

CAMPUS NEWS



Dr Joseph Pugliese, Ms Penny Pether, Mr Maurie Scott and Mr Robin Handley at the launch of Law/Text/Culture

New journals reflect changes in law

The Faculty of Law launched two new journals at a ceremony on 22 November, reflecting new areas of study and practice in the law.

These journals provide forums for discussion and exchange of ideas for the legal profession, students and interested members of the general public.

Law/Text/Culture reflects the urgent need for the law to engage more with other disciplines and address such contemporary interdisciplinary concerns as gender bias in the judiciary and the limited access to justice for certain sections of the community.

Through essays, art work and poetry it features work which crosses boundaries and reflects the societies and cultures in which the law operates.

This journal will offer opportunities to people who have not usually had access to academic journals and who have traditionally been relegated to 'sub' or 'marginal' cultures.

It was not surprising that a journal such as this should

emerge from the University of Wollongong's Faculty of Law which has a reputation as a leader in the interdisciplinary education of lawyers, and from the University's Department of English which is committed to the critical analysis of texts.

It has grown out of subject offerings in Perspectives on Law established in 1992 by Mr Robin Handley (Faculty of Law) and Mr Maurie Scott (Department of English), and will have as its core content, papers from the Annual Law and Literature Conference which was inaugurated at the University of Wollongong in October last year.

The editors are Mr Robin Handley and Ms Penny Pether (Faculty of Law) and Dr Joseph Pugliese and Mr Maurie Scott (Department of English).

The first edition includes a poem by Ruby Langford Ginibi of the Bundjalung people, articles by American novelist Sara Paretsky; Professor of Constitutional Law at

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Two new journals reflect changes in law



Professor Martin Tsamenyi and Ms Judith Jones at the launch of the Australasian Journal of Natural Resources Law and Policy

From page one

Yeshiva University, New York, Richard Weisberg and law student Ben Ball; and reviews by Bill Priestley, a Justice of the NSW Court of Appeal and Patron of the Law and Literature Association of Australia, and Liz Bradshaw, a Fine Arts graduate who currently works as a designer and editor.

The second journal, the *Australasian Journal of Natural Resources Law and Policy* also reflects an area of expertise at the University of Wollongong.

The Faculty of Law established the Centre for Natural Resources Law and Policy in 1991 to provide education

and training in the law relating to the development and conservation of natural resources for industry, government and the legal profession – a critical area for contemporary society.

This new journal is devoted to publishing articles and information on all aspects of natural resources.

It is policy orientated and will be available to scholars, resource developers and their advisers, conservationists and environmental law and natural resources policy makers.

The Editorial Board consists of Professor Martin Tsamenyi, Professor David Farrier and Mr Andrew Kelly from the Faculty of Law, University of Wollongong, and Ms Judith S Jones, from the Department of Law, University of Western Sydney.

In the first edition, natural resources law and policy in each state are covered and lead articles discuss current issues such as regulating for fuel economy in the road transport sector, the ownership of minerals and petroleum in Papua New Guinea and the relationship between mining and planning in New South Wales.

Both journals have been established with the assistance of a challenge grant from the Vice-Chancellor of the University of Wollongong, Professor Ken McKinnon.

At the launch Professor McKinnon said the journals fitted in well with the character of the University of Wollongong which is always prepared to take on something new and interesting.

The Journal of Natural Resources Law and Policy is the first of its kind in the world, and the *Law/Text/Culture* journal is 'a bold risky journal at the meeting edge of several academic cultures', he said.

Review of the Department of Modern Languages

In accordance with the University's review procedures for academic units, the Vice-Chancellor has initiated a review of the Department of Modern Languages.

The review will take place early in 1995.

Submissions to the review panel are invited from the campus community.

Submissions, which will be treated as confidential, should reach Manager, Academic and Student Services, Peter Wood, no later than 13 January.

A copy of the procedures is available on the Administration File Server – refer to Section M of the Management Handbook in the 'Public Information - Public' folder.

Enquiries: Manager, Academic and Student Services, Peter Wood, ext. 3943.

Sexual harassment and the University community

The issue of sexual harassment is often raised by members of the University community.

Questions are continually asked as to what actually constitutes sexual and sex-based harassment.

