

MONTAGE

NEWS FROM THE CAMPUSES OF MONASH UNIVERSITY

Hopes run high for flu cure

A cure for the flu is one step closer today, after a potent new drug, designed and synthesised by Monash scientists, has successfully been tested on humans.

Preliminary clinical trials in America have proved that the compound GG167 prevents the influenza virus from spreading in the human body. The development of the compound attracted international media attention when it was made public last year.

The success of GG167 has come after 20 years of research by a number of participating bodies including Glaxo Australia, the pharmaceutical company currently developing the compound; CSIRO; Monash University; and Biota Holdings, a small Australian drug company funding the research.

The compound was developed by scientists at Monash University's Victorian College of Pharmacy (VCP), based on information supplied by the CSIRO, for Biota Holdings.

Dr Mark von Itzstein, leader of the VCP team, says the discovery is a world first, "putting Australia on the map in terms of discovery of human pharmaceuticals".

In 1983 CSIRO scientists identified a pocket-like feature consistent in each new form of influenza. They crystallised and determined the structure of the enzyme called sialidase, the first phase in finding the drug candidate.

Sialidase normally acts as biological scissors. In an infected cell, the enzyme cuts the virus free, enabling the virus to escape to infect other cells.

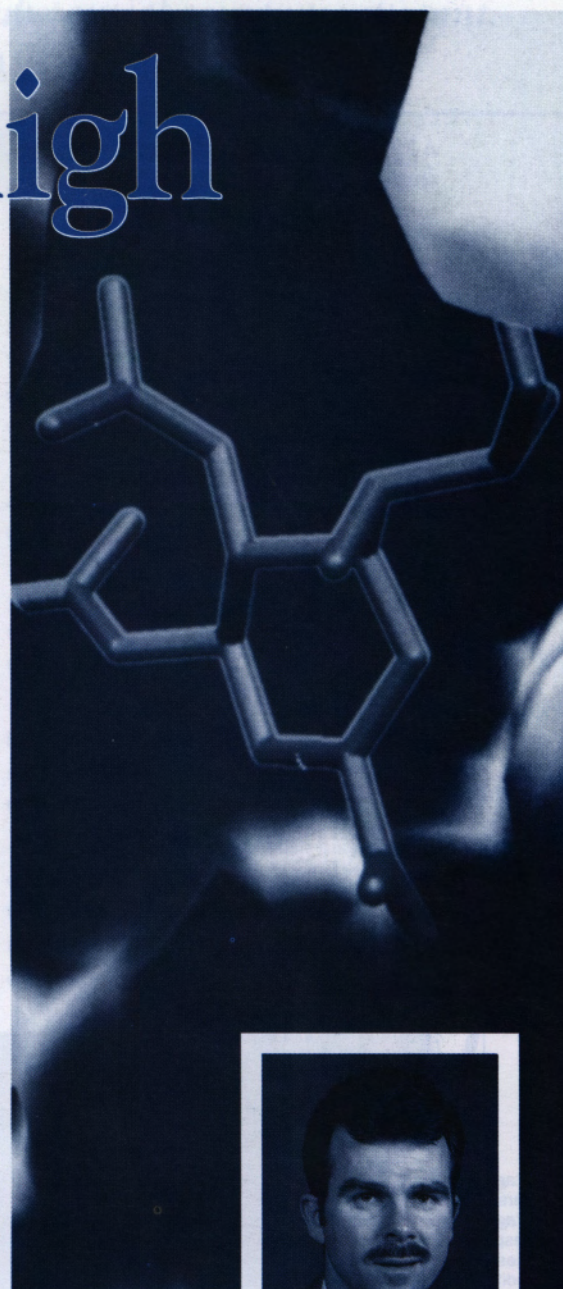
At this stage, Dr von Itzstein's team at the VCP took up the research. The compound they designed inhibits sialidase, trapping the virus within the infected cell and allowing the body's immune system to fight the virus more quickly and effectively.

Chemists at VCP designed the drug using high-technology computer programs to discover a way to plug the pocket-like feature.

Dr von Itzstein's team then undertook organic synthesis of the compound, which was followed by an in-vitro evaluation.

Early laboratory trials performed by Glaxo UK, Glaxo Australia's parent company, showed that GG167 was effective in treating influenza in ferrets, a species highly susceptible to human strains of the virus.

Continued on Montage 2



Dr Mark von Itzstein.

- New breast cancer study (3) • 'Backlash' feminists criticised (4)
- Monash student wins world sailing championship (5) • Doubts on health benefits of vitamins (8) • Savant: A question of life and death (16)

NOW & THEN

25 Years Ago

During the early planning days of the university, it was agreed to implement a policy for the planting of Australian flora only. The original overall plan provided for a dense perimeter plantation of quick growing native species, with the planting of major permanent trees to be carried out at a later date.

The campus generally offers an outstanding opportunity for continued development as a native garden. This area of approximately 250 acres is over three times larger than the Melbourne Botanic Gardens, and with thoughtful design, could become unique.

15 Years Ago

A Monash Master of Environmental Science student is mapping the distribution of mutagenic activity in Port Phillip Bay. Results from tests by Zena Helman, who holds a Bachelor of Science degree with honours in genetics, show evidence of mutagens – agents which cause damage to the genetic material in cells, the complex biological molecule, deoxyribonucleic acid (DNA) – in mussels collected from the bay.

A second part of the Monash study, to be conducted by fellow masters student Mr Tong Schui, an engineering graduate, will attempt to trace the mutagenic activity in the bay to its likely sources of industrial pollution.

5 Years Ago

The most radical change to maximum penalties in Victorian criminal law in more than a century is to be introduced by the State Government.

The reforms to Victoria's sentencing laws aim to bridge the gap between the

prescribed penalty, the sentence imposed by the courts and the time actually served.

Monash University academics, Richard Fox and Arie Frieberg, both readers in the Law Faculty, made a significant contribution towards the reforms.

This Month Last Year

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

The university is 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.

Monash is noted for its expertise in housing studies and urban geography. Associate Professor Chris Maher, of the Department of Geography and Environmental Science, 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.

Hopes run high for flu cure

From Montage 1

Further work done in the UK has also demonstrated GG167 is well tolerated by healthy human volunteers, who have received the drug intravenously as well as via inhaler and nose spray.

The importance of the drug is far-reaching. Current vaccines for the prevention of the flu are ineffective when deadly new strains develop, which occurs about every five to 10 years. The new compound is potentially effective against all known and future strains of influenza.

According to Dr von Itzstein, the drug can be used as a preventive measure, as well as therapeutically in the treatment of flu.

Dr von Itzstein says it is too early to say when the drug will reach the market: "There is still an array of studies to be done, including further clinical trials, before the drug can begin to be marketed," he explained. "Further trials are currently underway in Australia and Europe."

By JULIET RYAN



Shaking with Fright

A long-term university employee, working with Administration and Management Information Systems, recently found himself involved in a collision on the freeway while driving a university vehicle. Our man was unnerved but fine. The other driver, however, an 80-year-old man, was taken to hospital.

The next day, the university employee visited the hospital and told the other driver: "You gave me such a fright. When I saw you get out of the car, you were shaking so much I thought you were really hurt."

