"If you try to explain this phenomenon merely in terms of muscle filaments going in opposite directions, it doesn't work. With our 'popped sarcomere' model, it's quite obvious," Dr Morgan said.

"Tests on laboratory rats subjected to eccentric exercise (running downhill) support Dr Morgan's model. As with humans who run downhill, rats experience the same lengthening and subsequent stiffness in muscles. After a week of downhill running, the rats develop leg pain."

The new sarcomere model appears to offer a more scientific explanation to Ondieki's puzzling failure in the marathon.
Attuning those wayward body rhythms

A synthetic drug being tested by a Monash psychologist looks like taking the world of sleeplessness by storm. Not only does it appear to be highly effective in altering people's circadian rhythms, but once commercialised, the drug may be worth billions of dollars annually.

People suffering sleep disorders because their circadian rhythms are out of phase may benefit from a new drug developed by French scientists, now under trial at Monash University.

There is irony in the fact that the French company Servier, sought out the Department of Psychology's Dr Jenny Redman to conduct the experiments. It was pioneering work by Dr Redman and her colleagues on another drug - melatonin - that first suggested the feasibility of treating sleep disturbances and other disorders arising from out-of-phase circadian rhythms.

A decade ago Professor Roger Short, of the Department of Physiology, patented the application of melatonin for the treatment of such problems as sleep disorders, jet lag and a form of depression that strikes many people in winter called seasonal affective disorder. However, the Australians were unable to interest any drug company in commercialising these applications, and now their discoveries appear to have been overtaken by the new Servier compound.

Dr Redman says the compound is known, for the time being, as S-20098. Although the structure of S-20098 is very different from melatonin, the chemical that regulates the brain's own 'body clock', the synthetic compound mimics the action of melatonin by binding to the same brain receptors.

Servier discovered the drug by showing that it could initiate seasonal reproduction in animals. In many species, seasonal reproduction is keyed to day length - in spring, the increased daylight hours result in more light entering the eyes, which in turn causes a tiny gland in the forehead, the pineal gland, to manufacture more melatonin.

The effect of melatonin on seasonal behaviour in animals is seen at its most dramatic in tammar wallabies. Virtually all tammar females come into season on only the longest day of the year - the summer solstice on 22 December.

Precinical tests

Dr Redman says melatonin acts upon a structure called the suprachiasmatic nucleus. This nucleus is now also known to be the site of the central 'clock' that coordinates the body's circadian rhythms - although how it does this is still unclear.

Servier asked Dr Redman to conduct preclinical behavioural studies on its new compound.

"They asked me to do the experiments because of the work I published during my PhD when I was working with Dr Stuart Armstrong at La Trobe University," Dr Redman said.

"There are very few studies in the literature for melatonin, and Servier found it difficult to show any clear effects from S-20098, except for the effect on seasonal behaviour.

"The results of experiments with melatonin in treating jet lag and sleep disorders are only just starting to be published. We have developed a rat model for human sleep disorders, and my experiments with S-20098 suggest that it is at least as effective as melatonin in this application, and possibly better."

Dr Redman and Dr Armstrong have published a paper on delayed sleep phase syndrome, a sleep disorder that doctors frequently misdiagnose as insomnia. "It's not insomnia, because there is nothing wrong with the sleep mechanism in these people," she said. "But they do have a problem with the timing of their sleep - the person may not go to sleep until 3 o'clock in the morning, but if they get seven hours of sleep, they wake up feeling fine.

"Unfortunately, if they have a normal job, it's impossible to get seven hours of sleep, so they are chronically sleep-deprived. I suspect a great many shift workers choose shift work because they suffer delayed sleep phase syndrome. If they can't find shift work though, they end up being chronically sleep-deprived."

"My experiments with S-20098 on rats shows that it will advance the body clock, reinstating the appropriate sleep-wake cycle. Once this happens, all the other body rhythms that take their cue from the central body clock also realign themselves, so that body temperature changes and activity phases fall into line with the clock.

Benefits of S-20098

Dr Redman says blind people may be among those to benefit from the new drug if it comes through human clinical trials now under way in France. Most blind people do not succumb to light to entrain their body rhythms to the day-night cycle, so the body clock usually free-runs. By chance alone, it occasionally coincides with external clocks, but blind people often find they cannot sleep at the appropriate times.

"We hope this drug, which is called a chronobiotic, will help these kinds of problems," Dr Redman said.

"Like melatonin, it works at very low doses - the effective dose is around 50 micrograms per kilogram of body weight." The very catch is that the drug must be administered at the right time of day, usually in the evening; and the 'window of opportunity' is fairly narrow - no more than two hours. If the drug is given outside that timeframe, it may not work and can even send the body clock in the wrong direction.

Another very important group to benefit could be elderly people in the early phases of senile dementia, including people with Alzheimer's disease. "In Alzheimer's patients, the wake-sleep cycle tends to break down as the disease progresses, so they get fragmentation of their sleep across 24 hours rather than at the appropriate time," Dr Redman said. "If somebody in the early stages of dementia is awake at night and wandering around the house, it can be very difficult for carers to cope. If the drug is effective in restoring sleep cycles in dementia patients, it could keep them out of institutions longer."

Dr Redman says Servier, one of the largest pharmaceutical companies in France, has had a longstanding interest in serotonergic drugs - drugs that cause the brain to synthesise serotonin, a neurotransmitter that has a calming effect. It developed its interest in chronobiotics during the late 1980s, and appears to have beaten other international drug companies to the development of a melatonin mimetic. The global market for an effective chronobiotic could be more than a billion dollars.

Dr Redman says she and other researchers are awaiting the day when a drug company finds a melatonin antagonist - a drug that actually blocks the action of melatonin. Melatonin receptors are widely distributed in the brain, but the way in which melatonin works is still not clear. A blocking drug would allow neurologists to study how certain parts of the brain react to an absence of melatonin, which could throw light on a range of human disorders.

"It seems likely that melatonin is involved in phenomena as diverse as circadian rhythms, reproduction, the functioning of the immune system - even the development of certain cancers," Dr Redman said.