Sexual harassment encompasses any verbal or physical conduct of a sexual nature which would normally be considered offensive that is unwelcome, unsolicited and unreciprocated.

It may include:

- inappropriate displays of erotic or pornographic material;
- sex-orientated comments on physical appearance, joking or abuse;
- deliberate and unnecessary physical contact such as patting, pinching or deliberate brushing against another's body;
- requests for sexual activity in exchange for favours in the workplace, good grades, etc.
- displays of nudity;
- sexual violence.

Sexist behaviour and sex-based harassment have also been regarded by the law as discrimination on the grounds of sex.

The Sexual Harassment sub-committee of the Equal Opportunity/Affirmative Action Committee is planning its future directions for the next two years.

The sub-committee is keen to receive input concerning areas of concern and suggestions on appropriate ways to inform and raise awareness of sexual harassment and other sex-based harassment issues.

The sub-committee wants responses from the community at large on experiences with these issues.

Sexual harassment is against the law. It is covered by both NSW and Commonwealth legislation and in the University context covers both employment and education.

Employers are legally responsible for ensuring a harassment-free

workplace for their employees and may be vicariously liable for the actions of their employees.

Supervisors too, may be held responsible for sexual harassment in their work units, particularly if they fail to take appropriate action to prevent its occurrence or continuation.

It is the right of all persons on campus to work or study in an environment that is free from personal intimidation and harassment.

The Council and the Executive of the University have made it very clear they will not condone any form of sexual harassment on campus involving staff or students.

Any suggestions for raising awareness of these issues to staff and students or offers of assistance to the Sexual Harassment sub-committee would be welcomed.

Any queries may be directed to Maxine or Faye at the Equal Opportunity Unit, ext. 3917 or 3030.

Illawarra Technology Corporation welcomes Vodafone R&D investment

Chairman of the Illawarra Technology Corporation (ITC), Mr George Maltby, has welcomed the announcement of a major investment in Wollongong by Vodafone, Australia's new all-digital mobile phone company.

ITC is Wollongong University's research and development, training and education, and consulting company.

Mr Maltby was commenting on the announcement of Vodafone's commitment to \$1.5 million in a research and development program at ITC's Centre for Information Technology Research (CITR).

The research and development will focus on the areas of radio frequency studies and network modelling.

Vodafone's commitment is a clear recognition of the role CITR has played in spearheading the establishment of Wollongong as a major centre in telecommunications research.

CITR employs more than 45 researchers in industry-funded projects which it manages.

Mr Maltby said the partnership between Vodafone and CITR was strategically important for ITC and the

Illawarra.

'Vodafone is a leader in its field, one of the world's largest mobile communications companies, and CITR has a very strong track record and reputation in leading-edge research and development in telecommunications,' Mr Maltby said.

'We have substantial contracts with a number of the leading telecommunications companies and it is very satisfying to see the newest national carrier choosing to conduct major research and development in the Illawarra.

'It's well known in the telecommunications world that Wollongong, and specifically the University and ITC, represent value for money as a place to do serious research.'

CITR Director, Professor Hugh Bradlow, said this is a very exciting era for telecommunications research.

'Vodafone's specialty, which is mobile digital communications, is at the forefront of research and development in Australia and worldwide,' he said.

'CITR specialises in telecommuni-

cations switching systems, software, wireless communication and computer-based training.

'Within these broad areas, the Centre applies university research skills to deal with real industry need.

'All companies, including the large telecommunications carriers like Vodafone, have to operate efficiently and profitably.

'So within each of our specialist areas we develop specific skills and solutions to help industry solve their challenges.

'One of the specialist areas we have been developing is in techniques to assist carriers in organising their networks to get cost-effective operation from advanced technology systems and sophisticated software.

'This will enable the carriers to provide more competitive services to their clients.

'The work we are doing for Vodafone is a perfect example of applying such skills, as it will not only result in effective networks but will also help minimise the environmental impact of mobile antennas.'

Wollongong hosts national conference on ecologically sustainable development

The University of Wollongong hosted a highly topical national conference on successful strategies for achieving ecologically sustainable development (ESD) from 5-7 December.

The *Protecting the Future: ESD in Action* conference was convened by the Futureworld: National Centre for Appropriate Technology (NCAT) organisation.