The elderly victim replied: "I have to tell you, I was shaking badly before I got into the car."

Monash Ghost Busters

Apparently the ghosties and ghoulies living in one of the oldest buildings on Clayton campus are getting out of hand.

University cleaners are now refusing to work on a certain floor, after a number of encounters with Monash's resident ghost.

Video surveillance cameras have been put in place to track down the ghost to confirm that it does exist and is terrorising staff, as reported.

According to staff, the unknown spirit occupies only one floor, and staff working late at night often report the presence of a dark rushing shadow, or a chilly, unexpected breeze.

MONTAGE

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Dr David Kissane.

Healthy mind, healthier body

A Monash research study offering new hope to breast cancer patients has attracted a substantial government grant.

Georgie Allen reports.

More than 300 women with early-stage breast cancer are taking part in a Monash research project which may substantially prolong their lives.

The world-first study, headed by Dr David Kissane from the university's Department of Psychological Medicine, is designed to improve participants' quality of life.

The study also examines the theory that psychological well-being has a positive impact on the survival time of breast cancer patients.

Overseas studies have found a positive link between mental attitude to cancer and patients' ultimate survival outcome.

However, Dr Kissane believes that the Melbourne Breast Cancer Psychological Therapies Project may be the first study to examine the effect of psychological therapy on patients in an early stage of the cancer.

The project has received a \$250,000 grant from the Commonwealth Department of Human Services and Health (Research and Development) over three years.

Patients meet for 90 minutes of group therapy each week to develop a supportive network, work through grief, learn cognitive approaches to deal with fear, improve problem solving and coping skills, re-develop a sense of control over their lives and re-evaluate their priorities.

A supportive network helps patients appreciate that they are not alone and encourages them to draw upon the support of others.

Grief therapy is considered important as cancer patients typically experience a great sense of loss.

"Breast cancer patients principally mourn the loss of health and well-being, a certain future, their breast, hair, sense of femininity, self-confidence and self-esteem, and activities from previous lifestyles," Dr Kissane said.

The therapy emphasises the Heideggerian philosophy of living in the present and of capturing a sense of meaning and joy in life, to help patients redevelop a sense of control in their lives.

Longer survival

Longer survival has not only been linked with psychological well-being, he says, but also with "more joy, a fighting spirit, an internal focus of control, the pursuit of a meaningful life, the expression of emotions and more social support".

Poor survival time has been associated with stoicism, helplessness, hopelessness, social alienation, stressful life events and high anxiety.

Participants will also undergo breast cancer relaxation and meditation therapy to provide them with techniques for relaxing and countering stress and tension.

One in 12 Australian women develops breast cancer and the incidence has risen by 25 per cent since 1975. One in 24 female

deaths is due to breast cancer, the leading cause of death in women aged 35 to 54.

Participants in the study have come from the Monash University teaching hospitals – Monash Medical Centre, Alfred Hospital and Box Hill Hospital – and also from Cabrini, St Vincent's Repatriation General Hospital and Peter MacCallum Cancer Institute.

According to Dr Kissane, the development of a network across Melbourne hospitals was a significant aspect of the study, allowing for the recruitment of fourteen group therapists. The therapists have been trained specifically to deliver therapy for this project.

The researchers hope the study will also benefit the wider community by demonstrating ways of integrating psychological therapies into traditional medical care.

Dr Kissane hopes to publish his findings on the effects of psychological therapy on the quality of life of cancer patients within three years, and results regarding survival outcomes within five to 10 years.



Research assistants, Allison Poot (left) and Nadia Ranieri.

Feminist backlash? Balderdash!

Far from suffering an anti-feminist backlash, women in the nineties are making significant social and economic progress, according to well-known feminist Beatrice Faust.

In her book, *Backlash? Balderdash! Where is feminism going wrong?*, Ms Faust, a course developer at Monash University's Gippsland campus, is critical of what she labels "wimp feminism".

Ms Faust believes that the backlash theory – the notion that the community has rejected feminist values – is promoted firstly by "wimp – or victim – feminists" and secondly by the media "whenever there is a serious absence of earthquakes".

Women who exploit their helplessness, choosing to be victims rather than strong and successful, are "wimp feminists". Ms Faust has coined the word "wimporrhoea" to describe the phenomenon.

"These women are committed feminists, but they see men as 100 per cent bad and society as 100 per cent unsympathetic. They look for handouts and band-aid solutions," Ms Faust explained.

"The way they approach their problems means there is no solution because everything in the world is so bad it just can't be changed."

While Ms Faust admits that many of these "victim" feminists have genuine grievances, including rape or battered wife syndrome, she believes they need to overcome their pain and develop a rational approach.

"Women can make a career out of being victims instead of putting their pain behind them," she said.



The theory of an anti-feminist backlash has been bandied about for several years, but Ms Faust says that the position of women in Australia has never been better.

"Everywhere I look I see improvement in people's attitudes and a wider range of people being sympathetic. There has been so much positive change."

In *Backlash? Balderdash!* Ms Faust says that women are highly visible in non-traditional work, refuting the notion of a backlash. She says: "Work is where the young women are in Australia. Current projections for promotion in the Public Service foreshadow the end of the glass ceiling."

So why is the belief in a backlash prevalent? Ms Faust says it is partly the work of the "wimp feminists" and partly because the changing role of women in society is not visible to the media or, therefore, to the public.

"The women who argue that there has been an anti-feminist backlash are also influenced by the feminist movement in the US, where the theory has been more widely publicised," she said.

Misinterpretation of data was another reason some women were claiming an anti-feminist backlash.

"Wimp feminists in academia provide dubious research to bolster existing prejudices," she writes. "One study shows that 92.2 per cent of women have been sexually assaulted or harassed. This statistic mixes cashews with wingnuts. That is, it mixes flashers, frotteurs, and heavy breathing freaks with bashings and pack rapes."

Ms Faust says that "wimp feminism" may have become popular among some women,

but many young women are taking advantage of the opportunities the feminist movement had opened up to them.

"This is the whole point of social change, as long as women today use it in a positive way," she said.

"Even though feminism in Australia is doing well, there are still issues that need attention such as child care and superannuation."

So what is the future of feminism? Ms Faust sees a move towards internationalism.

"In the last 10 to 15 years there has been a gradual awareness of women in other countries, women in other religious and ethnic groups and their problems," she said.

"Women in places such as Africa, Indonesia and Papua New Guinea are becoming organised too, and expressing their own needs."

BY JULIET RYAN

World championship plain sailing for Monash student

Two months ago Melanie Dennison was a regular 20-year-old Monash University commerce student, planning to move out of home to live with friends.

Today she is appearing on television, taking telephone calls from other stations, and has a journalist waiting to interview her in her lounge room.

Yet Melanie is taking it all in her stride. She is, after all, Australia's newest world champion.

Melanie recently won the women's division of the world Laser sailing championship in Wakayama, Japan. The event, contested by 90 women and men, involved an exhausting 15 races held over just five days. Weather conditions during the race varied enormously and entrants' abilities to adapt to constant change were sorely tested.

Despite the difficulties, Melanie qualified for the final series with a significant lead over the other women and in sixth place overall. Her strong position meant that the women's title was hers even before the finals were held.