"There may be different types of melatonin receptors in different regions of the brain, which could account for melatonin's multiple roles in the body.

"From the researcher's viewpoint, a melatonin antagonist would be very useful, because if we know clearly what endogenous melatonin does, there may be cases where we could obtain therapeutic benefits by blocking or shifting the body's cycles."

From Servier's S-20098 is promising relief for those who suffer from jet lag. The tiredness that overwhelms the long-distance traveller may become a thing of the past.

As an example of the number of people throughout the world who will benefit from the new compound, Dr Redman points to the 2000 Olympics in Sydney.

"Think of the thousands of people who will be travelling, for the first time, to the other side of the world. Also, it will be very important that the competitors' body clocks adjust quickly so that they don't lose too much of their vital lead-up training time."

Popping sarcomeres

from Research page 1

muscles with 10 per cent more sarcomeres than the control group that had been running up till.

Dr Morgan's original insight came when he was lecturing while on sabbatical leave in Boston in 1981. "One of my students asked me what happens when you stretch a muscle that is difficult to see because the sarcomeres are so far apart. But they didn't carry out a quantitative analysis.

"It's difficult to see because the damage is concentrated in small patches throughout the entire muscle. But in 1991, not long after I published a paper outlining the theory, Dr Larry Brown and Dr Lydia Hill of the University of London published a paper describing exactly what I had predicted - they showed micrographs of sarcomeres that had been pulled apart. But they didn't carry out a quantitative analysis.

"It remains to be seen whether there are sufficient numbers of popped sarcomeres to prove my hypothesis."
Mr Sadafi says the main problem area appears to be rejected takeoffs and landings, where the margin for error is very small.

In Australia, the Civil Aviation Authority (CAA) research suggests that about 80 per cent of aircraft accidents of all types occur through pilot error; 18 per cent are the result of air traffic control misunderstandings; and only 2 per cent are due to structural or mechanical failures.

According to Mr Sadafi, takeoff and landings are the most critical stages of any flight, with most problems encountered during the landing phase. During takeoff, many systems must be checked, and the V1 speed — when an aircraft accelerates to maximum power settings involves high strains, increasing the risk of malfunction that could lead to a loss of power or even an engine failure.

The failure of one component may increase the risk of other failures. With a non-operative engine for instance, the reverse-thrust capability of the aircraft is compromised, resulting in more strain on other engines and brakes, which in turn increased the risk of a tyre burst.

In an emergency, pilots have to think very rapidly. A 1980 British Airways air safety review concluded: "Pilots are the only people in a company who make multimillion dollar decisions in split seconds."

The psychology of takeoff places further pressure on air crews. One pilot described the feeling: "The closer you get to V1 the more you tend to think of the aeroplane as a 'go' aeroplane, and you tend not to stop once you've just 100 knots, unless you have something very serious. ... if you get a warning of a lesser system failure, it's frequently easier to proceed, to take this failure into the air, sort it out and then come back.'"

Mr Sadafi says that even after the critical VR (velocity rotation) point, when the wheels leave the ground, there is a possibility of bird strike, mid-air collision, mid-air engine failure, wind shear, microbursts or other critical system failures.

Once an aircraft has made its way safely to its destination and is preparing to land, new hazards emerge. The greatest hazard is from other aircraft in the vicinity of a busy airport. In poor visibility, aircrews rely heavily on air traffic control reports and visual observations. Accidents have been known to occur because of false or conflicting information given to the crews of aircraft in close proximity.

Mr Sadafi has suggested that several measures that may reduce the potential loss of life during a landing or takeoff incident. Though some might be too costly or impracticable, he hopes they might prove useful among other engineers and air safety officials.

One of the problems with aborting a takeoff after V1 is that it is unlikely an aircraft can be stopped before the runway finishes and a pilot has no accurate way of assessing the required stopping distance after V1. The obvious solution is to lengthen runways, which may not be possible because of the cost or availability of extra land, especially at coastal sites.

A new generation of super-sized airliners will ultimately require longer runways. In the interim, Mr Sadafi says that giant safety nets could help slow crippled aircraft during takeoff or landing. Their main purpose would be to dissipate the energy generated by a heavily loaded aircraft moving at high speed. The nets could be built as permanent fixtures at the end of runways, or hydraulic jacks could make them pop up in an emergency (see diagram).

A succession of nets could be used, with a primary net designed to shear, and a secondary set of nets that might employ hydraulic or pneumatic dampers to absorb the residual energy. Designers would strive to take into account the amount of damage that may result from using the nets. For instance, aircraft fuselages may need to be strengthened. The question of how the nets would be activated — by the pilot, air traffic control or ground-based computers — also needs to be considered.

Mr Sadafi says the new nets would have to be constructed from extremely strong, space-age materials, which may have to be invented for the purpose.

Parachute deployment has been an attribute of military aircraft for many years. Mr Sadafi said that a parachute, or series of parachutes, could also be used to brake commercial aircraft in conjunction with spoilers, reverse-thrust and conventional braking systems. Practical engineering problems would include the method of deployment, materials to be used, the area of the parachute(s) and stresses the chute(s) would impose on an aeroplane's frame, and where the parachute(s) would be housed. He suggests that special pods might be mounted under the wings, or under the rear fuselage towards the tailplane.

Flammable aviation fuel spilling from ruptured tanks is an ever-present hazard in a landing or aborted takeoff. Mr Sadafi says the readiness of equipment and fire crews is always critical, and precious seconds can be lost while they race to the scene. It may be possible to place extinguishers along the length of the runway, or even within the runway.

A different view video cameras to record critical components could be monitored from the cockpit. A fatal accident that occurred at Nairobi airport in 1974 when a Jumbo jet attempted a takeoff without flags resulted in a fire that killed 55 passengers and four cabin crew.

Such accidents are preventable, Mr Sadafi says. Modern video surveillance systems could be used as a backup to existing warning sensors and alarms. Images from cameras located near flaps or landing lights could be relayed to the cockpit for analysis down the video-camera recognition systems.