Dr Siva M Sivakumar, from the Faculty of Engineering at the University of Wollongong, is an executive member of the management committee of Futureworld and co-organiser of the conference.

The conference had one main theme each day. These themes were:

- ESD and the Conservation and Management of Natural Resources (biodiversity, water, energy, soil, forests and fisheries);
- Cleaner Production and Environmental Management Technologies; and
- Eco-Cities, Towns and Villages.

There were field trips available to Industry World, Jervis Bay, Mt Kembla Field Studies Centre and Ted

Trainer's sustainable living centre at Picnic Point.

The conference took a very integrated and holistic approach to the different aspects of ESD.

Chair of Futureworld, Dr Judy Messer, said all speakers were asked to acknowledge the ecological, technological, economic, legal, political and social contexts of their topic even though their presentations may be focussed on only one aspect.

More than 60 papers were presented including keynote speakers from overseas: Dr David Munro (Canada: 'Caring for the Earth'); Steve Loken (USA: Director of the Centre for Resourceful Building Technology, Milloula, Montana); and Ellis Katsof (Canada: 'ESD and Health Communities').

According to the conference organisers: 'Steve Loken lectures widely on the use of re-used and re-manufactured materials in the construction industry.

'Steve has built a beautiful up-market three-storey house made completely out of reused and re-manufactured materials.

'There is a huge potential market awaiting development in this field and we hope that this conference will act as a stimulus for this type of environmentally friendly manufacturing innovation in the Illawarra and elsewhere in Australia.'

Well-known Australians who spoke included yachtsman Ian Kiernan, of 'Clean Up Australia/Clean Up the World' fame, and author Eric Rolls, who was the guest speaker at the conference dinner.

The Futureworld project will be built on a spectacular 3.5 ha site at Cringila, Wollongong, and the conference organisers are pleased that grants have been received to enable site development work to start.

'We believe that Futureworld will provide the honey-pot ecotourism attraction that Wollongong has not yet achieved,' Dr Messer said.

'Futureworld will fit very nicely with Industry World and the ESD Conference is one way of promoting our aims.'

Dr Sivakumar said the University of Wollongong research and academic staff were well represented in this interdisciplinary and an important conference.

'University speakers who cut across five faculties included Dr Paul Cooper, Antonio Chan and Dr Sivakumar (Faculty of Engineering), Professor Jim Falk and Dr Sharon Beder (Faculty of Arts), Associate Professor Phil Laird (Faculty of Informatics), Karla Sperling (Faculty of Law), Neil McLaren and Brian Ferry (Faculty of Education), and Adrian Deville and Tim Turpin from the Centre for Resource Policy,' he said.

Major sponsors of the conference were the University of Wollongong, Wollongong City Council, Water Board, Healthy Cities, Water Research Foundation of Australia (Illawarra), Wildlife Preservation Society (Aust.), NSW Environment Protection Authority and the Nature Conservation Council of NSW.

The conference was also supported by the Environment Research Institute, Wingecarribee Shire Council and the Water Engineering and Geomechanics Research Program.

Energy Management short course

The Faculty of Engineering, in association with ITC, has been contracted by the Australian International Development Assistance Bureau (AIDAB) to provide a short course in Energy Management for five participants from the Philippines Government.

The course was being run over three weeks in late November and early December.

The participants include a research scientist and an engineer from the Philippines Department of Energy, a supervisor in information dissemination from PNOC-Energy Research and Development Centre, and two department managers from the National Power Corporation.

Because of the varied background, interests and requirements of the participants, the course has been specially designed.

In addition to the program of lectures on relevant topics, several site visits have been included to provide the participants with an overview of the different ways that energy management issues are undertaken in Australia.

Organisations to be visited include: the Energy Efficient Research Centre, BHP Port Kembla, Appin Colliery, Wollongong Gas, the Australian Nuclear Science Technology Organisation (ANSTO) and Pacific Power International.

The course has been coordinated by Dr Ernest Baafi of the Department of Civil and Mining Engineering.

Further information: Ann Webb, phone (042) 268 952.



Professor Dennis Calvert and Dr Irene Kreis at the launch and seminar.

Head of the Medical Research Unit, Professor Dennis Calvert, launched the Illawarra Environmental Health Unit (IEHU) on 24 November at an environmental risk seminar held at the University for health professionals.