"I had a good lead on the points table going into the last day, so that even if I lost the final I still would have won the women's section," she says. As well as her win in the



women's division, Melanie finished ninth overall.

This latest victory comes hot on the heels of her success at the Australian University Championships held in Queensland earlier this year.

Representing Monash University and assisted by the Monash Sailing Club, Melanie finished first in the women's division of the competition and third in the combined championship.

Most people would believe that after reaching national and international success by the age of 20, they could take a well-earned break. Not Melanie Dennison. She has already begun her Olympic campaign, which she hopes will see her reach peak form in Atlanta in 1996 and take her to the Sydney Olympics in the year 2000.

Working with fellow Monash student Cameron Hooper, Melanie has begun a strict training routine involving an intensive

gym program and a great deal of time on the water practising tactics and technique.

Few people, she says, realise the level of physical fitness required for success in sailing. "Most people think sailing is very easy. It's not like that at all. It's like a marathon really. You are out there for two and a half hours and you have to concentrate for the entire time. It is physically and mentally very demanding."

Her self-confessed competitive nature has led to an involvement in netball, basketball, squash and a host of other sports. But none presented the combined mental and physical challenges of sailing.

Melanie will compete in New Zealand later this year, where she will begin the long process of qualifying for the Olympic Games in Atlanta. She has her sights firmly set on winning gold for Australia and, if the last few years are anything to go by, it is difficult to imagine anything standing in her way.

BY JAMIE SILVER

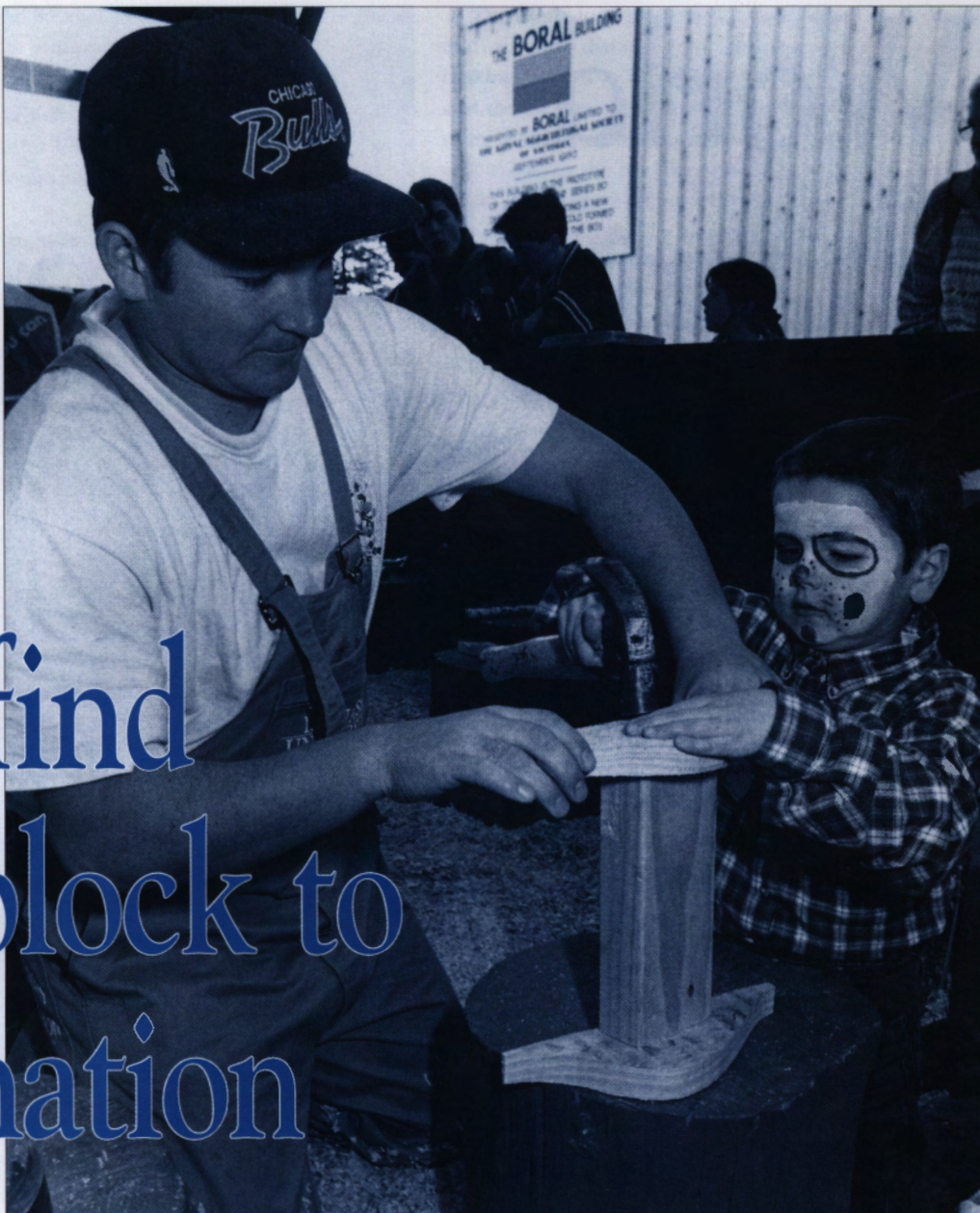
Monash University's 'Children Working with Wood' program has received a \$35,000 grant to set up a mobile facility allowing it to travel to schools and agricultural shows.

The Monash Development Board is providing the money so that the program, devised and run by the Faculty of Education's Mr Bob Greaves, can reach more Victorian children.

The highly successful program has been running for about 15 years, and has inspired a creative spirit in many young children.

Children are given pieces of untreated pine in abstract shapes and, with the help of staff and teacher education students, are encouraged to build anything their imaginations can come up with.

Children find wood no block to the imagination



The activity is designed to give children the opportunity to exercise their creative skills, to use their maths skills when estimating, calculating and measuring the wood, and language skills when discussing their ideas with the staff.

Mr Greaves said the chance to express creativity also helped bolster the children's self-confidence: "It makes the children believe in themselves and raises their self-esteem."

About 4000 children attend the program each year at the Royal Melbourne Show and many children return regularly to build new objects.

Children over the age of five must leave parents and grandparents at the gate so that the adults are not tempted to prompt the children or take over their work.

Mr Greaves believes it is important that the pieces of wood the children work with

do not resemble recognisable shapes such as birds or cars: "Children can explore their own ideas," he said.

"One piece of wood will look like a rocket to one child and a dinosaur head to another.

"Girls tend to make figures, animals, faces, dolls, furniture and sometimes cars and aeroplanes. Only once did a girl make a gun. On the other hand, boys make cars, aeroplanes, tanks, dinosaurs, and sometimes guns."

As well as being educational, he says, the program is considered therapeutic: "Disabled children are able to participate in and gain great satisfaction from an activity beyond their usual opportunities."

Mr Greaves talks of one experience when he spent over an hour with two Down syndrome boys who were making cars. One

boy returned later in the day to show him how he had painted the car and to make a trailer.

The grant money will be used to set up a fully-equipped custom-built trailer to visit Victorian primary schools and kindergartens.

"This project will enable us to provide this unique service as a supplementary activity which supports the curriculum areas of art, technology, science and language," Mr Greaves said.

