

Graduation focus shifts to Malaysia

The University of Adelaide is preparing for its fourth graduation celebration in Malaysia. The event, at Kuala Lumpur's Hotel Istana on Sunday 25 May, is the largest yet, with seventy-four new graduates due to attend with their families and friends.

Eight of the University's eleven Faculties are represented in the celebration, with the largest groups coming from Economics & Commerce (23) and Medicine (24).

The majority of those graduating in Medicine (and also in Dentistry) have undertaken their studies in Adelaide through the highly successful MATES (Malaysian Australian Tertiary Education Scheme), following their matriculation at the Universiti Sains Malaysia.

Seventeen of the successful graduating students transferred to Adelaide to complete their degrees under the University's twinning agreement with the Sepang Institute of Technology (S-I-T).

The Chancellor (Mr Bill Scammell) and Vice-Chancellor (Professor Mary O'Kane) will lead a group of Adelaide representatives travelling to Kuala Lumpur for the ceremony.

Delivering the Occasional Address will be the President of Adelaide Uni Alumni (Malaysia) Berhad and Senior Vice-President of KTA Tenaga Sdn Bhd, Ir. Chris Chong Chow Pang.

An Adelaide Engineering graduate (BE 1961), Mr Chong has been involved in many mechanical engineering projects, especially in the field of power generation.

He is a Member of the Institution of Engineers, Malaysia, a Fellow of the Institution of Engineers, Australia, and a Member of the Institution of Mechanical Engineers in the UK.

He has also played an active role in community services, and is currently a Director of the Malaysia-Australia Foundation, a non-profit organisation promoting closer relationship between Malaysia and Australia.

He succeeded Datuk Dr Sam Abraham as President of Adelaide Uni Alumni (Malaysia) Bhd last year. The organisation was established to foster and consolidate ties between the University of Adelaide and its many graduates in Malaysia — in some families spanning three generations.

Adelaide Uni Alumni (Malaysia) Bhd will hold its Annual Dinner at the Hotel Istana following the graduation celebration. Guest of honour is the Chief Minister of Sarawak, YAB Datuk Patinggi Tan Sri Haji (Dr) Abdul Taib Mahmud — an Adelaide Law graduate (1961) who was awarded the degree of Doctor of the University in 1994.

—John Edge

West must commit to continued public funding: Uni submission

The University of Adelaide has called for a commitment to the continued public funding of universities and the establishment of an Australia culture which greatly values higher education.

The University has made these points in its submission to the Federal Government's Review of Higher Education Financing and Policy.

Committee Chair Roderick West and member Professor Lauchlan Chipman visited the University late last month. They met with a range of people from the University community and were taken on a tour of Waite Campus.

The University's submission argues that Australia, if it is to secure a healthy economic future, is critically dependent on the rapid development of knowledge-intensive industries.

In fact, it is suggested that if Australia does not nourish the intellectual resources and skills to develop successful tertiary industries, it will be "condemned to be a quarry and farm for more prosperous and dynamic

economies in our region and beyond".

It follows that "Australia requires a high level of investment in university education and research".

"Universities are about knowledge," the submission says. "Or to put it another way, universities are a central component of the knowledge industry."

"If the thesis is accepted that knowledge-based development is needed urgently for Australia's future, then it follows that higher education is crucial to development and therefore should be fully funded by the public purse."

"If the thesis is not accepted then the argument of who should pay becomes more problematic."

The submission calls for a simplification of the data collection processes imposed on universities by government. It also suggests the development of a broad set of agreed performance indicators with common definitions and questions across all the collection agencies which can be assembled and published.

In the event of a decline in public funding and an increase in the influence of market forces, the submission says government regulation must be reduced.

The submission discusses the many options for funding models, and the University expresses its support for models which promote diversity.

Discussing the pros and cons of vouchers, the submission says the University is willing to participate in experiments in performance-based funding for teaching and training projects.

On research, the submission argues that 20% of the Operating Grant should be devoted to the Research Quantum to ensure that the research infrastructure of universities like Adelaide is not eroded.

On research training, the submission says that while the Higher Degree Research load has grown significantly, funding has not increased to cover this load.

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Research project shakes the earth

When Dr Michael Griffith sees the thousands of brick houses that have been built around Adelaide, he sees the potential for disaster.

Unreinforced brick masonry is one of the most vulnerable forms of construction in terms of earthquake damage, which is why its use has been banned in California.

But in Australia it's the most widely used method of construction; around 90% of homes in Adelaide are built with some form of brickwork, much of which is unreinforced brick masonry.

Fortunately, Australia's seismicity is much lower than that of California. Nevertheless, the earthquake that struck Newcastle in 1989 caused major damage to buildings made of unreinforced brick masonry and resulted in the loss of 13 lives, illustrating the potential danger posed by earthquakes in Australia.

Although there has not been a large quake in the city of Adelaide since 1954, Adelaide is one of the more seismically active areas of Australia.

In March this year an earthquake measuring 5.1 on the Richter scale struck the mid-north of South Australia. That quake caused minor damage, but the effects could have been much different if it had hit the Adelaide metropolitan area.

As the head of the University of Adelaide's Department of Civil & Environmental Engineering, Dr Griffith's main research interest is earthquake engineering. He is currently leading a three-year study into unreinforced brick masonry.

The study, which is being conducted jointly by the University of Adelaide and the University of Melbourne, is funded by a \$151,000 grant from the Australian Research Council.

Using special 'earth shaking' equipment, researchers have been testing brick walls by creating simulated quakes of up to magnitude of 0.6g (about magnitude 7). It takes only seconds for a standard wall to come crashing down, prompting Dr Griffith to suspect that Australia's standards might not be able to cope with such an event.



Reduced to rubble — Dr Mike Griffith examines an earthquake-tested brick wall. Photo: David Ellis

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INSIDE

In this issue we present the first in a series of thematic features which will appear every two months. The first feature focuses on international dimensions of the University's work. See pages 5-6, 11-12.



Tho' cowards flinch

As I write this there is still the odd red flag draped sadly over the front fence. Last week there were red flags fluttering everywhere as a swarm of students surged through the Mitchell Building foyer, up the stairs, and draped themselves and their flags over the banisters. I had never realised what a good building the Mitchell is for draping!

The students were protesting — loudly but peacefully — against the introduction of undergraduate fees for those students who do not make it into the Commonwealth load; from 1998 universities will be allowed to charge fees for 25% of the total number of domestic places in any given award course.

I am no great fan of undergraduate fees. Indeed my own position is that higher education is an important public good and should be available freely, as far as practical, to all those who meet university entry requirements.

However, we live in a time of severe cuts to higher education. There has been a lack of appropriate indexing over a long period of time during which the system has grown enormously.

More recently, direct cuts to research-based universities such as ours have added to the problem of maintaining research infrastructure and teaching facilities.

At a time when we are still fairly dependent on our income from the Commonwealth Government the possibility of charging fees must be a major issue on the agenda.

The University has a vision that it will become one of the world's great universities over the next 25 years.

Being a great University means that students at all levels will want to come to us from all around the world and we will have the very best staff. If we are going to achieve this we will need to offer substantial scholarships to assist students to come to the University.

We will need to pay our staff appropriately and we will need to be less dependent on Governments which look to short-term political gain while we are planning over a quarter of a century.

Clearly, to achieve our long term goal we must face up to difficult choices over the balance between public and private funding even while we work to improve the quality of education and research.

Striking the right mix will be the subject of vigorous debate in our University community and in the higher education system as a whole.

It's within the shade of these decisions that we'll live or die.

MARY O'KANE

Speaking for myself



In the current issue of *The Adelaide Review* under the heading "O'Kane on academic freedom" is printed a document purporting to come from the Vice-Chancellor's office. Following this is a notice from the University of Adelaide NTEU Branch Committee, published in *The Australian*, 12/3/97. The intention of the juxtaposition is clearly to raise misgivings about the administration of the University of Adelaide.

Whatever the first impression may be, a careful reading of the document over Mary O'Kane's name offers very little to which serious objection can be made: official announcements should be made through the proper channels; facilities provided by the University should not be used for the private business of those employed in the University; proper protocols need to be observed in dealing with eminent persons, and so.

Most of this, I would have thought, could have been left to the

good sense of those concerned: if the directions were taken absolutely literally the Vice-Chancellor's office would be overwhelmed with trivialities, the bureaucracy would extend, and the University would become even less efficient at doing what it ought to be doing (ie, research and teaching and contributing to the intellectual vigour of the community) than recent interference by higher powers has already made it.

However, since the document has been made public in a way that suggests it is an attack on 'academic freedom', may I suggest, humbly and with respect, that Professor O'Kane issue another circular to make clear that there is no such intention: perhaps something along the following lines.

"The University of Adelaide recognises that those who work in it, the academic staff and students, should be among the most intelligent members of the community, with the best trained minds and the most extensive information in their areas of special expertise. The University therefore encourages the participation of its members in public debate on all issues, and sees

this participation as an important part of the University's function and its service to the community as a whole. Government policy in relation to universities, and the policies and practices of particular university administrations, are clearly part of this general debate, and should not be excluded. Uniformity of view on any issue is not to be expected (nor is it desirable), so opinions expressed should be clearly those of the writer(s) or speaker(s) only, and not claim wider provenance. However, when matters of specialist knowledge are involved it may be perfectly proper for the academic standing of the person expressing the opinion to be indicated."

I worked in the University of Adelaide for a long time, including spells as head of department and dean, and I still have honorary status within my department (which I value) and a function in the Alumni Association, but I make it clear that I speak only for myself — though these are views I have long held and (I hope) acted upon.