Mr Sadafi says it is in the airline industry's best interest to implement as many of these measures as economically and practically feasible.
Investigating the hormone regulator

If the pituitary gland secretes too much, or not enough of the many hormones it controls, the effects can be severe. Research by a Monash physiologist aims to better understand this “bean-sized” organ so that drugs to correct hormonal imbalance may be developed.

For Dr Ben Canny, the pituitary gland, a master gland located at the base of the brain, is occasionally, he wishes nature had made it a little larger, and labelled its components. As the body’s hormonal hub, and a dominant influence on the nervous system, the pituitary is a focal point for both endocrine and nervous system researchers. But the question Dr Canny is asking is more elemental: at the deepest levels of cell function, how can the ebb and flow of charged atoms of calcium—calcium ions—modulate the behaviour of the pituitary gland, which affects so many other body systems?

A checklist of the hormones produced by the different cell types populating the pituitary gland includes: oxytocin, the hormone that controls milk let-down in lactating females, and vasopressin, which regulates blood pressure by causing the arteries to constrict and the control of the amount of urine the kidneys produce.

The endocrine glands targeted by the pituitary’s hormones—the thyroid, testes, ovaries and adrenals—in turn produce hormones that modulate the pituitary’s own secretory behaviour, via feedback loops.

When changing hormone levels influence mood, when blood pressure rises with stress, when psychological stress impairs the sex drive or induces infertility, or when athletes bulk up with anabolic steroids develop some of the characteristics of the opposite sex, the explanation is likely to involve mixed or overlapping signals that affect the pituitary’s multi-faceted community of hormone-secreting cells.

Dr Canny wants to know how the signals coming into the pituitary gland are transduced—how a cell “understands” the insistent message of a hormone arriving at its surface receptor molecules to respond by increasing or reducing its own level of hormone secretion. He says that calcium is the key.

“‘We’ve known since the 1970s that the transport of calcium ions is essential in controlling hormone secretion,” Dr Canny said. “The major advance since then has been an understanding of how calcium levels in the cell are controlled. Calcium levels can be increased by an influx of ions from outside the cell, through the membrane, or the cell can release calcium from its own internal reserves.”

As a PhD student, Dr Canny studied how the pituitary controls levels of stress hormones in the bloodstream. But he knew that real progress could only be made by studying single cells, rather than entire glands. The problem was that homogenised pituitary glands contained a mixed population of cells, with different patterns of hormone secretion. The question was how to distinguish one from the other.

As a postdoctoral researcher at the University of Virginia in Charlottesville in the US, Dr Canny learnt a technique called a haemolytic plaque assay. A mixed population of living pituitary cells is placed on a plate and mixed with a solution containing thousands of red blood cells. The anonymous pituitary cells were then stimulated with brain-derived factors to cause them to release whichever hormone they were programmed to secrete.

An antibody, added by the researcher, trapped the secreted hormone and attached itself to the red blood cells. A biochemical cascade was then generated, eventually resulting in the destruction of the same red blood cells. The result of the process, a clear haloesque plaque surrounded any individual cell that secreted the hormone of interest. Once unmasked, the cells can be isolated and studied individually.

But Dr Canny was puzzled to find that a supposedly uniform population of cells of one type produced different sized plaques, indicating that they were producing different amounts of the same hormone. “Nobody knows why,” he said. “But if we remove the adrenal glands from a rat, the absence of cortisol to serve as a feedback control means that pituitary cells increase their secretion of ACTH, the hormone that normally controls cortisol levels.”

But the loss of this feedback loop alone cannot accounts for the great variability of hormone output by individual cells of the same type. Dr Canny suspects the cells may be at different stages of their cycle of growth and division, which might change their sensitivity to incoming hormonal signals.

Dr Canny made an important discovery. The two brain-derived activators of ACTH secretion—arginine vasopressin (AVP) and corticotropin-releasing factor (CRF)—have very different effects on how a cell secretes ACTH. AVP seems to switch the cell on, after which CRF regulates the amount of ACTH released by that particular cell.

“So we have AVP as the on-off switch, and CRF as a volume control,” Dr Canny said. “It seems to be true not just for cells that secrete ACTH, but for three or four other cell types in the anterior pituitary. It might be a generalised control system. The next step is to relate these secretion profiles to the calcium signals.”

An all-or-nothing response

Dr Canny obtained dramatic false-colour images of a cell that had been stimulated by AVP, releasing its internal reserves of calcium as a signal for commencing secretion of ACTH. Interestingly, he said, individual cells exhibit in all-or-nothing response: if AVP is below a particular concentration, nothing happens. Above this level, calcium release is triggered. But different cells exhibit different threshold levels. The number of cells secreting ACTH increases with the concentration of AVP. Dr Canny said. “So in the variable calcium-release threshold, we seem to have found a correlate of the variable secretion response we observe in the plaque assay.

Ultimately, we would like to demonstrate absolutely that hormone secretion begins at the same time that calcium is released. So far we have only been able to show one or the other event by itself. The problem is to demonstrate both phenomena at the same time, so we have direct evidence of the link between them.

“We have a few ideas about how we might do it. The past decade has seen an explosion in the development of fluorescent dyes that give information about the concentration of particular substances in cells. One of these, called a2r, fluoresces in the presence of calcium when exposed to ultraviolet light. “If at the same time we can load a cell with another dye that fluoresces in the presence of ACTH, but under a different wavelength of ultraviolet light, we will be able to compare hormone secretion with calcium release. By switching rapidly between the two different wavelengths, we could show that ACTH levels are increasing almost simultaneously with a rising calcium signal. This would be the direct evidence we need.”

Another technique would be to use a dye that binds to the outer cell membrane. When a cell begins to secrete ACTH through its membrane, it swells, increasing the surface area of its membrane available to take up the dye. So ACTH secretion would correspond with an increase in fluorescence.