The facility will be staffed by six fourth-year Bachelor of Education students, under supervision, as part of their practical work.

The trailer will also help the program attend the many rural agricultural shows it is invited to.

BY GEORGIE ALLEN

Modelling better outcomes for the justice system

The number of times criminals re-offend while on community-based orders can be halved, using a supervision model developed by a Monash University academic.

Dr Chris Trotter has been working on the model for several years in conjunction with the Victorian Department of Justice and with funding from the Australian Criminology Research Council.

Dr Trotter, a lecturer in the Social Work department, has looked at different methods of supervising offenders who have been placed on community-based orders or parole.

Positive results from research conducted on the model led the Victorian Department of Justice to introduce it into the criminal justice system.

"There was a 30 to 50 per cent reduction in people reoffending in the supervised group, using the model, in comparison with a randomly selected control group," Dr Trotter said.

"It is an integrated model involving focus on high-risk offenders, the use of problem solving, a pro-social approach and empathy," he explained.

Previously these areas had been applied separately rather than as an integrated model, when treating offenders on parole.

Dr Trotter's program included training community corrections officers (CCOs) to use the model. The supervisors were then able to apply it when working with offenders on community-based orders.

"Through positive reinforcement, rewards and praise, clients on community-based orders learn that pro-social behaviour and positive actions can have advantages."

The model also uses problem-solving skills to help clients identify problems related to their criminal behaviour.

"There are about 8000 people on community-based orders and parole in Victoria," Dr Trotter said.



Dr Chris Trotter.

"Just about anyone who comes into the criminal justice system will at some time be supervised on community-based orders or parole and will therefore be exposed to the model."

Dr Trotter's success has led to an invitation as a guest lecturer at Oxford University.

He has also conducted a number of seminars in Britain and will spend some time in New Zealand training CCOs to use the model.

New Zealand has taken Victoria's lead and introduced the model. "CCOs in New Zealand will be trained to implement the

model and it will be used across the whole country," Dr Trotter said.

The financial implications of the system are far-reaching. With estimated costs of imprisonment around \$50,000 per person each year, reducing reoffending will have obvious financial benefits.

Dr Trotter believes that his supervision model works because it "addresses the cause of the problem" rather than alienating individuals through social and personal deprivation.

BY JULIET RYAN

Vitamins: supplement to good health or fashionable fad?



Vitamin supplements help promote a healthy body and healthy lifestyle. Or do they? Recent studies have shown that vitamins may not be as good for you as first thought.

While vitamin supplements are popular among the health-conscious, scientific evidence supporting their health benefits is anything but clear-cut.

Vitamins A, C and E are variously credited with protecting against cancer and cardiovascular disease. They are all antioxidants, able to neutralise oxygen-free radicals, the highly reactive molecules that can disrupt important enzymes and damage genes.

But recent studies involving these vitamins have provided some big surprises, according to Professor John McNeil, head of the Department of Social and Preventive Medicine at Monash Medical School at the Alfred Hospital in Prahran.

Professor McNeil's department has recently received a grant of \$300,000 from the National Health and Medical Research Council (NHMRC) for a study of vitamin E. The five-year study will investigate the vitamin's effectiveness in preventing atherosclerosis in smokers. Atherosclerosis, a disease commonly associated with ageing in the affluent West, is the build-up of fatty deposits in the heart and arteries.

A recent US study has suggested that vitamin E may be much more effective than vitamin C in preventing atherosclerosis in smokers. But why focus on smokers?

Professor McNeil says cigarette smoke, and the breath of smokers, are both full of free radicals. Smokers therefore provide the most severe test of the protective properties of vitamin E supplements.

In blood serum, molecules of vitamin E surround globules of low density lipoprotein – the so-called 'bad cholesterol' – allowing the globules to be eliminated safely from the body.

The study will involve 500 smokers, half of whom will receive a daily dose of 500 international units or 370 milligrams of vitamin E. The rest, matched for age and sex, will receive a placebo.

Free radicals are believed to burn off the protective vitamin E however, exposing the lipoprotein to oxidation. The oxidised cholesterol is then deposited in artery walls.

The study will involve 500 smokers, half of whom will receive a daily dose of 500 international units or 370 milligrams of vitamin E. The rest, matched for age and sex, will receive a placebo.

"We are doing the study jointly with Professor Barry McGrath, of the Monash Medical Centre, who will be using ultrasound to monitor the progression of atherosclerosis in the carotid artery in the neck," Professor McNeil said.

He says the idea that vitamin E may help prevent atherosclerosis was advanced about 10 years ago. More recently, interest has been sparked by a Swiss biochemist, Dr Frederick Gey, who wondered why in some countries, populations with average cholesterol levels had an unusually high incidence of heart disease, while in other countries, populations with similar cholesterol levels had much lower rates.

Dr Gey found that lower rates of heart disease seemed to be associated with higher serum levels of vitamin E. Last year, two new US studies published in the *New England Journal of Medicine (NEJM)* again put the spotlight on vitamin E.

The first was a study of vitamins A, C and E in the serum of 50,000 volunteer doctors, dentists and veterinarians in the US, members of the US Health Professional Study.

Participants gave blood samples in 1986 and recorded what they ate and what dietary supplements they took.

"There was a very convincing relationship between the amount of vitamin E in their serum and their subsequent risk of heart disease," Professor McNeil said. "Those who took vitamin E supplements had only 60 per cent of the risk of people with the lowest vitamin E levels in their serum."

Surprisingly, there was almost no relationship between vitamin C intake and heart disease. The results of the second study published in the *NEJM* reported similar results in a large group of nurses – members of the US Nurses Health Study.

"So the epidemiological evidence for vitamin E is looking good, but there is still a lack of clinical evidence," Professor McNeil said. "It is easy to be led astray by observational studies, and our own randomised trial may help to firm up the evidence that vitamin E protects against heart disease."

The vitamin E story took a new twist recently when the *NEJM* reported on a Finnish study involving 28,000 middle-aged smokers. The smokers were randomly allocated to four different vitamin regimes. Seven thousand took beta-carotene (which the body converts into vitamin A), 7000 took vitamin E, 7000 took both beta-carotene and Vitamin E, and 7000 received a placebo.

"Disappointingly, there was no benefit from beta-carotene. In fact, it seemed to have a detrimental effect, because there was a significant increase in mortality – around 8 per cent – and an increase in most forms of tumour and heart disease. I think the study casts serious doubts on the role of beta-

carotene in disease prevention," Professor McNeil said.

"But the results for the vitamin E group were very interesting, because they showed only an insignificant reduction of 2 per cent in mortality – nothing like the benefit hoped for. There was a slight fall in the incidence of ischaemic stroke and heart disease, and the risk of lung cancer, but this was balanced by a small increase in other cancers, and a small increase in the rate of cerebral haemorrhage – bleeding from the brain."

"Vitamin E has been thought to be very safe, but recent data suggests it may interfere in some way with blood clotting."