FH Mares
Balhannah

GUEST COMMENTARY

New Directions in the Faculty of Arts Postgraduate Structured Program

Unlike North American universities that place a high degree of emphasis on coursework in their PhD programs, most Australian universities follow the British tradition of a PhD by thesis only program with no or little component of coursework. Increasingly, though, it is felt across Australian universities that some 'orientation' is essential for all PhD students, especially when there is pressure on students to complete their theses in less than four years.

In 1994, the University of Adelaide pioneered a program for all higher degree research students, called 'Structured Program', during which students identify a research topic, do a literature review, prepare a research proposal and present it to their department in a seminar format. At the same time a special program for non-English background international students, called 'Integrated Bridging Program' was put in place. This covers language-related development along with discipline-based training.¹

While initial evaluation reports have suggested that the Structured Program produced a high level of satisfaction both for staff and students, the Faculty of Arts identified some areas of concern and the Higher Degrees Committee throughout 1996 discussed these issues and came to the conclusion that part of the Structured Program needed to be delivered at the Faculty level rather than by individual departments.

The Structured Program consists of two components: the compulsory component, the Core, which culminates in the presentation of a research proposal — the approval of this research proposal completes the Core component and confirms the enrolment; and the second component, Directed Studies, which is not compulsory, but activated on a needs basis, usually where the students would benefit by doing some coursework related to their discipline and field of research.

by
Professor Purnendra Jain
and Dr Margie Ripper

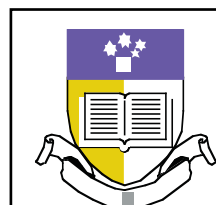
The Higher Degrees Committee felt that the core component of the Structured Program had many elements in common to all departments and that those elements might best

be delivered at the Faculty level. The Associate Dean then consulted all department heads and most shared the view of the Committee. The Committee then formed a Working Party which brought forward a report with the recommendation that several training sessions be provided on a faculty-wide basis covering information technology and multimedia skills including use of e-mail, the World Wide Web and Netscape, intercultural and communication skills, techniques of postgraduate research, seminar presentation and teaching skills, the respective roles and expectations of supervisors and students, the structure of the Faculty and the University postgraduate support mechanism.

There are several merits of this program. First, the Faculty is able to draw together experts from various departments of the Faculty and make their knowledge available to all postgraduate students. It is clearly the case that some smaller departments are not able to dedicate the expertise and resources necessary to cover all areas of the core component of the program, and thus their students were missing out on some important aspects of postgraduate training. The common program addresses this inequity.

Second, the program is cost effective as departments are not directing scarce resources into duplication of generic work that could be effectively provided at the Faculty level. Finally and importantly, this common program is expected to help overcome some of the isolation that postgraduate students often feel in the humanities and social science disciplines where students from one department have little chance of interaction with students in another department.

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Spectrometer facility puts South Australia at the forefront

Scientific research in South Australia has received a major boost thanks to a new \$1.2 million scientific instrument based at the University of Adelaide.

Called a nuclear magnetic resonance (NMR) spectrometer, the instrument can be used for a huge range of scientific work, such as research into cancer, and has many medical and industrial applications, making it a valuable resource for the State and the nation.

The new NMR instrument will be used by chemists and molecular biologists to discover the shape, structure and other properties of molecules. The spectrometer does this with a combination of a powerful magnetic field and radio waves.

This state-of-the-art instrument is

the most powerful of its kind in SA. Funded by the Australian Research Council, the spectrometer will be operated jointly by scientists from all three South Australian universities — Adelaide, Flinders, and UniSA.

"This instrument brings us to the forefront of chemical and molecular biological research," said Dr Simon Pyke from the University of Adelaide's Department of Chemistry.

"The discovery and refinement of chemicals used in everyday life, including pharmaceuticals, agrochemicals and synthetic polymers, depend on an intimate understanding of the shape and structure of molecules.

"A method has recently been developed using this technology in

the early detection of cancer, and future changes in import controls for wine in the European market may require this technology," Dr Pyke said.

He said the instrument's INTERNET-capable computer control also represented an opportunity to sell a range of services into South-East Asia.

"The new spectrometer will provide enormous benefit to researchers of all universities in South Australia, and their research efforts will in turn benefit industry, the economy, and the community as a whole," Dr Pyke said.

The new spectrometer facility was launched at the University of Adelaide on 6 May by the Vice-Chancellor, Professor Mary O'Kane.

West: Uni submission

From Page 1

"This load growth has been allocated in strange ways, being assigned to post '87 universities in greater numbers than to top rank research performers such as Adelaide," the submission says. "This would seem to be an under-use of the research intensive universities. This matter must be addressed urgently."

Summing up the wide-ranging arguments, the submission concludes:

"What we want is a change in the way in which the system is funded and regulated so that diversity is encouraged and individual universities are free to pursue their different 'missions' and conceptions of excellence with only the degree of regulation required to be accountable for the significant levels of public monies invested in university education and research."

—David Washington

Death of Gerald Allen

The University is saddened by the recent death of Mr Gerald Allen, who was swept from rocks while fishing near Port Lincoln on 7 May.

Mr Allen was a partner with Coopers & Lybrand who had lectured in the past in the University's Faculty of Economics and Commerce.

In 1992 he was elected to University Council for a one-year term. He was a member and past convener of the Finance Committee, current convener of the Audit Committee, convener of the Finance Committee of the Anti-Cancer Foundation and a member of its Board of Directors, a member of the Luminis Board and a Director of Martindale Holdings Pty Ltd.

He was involved only a few days before his death in a meeting of the Appointment Committee for the two new Senior Management positions in the University.

Reporting Mr Allen's death to Council on Friday 9 May, the Vice-Chancellor, Professor Mary O'Kane, said, "As a person involved in business large and small, Mr Allen provide a useful perspective to the University's activities, particularly regarding financial matters in which he had had over 30 years of experience".

Lively debate on fees issue

Faculty boards, the Academic Board and Council are leading discussion at the University on issues surrounding the possible introduction of up-front fees for additional undergraduate places.

Faculty boards have been discussing a paper produced by the Vice-Chancellor, Professor Mary O'Kane, over the past few weeks. Academic Board will debate the paper on 21 May and Council will discuss the issues in June.

Council decided at its May meeting to investigate the possibility of organising a forum for students and Council members to discuss the complex issues surrounding the possible introduction of fees.

The Council meeting followed a day and night of protest action by students against the possibility of up-front fees. Professor O'Kane held an impromptu discussion with students during the Students' Association protest in the foyer of the Mitchell Building.

About 200 students gathered in the building following a demonstration outside the Pirie St office of the Minister for Employment, Education, Training and Youth Affairs, Senator Amanda Vanstone.

—David Washington

Research shakes the earth

From Page 1

"We've conducted some preliminary research looking at the effect of earthquakes on unreinforced brick masonry, and we've identified what we think are the two main weak links in the structural system," Dr Griffith said.

"The problem lies with the bending strength of the brick walls, and the connections between the walls and the floor slabs or roofs in the buildings. Those two aspects are really what make unreinforced brick masonry buildings the most prone to earthquake damage in the country."

He said the study had two main phases: to identify the problems brick walls experience in earthquake situations, and to find solutions for those problems.

Professor O'Kane told the students she opposed up-front undergraduate fees in principle, but saw little option if the University was to raise extra funds to meet its obligation to give staff a significant pay rise as well as maintain the quality of teaching and research.

Students expressed a range of concerns about up-front undergraduate fees including equity, the potential effect of extra students on university resources, and the possibility of wider undergraduate fees being introduced in the future.

From next year, the Federal Government will allow universities to open a proportion of fee-paying places for Australian undergraduates above and beyond the normal government-funded places. Fee-paying places would be limited to 25 per cent of a course's total number of places.

A handful of students stayed in the Mitchell Building overnight following the day of protest. Unlike the occupation of administration buildings at several interstate universities, no damage was done and students cooperated with University security and administration staff.

—David Washington

"If, as we suspect, the wall connections are not up to the seismic load requirements, we'll then go onto the second phase of the research. That is, to look at ways of improving the strength of those connections, so the brick walls can safely transmit the forces that are going to be generated by an earthquake."

Dr Griffith said the research project was one of several undertaken by Civil & Environmental Engineering in the field of earthquake engineering.

"There are many implications for this work, such as improving safety for the public, and we feel the benefits are important enough to warrant further research," he said.

—David Ellis

[See also story page 9]

The News IN BRIEF

PLANETARY CATASTROPHES

Dr Vic Gostin from the Department of Geology & Geophysics will deliver a free public lecture entitled "Planetary Catastrophes: Geological Foundations to Human Myths" in the Mawson Lecture Theatre on Wednesday 28 May at 7.30pm. The lecture is presented by the South Australian branch of the Australian Skeptics.

Earth has suffered many catastrophes since its birth (and that of its Moon), including Oxygen "poisoning", equatorial ice caps, large meteorite showers, giant meteorite impacts, enormous volcanic eruptions, earthquakes, tsunamis, and floods.

Dr Gostin's lecture will summarise the geologically recorded phenomena, and by placing these into the history and growth of human consciousness, will indicate their influence on our myths and belief systems. These will include legends and theories concerning Atlantis, Lemuria, Antarctica, the Biblical Flood, Earth's Axial Shift, and Velikovsky.

Although not essential, those wishing to attend the lecture are asked to register their interest by contacting James Lakes on 8356 0601 or by email <lakes@senet.com.au>.

WORLD VISION

The new Chief Executive of World Vision and former South Australian Premier, Mr Lynn Arnold, will present a seminar on "World Vision and Cultural Interface" for the Centre for Intercultural Studies and Multicultural Education (CISME) in the Council Room (Level 7, Hughes Building) on Tuesday 27 May at 6.00pm.

Mr Arnold has a long-held commitment to international development. He was State President and National Vice-President of the South Australian executive of the United Nations Association of Australia, and one of the co-founders of the Biafran Relief Campaign in Australia in 1968.