“Our ultimate goal is to understand how the control of hormone secretion from the anterior pituitary regulates the quality of life. If something goes wrong with the pituitary, then increasing the level of secretion of one or another hormone, the effects can be severe. After diabetes, 75 per cent of the practice of endocrinology is concerned with abnormalities related to the pituitary gland. There is a whole range of tumours that affect the various tissue types of the anterior pituitary.

“If we are going to develop drugs to adequately treat conditions that involve under or over expression of particular pituitary hormones, we need a precise understanding of what is going on. Today’s therapies are often marred by lack of specificity, resulting in unwanted side effects. By understanding precisely how things are linked, we will be able to make more accurate interventions.”
Max Robinson's ever-changing world

Mr Max Robinson is no stranger to computers or, for that matter, Monash University.

Mr Robinson, Administration and Management Information Systems (AMIS) branch manager, celebrated his silver jubilee at Monash on 6 September this year. A Monash computer science and mathematics graduate, he worked outside the university for a short while before returning to the fold 25 years ago to work in administrative computing.

In his time at Monash, Mr Robinson has seen many changes in computing systems - a world where new developments occur daily. He has managed AMIS since 1984, overseeing the systems development branch, production support, PC user support group, and the PC system development group. He is also responsible for monitoring the progress of each branch and offering support to his staff so they are able to provide a high-quality service.

Like the fast-moving world of computers, Mr Robinson is always looking ahead. He offers his staff a simple but progressive philosophy: "It is not the step you take now that matters, it is the implication of that step on the one you take tomorrow that is crucial."

"It is a very fast-changing environment and one where the demand for information from our systems is almost exponential," he said.

According to Mr Robinson, the changes in attitude towards computers and their application in the Monash workplace has been quite dramatic over the years, to the point where there is now a good working relationship between departments.

"When I first started here there was an air of mistrust about computers, but now it has moved completely the other way to where people are very positive about making use of the technology available to them," he said.

"As a result, we have become very customer-oriented and enjoy the challenge of making the systems understandable and available to our clients, so they can get their jobs done easily and efficiently.

"However, unless there is a focus on business process re-engineering, the provision of computer-based systems will not necessarily result in the delivery of a quality service."

"AMIS staff are always up to date on the latest technology so they can develop new systems to make the working lives of people easier."

The current involvement of AMIS in the Core Australian Specification for Management and Administrative Computing (CASMAC) project is a glowing example of this philosophy.

"It means there is new money being generated in the community and both the new employers and employees are paying taxes rather than claiming a benefit from the government," Professor Kiellerup said.

"A change of attitude in the people involved in the program was dramatic. In the space of two months, successful applicants began to think of themselves as self-employed or as the employer."

"Wangia and Osero records will welcome a similar system in Kenya because of the socio-economic benefits it would have for the country," Professor Kiellerup said.

"Mr Wangia and Mr Osero would like to see their country adopt a system that is at least similar, given the resources available to them," he said.

Mr Wangia said their major objective was to focus on strengthening existing small businesses and improving entrepreneurship education in Kenyan training institutions.

"Monetary constraints, he believed, would not allow the Kenyan Government to implement an exact prototype of NEIS, but many of the training systems they had observed would be of use to the education system.

"We hope in time to be able to develop a system that is at least similar, given the resources available to us," he said.

Mr Osero said their new found knowledge would allow them to introduce a style of teaching that involved the use of case studies and the development of business plans.

"We envisaged a situation where the business plans would be sold to potential business people."

"Fortunately, we have the full support of our government, as it is committed to improving entrepreneurial programs and very eager to implement new and innovative ideas," Mr Wangia said.

And the winner is...

Senior lecturer in the Faculty of Education Dr Tony Townsend has won a fully catered dinner party for 40 people, courtesy of the Australian Spitroast Professionals. The function is the prize of a competition run in the September issue of Monago, which asked readers to submit the answer to a visual puzzle (solution: 120).

More than 100 Monash staff and students entered the competition.

Dr Townsend, who was based at the Peninsula Centre and Community Development in the School of Early Childhood and Primary Education, says he will use the prize to help celebrate the completion of a home extension that has taken six months.

In the few competitions he has entered, Dr Townsend admits to being fairly lucky.

"I have a tendency to win things every now and again. I won a cricket bat from my cricket club last season and a bicycle the year before."

To organise a spitroast function, contact 752 2746.

Kenyan visitors mean business

A Monash scheme that helps the unemployed establish their own businesses has attracted the Kenyan Government's attention.

The New Enterprise Incentive Scheme (NEIS), which has been run by the Syme Centre for Enterprise Development for the past eight years, drew special interest from two Kenyan business educationalists visiting Melbourne last month.

During their stay Dr Caleb Wangia, from the Jomo Kenyatta University College of Agriculture and Technology, and Mr Samson Osero, from the Kenya Technical Teachers' College, expressed an interest in establishing a similar program in Kenya.

NEIS, which is funded by the Federal Department of Employment, Education and Training, has proven very successful in Australia. The scheme helps people who are unemployed or receiving social security benefits to establish their own businesses.

Income support and business advice are also offered by the program.

The Syme centre's executive director, Professor Denis Kiellerup, said the NEIS program had enjoyed success because of its commercial viability and its ability to address the unemployment problem.

He said the spin-offs of the scheme were tremendous, with many businesses creating additional employment opportunities.

"The facilitator is only there to provoke the participants' thoughts, so they can establish their own businesses," Mr Osero said.

"What you see developing is an enterprising culture where people are self-motivated and set for work."

"Is it our final objective to achieve an enterprise mentality in Kenya, and is it to provide a blueprint for a computer system that is at least similar, given the resources available to us," he said.

Mr Wangia said his new found knowledge would allow them to introduce a style of teaching that involved the use of case studies and the development of business plans.

He envisaged a situation where the business plans would be sold to potential business people.

"Fortunately, we have the full support of our government, as it is committed to improving entrepreneurial programs and very eager to implement new and innovative ideas," Mr Wangia said.

The Kenyan businessmen were given an insight into the scope of opportunities available to Australian women when they met four women entrepreneurs on the NEIS program.