Professor McNeil says these studies demand a major reassessment of the anti-oxidant hypothesis. The NHMRC-funded Melbourne study should help resolve some of the questions surrounding the efficacy of vitamin E in warding off atherosclerosis and heart disease. In particular, it should determine whether higher

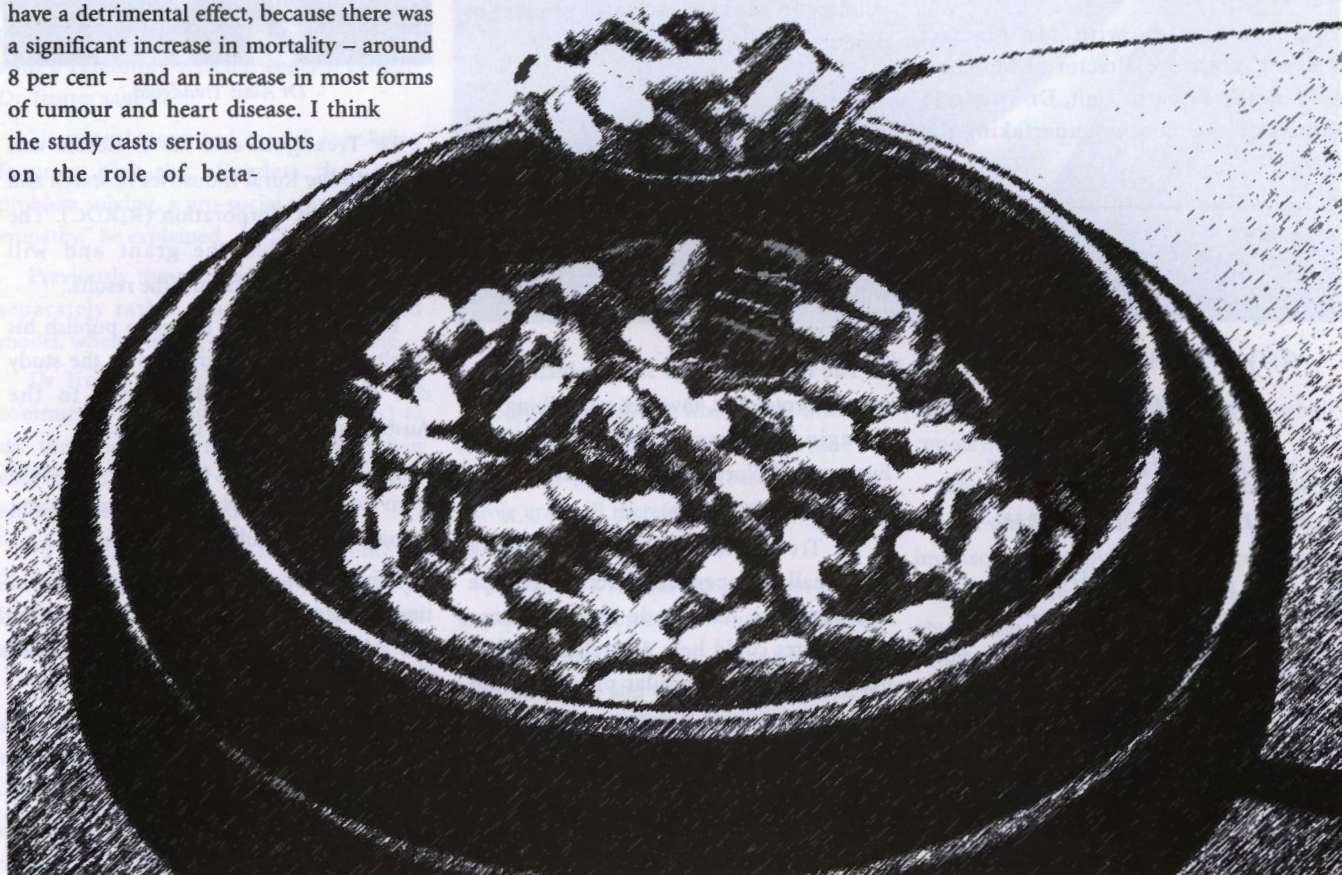
doses are beneficial, as suggested by the two US studies.

It should also help explain the increased rate of cerebral haemorrhage associated with vitamin E use. "Vitamin E has been thought to be very safe, but recent data suggests it may interfere in some way with blood clotting," Professor McNeil said. "Our study fits into this context in important ways. We will be investigating the effects of higher doses of vitamin E on atherosclerosis, to see if they have a value beyond that of much lower doses.

"We need to know if vitamin E may help prevent atherosclerosis in smokers who can't break their habit, and whether some patients, for example those with high blood pressure, should not take vitamin E because of a risk of cerebral haemorrhage.

"Before we can recommend any therapy, we must study it properly. The Finnish study confirms that it is too early to recommend vitamin E supplements because we don't know what doses we should use. In retrospect, it would have been helpful for the Finnish researchers to have the results of a study like ours, so they could have fine-tuned their dosages before starting."

As for the supposed virtues of antioxidant vitamins in warding off heart disease and cancer – at least in the case of beta-carotene and vitamin C – Professor McNeil says it is a case of "a beautiful hypothesis being slain by ugly facts".



Tapping into Asia's flourishing food markets

Changing patterns in the food markets of South-East Asia present a unique opportunity to Australian farmers. Georgie Allen reports.

A Monash University researcher is helping Australian farmers exploit the growing food markets of South-East Asia.

Dr Alan Treadgold, senior fellow at the university's Australian Centre for Retail Studies, has been awarded a \$42,000 grant to study the changing structure of food retailing in nearby Asian countries.

Dr Treadgold said the research would allow the Australian agribusiness industry to take advantage of opportunities to export to the region.

In conjunction with Mr Michael O'Keeffe, executive director of Monash's Agribusiness Research Unit, Dr Treadgold will spend six months undertaking the study.

"It is a window of opportunity, but one day the window will close. If you don't exploit these opportunities other companies will."

He said South-East Asia was the only region in the world with strong economic growth, and that Australia was in a unique position to exploit the opportunities the region presented.

But he had a warning for Australian companies: "It is a window of opportunity,

but one day the window will close. If you don't exploit these opportunities, other companies will."

The researchers will travel through South-East Asia interviewing retail buyers and senior managers on issues such as their expectations of suppliers, what influenced their purchasing decisions, and whether they worked through wholesalers, distributors or independently.

Dr Treadgold said he expected the results to be fairly complex, differing from country to country and from product to product.

He said the Australian agribusiness industry recognised that the opportunities in South-East Asia were enormous because the markets were growing and consumers were becoming more affluent.

However, he believed the industry was still "not quite sure how to exploit these opportunities".

The first part of the study, which began in mid-September, involves researching the changing patterns of food retailing in Europe and North America to study patterns of modernisation.

Dr Treadgold said that identifying how small, independent stores in Europe and America had made way for large chain stores could help Australian retailers understand how a similar process would work in Asia.

The second part of the study, to begin later this year, involves travelling throughout the region to gain first-hand experience of the "dynamic" food markets.



Dr Alan Treadgold.

Dr Treadgold and Mr O'Keeffe will report to the Rural Industries Research and Development Corporation (RIRDC). The RIRDC provided the grant and will disseminate and distribute the results.

Dr Treadgold also hopes to publish his results and conduct seminars so the study can be of maximum benefit to the Australian agribusiness industry.

Dr Treadgold is on a one-year sabbatical from Coopers and Lybrand, an auditing and management consulting firm in the UK.