Since leaving politics in 1994, Mr Arnold has completed a Diploma in Senior Company Administration at ESADE in Barcelona, and has been studying for a PhD at the University of Adelaide.

GERMAN DONATION TO BARR SMITH LIBRARY

The German Consul general, Dr Gunter Heisch has presented to the University a microfiche collection, "Bibliothek der Deutschen Literatur", on behalf of the Deutsche Forschungsgemeinschaft.

The set contains a full-text collection of German literature from the 4th century "Ulfilas" to 1900, representing more than 2,500 authors and 15,000 titles. The project was undertaken with the support of the Cultural Foundation of the German States in association with publisher GK Saur, and took four years to complete.

Only a limited number of sets were produced (each costs DM35,800) and copies have been donated only to the major national libraries of France, Russia, Japan and the Library of Congress.

The Barr Smith Library's former subject Librarian, Ninette Ellis, approached the Deutsche Forschungsgemeinschaft on behalf of the German Department and the German-speaking community, and the University of Adelaide has been honoured with the gift on the strength of its strong German-language collection and long record of teaching and research in German language and literature.

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New book sexes the subject of law

The feminist eye on the law has traditionally focused on how the law discriminates against women.

Now, a new book edited by two members of the University of Adelaide's Law Faculty, Ngaire Naffine, Reader in Law, and Rosemary Owens, Senior Lecturer in Law, has taken the debate to a deeper level.

The book examines the law's role in the maintenance and construction of ideas about the very nature of men and women.

Sexing the Subject of Law considers the idea of the legal 'person' — the basic unit of law, or the legal entity, which includes individuals, corporations or States. For example, the 'person' in international law is the State, and in labour law the 'person' is the worker.

The book's 14 contributors examine the different ways the law sexes these various legal persons, reflecting in the process on what it is to be human, the nature of law, and the relationships between body and mind, culture and society.

The project was funded from the University of Adelaide's Quality Audit Funds in 1995. This enabled the project's participants to convene a series of seminars at the Law School in 1995 and 1996.

Commenting on the inspiration for the book, Ms Owens said that "across the disciplines, postmodern theory has led to a questioning of the boundaries of traditional conceptions of the person. We wanted to extend this analysis into law".

Dr Naffine said: "In law, the concept of the person has always been of particular interest because it is the



L to R: Rosemary Owens and Ngaire Naffine at the launch of their book last month. Photo: David Ellis

basic legal unit, the entity around which the law is organised".

The book examines the nature of the legal person in a range of subject areas including human rights, legal theory and the philosophy of law, criminal justice, medical and family law, and the law of evidence and procedure, to name a few.

As well as academics from the Adelaide Law School, the book's contributors include academics from Flinders University, La Trobe, the University of London and the University of Melbourne. Together, they represent a formidable group of scholars.

In her foreword, Marcia Neave, Professor of Law at Monash University, says the book is the "first systematic attempt to examine how (the legal person) is overtly and covertly sexed within the Anglo-American legal system".

She notes that the book tackles one of the central problems of feminism — that is, the tendency of such a discussion to reinforce notions of inherently male and female characteristics.

Sexing the Subject of Law is published by LBC Information Services and Sweet and Maxwell (London).

—David Washington

GUEST COMMENTARY CONTINUED

From Page 2

The common program is being piloted in 1997. The Higher Degrees Committee will maintain close contact with the departmental postgraduate co-ordinators as well as with the students to ensure that the program is meeting their needs, and to canvas ideas for development and modification in the future.

The detail of the program is available on the University's web site <<http://www.etu.adelaide.edu.au/ACUE/SP/EXAMPLES.HTML>>.

The challenge that faces the program co-ordinators is to provide information pitched at the appropriate level for the diverse group of students beginning their candidature.

For example, some have an extensive background in research while others draw solely on their honours experience. Some have very basic 'computer literacy' whilst others have highly developed expertise. Some have no experience in teaching or seminar presentation whilst others may be very experienced in tertiary teaching.

The program attempts to accommodate this diversity by providing core material with optional extended sessions which can be subscribed on a needs basis.

For example, all participants are introduced to a range of systems for managing the reference material that is amassed in the process of writing a thesis. These systems for indexing and note taking complement the library search skills that students develop with their particular subject librarian. Both hard copy and computerised systems for managing references are demonstrated. Extension sessions are offered in the use of the computerised system ENDNOTE 2.

Postgraduate study has always had the dual function of developing scholarly expertise and providing an

'apprenticeship' for academic work. The Division of Humanities and Social Sciences is committed to providing postgraduate training which fosters excellence in scholarship, teaching and research.

Our methods of providing this training are inevitably influenced by the burgeoning of electronic sources of scholarly material and the increased speed and volume of academic publication. These new sources and 'tools of trade' can seem overwhelming to postgraduates and academics alike.

One of the tasks of the common program of the Structured Program is to develop skills in selection from amongst these materials and to gain sufficient overview of the electronic aids to decide on what is useful and appropriate for each individual.

The program will be evaluated at the end of 1997 and necessary adjustments made in the light of feedback received from students, supervisors and other interested parties.

¹ For details of the Structured Program at the University of Adelaide, see Margaret Kiley and David Liljegren, 'The Crucial Beginning: A Structured Program at the Commencement of a PhD'.

This paper was presented at the conference 'Blueprint for Better Graduate Studies' in Chiang Mai, Thailand, from 5-7 February 1997. (Copies are available from the Graduate Studies Office.)

Purnendra Jain is Professor in the Centre for Asian Studies. He served as the Faculty of Arts Associate Dean (Higher Degrees) in 1996.

Margie Ripper is a Lecturer in the Department of Women's Studies. She is the Faculty's current Associate Dean (Higher Degrees).

Adelaidean Feature

INTERNATIONALISATION

25-year vision demands shared goals and a shift in institutional culture and attitude

The real issue for the University of Adelaide is not *whether* but *how successfully* it will internationalise.

Those words from the Director of International Programs, Dennis Murray in a report currently under consideration by the Vice-Chancellor's Committee (VCC), encapsulate the challenge facing the University of Adelaide.

There is now a trend towards internationalisation impacting on universities in every country as they come to terms with issues such as the education of international students, internationalisation of the curriculum and research, providing opportunities for overseas study by local students and the generation of institutional income from international sources.

The internationalisation stakes are already running, and the only future for also-rans is, as the report puts it, a "less than genteel decline".

That challenge is one which the University of Adelaide is determined to meet, as the Vice-Chancellor, Professor Mary O'Kane, has made clear since she took office. Her aim is ambitious, but simple — to make the University of Adelaide one of the great universities of the world within 25 years.

But what makes a great international university?

At the first of an ongoing series of planning day retreats, held on 19 March, the Vice-Chancellor's Committee articulated some of the characteristics which distinguish world-class universities to date, and considered what the University of Adelaide would need to change to have these characteristics.

Universities currently recognised as the greatest in the world

- are broadly-based, covering the spectrum of arts and sciences rather than focusing on single areas
- are committed to the values of liberal education and provide excellent education for the professions
- pay little attention to vocationalism, because it is the name of the institution rather than the content of the course that guarantees the employability of their graduates
- have significant numbers of senior staff in all areas, major international figures in almost every department, including disciplines little taught elsewhere, and attract and retain staff by international prestige and working conditions at least as much as by salary
- have achieved a degree of financial independence that preserves them

from the vagaries of government policy

• place extremely high importance on the quality of their students, devote teaching to student learning, and have large numbers of overseas students, especially at postgraduate research level

• prioritise and maintain a clear focus on core academic activities and on research.

"Globalisation and information technology will probably lead to the development of additional characteristics that come to define a world-class university," Professor O'Kane said. "Knowing these is part of our challenge."

The report now before the VCC sets out a clear framework for a comprehensive institutional strategy of internationalisation.

It covers student programs, teaching and curricula, research, scholarship and consultancy, cultural development of the University, income generation, and international alumni, and explores the potential for internationalisation in these areas through individual program strategies, specific geographic strategies, strategic alliances with other institutions and organisations, and the University's own organisational structures.

The paper is being developed further, but the Vice-Chancellor's Committee has broadly endorsed its thrust and will be examining it in more detail over the coming months.

The VCC has also agreed that it is important to begin a process of dialogue within the University about what internationalisation might mean, and what value it might have for the institution and its intellectual and academic enterprises.

As the report notes, "An institution's approach to internationalisation requires a strategic focus on collectively and explicitly directed evolutionary development of the institutional culture by staff and students as a shared goal.

"The issue is one of a shift in culture and attitude, choice of direction, acceleration of effort as well as commitment to follow through, including commitment to allocate necessary resources.

"A focused, coordinated internationalisation effort emerging from a shared commitment by academic and support staff and by students is likely to succeed. An internationalisation strategy imposed from above will not."

—John Edge

Wine students' visit a chance to benchmark

The leading role that South Australia — and particularly the University of Adelaide — plays in wine education was reinforced recently when 16 international wine marketing students visited the State.

The students were taking part in a whirlwind Australian tour as part of their International Masters Degree in Management, Marketing and Economics of the Wine and Spirit Sector.

The postgraduate course, which takes students to France, the Ukraine, Spain, Portugal, Italy, Hungary, Germany, California and Argentina, is run by the prestigious Université Internationale du Vin et des Produits de la Vigne.

After visiting Western Australia, the students spent seven days meeting with wine industry leaders, touring wine regions and visiting wine education campuses in SA.

A highlight of their trip was a meeting with wine marketing students at Roseworthy Campus, which was followed by a barbecue and wine tasting.

Senior Lecturer in Wine Marketing, Dr Larry Lockshin, said the visit was an important recognition of the role that South Australia is playing in the wine industry.