They said that the meetings convinced them of the need to address the low employment of women in their country. Dr Wangia said employed women in Kenya tended to be discouraged from entering business.

"I have a tendency to win things every now and again. I won a cricket bat from my cricket club last season and a bicycle the year before."

To organise a spitroast function, contact 752 2746.

OCTOBER 1993 MONAGE 7
Student lawyers take centre stage

Two Monash law students successfully represented Australia in an international interviewing competition in Canada recently.

Mrs Trudy Edmondson and Mr Richard Kervin were selected to represent Australia after winning the national interviewing competition at Wollongong.

Mrs Edmondson and Mr Kervin are now working as articled clerks. The Law faculty is currently running a series of seminars on interview techniques to help fund the trip.

Monash will be represented by two students next year at the 1994 National Client Interviewing Championship, to be held at Bond University.

"The standard from all competitors was very high, and both Trudy and Richard performed excellently," he said.

"The competition was a great experience for them, and they also had the opportunity to visit local law firms."

Mrs Edmondson and Mr Kervin were given three simultaneous interviews of increasing levels of difficulty.

The pair were accompanied by Mr Ross Hyams, a lecturer in the Faculty of Law and coordinator of the Monash-Oakleigh Legal Service. According to Mr Hyams, the competition was fierce.

"It was an exciting experience," Mrs Edmondson said. "We were given an hour to prepare ourselves for each interview, and it was very demanding."

Mr Kervin said, "We were able to adapt our answers to suit each lawyer. It was a valuable learning experience."

Now for the next 25 years

Mannix College, one of the halls of residence on Clayton campus, has celebrated its silver jubilee with the release of a book detailing its history.

The book, Omnia annibus — all things to all collegians. The first twenty-five years of Mannix College, was launched by Mannix College Council chairman Archbishop Sir Frank Little at a silver jubilee dinner in August.

College dean Dr Gabrielle McMullen compiled the book, which gives a chronological overview of events that have shaped the college's development since its opening in 1963.

The book pays special tribute to Archbishop Sir Michael Young and Mr Brian O'Brien for their efforts in establishing the college.

The celebration also marked the sixth annual Mannix Old Collegians' Association dinner, which was attended by one hundred and twenty members.

The college, owned by the Catholic Church, was the first hall of residence to be affiliated with Monash.

Copies of the book are available from the college office for $12.50. Mail orders are also available within Australia for $16.20 (includes packaging and postage).

Leaving a legacy

One of Australia's best known Aboriginal authors, Oodgeroo Noonuccal (Kath Walker), who was given an honorary Doctor of Letters from Monash, has died of cancer at the age of 72.

Oodgeroo was awarded the honorary degree in 1991 for her work as a poet, writer, painter, teacher, political activist and conservationist.

She was the first Aboriginal to break into mainstream Australian publishing without surrendering her Aboriginal identity. Her first book, We are going, was published in 1964 and sold out within three days.

In the 1980s, Oodgeroo explored new modes of cultural expression and communication. Her first exhibition of paintings was held in 1981.

She also became involved in films, most notably as an actor and script advisor for Bruce Beresford's The Fringe Dwellers.

Agreement signed with Vietnam

Monash University and Vietnam's Ministry of Education and National Centre for Technical Progress have signed an agreement to establish a joint office in Hanoi.

The three parties will work together in Vietnam on education and training matters. The university's vice-chancellor, Professor Mal Logan, said the Monash office in Hanoi would support a two-way flow of undergraduates and postgraduates.

Among the principal speakers at a recent meeting of the Law Association for Asia and the Pacific was Monash criminologist Professor Richard Fox.

More than 1000 delegates from the ranks of lawyers, judges, legal practitioners and academics attended the Lawasia conference, held last month in Colombo, Sri Lanka.

At the criminology session, Professor Fox spoke on the need to protect those who expose corruption, malpractice and waste in the private and public sectors — the "whistleblowers".

While in Colombo, Professor Fox also delivered the Medico-Legal Society of Sri Lanka Oration on the subject of 'Psychiatry and the law: Sentencing offenders — the compulsion of voluntary treatment'. The society's inaugural oration was delivered last year by former Monash professor of law Emeritus Professor Christie Werrsmann.

The President of Sri Lanka, His Excellency Mr D. B. Wijetunga, (left) welcomes Professor Fox to the conference.

Memories of the Vietnamese government officials who visited Monash recently included Professor Dr Nguyen Mai, Mr Tran Quang Minh, Dr Pham Gia Tuan, and Mr Pham Quang Trung.

During the visit, the delegation observed university teaching and research programs, and met with senior university staff to discuss issues relevant to the restructuring of higher education in Vietnam.

The vice-chancellor, Professor Logan, and Professor John Buijsen with Vietnamese government officials at the signing ceremony.
Exploring Dracula's other side

Just for a change, bats, blood and gore did not feature in the recent Monash performance of Dracula.

Instead, the production by first-year Language in Performance students explored the other side of Bran Stoker's famous novel: the unconscious, repression, relationships, sexuality, and hysteria.

Language in Performance, offered by the English department and the Centre for Theatre and Drama Studies, explores the semiotics of performance, connections between text and performance in drama, and the organisational skills involved in mounting a production. Almost 170 students are enrolled in the course.

Lectures in drama, literary theory and cultural studies and director of college, Dr Chris Worth, says the Centre for Theatre and Drama Studies does not profess to being a drama school.

"We mount a performance for every section of the course - from first through to third year - to put our studies into practice. Students are then better able to get a feel for the organisation, production and cooperative effort involved," Dr Worth said.

"Of course, there are those students who are interested in acting as a career. Probably about 30 to 40 aspire to be actors. Their advantage is that when they eventually do take acting seriously, they will have the base of an arts degree, as well as the intellect and discipline that goes with it. Directors are now looking for intelligent actors."

Dr Worth said Dracula was a good choice because of the number of roles involved and the opportunities for expression they offered the students. More than 100 students auditioned for the show, and more than 50 were involved in the production, including dancers, actors, a production designer, prop and lighting specialists.