While in Australia he will also spend time teaching at Monash and consulting for the Melbourne arm of Coopers and Lybrand.

His sabbatical resulted from a short trip to the Centre for Retail Studies in 1990, when he made several public presentations and was visiting lecturer on some of the centre's management programs.

A research fellow at Monash University has been honoured for her contribution to greater understanding among Australian health workers of Asian birth practices and culture.

Dr Pranee Liamputtong Rice, from the university's Centre for the Study of Mothers' and Children's Health, recently won second prize in the Public Health Association of Australia's J. A. Thompson Award.

The accolade comes only one month after the launch of Dr Rice's second book, *Asian Mothers, Australian Birth*, which details the medical experiences of non-Australian-born Asian women during pregnancy, child birth and early child-rearing.

The book highlights the differences between Asian and Western attitudes to pregnancy and birthing practices, and the need for health care workers to be culturally sensitive to alternative traditions and beliefs.

For Dr Rice, who migrated to Australia from Thailand in 1982, the project has been a personal journey. She was inspired to undertake the study after her own experiences of giving birth in a foreign country.

"The birth of my first child and the experience I had in hospital, while not bad, made me realise how much distress other women, who still adhere to traditional ways of birth, could encounter," she said.

In addition to her research, Dr Rice visits hospitals to discuss with medical staff the pregnancy and birthing traditions of Asian women and how these beliefs can be accommodated within Western medical practices.

Dr Rice tells the story of Mai, a Hmong refugee from Laos, to highlight how differences between cultures can be overcome with understanding and acceptance.

Soon after arriving in Australia, Mai gave birth by Caesarean section to her sixth child. For more than a year following the birth, Mai suffered crippling pains in her back and throat. Medical specialists could not explain why.

According to the Hmong culture, each person has three souls. Mai believed that during the operation, one of her souls left her body and, because she was moved to a recovery room before regaining consciousness, the soul was unable to re-enter her.

When Dr Rice learned of Mai's situation, she convinced the hospital to allow a soul-calling ceremony to be conducted in the

Giving birth to new understanding



Hmong refugee, Mai, and one of her six children.

delivery room where Mai had given birth a year before.

Early one Sunday morning, a shaman conducted the ritual, using incense, an egg, a bowl of rice and a live chicken, to restore Mai's soul to her body.

So far, nursing staff and midwives have been the main beneficiaries of Dr Rice's research, particularly those at hospitals that cater for large numbers of women from non-English-speaking backgrounds.

Dr Rice is greatly encouraged by the award. "The award is a great honour for me. It is, I think, a good sign that people in public health areas are aware of my work and would like to see it continue," she said.

Dr Rice hopes that the award, coupled with her two books and the information seminars she conducts, will help spread awareness of her work to every facet of the health care industry and improve cultural understanding and acceptance.

BY JAMIE SILVER

Australian car drivers do not understand the needs of trucks and often "poach" the space heavy vehicles require for safe braking, a Monash study has found.

The study by Dr Jim Jarvis, a PhD student in civil engineering, also revealed that drivers of heavy vehicles use their brakes mostly for "trimming" (maintaining a constant speed) rather than for stopping or slowing dramatically.

Yet present Australian design rules set standards only for emergency braking, and

hooked together their brake systems could be incompatible.

During the study, road design for heavy vehicles became a significant public issue after horrific bus accidents in New South Wales and Queensland.

"It's a matter of complex plumbing and timing and if things don't match, the bulk of the braking may end up being done by one set of axles, the drive axles of the tractor for example. This could lead to excessive wear, and eventually jack-knifing or loss of control."

The logger was designed to record automatically the distance and time between braking, as well as the rate of deceleration and the change of speed over the braking time. It also monitored air pressure in several valves in the braking system on four trucks driven by 12 different drivers.

The study examined 10,000 kilometres of data collected from trucks travelling along the Hume Highway between Melbourne and Sydney and from a heavy van delivering hardware in suburban Melbourne.

Dr Jarvis found it was only under emergency conditions that trucks took a greater distance to brake than cars. This braking distance could be improved by fitting trucks with good anti-lock braking systems.

"When ABS technology was introduced it did not work well, but the new European digital systems are very sophisticated. One company had ABS-fitted trucks that had clocked up more than one million kilometres without a problem. And such ABS technology makes an ordinary driver perform as well as the most skilled driver when braking", he said.

"When braking, drivers generally do not wash off much speed – only about 20 kilometres per hour. This makes sense because driving at a constant speed saves fuel, and it saves work for the driver. Truck drivers are continually told about defensive driving and generally practise it," he said.

BY TIM THWAITES

Study raps truck 'space invaders'

not for the range of conditions in which brakes are most frequently used.

Dr Jarvis has recommended a campaign to educate car drivers about the needs of trucks in traffic and has suggested that testing procedures for new trucks include checking brakes over the complete range of pressures they use.

The study has already resulted in a series of television commercials and a publicity campaign through the RACV and the NRMA to make car drivers more aware of the dangers of poaching truck space.

Traditionally, road designers assumed trucks had much the same road needs as medium-sized sedans. Planners argued that trucks usually moved at slower speeds and that truck drivers were more experienced and had a better vision of the road than car drivers.

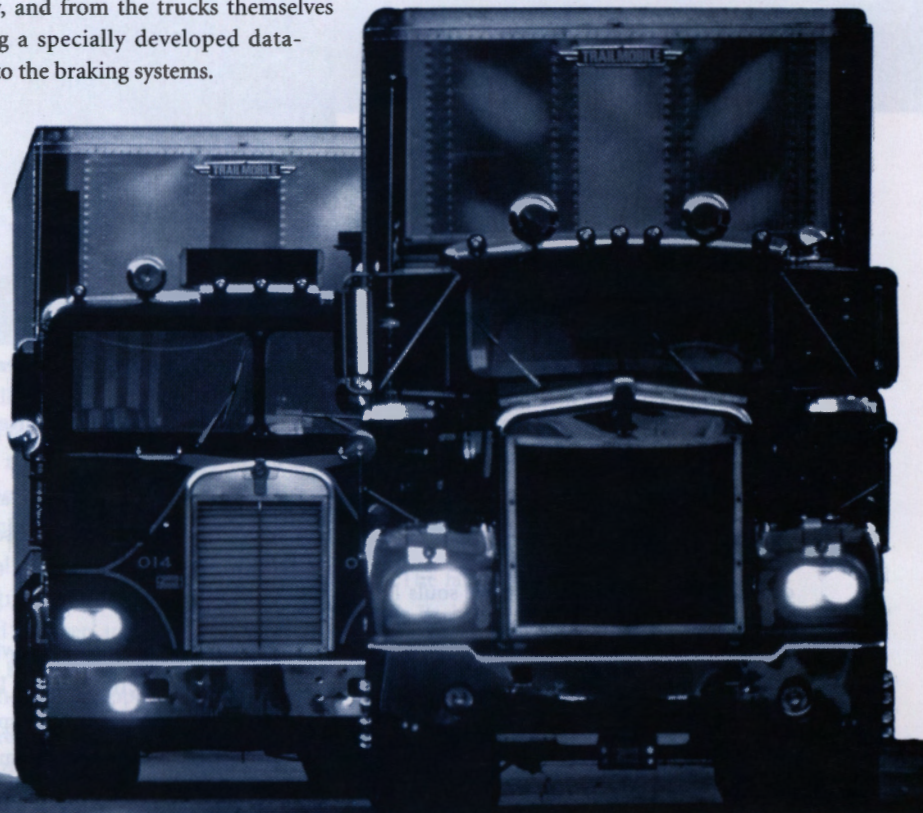
Dr Jarvis said this assumption needed testing since improvements had been made in the performance of heavy vehicles, which meant they could travel as fast as cars.