"The students — who came from France, Spain, Bulgaria, Chechnya and Argentina — were from



Front L to R: Philippe Walter and Christian Legier. Back (L to R): Philippe Cohen, Sergio Fiorentini and Diego Mohammad at the Adelaide TAFE's Jack Kilgour Tasting Room. Photo courtesy of Dr Larry Lockshin.

varying backgrounds. Some were trained winemakers and viticulturists who wanted to expand their international knowledge while others are from family vineyards or the retail trade," Dr Lockshin said.

"They will become future players in the world wine industry, so we believed it was very important

that they see what we are doing in Australia and have an appreciation of the quality goals, product development and marketing approaches used in this country."

Dr Lockshin said the students were very impressed with the educational opportunities offered at the University of Adelaide and several made enquiries about studying here for a postgraduate degree in wine business.

There was also considerable interest in the new Australian Centre for Wine Business Management, which has been established in collaboration with the University of SA, TAFE, Edith Cowan University and Griffith University.

"Australia is a new winemaking country and while we have achieved a great deal we must not rest on our laurels," Dr Lockshin said. "We must be constantly learning and aware of developments in the international wine industry. Interaction with overseas students will help our students to benchmark themselves against world best practice and boost their skills in wine marketing."

Dr Lockshin said that there was a commitment by both the Department of Agricultural Business and the Centre for Wine Business Management to host similar tours in the future.

—Peter Fuller

Adelaidean Feature

INTERNATIONALISATION

Push to get Australian students moving

Australian students are notoriously immobile when it comes to tertiary study, preferring — unlike their North American, European or Asian counterparts — to stay close to home. They do not normally think of going interstate to study, let alone out of Australia.

Equally, many University staff still do not see study abroad as a mainstream educational value. And it costs so much to study overseas.

In this context, trying to persuade students that spending a semester at an overseas institution is one of the best things they could do for themselves — both academically and personally — might seem like an unwinnable battle.

But at a time when the pressure to

produce mature, “internationally literate” graduates is increasing, study abroad is an obvious strategy to pursue, and this battle is one that the University of Adelaide is set on winning.

In 1992, the University sent five students on study abroad programs. By 1996 the number had risen to 34, and this year will see 44 heading overseas.

Slowly but steadily the University is inching its way towards its goal, which is to have 10% of commencing Australian undergraduates studying overseas for one or two semesters by the year 2000 — although it will still require a substantial increase in a short time to meet the target of around 300 per year which that goal entails.

Of the 44 students studying over-

seas this year, 28 will go to North America — 15 to the United States (University of California, College of William & Mary, Indiana University, University of Oregon, and Washington State University), and 13 to Canada (McGill University, University of Guelph and University of Victoria).

The European destinations are France (two to the University of Poitiers), Germany (two to the University of Mannheim and Albert Ludwigs University Freiburg) and Finland (one to Helsinki School of Economics & Business Administration).

Asia has attracted the remaining 11 students, with four to Japan (Kansai Gaidai University and Kansai University), four to Malaysia (Universiti Sains Malaysia), and three to Thailand's Thammasat University.

It is the first time the University has sent students to Mannheim, the University of Victoria and Kansai University.

As part of its effort to expand the Study Abroad program, senior management is also examining guidelines for a Study Abroad Grants Scheme which it is hoped will encourage more students to consider the benefits of overseas study.

The aim is to provide all students selected to go on exchange with some financial assistance — a basic grant of \$750 or \$1000, depending on destination, with students being able to apply for extra funding on top of this in cases of financial need.

The University is also examining a

range of other strategies to facilitate the administration of the study abroad program, increase opportunities within it, and get the message out to students, departments and faculties.

The desire to encourage study abroad coupled with the gradual increase in the numbers taking up the opportunity has also led to the creation of a separate Study Abroad Office within the International Programs Office.

Located on level 5 of the Old Classics Wing, with entry from the Wills Courtyard, the Study Abroad Office includes a resource centre where students can consult materials relating to the University's overseas exchange partners.

The Study Abroad Office is staffed by two study abroad advisers — Jane Olsson for Europe and Asia and Lizzie Summerfield for North America, as well as an assistant study abroad adviser, Paula Ritchie.

It also recruits and coordinates the admission of incoming, fee-paying study abroad students, whose numbers have also increased (up 20% this year).

“We would be pleased to see or hear from any students interested in knowing more about exchange opportunities,” said Study Abroad Adviser, Jane Olsson.

“And we'd be more than happy to come and talk to staff and student groups in the Faculties,” said her colleague Lizzie Summerfield.

—John Edge

Food science research to benefit from overseas links

International collaboration between food researchers is vitally important if the safety and quality of food is to be improved.

That was the message from visiting microbiologist Dr Terry Roberts, who was a recent guest of the University of Adelaide's Food Technology Research Group (FTRG) and the Department of Chemical Engineering.

Dr Roberts, formerly the head of Microbiology at the Institute of Food Research in the UK, is one of the founders of ‘predictive microbiology’ — the process of modelling the growth, survival and death of common bacterial pathogens in food.

By taking into account certain conditions, such as temperature, humidity and pH levels, researchers can use computer-based models to predict how bacterial pathogens will thrive in food.

This work is important to further understand the harmful micro-organisms at work in food and therefore improve the safety of food items.

Predictive microbiology is undertaken by several institutions around the world. Adelaide's FTRG, which is headed by Dr Ken Davey, is one of Australia's leading research groups in this field.

Dr Roberts last month visited the FTRG while in Australia for a major food science and technology conference. He also presented a seminar on predictive microbiology to University staff and students.

He said predictive microbiology involved an important mix of researchers from various fields, including mathematics, statistics, engineering and microbiology.

“That mixture has become extremely vital. Years ago the engineers would hardly ever talk to the microbiologists, but now that kind of collaboration has really taken off. Each researcher learns a bit about the other, and it's sometimes necessary to have a range of expertise to optimise the output,” Dr Roberts said.

Continued on Page 8

Dentistry exchange with India



Professor Mary O'Kane and Dr Ramdas Pai sign the agreement between Adelaide and the Manipal Dental School. The elephant in the foreground is a gift to the University from Manipal. Photo: David Ellis

The University of Adelaide and the Manipal Academy of Higher Education in India have signed an agreement to exchange dentistry staff and students.

The agreement was signed in Adelaide by the Vice-Chancellor, Mary O'Kane, and the President of the Manipal Academy of Higher Education, Dr Ramdas Pai.

The agreement is a recognition of the growing relationship between Adelaide and Manipal.

The Dental School at Manipal aims to develop its undergraduate curriculum to enable students to study a wide range of disciplines within Dentistry.

The Faculty of Dentistry at Adelaide has just developed a new curriculum and is able to offer the Manipal Dental School expertise in

aspects of the new curriculum, including teaching in Forensic Odontology.

The agreement calls for staff exchanges, as well as the transfer of technology and staff development. Research collaboration will be encouraged.

Student exchanges will occur at the undergraduate and postgraduate levels, and will enable students to gain a wider international experience.

The Dean of the Faculty of Dentistry, Dr Viv Burgess said that the agreement was signed in recognition of the active relationship developed over the past decade.

It was hoped that this agreement would lead to other joint activities, he said.

—David Washington

Adelaidean Feature

INTERNATIONALISATION

'Rich tapestry' of offerings to support international student learning

by Ursula McGowan and Margaret Cargill

In 1991 when we were appointed to work in the newly formed Language and Learning Service of the ACUE the international student numbers were heading for a grand total of four hundred. We were soon overwhelmed by inquiries and requests for help with many of the issues which emerged for students and staff, as international students swelled the numbers in courses and research programs.

There was some early disappointment on the sides of both students and staff.

International students who were on prestigious government scholarships, who had been chosen for their outstanding ability and who had passed their English language entry requirements with flying colours, suddenly found themselves in the 'slow learners lane'. Their ability to use English seemed to desert them in the face of its Australian variant. The speaking speed and the use of idiom by their lecturers, and their own inability to understand the local allusions and jokes which peppered the language of their peers, made many of them feel inadequate, disappointed and probably very homesick.

Lecturers and supervisors found it hard to understand why students who had passed the language entry requirement were often unable to write or speak well after all, and many asked for our advice or referred students to us.

Clearly we had to be creative with our time. We began by providing individual consultations and workshops in which we tried to help people help themselves, but also set about finding funds to pay for additional language and learning development time and resources across the university.

A basic principle underlying our work is collaboration. It has been gratifying for ACUE staff to be able to be involved in Faculty-funded initiatives which assist the internationalisation of the University.

The most prominent examples were the decisions by the A&NRS to appoint and continue to fund the 0.4 position of Language and Learning Lecturer (Margaret Cargill) in

1991, the Faculty of Medicine to fund a Language Development Program since 1994 for access by first and second year students (Coordinator: Helen Mullins) and the Faculty of Mathematical and Computer Sciences to fund an accredited ESL subject. The latter has been taught, since 1995, by Barbara Wake and Ursula McGowan under the coordination of, and in collaboration with, faculty staff. In addition we have been consulted for advice and assistance in setting up support programs for Overseas Qualified Lawyers and Overseas Qualified Dentists.

Through successful submissions for grants and collaboration in faculty-funded initiatives, the Language and Learning Service has, over the six years of its existence, been responsible for the development of a rich tapestry of offerings to assist the University's progress towards internationalisation.

The principle has been one of integration, based on the recognition that student motivation, and so their capacity to learn language, is directly related to the need to use that language for the purpose of relevant communication.

Quality Audit, Teaching Development and Equity Grants were used to initiate a number of programs.

The most comprehensive of these programs is the Integrated Bridging Program (IBP) for all incoming international postgraduate students. In the space of two-and-a-half years the IBP has provided an integrated semester-length program for more than 300 research and postgraduate coursework students. Under the coordination of Kate Cadman, the IBP has become a platform for further provisions. The most recent of these is the Introductory Academic Program (IAP) for undergraduate students funded through AUSAID in 1997.