At present the Centre for Theatre and Drama Studies stages productions in the Guy Manton room in the Menzies building on Clayton campus. "As the performing arts building opens, the centre will use facilities such as the drama studios and small theatre," Dr Worth said.

"Many GE students are studying drama. People are beginning to realise that drama and performance skills help them after they have completed their courses. Students are taught presentation, confidence building, organisation, cooperation and teamwork."

Hosting the play at the Malachie demonstrates Monash University's increasingly close relationship with the Performing Arts, Dr Worth said.

"I would like to see Monash students trial some more experimental works. There are many new, innovative plays that have never been seen because they would not appeal to the mass audience."

"Students are in the best position to attempt these works. They stretch their own imaginations, use their skills, and bring scripts that otherwise would not see the light of day to the public."

The Brides

Ms Srebroska Kunek has a personal history that echoes many of the stories told in her new multimedia exhibition "The Brides - The Story of Postwar Immigration of Greek Women to Australia."

As an immigrant from Croatia who arrived in Australia with her grandmother when she was 9, Ms Kunek, the exhibition's director and facilitator, was excited by the prospect of taking photos at St Vincents Pier - the place where she and thousands of other immigrants first walked on Australian soil.

At the pier, she posed to the remnants of another life - the rusted train tracks reminiscent of the transportation used to take Greek women to their posts at Boongall, the multilingual signs above the ticket office, the dilapidated milk bar, and the bronze gates that symbolised the entrance into a new life for the immigrants.

The exhibition, which includes tape recordings, letters, photographs, and embroidered texts, presents for the first time a story of immigration that is little known in Australia.

"With The Brides exhibition, I wanted to acknowledge publicly the heroics that they went through to get here, the promises that were not upheld, and recognition of the lives they created for themselves, overcoming language difficulties, unemployment and the different culture and society in Australia."

"Yet for all the problems they initially had, the Greek women did not regret the decision they made to follow the adventurous and outrageous path to the unknown."

The histories of 30 women are told in Greek on panels of embroidery with photographs and embroidered texts. The panels include quotes from official government immigration documents and explore the Greek and Australian perspective.

"I looked into the archives of the Greek Government and how they encouraged women and men to migrate in order to fix their own unemployment problems," Ms Kunek said.

"In Australia, the government used the immigration scheme to build a nation based on the strength of the family unit. However, the males were originally split from their families to come and work here, and their wives and depen­
dents from southern Greece were not sponsored. Also, when single women arrived they were taken straight to their place of work without even a glimpse of Melbourne along the way."

"The people who immigrated are a great part of Aus­
tralia's history. There has been little analysis about their plight and their contribution to the current state of Australia now. These immigrants were central to postwar development in Australia, to the major works that were built, and in making Australia multicultural."

Ms Kunek looks forward to making the information available in multimedia form through CD-ROM.

"There is so much information in the exhibition - tape recordings, letters and photos. These will eventually be housed in the main library at Monash," she said.

Ms Kunek is completing her doctoral thesis on Euro­
pean female migration to Australia, with a particular focus on Greek women. She is also interested in the plight of women in war and helped assemble aid packages for the women survivors of the Bosnian death and rape camps.

The Brides was on show at the Monash Studio and next year will travel to other Greek and regional centres. Ms Kunek has also been invited to take The Brides to Greece and to New York's Immigration Museum on Ellis Island.

The arts gallery

The Waverley Festival of Theatre will run from 15 to 23 October (excluding Sunday 17 October) at the Alexander Theatre.

The festival features a different play by leading theatre groups each night. Following is the program of events, which includes many well known plays covering comedy, farce, drama and suspense. Performances begin at 8 pm each night.

FRIDAY 15 OCTOBER Waverley Theatre Inc Lost in Yonkers

SATURDAY 16 OCTOBER The 1812 Theatre The Exorcism

MONDAY 18 OCTOBER The Powerhouse Players Arfog Odgers

TUESDAY 19 OCTOBER Merdollas/Teatre Co In Broken Mirror

WEDNESDAY 20 OCTOBER Werribee Theatre Co On Golden Pond

THURSDAY 21 OCTOBER The Basin Theatre Group Death of a Salesman

FRIDAY 22 OCTOBER Peridot Theatre Inc Noise Off

SATURDAY 23 OCTOBER Malvern Theatre Co Some Time Next Year and The Gala Awards Night

Tickets are $12 ($8 for Monash staff), and $22 for the final Gala Awards Night, which includes a champagne supper. To book, telephone 801 3814.

Monash University Gallery

Luminaries

The current exhibition at the Monash University Gallery, Luminaries, investigates the use of light and light technology as a sculptural, conceptual and perceptual creative device.

The 50 works by 33 Australian and international visual artists explore diverse media, including luminal kinetics, LED, light boxes, holograms, neon, light performance, domestic lights, and sound sculpture.

The late 1960s and early 1970s light works will be augmented by international works from the collections of the Museum of Contemporary Art and the Art Gallery of New South Wales.

Luminaries will run until 23 October at the Monash University Gallery, Clayton campus.

Arts, Crafts and Tuition Centre

Pottery, Shibusa massage, Silk painting, Photography, Painting for everyone. Pastels. Drawing on the right side of the brain. Study skills and French polishing are among the courses being offered in the next few months by the centre.

All courses cost less than three dollars per hour for Monash University (Clayton) students. For further information, contact ext 75 3181.
**New direction for staff unions**

This month ACUSA joins with two nationwide tertiary education staff unions to form the National Tertiary Education Union (NTEU). Dr Paul Rodan, who is a joint vice-president of the new union, provides insight into the amalgamation and the future.

The establishment of the NTEU on 1 October signals a new beginning for staff at Monash and all other tertiary institutions around Australia.

The NTEU consists of the Australian College and University Staff Association (ACUSA), the Federated Australian University Staff Association (FAUSA) and the Union of Australian College Academics (UACA). It not only promises a more streamlined and effective method of industrial representation, but also provides a voice presence on the federal industrial relations scene.