The unit has been established as the result of coordinated action between the University of Wollongong, the NSW Health Department, the Illawarra Area Health Service and the IAHS Public Health Unit.

Professor Calvert said that this was a new kind of initiative for the state.

'There are few places where interests in environmental health have coalesced into a single unit,' he said.

'It is an ambitious and exciting brief that extends locally, nationally and internationally.'

The unit's major task is to research and evaluate major environmental health issues affecting the Illawarra Region or the State of NSW.

It will also be concerned with global issues. It will have a public service role by pointing to areas where there should be concern and putting to rest others that are groundless.

The present focus of research is on

Launch of the Illawarra Environmental Health Unit

heavy metals, air pollution and climate change.

It will have an important role in teaching and is involved in the introduction of a program in environmental health that is being established at the University.

Dr Irene Kreis is the head of the unit. She holds qualifications from the universities of Leiden and Harvard and has worked as the Environmental Epidemiologist at the National Institute for Public Health and Environment Protection and as a clinician in a mining region of the Netherlands.

She has worked on the health effects of heavy metals, air pollution and various pests and herbicides.

Associate Professor Paolo Ricci, from the University's Department of Public Health, is also involved in the unit.

Associate Professor Ricci's background includes a public health

traineeship in the US Public Health Service.

His professional activities include quantitative epidemiology, applied toxicology, 'toxic' tort law, European Union law and mathematical representations of uncertainty.

The senior environmental health officer, Richard Willison, has spent the last 30 years as a generalist investigator of environmental matters that may affect public health.

He has been seconded to the unit from the Illawarra Public Health Unit, primarily to assist in the Illawarra Child Blood Lead Study.

Karin Allen, who also has been seconded from the Illawarra Public Health Unit, is the administrative assistant.

Other people involved with the unit include Professor Calvert, Ms Victoria Westley-Wise (Public Health Unit), Ms Deanne Condon-Paoloni and Mr John Morrison.

Two prestigious grants go to Wollongong

Two members of the Department of Accountancy at the University of Wollongong have received research scholarships from the Australian Society of Certified Practising Accountants (ASCPA) under its prestigious Research Grant Scheme.

Only seven such awards were made nationwide.

Ms Anne Abraham received \$3000 towards her project 'Predictors of voluntary audit demand by private non-profit organisations'.

Ms Connie Spasich also received \$3000 for her project 'Professional female accountants' perception of women's career development within accountancy'.

The CPA Research Grant Scheme seeks to expand the research base of the Accounting discipline and to raise the research profile of Australian accounting academics.

The selection criteria included a well-defined topic, the potential of



Anne Abraham



Connie Spasich

the project for developing the research profile of inexperienced researchers and the feasibility of the project with regard to its scope, methodology and timely completion.

Professor Michael Gaffikin assured the ASCPA that there would be a high

level of support for the project within the department.

Information Technology strategic plan in 1995

Director of Information Technology Services (ITS), Greg Naimo, has fore-shadowed the development of an Information Technology Strategic Plan for the University in 1995.

A working party has been formed to evaluate the constantly changing developments in information technology and their many applications and uses in the educational process.

The working party will call for submissions on IT early in 1995 (details to be advised), as well as run several technology update sessions, with visits from IT experts and technology vendors.

Mr Naimo said input from members of the University community is encouraged, whether on an individual

basis or as a representative of any academic unit or special interest group, on any matters regarding IT.

Further information or initial comments can be directed to Mr Greg Naimo.

The working party comprises: Professor Bill Lovegrove (Chair), Professor Michael Gaffikin (nominee, Education Committee), Associate Professor Sandra Wills (Director EMS), Mr Greg Naimo (Director ITS), Mr John Shipp (University Librarian), Mr Gerard Neiditsch (National Director of Computing, Blake Dawson Waldron), Professor Fergus O'Brien (visiting member) and a nominee from the Graduate Faculty.

Review of the Graduate School of Journalism

In accordance with the University's review procedures for academic units, the Vice-Chancellor has initiated a review of the Graduate School of Journalism.

The review will take place early in 1995.

Submissions to the review panel are invited from the campus community. Submissions, which will be treated as confidential, should reach Manager, Academic and Student Services, Peter Wood, no later than 13 January.