A Volunteer Scheme has also been established to provide international and other ESL students with volunteers who are interested in spending time in meeting with and offering friendship to persons from other languages and cultures. It was initially funded through an Equity Grant and continues to be provided

through the Language and Learning Service.

A credit-bearing undergraduate subject, 'ESL For Mathematical and Computer Sciences', which is funded and coordinated by the Faculty of Mathematical and Computer Sciences, has been developed and taught by ACUE Language and Learning staff in collaboration with Faculty staff since 1995. The principle underlying this course is the integration of subject content into the language development program for students whose home language is other than English.

In 1995-96 a Quality Audit Grant provided funding for the Literacy Project initiated jointly by the ACUE and the Department of Commerce. This two-year project, which was carried out by Christine Ingleton and Barbara Wake, included the documentation of projects in three other Faculties or Departments — the Faculties of Mathematical & Computer Sciences and A&NRS and the Department of Labour Studies. This work culminated in a booklet,

Literacy Matters, which is about to come out in print.

Other materials initiatives which are based on our experience of the needs of students include:

- a booklet *Written Communication* produced for the Faculty of A&NRS by Margaret Cargill and Melindy Bellotti on a 1996 Teaching Development Grant
- the Quality Audit-funded resource collection 'English Language Study Skills (ELSS)' housed in the Reserve Collection of the Barr Smith Library, and in the Waite and Roseworthy libraries (Ursula McGowan, Janice Laurie and Patrick Condon)
- two Teaching Development Grant-funded video learning packages — 'Oral Language Development For Students Of Medicine' (Ursula McGowan and Dr Sheila Clark, General Practice) and 'Learning /Teaching Materials For NESB Mathematical And Computer Science Students' (Barbara Wake and Alison Wolff, Pure Mathematics)
- a Teaching Development

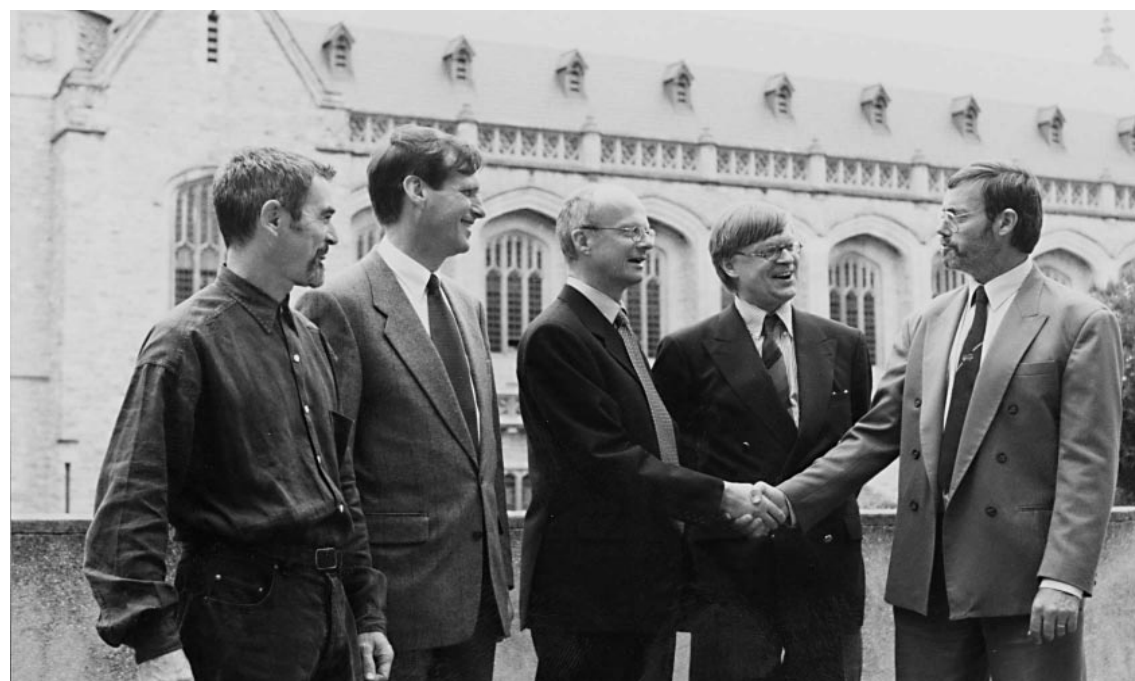
Grant-funded project to assist international students in 'Reading Australian Newspapers', which is currently under way in the Department of Economics (Ursula McGowan & Judy Cowie, Economics).

In 1997 the number of international students on campus has risen above the 1000 mark and we have clearly moved a long way since the days when staff felt helpless when faced with international student issues.

The initial disaffection of staff and students can now, in many instances, be addressed systematically through programs which provide a path through the linguistic and cultural issues raised by the process of internationalisation.

As the understanding of this fact becomes more widespread, and resources are earmarked to support and spread such programs, the process of internationalisation will become ever more rewarding for staff and students of the University of Adelaide.

Law extends its European links



The Faculties of Law at the University of Adelaide and University of Mannheim, Germany, have officially launched an exchange agreement for closer collaboration. Under the agreement students can exchange between Adelaide and Mannheim, giving them the chance to expand their law studies in another jurisdiction and to experience student life overseas. The launch of the agreement coincided with a visit to Adelaide of three senior staff from Mannheim, including the Rector (Vice-Chancellor), Professor Dr Peter Frankenberg. Pictured above are (from left): Mr Dennis Murray, the University of Adelaide's Director of International Programs, his counterpart from Mannheim, Mr Gert Lohbeck, Professor Dr Frankenberg, Professor Dr Eibe Riedel, and Adelaide's Dean of Law, Associate Professor Rob Fowler.

Adelaidean Feature

INTERNATIONALISATION

From Peshawar to Adelaide: 'everything is achievable if you don't lose courage'

When PhD candidate Akhtar Ali arrived in Adelaide on 31 January 1994 after a tiring, three-day journey from his home in Pakistan's North West Frontier Province (NWFP) he was met at Adelaide Airport and told he was going to the Royal Adelaide Hospital. Since he had already taken all the necessary medicals, Mr Ali was very upset by this, until it was explained that he had simply been booked temporary accommodation in the residential wing of the hospital. That evening, after an orientation session during the day, he went to Rundle Mall in search of somewhere to obtain food, but was surprised and concerned to find all the shops shut; in Pakistan they remain open till 9.00pm.

These small incidents — both of which seemed more stressful at the time because of the tiring journey — illustrate the myriad, disorienting cultural adjustments that international students have to make when they come to Adelaide, and the importance of the meeting, greeting and general support services that the International Programs Office and groups such as the Overseas Students' Association provide for them on arrival and throughout their courses.

Today, Akhtar Ali is happily ensconced in Associate Professor John Randles' laboratory in the Department of Crop Protection at the Waite Campus, pursuing his PhD research on the pathology and molecular characterisation of a South Australian isolate of Pea seed-borne Mosaic Virus.

And he has turned his own early experience of being "a stranger in a strange land" into active support for other new arrivals — with periods of service on the Postgraduate Students' Association, the Waite Institute Students' Association, the Council of International Students of South Australia and the Overseas Students' Association.

"Sometimes when I remember that time and tensions, I really can't imagine how I faced it," he said. "But now I don't have home sickness or a scarcity of friends and I

enjoy the company of many friends from different countries."

Mr Ali, who did his undergraduate and Masters degrees in Plant Pathology at NWFP Agricultural University in Peshawar — winning merit certificates and a bronze medal en route — came to Adelaide as the holder of an open merit PhD scholarship through AIDAB (now AUSAID).

He is on leave from a lectureship in Plant Pathology at NWFP Agricultural University, to which he will return after completing his PhD next year.

Why choose Adelaide?

"A friend at University in Peshawar got his Masters degree from Adelaide, and he was very enthusiastic about the University and the reputation of the Department of Crop Protection," Mr Ali said.

"He was right, and I feel lucky to be here. The facilities are excellent, and everyone has been very friendly and supportive."

Akhtar Ali's PhD research has taken him to New Zealand, to the 10th Biennial Australasian Plant Pathology Conference at Lincoln University, to present a paper on some of the characteristics of the pathotype 4 isolate which he is studying.

He has also been back briefly to Pakistan, undertaking a seven-week survey there in 1995 from which he reported two new pathotypes of Pea seed-borne Mosaic virus; that work subsequently led to an article recently published in the international journal *Plant Disease*.

He also married on that trip, and his wife joined him last year for the final year of his degree; she is using her time in Australia to study English at TAFE.

"The early difficulties and tensions I felt have made me more strong, more competent and more independent in my life," Mr Ali said.

"I would like new students to know that everything is achievable if you don't lose courage."

—John Edge



Akhtar Ali — from Peshawar to Adelaide to work with John Randles on Pea seed-borne Mosaic virus. Photo: John Edge

Overseas links benefit food research

From Page 6

Similarly, he said increasing international collaboration between research groups would ensure a better outcome for the food industry and consumers worldwide.

Adelaide's FTRG already has links with many other research groups around the world, including the French association ADRIA, which is one of the most eminent food spoilage research centres in Europe.

Dr Ken Davey said the food industry was the biggest indus-

try of most countries around the world, and there was an urgent need for collaboration between researchers to help provide cheaper and safer food.

"People throughout the world are becoming much more concerned about their food," he said. "They want to know if it's safe, or if it's natural. The bottom line is that by using these models researchers can help the food industry, which in turn has major benefits for the public," Dr Davey said.

—David Ellis

SA teaching and learning holds its own on world stage

South Australia's three universities are making important steps forward in the quality of teaching and learning, according to world-renowned education expert Professor John Biggs.