For too long, Dr Rodan believes, college and university staff have been overlooked in the national arena because "there's been too many education unions running around trying to represent the one industry group."

ACUSA members voted on amalgamation two years ago. Of the 56 per cent of members who voted, 97 per cent supported the amalgamation.

Due to federal legislation requirements, UACA and FAUSA voted more recently. Ninety-six per cent of UACA members and 62 per cent of FAUSA members voted "yes".

"Our chief rivals for general staff membership are the state public service unions," Dr Rodan said. "At the moment they have enough on their plates with threats to public service numbers in Victoria and Western Australia, and probably South Australia very soon as well."

With this pressing issue on their agendas, Dr Rodan says, "there's money in it for people working in the education industry to be in a specialist education industry union." He adds, "Increasingly, Australian industrial relations is about fairly big unions and about having a say in the main game. This means making representations to government and having a visibility in fact ACTU."

Dr Rodan says higher education has been losing ground in the past few years, partly, he argues, because the Australian Vice-Chancellors' Committee has not been effective as a lobby group.

"If you look at the budget, HECS has gone up, funding's down, and virtually no one gives a damn," he said.

More than 2000 Monash staff members of the NTEU, making it the largest branch in Australia. The FAUSA and ACUSA offices on Clayton campus have been amalgamated to form one office, and every other campus will have access to NTEU expertise.

"The sooner we integrate and become collectively the better," Dr Rodan said. "The NTEU will provide a better range of services to staff, more information, discount schemes, and much quicker information dissemination." Eligibility to join the NTEU differs from state to state. All university and college academic staff in Australia may join.

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**Wherefore art thou, bachelor?**

In an age of political correctness, why not question the etymology of the bachelors degree?

Does a female undergraduate undertake a spinster degree? Probably not, but the origins of bachelor are still a mystery to linguists around the globe.

Monash took a closer look at the word "bachelor" after an elderly man sought "an expert" at the university.

"Nobody knows where the word comes from," said the caller, who wished to remain anonymous. "I just can't find out its original meaning."

Calls to several faculties were fruitless, as was the trusty office dictionary which referred to old words baccalar and baccalauriae but provided no further explanation.

The only alternatives was to consult the university library's giant Oxford dictionary second editions, 1989.

Subject librarian Ms Stephanie Foott plucked out one of the many volumes and offered the best explanation.

She found that baccalaur, was Latin for a tenant or worker, known as a baccalauriae. The "word baccalauriae is very similar to the Latin word for launder berry, "baccus berry."

"It's a telltale word of a symbol of honour, a baccus berry must have been a junior honour, such as an undergraduate degree," she said.

Further research in the main library's Barhab Dictionary of etymology (1988) provided more details.

This dictionary said the first known reference to "bache­tor" as a university graduate was in 1576 in a version of Persians by a Persian who was an old poem. It was in 1613, in which the term "bachelor" was a junior member of a guild.

But Bachelor's is left to readers in doubt with: "The ultimate origin of 'bachelor' is uncertain."

The next step was calling on the expertise of the head of Linguistics, Acting Professor Keith Allen.

"I'm sorry, but the answer is that the really really know what the original meaning is," he said.

"One suggestion is that 'bachelors' comes from a French word 'barrasheer', which is a young or low ranking knight." The word was also connected with the land, applying to male farmers working for some sort of lord. It was a junior member of a guild.

"But it seems that 'bachelor' was originally applied to socially inferior males and females. For a time, the word shifted to apply only to males, and it stayed that way until women started gracing to university in the past century."

Finally, the friendly staff at Melbourne's Oxford University Press office agreed to consult their latest great Oxford dictionary.

According to their reference, bachelor was "intimated as a baccalaureus formally altered by a prefix, baccalau­riae to form as a baccalau­tirae". It meant "young man, a tenant or worker, working for some sort of lord."

"But there's more food for thought. If the word 'bachelors' is linked to 'baccus', are there any historic university ties with the Latin word 'baccus', which means is a lot to consider." Any more ideas? Contact your Montage writer on extension 75 5863.

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**A mountain of potential**

A creative band of Monash University students is bridging the gap between education and business.

Concerned about the bleak graduate employment opportunities, the group of final-year students set up their own company for work experience.

Under the name of Yamony, the group developed a unique and stock holder and released it as a "Slinger" for the 1993 season.

Within weeks of its launch, the Slinger attracted dozens of customers at Monash University's August Open Day and a special youth trade fair in Chadstone.

Yamony was set up as part of Young Achievers' Australia Program, which allowed several Monash student groups to "go into business" this year.

The program operates at both secondary and tertiary levels to give students hands-on experience at running their own company.

Yamony spokesman Mr Brath Tran said the group was attracted to the program because it offered an opportunity to take business risk in a supportive environment, with sponsorship from Monolake Water.

He said the Slinger was aimed at the specialist ski wear industry and connected with desert material, velcro fasteners and an adjustable strap.

"Slinger wraps tightly around both downhill and cross-country skis and allows people of all ages to safely carry their skis over their shoulders," Mr Tran said.

"Everyone worked very hard on the project and the product seems to be going really well."

Under the Young Achiever guidelines, student participants have seven months to operate the companies.

During this time, students appoint executive directors, raise capital, organise market research, develop a product, market the product, handle accounts, report to shareholders and, finally, liquidate the company.

Mr Tran said the program provided valuable experience for students about to venture into the business world.

"Job prospects after university are looking pretty bleak, so we're doing something to improve our prospects," Mr Tran said.

"After all, how are we supposed to get work experience when there are no jobs for us in the first place?"
The number of Australians who associate themselves with a Christian group has increased by 1.1 million since 1986, discounting the common belief that religion is becoming progressively unpopular. According to the journal People and Place, published by Monash University's Centre for Population and Urban Research, 76.6 per cent of Australians now identify themselves with a religious group. (Figures are based on the 1991 census.)