The study was also designed to test the effectiveness of the Australian design rules for braking systems in heavy vehicles.

There are different design rules for prime movers, tractors and trailers. Dr Jarvis is concerned that when they are

Dr Jarvis said it was also important to learn how truck drivers used their brakes on the road and how the development and fitting of anti-lock braking systems (ABS) for heavy vehicles affected the behaviour of truck drivers.

He gathered his information from truck drivers through a questionnaire and an interview, and from the trucks themselves by wiring a specially developed data-logger into the braking systems.



Monash artist portrays the inconsistency of reality

Aclaimed Monash University artist, Clive Murray-White, was recently commissioned to create a sculpture to stand outside the New Gallery of Fine Art in Cairns.

The six-metre-high sculpture, 'Portrait of an Inconsistent Idealist', was shaped from a piece of Chillagoe marble that Murray-White chose principally for its colour and shape.

"It was a predominantly cream-coloured stone with a variety of coloured veins ranging from tans through to greys, pinks, yellows and even crimsons," Murray-White said.

He was also taken with the "almost skin-like" grain of the stone and its 'penato' shape, which he is renowned for using in his work.

The penato is a Tuscan woodcutting tool, a combination of an axe and pruning hook, and, for Murray-White, a symbol from the roots of Western culture.

The gallery had put a great deal of trust in him, Murray-White said, commissioning him to make the sculpture without asking for drawings or models.

"This sculpture had to say at a glance where our culture has come from – that not only do we live on a fabulous island continent but that we are an imaginative, insightful, even heroic nation," he said.

One of the most intriguing features of 'Portrait of an Inconsistent Idealist' is that it has only one clearly visible eye.

Murray-White said it was a way of luring people to walk up to the face, to bring them "into the magnetic field that artworks sometimes produce".

The "hidden" eye also represents the artist looking inward and the intense visualisation and focus one has by closing one eye.

The title of the piece, 'Portrait of an Inconsistent Idealist', represents the idea that reality is inconsistent: "Some things are beginning, others are ending, some are just about complete, others over-ripe, a conclusion is often the beginning of something else, what is rock from one view is sculpture from another."

Murray-White has a different nickname or identity for the three different views of the sculpture.

The left side of the sculpture he sees as the stern leader and archetypal heroic figure, which he has nicknamed Napoleon, Captain Cook or Lord Nelson.

The centre view is nicknamed Mawson and is an explorer, more heroic than the military leader, and "possessor of that particular style of human drive that

belittles the best efforts of almost all other achievement".

The right side is somewhere between "a stereotype American motorcycle cop and a Holbien Cardinal type of personage ... with a bit of god the priest or lawkeeper, god the warrior and god the explorer".

Murray-White is currently lecturer in charge of sculpture on Monash's Gippsland campus.

He gets much of his inspiration from his students, particularly his Aboriginal students who, he believes, understand their culture very clearly.

English-born Murray-White studied art in Australia and Britain before joining the "Bayside Mafia", a group of artists, lyrical abstractionists and steel sculptors which sprang up in Melbourne during the seventies.

He later moved to the country to escape the influences and conformity of the city art scene and to find the courage to do something "more dangerous".

BY GEORGIE ALLEN





To sleep, perchance to dissociate

While the practice of hypnosis has been around since biblical times, concerns still remain regarding its use by unqualified practitioners. Rhonda Dredge reports.

Although a recognised medical technique, hypnosis is still considered by some to be a novelty stage act and is used illegally in therapy by unqualified practitioners.

Senior lecturer in psychology at Monash's Caulfield campus, Dr Barry Evans, has monitored many advertisements offering hypnosis for weight control, stopping smoking and even breast enlargement.

Although Dr Evans, the Australian Society of Hypnosis, the Australian Psychological Association and the police know that many hypnotists are unqualified, there have been no prosecutions in the past decade.

The use of hypnosis is regulated by law in all states of Australia except New South Wales. In Victoria its practice is limited to medical practitioners, dentists and psychologists.

Dr Evans said the law as it stood was hard to enforce: "The 1965 Psychological Practices Act defined hypnosis as inducing a sleep-like state. From a legal point of view the definition is vague and the practice almost impossible to prove."

As the editor of the internationally recognised *Australian Journal of Clinical and Experimental Hypnosis*, Dr Evans's aim is to promote the professional and safe use of hypnosis within Australia.

This year, he compiled two anthologies which deal with major issues facing the profession – *Hypnosis and the Law: Principles and Practice* and *Hypnosis in the Management of Anxiety Disorders*.

The journal is published by The Australian Society of Hypnosis, which presented draft legislation at the recent meeting of State health ministers, with the aim of gaining national uniformity in legislative controls.

Depression, panic attacks, psychiatric disorders and difficulties in terminating the trance are some of the more serious complications of the inappropriate use of hypnosis.

Dr Evans believes controls need to be tightened because of the "well-documented dangers of being treated by hypnotists who learn their trade from books or who receive little or no training". Depression, panic attacks, psychiatric disorders and difficulties in terminating the trance are some of the more serious complications of the inappropriate use of hypnosis.

"Hypnosis is simply an adjunct to all therapy, a way of increasing its impact and gaining access to the patient's imaginative resources. You need to be professionally trained in a discipline to ensure that it is used appropriately."

The practice of hypnosis dates back to biblical times but was made famous by Mesmer in the 18th century. In 1840, surgeons in the British Army in India used hypnosis on 350 patients to perform operations without anaesthetics.

Despite its long history and a resurgence in its use since the 1950s, it is difficult to explain what a hypnotic state is, hence the difficulty of legal definitions. There is still debate over whether it is a state or a trait.

"There are no consistent physical signs that accompany the state, such as EEG patterns. It is akin to the mental control of pain any footballer can show on the field. Perhaps the control of pain is a skill people develop after they are trained in the ability to hypnotise themselves," Dr Evans said.

Contrary to the myth that only suggestible people can be hypnotised, an estimated 80 per cent of people are hypnotisable to some degree. Suggestibility helps as does the ability to dissociate or screen out one's surroundings and imaginative involvement.

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From Montage 14

These characteristics make hypnosis a relevant therapy for those suffering from post-traumatic stress syndrome. The syndrome was recognised after the Vietnam War, when studies showed that the suicide rate among returned US servicemen was as high as the number of war fatalities.

Since then the research field has spread to cover witnesses to the Hoddle Street and Queen Street shootings, the Ash Wednesday bushfires and victims of assault and rape.

One recent study put the number of World War II veterans still suffering from stress, previously called shell shock, at 45 per cent.

The sufferers of post-traumatic stress syndrome typically avoid stimuli associated with the trauma, and experience flashbacks and persistent over-arousal. They are alert to the dangers of any situation.