Professor Biggs, who has held senior positions in education in Hong Kong, Canada and Australia, is best known for his research in educational psychology, student learning and staff development.

He was a guest presenter at the recent 'Innovation in Teaching and Learning' conference — a one-week event shared by all three universities aimed at improving the quality of teaching and learning in this State.

The conference, held in April, was attended by more than 350 academic

staff and involved discussion, workshops and a debate on a range of education issues.

These included increasing class sizes, the changing age, expectations and needs of students, the effectiveness and efficiency of teaching programs, and the system of assessment.

Professor Biggs praised the universities for the event, which he described as a "unique collaboration".

"The three independent universities in Adelaide [University of Adelaide, University of South Australia and Flinders University]... see problems in teaching and learning as common to all institutions. And so the cooperative theme of this event is extremely important," Professor Biggs said.

He said Australia, which was one of the first countries to set up professional development units in universities, ranked highly when compared with the quality of teaching and learning in other countries.

"Hong Kong is now the only country in the world that I know of where all institutions in the system have staff development services, and teaching is very innovative there. I think Australia rates quite high compared to the United States.

"Our big problem, of course, is the sudden stresses and strains in very recent years in the tertiary sector — the cuts, the amalgamations, the differential expectations, the corporatisation, and all of these non-education issues that are in fact crowding the

education agenda."

However, Professor Biggs said events such as this conference showed that South Australia's educators were willing to rise to the challenge and take steps to improve the quality of teaching and learning.

"Here, you've got a culture of collaboration between institutions, which is terrific. It can only be productive. I've been really delighted with the response [to the conference].

"The general feeling across the three universities with this staff development exercise has been very positive. It's gratifying to see that they have put it among their top priorities," Professor Biggs said.

—David Ellis

New course gets Court recognition

The Office of Continuing Education in association with the Institute of Arbitrators Australia SA Chapter has developed a new course to train professional and commercial arbitrators and those involved in day-to-day transactions likely to benefit from an understanding of disputes and dispute resolution.

Endorsed by the Council of the Institute of Arbitrators Australia, the 13-week course (now in its sixth week) introduces students to the concepts and legislative and commercial frameworks upon which arbitration, as a recognised form of alternative dispute resolution, is based.

It gives those working in a wide range of professions a better understanding of arbitration as a commercial process.

The 20 students in the course come from professional backgrounds ranging from insurance and construction industries to health and Workcover.

So far, they have had presentations from academic staff of the University of Adelaide and the University of SA and from recently retired Supreme Court Justice, Derek Bollen. Other topics will be presented by practising arbitrators and experts in alternative dispute resolution.

The culmination of the course is a weekend workshop where the students will get a chance to practise and hone their dispute resolution skills.

"This course is particularly innovative in recognising that while alternative dispute resolution has its base within the legal framework, most of those professionally involved in this area of practice are not from a legal background," said the Director, Continuing Education, Mr David Israel.

Opening the course, Chief Justice John Doyle said, "Knowledge by the courts that this course will provide suitably skilled practitioners will enable the courts to encourage parties to resort to Alternative Dispute Resolution, confident that appropriately skilled practitioners, with a wide range of backgrounds, which seems equally important, are available."

A further, more advanced course is planned for 1998, with successful completion accepted as equivalent to passing the Institute of Arbitrators Australia national exam.

• On Sunday 22 June a conference will be held at the University on the topic "Arbitration, Education, the Course and the Community". A limited number of places is available. Those interested in attending should contact Chris Holmes in Continuing Education on 8303 4777.

Advertisement

US team explores Australia's earthquake mysteries

A husband and wife team from the United States is helping uncover some of the mysteries about earthquakes in and around Australia.

Dr Marian Magee and Dr David Castillo, who moved to Adelaide from California last year, are both working on separate crustal stress-related research projects with the Department of Geology & Geophysics.

Marian Magee was previously conducting earthquake research at Stanford University, where she earned her PhD, and was involved in compiling a World Stress Map for the US Geological Survey.

Her work at Adelaide is funded by a three-year grant from the Australian Research Council and involves compiling data on crustal stress points for the whole of Australia. The information gathered will help scientists create a stress map that will allow them to better understand the forces that shape Australia as well as the kinds of earthquakes that occur here.

Unlike an area such as the infamous San Andreas fault in California, where earthquakes are common, Australia is known as an 'intra-plate' area — there are no plate boundaries, and therefore no major identifiable earthquake-causing faultlines that cross through the continent.

"My personal interest in this is to try to understand intra-plate earthquakes — the earthquakes that happen away from plate boundaries. And Australia has had a few in recent years that are very interesting," said Dr Magee.

"With an area like the San Andreas fault it's obvious why we have so many earthquakes. But in Australia these intra-plate earthquakes are still a mystery. No one knows what causes them, and although you don't have a lot of seismic activity frequently, when you do have an earthquake it's usually a large one."

Dr Magee said there were certain hazards associated with intra-plate earthquakes, because they were infrequent and unpredictable.

"The effects are the same whether you have an earthquake in California or one in Australia — the same amount of energy is released.



US team Marian Magee and David Castillo. Photo: David Ellis

Because they happen more frequently in California we're more prepared for them, in that buildings are built to withstand certain ground motions, whereas in Adelaide they happen so infrequently that buildings and people aren't prepared for them," she said.

David Castillo, who also earned his PhD at Stanford University, was previously with the Lawrence Livermore National Laboratory in California, where he was involved in research that will eventually lead to the drilling of a borehole through the San Andreas fault.

Although still involved in earthquake research in California, Dr Castillo is conducting a project at Adelaide that examines the physical stress in Australia's North-west Shelf in the Timor Sea — an area of prolific oil exploration and major earthquake activity. The two-year study is funded by an ARC collaborative grant, with industry partners that include BHP, Woodside and Santos.

Each time companies such as these drill for oil it can cost them about \$10 million. Not every drilling operation is a success; sometimes they find oil, sometimes they find water, and sometimes they recover what is known as a 'residual oil column' — a geologic structure where a large amount of oil once existed,

but for some reason has escaped along faults that originally sealed the hydrocarbon reservoir.

Dr Castillo's research project is looking at a possible relationship between tectonic stress in the north-west shelf and these residual columns, in a bid to improve the oil companies' chances of success and save them millions of dollars.

"We've discovered a relationship between the fault orientations and the in-situ stress magnitudes that dictate fault-seal preservation or, under certain conditions, fault-seal failure. Failure occurs when the faults slip during earthquakes," Dr Castillo said.

"Now that we have an idea of the probable mechanisms behind preserving fault-seal integrity, because some faults are more stressed than others, we want to develop a predictive tool for the oil and gas industry that alerts them not to drill in high risk areas where the stresses are high but more importantly, to guide them into drilling in areas where the seal integrity of the faults is high.

"This work is really applying techniques that have been used in the US for some time now, and the industry partners have taken to it wholeheartedly," he said.

—David Ellis

Advertisement

How to get a credit in conference organisation without having to do any study

The Adelaide Convention and Tourism Authority (ACTA) is hosting an educational seminar covering the key considerations of hosting a conference. This seminar is designed specifically to address the needs of the academic market.

We do the work. You get the credit.

The complimentary seminar will present guest speakers from the meetings industry who will provide accurate, up to date and relevant information on a range of topics including —

- securing the event to Adelaide
- winning presentations
- negotiating with a venue
- what to expect from a professional conference organiser (PCO)
- developing a social program.

Meet with industry suppliers at our trade exhibition.

The seminar will be on Tuesday 27 May 1997 from 4.00 to 6.15pm.

For further information contact Anne-Marie Quinn on ext 33011 or at ACTA on 8212 4794.



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Beef Forum focuses on consumer demand

Farmers and scientists in the beef industry were challenged to work together to satisfy consumer demands, at the Tenth Annual JS Davies Beef Research Forum, held recently.

Two guest speakers from America and New Zealand featured at the Forum which was held at Naracoorte in the State's South East and at the Waite Campus of the University of Adelaide. Entitled 'Designer Beef: Tailoring Genes for Client Needs', the Forum focused on how gene technology could be used as a tool to meet consumer demands.

Attracting over 120 people including producers, industry personnel and scientists, the Forum enabled people to interact to conceive ideas, disseminate knowledge and ultimately work towards developing a more efficient and profitable beef industry.

Guest speaker Professor Jerry Taylor, Professor of Genetics at Texas A&M, discussed 'Breeding Technologies on the verge of the 21st century'. He is also head of a program using molecular and quantitative genetic approaches to identify genes responsible for variations in beef carcass quality traits.

"An array of sophisticated and powerful breeding technologies will become available to livestock production systems within the 21st century.

"These range from the further development and utilisation of AI and embryo transfer, to research into reducing generation intervals, sexing semen, embryonic stem cell technologies and much more," he said.

"The low profit margin of many livestock production systems, especially

beef and sheep, makes it critically important that revenues be wisely invested.

"New technologies are only profitable to those who can make them work at an early stage of adoption. For the rest, new technologies up the ante just to stay in business."

"However, at all times we must keep in mind that the formulation of sound breeding objectives will continue to be fundamental to genetic improvement, with or without sophisticated technologies."

Also speaking at the Forum was Professor Dorian Garrick, who holds the Chair in Animal Breeding and Genetics at Massey University in New Zealand and is Head of the Animal Breeding Trust, which provides recording and genetic evaluation services to livestock breeders.

Professor Garrick discussed 'Comparisons between industry breeding programs', focusing on beef, dairy and forestry, and also 'Breeding objectives for beef cattle in New Zealand'.

"An industry that achieves and benefits from genetic improvement in the long term will have a balance between genetic advance in the breeding sector, gene flows to the commercial sector and cash flows to support infrastructure," he said.