A copy of the procedures is available on the Administration File Server - refer to Section M of the Management Handbook in the 'Public Information - Public' folder.

Enquiries: Manager, Academic and Student Services, Peter Wood, ext. 3943.



PAKISTAN CONSULTANCY

Associate Professor Malcolm Harris has been engaged by the British Council, through ITC's International Project Development Unit, as the international consultant in teacher education on the World Bank-funded Secondary Education Reform Project in Pakistan. Professor Harris will be based in Islamabad for four weeks from mid-November 1994.

There are 26 pre-service training institutions for secondary school teachers in Pakistan. The curriculum and courses of studies for these institutions are prescribed by the universities to which they are affiliated, but the management and overall control of pre-service teacher education rests with the respective provincial governments. The curriculum of these institutions, which determines the content and form of training, was last revised by the National Bureau of Curriculum and Textbooks in 1976.

In a study designed to assist the improvement in the quality of teaching for grades 9-12, Professor Harris will undertake an analysis of the management and curriculum of pre-service teacher education institutions and of their capability to train teachers for grades 9-12, and the development of appropriate strategies for improving the relevance, quality and management of pre-service secondary teacher education.

Further information:

Ann Webb (042) 268952

TRAINING AND EDUCATION - SINGAPORE

The project to provide the University's Faculty of Engineering Total Quality Management course in Singapore with Summershire Education Consultants is to continue in 1995. The presenters for the course are mainly from the Faculties of Engineering and Commerce.

This course has heralded a new era for ITC Training and Education in the presentation of University of Wollongong accredited courses in South East Asia.

Further information:

Peter McNamara (042) 268884

ENERGY MANAGEMENT SHORT COURSE

The Faculty of Engineering, in association with ITC, has been contracted by the Australian International Development Assistance Bureau (AIDAB) to provide a short course in Energy Management for five participants from the Philippines government.



• Pictured from left to right: Benjamin Marante, Baldomero Zamora, Cristina Baticados, Professor Tibor Rozgonyi (Dean of Engineering), Genevieve Almonares, Jim Langridge (Managing Director, ITC), Rudy Brioso.

The course is being conducted over three weeks in late November and early December 1994, and the participants include a research scientist and an engineer from the Philippines Department of Energy, a supervisor in information dissemination from PNOC-Energy Research and Development Centre, and two department managers from the National Power Corporation.

Because of the varied background, interests and requirements of the participants, the course has been specially designed. In addition to the program of lectures on relevant topics, a number of site visits have been included to provide the participants with an overview of the different ways in which energy management issues are undertaken in Australia. Organisations to be visited include: the Energy Efficient Research Centre, BHP Port Kembla, Appin Colliery, Wollongong Gas, the Australian Nuclear Science Technology Organisation (ANSTO) and Pacific Power International.

The course has been coordinated by Dr Ernest Baafi of the Department of Civil and Mining Engineering.

Further information:

Ann Webb (042) 268952

MARITIME POLICY WORKSHOP IN KUALA LUMPUR

The Centre for Maritime Policy (CMP) will be involved in a two day workshop in Kuala Lumpur, 7-8 December 1994, to establish a linkage with the Malaysian Institute for Maritime Affairs. The workshop is funded under the Australia-Asia Institutional Linkages Program of the Department of Foreign Affairs and Trade.

The workshop will investigate the economic, political and strategic implications of existing and projected patterns of seaborne trade in the Asia-Pacific region, with a particular focus on intra-regional trade. Wollongong participants will include the Joint Directors of CMP, Professor Edward Wolfers and Associate Professor Ross Robinson (also representing the Centre for Transport Policy Analysis), and Professor Martin Tsamenyi from the Faculty of Law of the University of Wollongong.

Further information:

Sam Bateman (042) 213224

AUSTRALIAN MUSEUM CONSULTANCY

The Department of Biology at the University of Wollongong is currently involved, through ITC, in a consultancy with the Australian Museum. This involves the preparation of a plan of management for the Holsworthy area, including mapping vegetation in areas at seventy sites, identifying areas that contain rare plants and rare collections of species, and assessing the disturbance of the area by the Australian Army.

Dr Kris French is the principal researcher, with Belinda Pellow as herbarium officer. Meredith Henderson will undertake the extensive field work which will be involved in identifying the plants. The information collected will then be examined, using geographic information systems (GIS) and multi-variate analysis.