This represents an increase of 1.6 per cent above the 1986 figures, and is the first time in many censuses that the figure quantifying people who identify with a religious group has increased.

Religious composition has also undergone massive change, with Catholicism overtaking the Anglican denomination as the largest religious group in Australia.

"There has been more change in the religious composition of Australia in the decade from 1981 to 1991 than in any other decade since the arrival of the first fleet," the report says.

Revising ancient Egyptian studies

Mr. Andrew Sibley's belief that art should be socially relevant is reflected in his most recent exhibition "Phnom Penh Fragments." While the style of his work is inspired by 13th century medieval alabaster bas reliefs, the collection focuses on 20th century images.

Mr. Sibley, a senior lecturer in fine art on Caulfield campus, used a material called sculptor-mould to create the many sculpture-paintings on show last month at the Lyall Burton Gallery in Flinders Street. 

"Since the early 1970's I have been interested in the combination of sculpture and painting. Before this time, they were always seen to be two different disciplines," Mr. Sibley said. He first encountered the artform while attending an exhibition in West Berlin. "When I came back to Australia I started experimenting," he said. "There are many influences in my work: the theatrical images from a puppet theatre I once had, and reflections from my travels in India, Europe and the Americas."

Sibley said that he regretted his works were not in a public place where people could look at them, and said that the Swettenham Street Walk would be the ideal place for his works to be displayed.

"Artists were traditionally communicators and had tremendous influence on society and culture," Mr. Sibley said. "Although the media have now taken on this all-assuming role, the artist still communicates most effectively through visual language."

"Art was also traditionally a legitimate form of complaint for society. Artists were able to be radical, question ideas and speak the voice of the people. This is still a role of the artist."

Learning to handle disabilities

The Jewish faith grew, although at a slower rate than the non-Christian religious groups. 

"Jews have been a stable 0.4 per cent of the population since 1947, but can be expected to decline in proportion if their growth rate continues," Dr. Sibley tells the report adds.

The number of Buddhists increased by 60,000 from 1986 to 1991 to represent 0.8 per cent of the Australian population, while the number of Muslims jumped from 110,000 in 1986 to 140,000 by 1991.

Much of the increase in the population of non-Christian religious groups is attributable to Australia's high intake of migrants during the late 1980s.

The report emphasises that the findings are based on the census and do not necessarily reflect numbers of people attending churches and other places of worship.

For more information, contact Associate Professor Gary Bouma on extn 75 2982. People and Place is published quarterly and costs $25 per year. Subscriptions may be arranged through Ms. Paddy Rapson on extn 75 2946.
SAVANT

Ethics in an age of self interest

How are we to live? Ethics in an age of self interest is Professor Peter Singer's new book, released last month. Following is an extract taken from the final chapter.

I

In a society in which the narrow pursuit of material self-interest is the norm, the shift to an ethical stance is more radical than many people realise.

In comparison with the needs of people starving in Somalia, the desire to sample the wines of the leading French vineyards pales into insignificance. Judged against the sufferings of immobolised rabbits having shampoo dripped into their eyes, a better shampoo becomes an unworthy goal. The preservation of old-growth forests should override our desire to use disposable paper towels. An ethical approach to life does not forbid having fun or enjoying food and wine, but it changes our sense of priorities.

The effort and expense put into buying fashionable clothes, the endless search for more and more refined gastronomic pleasures, the astonishing additional expense that marks out the prestige car market from the market in cars for people who just want a reliable means of getting from A to B—all these become disproportionate to people who wish to find a sense of purpose, who want to make a positive impact on the lives of others.

We cannot expect that this higher ethical consciousness will become universal. There will always be people who don't care for anyone or anything, not even for themselves. There will be others, more numerous and more calculating, who earn a living by taking advantage of others, especially the poor and the powerless.

We speak of tips—a recent visit to our local pub reveals that what we had just eaten was not tyre black. Look at this way. What if some cash-strapped purveyor of fine chocolate decided to throw caution and cocoa to the wind and for argument's sake—branch out into brake lining?

The problems, to pursue the metaphor would be manifold. Mechanic: "What seems to be the trouble?"

Car owner: "Trust me, I'm not applying strain to your pedal extremity, but every time I hit the brakes I smell hot chocolate.

M: "Dark!"

CO: "Dark chocolate.

M: "Yes, why?"

M: "Figures. Bought some dark chocolate yesterday. Tasted like brake linings."

And so forth.

Diversification is a very fine thing, but we don't particularly want our food chain to be welded to a vehicle component.

You will probably remember that athletic incantation "No pain, no Spain"—a cute little couplet that owed more to My Fair Lady than a five-ring circus.

With a little tinkering, we had the makings of an all-purpose slogan that could have revolutionised the marketplace. Instead, take these examples.

Primary students could have learned the basic of food production by chanting "No rain, no grain."

To cover the finer points of neurology, first-year medical students only need have uttered "No brain, no pain" several times.

And "No train, no pain" could have been a suitable aphorism for public transport aficionados who reckoned it was far better to travel than to arrive.

You never know better than us that nostalgia for our cultural inheritance should remain intact and unincorporated.

No one knows better than us that nostalgia for a long time to come, the world is going to remain a battlefield. These days, we have to fill out a computer form. In a marvellous illustration of self-important and petty bureaucracy, our latest contained no fewer than 16 spaces for docket number, time, date, transaction, customer code, customer name, vehicle registration number, gross weight, tare, nett, waste codes, waste description, rate per tonne, coupons, cash, and total cost.

We would offer local governments some advice but experience shows that when it comes to tips, they refuse.

(From the Nunawading Gazette, 23 September 1993)

DIGENES

Bidding our time in an urban pub recently, we picked up our empty bag of chips to find out just how much uranium and small bits of machinery we'd consumed.

We picked up our empty bag of chips to find out just how much uranium and small bits of machinery we'd consumed.

Biding our time in an urban pub recently, we've been shown to be over the top in our desire to use disposable paper towels. An ethical approach to life does not forbid having fun or enjoying food and wine, but it changes our sense of priorities.

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