"There are a number of components that are essential for the long-term success of genetic improvement programs. These include committed buyers, motivated breeders, a good and reliable data base, technology to rank individuals, research and extension. These must be mutually coordinated and matched to industry needs."

"However, at the end of the day all



L to R: Dr Wayne Pitchford (Animal Science), Convenor of the JS Davies Beef Forum with guest speakers Professor Dorian Garrick from New Zealand and Professor Jerry Taylor from America.

technologies should focus on what product consumers want, what steps need to be implemented to reach that goal, and how to make that product consistent."

Professor Garrick examined challenges to genetic improvement in the three New Zealand industries and later focused on selection objectives for beef cattle.

He stressed the need for results — both financial results and those measured through genetic advance in bull breeding herds. These results also had to be subsequently passed on through bulls from breeding herds to

commercial herds.

"Industry needs to sit down and address how they can profitably implement new technologies, and what impact this will have on the current industry — cost-wise, structure-wise and breeding-wise," he added.

The JS Davies Forum is supported by the University of Adelaide, the South Australian Stud Beef Breeders' Association and is run in conjunction with the Beef Improvement Association and the Australian Society of Animal Production.

—Elizabeth Butler



Wine leader moves to US research post

trol, analytical services and pre-competitive product development in a company which sells one in every four bottles of wine consumed in the US.

But that is not uncommon for the ambitious scientist who left the University of NSW to come to Adelaide in 1983 to head up the struggling Australian Wine Research Institute.

Professor Lee had spent some time in the USA and had been Associate Professor at the School of Food Science and Technology at UNSW before arriving in Adelaide.

"The AWRI was a terrific opportunity. It gave me a chance to put in place structures which have made the research organisation run very effectively, and also enhance the Australian wine industry," he says.

He believes his key achievements at the AWRI have been setting up a good administrative system to support technical services and R&D — "which doesn't always happen in research institutes" — and providing opportunities for staff growth.

Many of his scientists are now studying for MBAs or PhDs and have underwritten much of the industry's compet-

itive edge through the quality of their applied research work on yeasts, flavour analysis and cork taint.

Of equal magnitude is the achievement of helping to bring together the disparate wine research and teaching institutions in South Australia on one collaborative campus.

"I know the Roseworthy merger with the University is still seen by some as a controversial move. But frankly we had no choice. By moving wine science teaching to the Waite Campus we not only kept the proud traditions started by Allan Hickingbotham in the 1930s alive, but we expanded and strengthened them.

"We now have one of the world's leading wine science teaching and research centres in Adelaide. We have pulled in top staff, many of whom have world class qualifications in biotechnology and wine science.

"We have the highest enrolment of any Department in the Faculty of Agricultural and Natural Resource Sciences and one of the most popular postgraduate coursework programs, which attracts students from all over the world.

"And now we're seeing the growth and development of

wine marketing with the new Centre for Wine Business Management."

Professor Lee hopes the links which have been forged between the AWRI and the University (not to mention the CRC for Viticulture, CSIRO Division of Horticulture, and SARDI and PISA) will stay.

"There has been a great sense of collaboration and many of our finest graduates have benefited from the chance to work alongside scientists in the AWRI and other institutions," he said.

The challenge will be to find a replacement who has the tenacity, work ethic and determination of Terry Lee, who can fill his shoes on international committees and boards and command respect from winemakers and academics alike.

It is a task which the University has already started on but which may take six months. In the meantime Dr Pat Williams will serve as Acting Director of the AWRI and maintain the momentum started by Terry Lee.

For the foreseeable future Australia's most prominent wine industry research leader will be turning his interests to enhancing the competitive-

ness of E&J Gallo. But there will still be plenty of science in this new role, and opportunities to expand the world's pool of knowledge on grapevine breeding, pest and disease control and wine quality.

"The new position is certainly more commercial," he muses. "But E&J Gallo has a commitment to the wine industry as a whole and support two university chairs and other research initiatives."

Professor Lee will have extensive technical responsibilities with a new laboratory and a substantial budget committed to the improvement and development of wine quality.

He will be responsible for 70 staff including research scientists, analysts and applied researchers among whom there are at least 12 PhDs.

"It will be an enjoyable and rewarding move at this stage of my career, but I still plan to keep close links with Australia and the University where so much good work is being done.

"Adelaide can be very proud of its position in the industry and I hope that it will continue to grow and develop in the next decade."

—Peter Fuller

He doesn't even appear nervous when he admits he will be responsible for quality con-

Alumni IN BRIEF

'Koala problem' talk

"Why can't we see the biodiversity for the koalas?" is the question posed by an illustrated talk to be given by Professor Hugh Possingham on 4 June at 7:30pm in the Benham Lecture Theatre.

Professor Possingham, the Foundation Professor of Environmental Science and Management in the Faculty of Agricultural and Natural Resource Sciences, is the Chair of the Koala Management Task Force dealing with the 'koala problem' on Kangaroo Island.

In his illustrated lecture, Professor Possingham will present the facts behind the politics of Kangaroo Island koala management.

"The koalas introduced to Kangaroo Island are causing long-term environmental damage: trees are dying now as a consequence of over-browsing," he said. "The challenge facing the Task Force is to arrest and reverse this damage while minimising suffering to the animals concerned."

The Koala Management Task Force originally proposed culling 600 animals, but they are now carrying out a sterilisation process.

To help with our planning, please call 8303 4275 to indicate your intention to attend. However, numbers are not limited. Individuals, families and school groups are all encouraged to come.

Coming up: the Courts

In July, alumni are invited to join a group for a guided tour of some of Adelaide's court facilities, with a commentary about our legal system and the workings of the courts. The tour will be conducted by the Courts Administration Authority. Call 8303 4275 for information and bookings.

Annual General Meeting

The Alumni Association's Annual General Meeting, which was scheduled for Thursday 19 June, has been postponed. It will be re-scheduled for a date late in July. Further information will be announced in the *Adelaidean* as it becomes available.

Gifts for Alumni

The Alumni Office has a new stock of University of Adelaide ties and Alumni ties, both available in navy blue (each \$20). Handpainted silk scarves are also available in tasteful shades of blue with gold highlights (\$48).

These and other items of memorabilia may be purchased at the Alumni Office during normal office hours. Credit card facilities available.

Death of Mrs Diana Medlin

The Alumni Association advises with deep regret of the death on Tuesday 13 May 1997 of the distinguished educationalist Mrs Diana D'Este Medlin AM (BSc 1949).

On behalf of all members of the University community, the Association extends sincere sympathy to Dr Harry Medlin and his family in their sad loss.

Virginia Tech Alumni honour Adelaide engineering graduate

Chris Fuller (BE 74 PhD 79) has received the Virginia Tech Alumni Association Award for Research Excellence.

In Virginia Tech's newspaper *Spectrum* of 3 April 1997, Liz Crumbley wrote:

Respected by his colleagues throughout the world as perhaps the leading researcher in the field of active noise and vibration control, Chris R Fuller, the Roanoke Electric Steel Professor of Mechanical Engineering, has been selected by his peers at Virginia Tech to receive the Alumni Award for Research Excellence.

In the 1980s, Fuller invented and patented the technique of active structural acoustic control. Fuller developed a method of applying active control inputs (mechanical disturbances) to vibrating structures — such as airplane cockpits — to minimise sound radiation.

His technique has been licensed to three companies and is now in production and commercially sold.

As director of the Vibration and Acoustics Laboratories (VAL) at Virginia Tech, he conducts research projects funded by several US government and military agencies and various industries.

In 1995, the US Office of Naval Research awarded Fuller and the VAL a (US) \$2.5 million grant to develop structures that can sense an unwanted noise and then radiate other

sounds to effectively cancel the noise.

Before joining the Tech faculty in 1983, Fuller completed his undergraduate and PhD degrees at Adelaide University in Australia, and worked as a research fellow at the Institute of Sound and Vibration Research of the University of Southampton in England and as research associate at the NASA-Langley Research Center in Hampton, Virginia.

The author of more than 100 papers in major technical journals, Fuller has received three prestigious best paper awards during the 1990s, from the *International Journal of Applied and Experimental Modal Analysis*, the NASA-Langley Research Center, and the American Society of Mechanical Engineers (ASME).

He is a Fellow of the Acoustical Society of America, an associate editor of the *Noise Control Engineering Journal* and a member of the board of directors of the Institute of Noise Control Engineers. Fuller recently co-authored the definitive textbook in his field, *Active Control of Vibration*.

"Dr Fuller is easily the most well-known and most respected researcher in his particular field (active noise and vibration control) in the world today, an honor he has held for the past 6 to 8 years," wrote Associate Professor Colin H. Hansen from the Department of Mechanical



Dr Chris Fuller honoured by Virginia Tech Alumni. Photo courtesy of Virginia Tech.

Engineering at the University of Adelaide. "His group at Virginia Tech is also rated by many researchers in the field as the best in the world."

The University of Adelaide Alumni Association congratulates Chris on his Award, the selection criteria for which are as follows: Evidence of excellence in

the performance of diligent research, studious enquiry, exhaustive investigation, having as its aim the discovery of accepted conclusions, theories or laws in light of newly discovered facts or the practical application of such new or revised conclusions, theories or laws.

—Geoff Sauer

Calling all graduates of 1947!

Did you graduate in 1947? If so, you can expect to get an invitation to your Golden Jubilee Commemoration from the Alumni Association later in the year.

In the meantime, the Association is seeking addresses for some 1947 graduates. If you see your name here, or if you can help us to locate any of these people, please contact Adrienne Eccles at the Alumni Office: telephone 8303 5808 or drop a note to the Alumni Office, The University of Adelaide SA 5005.