The major part of identification work will be undertaken by the staff of the Janet Cosh Herbarium, which is located in the Department of Biology. The Herbarium, which is soon to be officially opened, has the expertise to provide identification of plant species and surveys of vegetation, and also to develop management plans for these areas.

Further information:

Belinda Pellow or

Kris French (042) 213655

CENTRE'S GULF LINKS

In early December 1994 the Centre for Transport Policy Analysis (CTPA) will be represented at a major conference, "The Future Role of Ports in the Gulf Cooperation Council", to be held in Kuwait. Associate Professor Ross Robinson, Director of CTPA, and Dr Sophia Everett, Senior Research Fellow, have been invited to present papers detailing their research experience in two particular areas of interest to the Gulf States - intermodalism and hub port development, and the privatisation of Australian ports.

The Conference, under the auspices of the Heir to the Throne and Prime Minister of Kuwait and the sponsorship of the Kuwaiti Ports Authority, is regarded as one of the most important forums for the discussion of port and shipping problems in the Middle East.

The Conference will provide opportunities for CTPA staff to renew links made earlier with personnel from the Dubai Ports Authority and other ports and shipping operators in the United Arab Emirates.

Further information: Sophia Everett (042) 268843

Hong Kong Mass Transit Railway Corporation

The Hong Kong Mass Transit Railway Corporation (MTRC) has the distinction of being the only Metropolitan Railway System in the world that runs at a profit. Recently ITC hosted three representatives from MTRC who enrolled in the Maintenance Management module which was being presented to City Rail in Sydney for its engineering staff. The MTRC representatives undertook the course to provide themselves with practical knowledge about the quality and types of courses that are presented by the University of Wollongong.

The course was co-ordinated by Mr Richard Dwight from the Department of Mechanical Engineering at the University, and it is hoped that this activity will lead to a Maintenance Management Systems Engineering Graduate Diploma course being offered by the Faculty of Engineering to MTRC in 1995. Negotiations are still underway.

The three representatives, Stephen Lam, Y H Chan and Chu Yee Ming hosted a dinner for those who were involved in the presentation of the course, as well as those who were involved in the future discussions about Maintenance Management. At another dinner hosted by ITC they were presented with a plaque from the University of Wollongong.

Being able to provide offshore training courses at Graduate Diploma level enables ITC to maximise the educational potential of the University of Wollongong.

Further information:

Peter McNamara (042) 268884

R&D AGREEMENT

Nowra-based Nationwide Rubber Enterprises Pty Limited, the Illawarra Technology Corporation (ITC) and the University of Wollongong signed an agreement on 6 October 1994 to establish a joint research and development advisory committee.

Nationwide Rubber Enterprises has been supplying rubber hoses to international car manufacturers, including Toyota and Mitsubishi in Japan, for over ten years and is the recipient of the 1993 General Motors World Wide award for Quality Service and Price - the only hose manufacturer from 30,000 GMH suppliers to receive the award.

The Executive Director of Nationwide Rubber, Mr Barry Clissold, said that the company was keen to maintain and enhance its international standing and ensure that the most modern, cost effective technologies were adopted as they became available.

"However, it is difficult as a small, specialist manufacturer to establish an extensive research and development capability of our own", he said. "We are delighted that we can now use the wide range of expertise available locally at ITC and the University of Wollongong, rather than having to go wider afield or off shore."

The University of Wollongong and ITC will provide Nationwide Rubber with assistance in the identification and definition of manufacturing variations, and help identify cost effective solutions. ITC is skilled in the design, development and integration of innovative automation systems.

Further information:

Roger Tindall (042) 268814

LAW OF THE SEA SEMINAR IN WOLLONGONG

A two day international seminar was held at the University of Wollongong on 4 and 5 November 1994 to mark the entry into force on 16 November 1994 of the 1982 United Nations Convention on the Law of the Sea (or UNCLOS). The seminar was jointly hosted by the International Law Association (Australian Branch) and the Centre for Maritime Policy (CMP).

The entry into force of UNCLOS is a very significant event. UNCLOS defines the rights and obligations of countries to use the sea and its resources. With its entry into force, for the first time there is available, in the one document, a comprehensive and agreed set of principles and rules for using the seventy per cent of the earth's surface covered by ocean or sea.