"My interest arose from the fact that these sufferers tend to show high hypnotis-

ability. Why does this happen? From a treatment point of view it's important to find out if those who are more hypnotisable are more likely to respond in this way to traumatic events. If so, clinicians could blunder in and use hypnotism as a treatment and worsen the condition."

Dr Evans's research shows that those suffering from the syndrome have enhanced hypnotisability.

The success of the treatment relies on the patient's ability to dissociate, which is a commonly used coping mechanism for blocking out the stressful experience.

Under hypnosis the sufferer "leaves everyday emotions behind" and can go back through the traumatic experience without suffering the usual painful responses.

Dr Evans's plan is to strengthen the links between Monash and the profession by seeking to introduce a masters course in health psychology in 1996.

Gender bias demeans the law

Lawyers have a special responsibility to work towards eradicating gender bias, according to Justice Sally Brown of the Family Court.

Addressing Monash University law students as part of the inaugural Monash Law Students' Society lecture series, Justice Brown said gender bias in the law was "systematic, circumstantial and less formal, and when blatant forms of discrimination become unacceptable they go underground".

Gender bias included "the exclusion of women because they are women, the unthinking use of incorrect and unchosen stereotypes, the use of double standards, the use of a male-defined norm, the failure to acknowledge or be sensitive to women's perspectives, not recognising harm if it is done to women, being gender blind to gender-specific realities, and using sexist, inappropriate and imprecise language".

Justice Brown said there were some men in the legal system who still found it

difficult to accept the notion of female lawyers: "Many male lawyers ... may have internalised the 19th century cultural expectation that women were not supposed to be lawyers."

A fundamental obstacle to proving gender bias in law and legal systems was that "women must make the case for gender inequality in law under the very conditions of social inequality they are attempting to change".

Similarly, gender bias appeared to attack the principles of fairness and justice, the very tenets on which the legal system is based.

"The possibility of the presence of gender bias raises a fundamental dissonance, being the gap between the ideal of justice and the reality of fairness," Justice Brown said.

"It is troubling to find bias in any institution, but it becomes far more difficult where the whole purpose of the institution is to provide and promote justice."

A question of life or death

From Montage 16

This is proposed in the Medical Treatment (Assistance to the Dying) Bill 1993 – promulgated by the Voluntary Euthanasia Society of Victoria. If passed, this bill would allow doctors to provide terminally ill patients with the means to end their lives. While the bill might not help every patient (because not every seriously ill patient would be able to take her life unaided), it would nonetheless be a first step towards liberalising laws that unjustifiably prevent doctors and patients from jointly deciding on a course of action that best meets the needs of incurably ill and suffering patients who wish to end their lives.

The current absence of a legal framework does not mean that doctors will refrain from practising voluntary euthanasia, or refrain from helping some of their desperately ill patients commit suicide. It merely means that many doctors will, at potentially great cost to themselves, be breaking the law, to assist their patients to die in a way that they regard as morally and professionally sound.

The honest and open Dutch approach is much preferable to our own. Patients can lawfully request direct help in dying from doctors willing to provide it; Dutch doctors do not have to fear legal sanctions if they abide by the patient's request, and Dutch society as a whole has accepted responsibility for the implementation of procedural frameworks that will protect patients and doctors alike. We have yet to accept that responsibility.

One thing is certain, though. Without a change in our legal framework, Australian doctors will not be able to truly listen to those who want to die – and patients will be dying in ways that are a horrible contradiction of their lives.

Helga Kuhse is the director of Monash University's Centre for Human Bioethics. She is the author of many articles and several books on ethics in health care, and co-editor of the international journal Bioethics.

A question of life or death

BY HELGA HUHSE

"Fourteen years ago, I broke the law. Technically I may have committed murder. Apart from parking offences and civil disobedience ... I am not aware that I have broken the law before or since. In helping my first husband to take his own life when it had become intolerable for him, the law says I committed a terrible act. For me, a much more terrible act would have been to watch him deteriorate physically and mentally, to know this was unbearable for him, and to do nothing." (Extract from *Willing to Listen, Wanting to Die*.)

Thus writes Mary Mortimer, one of the 19 contributors to the collection of stories in my new book, *Willing to Listen, Wanting to Die*. There are others as well, some of them writing anonymously, who admit that they have not only been willing to listen to an incurably ill relative, a patient or friend who wanted to die, but who were willing to render active assistance. As one of the anonymous contributors writes: "It is ten years now since I killed my mother. That's right, that's what I did. The hardest thing I've ever done in my life but I had to do it because she asked me to do it."

There is hardly a topic that has received greater and more consistent public attention during the last few years than "the right to die". Does a person who is incurably ill, who suffers much and wants to die, have a right to bring her life to an end, and is it proper for others to help her in this quest? Seventy-eight per cent of Australians now believe that doctors should be allowed to end a patient's life, at the patient's request, if the patient is hopelessly ill, in great pain, and has no chance of recovery.

According to the law, a person who helps another to end her life may be charged with murder or assisted suicide. This has not, however, prevented many Australian doctors from rendering such assistance. Two recent surveys indicate that more than a quarter of doctors engaged in the care of incurably or terminally ill adult patients have practised voluntary euthanasia at least once, and many more would like to see the law changed to allow the practice.

The Netherlands is currently the only country in the world where doctors are able to openly practise euthanasia and assisted

suicide. Even suicide was once considered a heinous crime. It was, however, decriminalised in England in 1961, and the Australian states (with the exception of the Northern Territory) have since followed suit. While attempted suicides are thus no longer subject to punishment under criminal law, assisting someone to end her life remains a criminal offence.



Helga Kuhse.

The strong message of the book is that the mere fact that an action is unlawful does not mean it is morally wrong. On the contrary, sometimes it is the law – not the action – that deserves moral condemnation. Existing laws which prohibit direct aid in dying to the incurably ill who request it enforce behaviour that leads to much unnecessary suffering and unjustifiably restricts the liberty or autonomy of the very people the law is meant to protect.

The prohibition of direct aid-in-dying is particularly astonishing when we remind ourselves that existing laws already recognise that it would not only be inhumane, but also contrary to the principle of autonomy and self-determination, to impose on patients an intolerable life of suffering they do not want. Competent patients may now lawfully request doctors to discontinue life-sustaining treatment and doctors may lawfully administer life-shortening pain and symptom control.

Is it not irrational to allow doctors and consenting patients to engage in the above two kinds of life-shortening decisions, while prohibiting them from directly, openly and honestly choosing death by direct means? The point is that death, following the refusal of treatment, will not always come swiftly and painlessly. Rather, the dying process may involve much unnecessary suffering for the patient.

It is often said that it would be impossible to frame laws that would not be subject to abuse. But why should it be any harder to frame laws that cover direct aid-in-dying than it would be to frame laws that cover other medical end-of-life decisions, such as the refusal of life-sustaining treatment? In Victoria, refusal of treatment is covered by the Medical Treatment Act 1988. It would be relatively simple to extend this Act to allow not only refusal of treatment by competent patients, but also direct voluntary euthanasia.

Another way in which our society might decide to proceed is to uphold the current prohibition on voluntary euthanasia, while decriminalising medically assisted suicide.

Continued on Montage 15