Doctor of Medicine

Covernton, John Selby, MBBS
McLarty, Thomas Leslie, MBBS

Master of Surgery

Boscence, William Edward Bruce, MBBS

Bachelor of Medicine and Bachelor of Surgery

Barrett-Lennard, Lancelot
Barter, Edgar Stewart
Chard, June Myra
Guymer, Max Willikam
Love, Clement Vernon
McQueen, George Hugh MBBS

(Melb) (*ad eundem gradum*)

Painter, Rowland George
Schulze, Robert George
Thomson, Theodore Roderick
Wallman, Ian Stuart

Master of Science

Robinson, Edwin George, BSc

Bachelor of Science (Honours)

In Physics
Butler, Stuart Thomas, BSc

Bachelor of Science

Allen, Gwenneth Dawn
Bates, Brian Lewis
Braden, Allan Walter Horace
Day, Alison Chapman
Deland, Raymond John
Dunne, Lawrence John
Eley, John Roberts
Hamilton, Jean Anne
Hunter, Betty Vera
Judell, Trevor Leopold
Langron, William Joseph
Mitchell, Geoffrey George
Paltridge, Richard Noel
Pettit, Rowland
Riedel, William Rex
Robinson, Mary Kelly
Turner, Donald Lionel
White, Brian Ross

Woodridge, Alan Frank
More, William St Barbe, BSc
(Western Australia) *ad eundem gradum*

Diploma in Pharmacy

Anderson, Gwendoline Eva
Coleman, Ronald George
Entwistle, John
Gilbert, Harold William
Larwood, Patricia Myrtle
Martindale, Edward John
Newbery, Betty Hilda
Newbery, John Henry Edward
Peek, Donald Harvey
Robinson, Murray Gilbert
Taylor, Ronald Norman
Williams, Edward Francis

Diploma in Secondary Education

Charlesworth, Thomas William, MA
Keon-Cohen, Russell Hallel, MA
Lewis, Leonard Arthur, BSc
Nicholls, Barbara Ruru, BA

Diploma in Primary Education

Farrow, Murray Aubrey, BA
Lawry, Reginald Arthur, BA
McElroy, Anthony Godfrey
Rudd, Kenneth Clive

Adelaidean Feedback

POLL THREE: Undergraduate Fees

The Faculty Boards and the Academic Board are being invited to advise on the possible introduction of fee-paying places for domestic undergraduate students above the HECS-liable, Commonwealth-funded load target.

Discussion of the issue has been accompanied by student action at several universities, including Adelaide. Council is expected to debate the issue in June.

QUESTION:

Should the University of Adelaide introduce fee-paying places for Australian students in undergraduate courses in 1998?

The *Adelaidean* Feedback Poll is intended to be a mechanism for comment on issues affecting the University.

The questions invite a straightforward YES/NO response but succinct reasons are also welcome.

Results of Poll Three will be published in the 2 June issue of the *Adelaidean*, and may include quotation where appropriate.

Respondents will not be identified if quoted, and the identity of all respondents remains confidential to the Editor.

Please reply by email to <judge@vco.adelaide.edu.au> by 5pm on Monday 26 May, 1997.

A faxed response is also acceptable (34838 or 8303 4838).

Foundation course pays off for Aboriginal science graduate

A love of science, a dream of becoming a police officer and a lot of hard work have paid off for 21-year-old Aboriginal student Mr Garry Rivett.

When he graduated from the University of Adelaide on Thursday, 1 May, Mr Rivett became the first student to receive a science degree after completing the Wilto Yerlo (Aboriginal Programs) Science Foundation Course.

The foundation course helps bring Aboriginal students 'up to speed' on science subjects, enabling them to continue on to university level.

Mr Rivett was one of the first students to undertake the course when it began at the University of Adelaide in 1993. Although he had completed Year 12 he had not studied chemistry at that level, which he needed for his science degree.

"The course was great, especially the chemistry... everybody [in Wilto Yerlo] was very helpful," Mr Rivett said.

While completing his Science degree Mr Rivett applied for and was accepted into the Australian Federal Police. He was one of only two cadets appointed by the force this year, and is now working with the AFP's forensic services division in Melbourne.

"I've always wanted to be a police officer, ever since I was about 10 years old," he said, "and science in general I've always found very interesting, especially chemistry and genetics. So now that I have a science degree I want to utilise it, which is what I'm doing in forensics."

Mr Rivett said he was grateful for the chance to study at the University and for the help of the Wilto Yerlo staff. He encouraged other Aboriginal students to take up university study.

"It's a lot of hard work getting there, but if you've always wanted to do a degree, not just science, there's nothing stopping you. And if you didn't finish Year 12, the foundation course is a good start," he said.

Science Foundation Coordinator Mr Peter Beavis said Wilto Yerlo was proud of Garry's achievement.

"It's not that he's just got through and graduated, he's actually done it with flying colours — Garry's got credits and distinctions in his degree, so he's done very well," Mr Beavis said.



Garry Rivett: love of science and hard work lead to degree. Photo: David Ellis

He said it was important for students, particularly Aboriginal students, to get a solid grounding in science before undertaking a degree.

"Sadly, very few Aboriginal students are coming through with Year 12 passes at all, and certainly very few with passes in the hard sciences, so they do need to do some preliminary study before entering university science courses.

"Although we've got a big increase in indigenous students going through degree courses, the area of the sciences

in general is still very under-subscribed by Aboriginal and Torres Strait Islander students.

"We'd like to see more indigenous students follow Garry's example and undertake this kind of study," Mr Beavis said.

—David Ellis

Aboriginal students who are interested in the Wilto Yerlo Science Foundation Course should call (08) 8303 3445 for more details.

5UV wins Archbishop's media citation

Radio 5UV has received one of South Australia's most prestigious media awards — a Media Citation from the Catholic Archbishop of Adelaide, the Most Rev. Leonard Faulkner.

The citations are given annually to media organisations for outstanding stories which tackle issues of significance to the community.

5UV's program "Keep Yourself Alive", which is part of a national education campaign on youth suicide, was

judged to be the best entrant in the radio category, defeating five entries from ABC Radio.

The "Keep Yourself Alive" program was produced by Tony Ryan and involved interviews with clinical experts and family members of suicide victims.

Two national programs were broadcast earlier this year and 16 educational audiotapes were produced for Australian GPs and other health professionals.

ACCOMMODATION

ADELAIDE: Walk to Uni from SE city, furn granny flat. Ideal for single person. \$95 pw (includes elec & phone). Avail now. Ph 8223 2707.

AVAILABLE: Full board accomm to interested overseas students. Close to all amenities. Ph 8264 1960 (evenings) or 041 449 9377.

BELAIR: House (with cat) avail from mid June to end Sept 1997. Fully furn, next to train and bus services. Reasonable rent. Ph Miles 8278 6953.

BLACK FOREST: 2 br, furn flat avail from end July to end Oct 1997. Suit individual or couple. Easy access to city (train, bus &

tram), close to shops, reasonable rent. Ph Donna 8293 1148 or email: dbrunero@arts.adelaide.edu.au

HACKNEY: Spacious, 3-4 br, 2 bathroom, fully furn home with modern kitchen, crockery, cutlery, linen, etc. 10 mins walk from Uni, RAH. Avail 16 July - early Jan 98. Ph Stephen 8303 3629 or Janet 8303 3573 or 8362 3811 (ah) or email: scramond@library.adelaide.edu.au

HAZELWOOD PARK: 2br house, pleasant, air-conditioned, on bus route to Uni. \$120pw. Ph 8332 6062 or 8379 1735.

HOUSE SITTER: Mature, English lady looking for a house to sit at Xmas time for 3-4 mths. Previous

Adelaidean

CLASSIFIED

experience in Australia, willing to care for pets and garden. Ph Jenny Nairn 8204 6257.

HOUSE SITTER: Avail late May to end July, male executive, mature and house-trained. Excellent refs. Ph David 8223 3600 or 0419 819 790.

MYRTLE BANK: 4 br, fully furn home, gas duct heating, solar hot water, adj park, walking distance to Waite. Suit interstate or overseas family. Avail 5 mths from end of June. \$220 pw. Ph 8379 1900 (ah).

OFFICE: 36sqm at 175 St

Vincent St, Port Adelaide in former art deco style post office building (B.1927). Ph 8447 8809.

SECOND VALLEY: Fleurieu Peninsula - New, modern holiday house. View to sea, hills & sheep. Spend time relaxing or use it as a base to explore the peninsula. Sleeps 5; variable rates. Ph 8379 6510.

STIRLING: Full board or fully furn room in a quiet house with nice garden. Extra study area available if required. Short term - negotiable; Medium term (1-2mths room only) - \$120 pw; Longer term (room

only) - \$100 pw; full board - negotiable. Bond required (4 weeks + 2 weeks rent in advance). Ph R Hamilton 8339 3063.

VIVONNE BAY, KI: Holiday house, beautiful beach, bush, self contained, architecturally designed, sleeps 5. Ph 8388 6404.

FOR SALE

HOUSE: ADELAIDE HILLS: Architect designed, 2 br, split-level home with spa, pool and half tennis court, located on very private half acre bushland, only 2 mins from village of Stirling and freeway to city. Priced in upper \$100,000s. Ph Roz 8339 4007.

MAGNA: Elite, 1985, burgundy, 161,000km. UKH

959. \$7,500 ono. Ph Angelo 8303 7499.

PERSIAN RUGS: 2 persian rugs X Kashan, 1.36 by 2.19m. All offers considered. Ph: 8239 0436.

DEPARTMENTAL

TENDER: RV Troopcarrier, 6 seater, VUH 918, 1996, white, diesel, 5 speed, air cond, winch, bullbar, towbar, 40,000km (approx). Telephone Keith Cowley 8303 7814 to arrange inspection. Tenders in a sealed envelope marked Tender RV Troop-carrier to Laboratory Manager, Environmental Science & Management Department, Roseworthy Campus, Roseworthy SA 5371 by 4.00pm Friday 23 May 1997.