Although the entry into force of UNCLOS was delayed by difficulties over the deep seabed mining regime created by the Convention, these problems have now been resolved and a widely accepted agreement on Sea Law has been achieved.

UNCLOS has great importance to Australia. Because Australia is a trading nation with a long coastline and extensive maritime zones, marine and maritime issues feature prominently among Australia's national interests. Australia's Exclusive Economic Zone (EEZ) is one of the largest in the world. Since the 1970s, Australia has played a leading role in negotiations on UNCLOS.

The seminar addressed comprehensively the implications of UNCLOS for Australia, especially for Australia's marine industries. It also considered how the law of the sea might continue to evolve in the future in response to factors such as technological developments and changes in the global

political and economic environment.

The Keynote Address at the seminar was given by Dr Thomas Mensah, Director of the Law of the Sea Institute based in Honolulu. Dr Mensah was formerly legal counsel of the International Maritime Organisation (IMO) in London, and is regarded as one of the leading international figures in the field of marine and maritime law. Other speakers at the seminar included Professor Ken McKinnon, Vice-Chancellor of the University of Wollongong, the Hon Peter Nygh, President of the International Law Association (Australian Branch), legal practitioners, industry representatives, and officers from Commonwealth Government departments and agencies.

Further information:

Sam Bateman (042) 213224

INDONESIAN LAWYERS GRADUATE IN MARINE AND MARITIME LAW

The twenty participants from Indonesia for the first Marine Law Course, which was presented over ten weeks from 4 July 1994, were presented with graduation certificates in a ceremony held on 8 September 1994. The Indonesian Ambassador to Australia, His Excellency Mr Sabam Siagian, travelled to the University of Wollongong from Canberra for the occasion.

The participants, all distinguished lawyers, studied a marine and maritime law course held at the Centre for Maritime Policy. The course was conducted by Centre Manager,

Commodore Sam Bateman, and Professor Martin Tsamenyi from the University's Faculty of Law for the client, OTO Bappenas (Overseas Training Office, National Development Planning Agency, Government of Indonesia).

A further group of twenty lawyers arrived from Indonesia at the end of September 1994 to undertake the second presentation of the course.

Further information:

Sam Bateman (042) 213224



• Indonesian lawyers who attended the first Marine Law Course

WELC's NEW INTERNSHIP PROGRAM

The University of Wollongong is the first institution in Australia to successfully launch a stand-alone internship program for international language students. The 24-week course, combining Business English and a period of internship in an Illawarra company, is jointly administered by the Wollongong English Language Centre and the University's Co-operative Education Unit, which has had extensive experience in placing postgraduate and Study Abroad interns in a variety of industries.

The internship program will bring together high calibre international students, who must have completed at least 2-years tertiary education in the field to which they are applying, with local businesses seeking to broaden their international horizons.

During their 12-week period of internship, following a period of intensive Business English studies at WELC, students will undertake a research project under the direction of the company to which they are attached.

The program is being offered to students from France, Germany, Spain and Italy, many of whom are required to complete an international internship prior to graduation from a bachelor-level course. In order to ensure quality controls, the program will be limited to 50 language student placements per year.

Over 12 months of negotiations with the Department of Immigration and Ethnic Affairs were necessary to have the course approved as a student-visa course, overcoming the obstacle of a student visa holder transferring to an occupational trainee visa.

Further information: Peter Day (042) 268905; Peter Rose (042) 213159

**ENVIRONMENTAL
AWARENESS COURSE**

ITC's Vocational Training Centre has recently been contracted to provide an Environmental Awareness course for Wollongong City Council. The course is designed to make the employees aware of their responsibilities in relation to environmental matters, and the steps that they need to take to protect themselves, and the Council, from prosecution under current environmental legislation.

This course has been tailored to suit the particular needs of the Council, and participants will be provided with both theoretical and practical experience throughout the course. Visits to Council work sites and places of concern will be included as part of the course.

A similar course, developed for the employees of the Port Kembla Coal Terminal, was held in July of this year.

Further information:
Peter McNamara (042) 268884

CTPA's ADVISORY ROLE

In November the Director of the Centre for Transport Policy Analysis (CTPA), Associate Professor Ross Robinson, was invited to address the Australian management group of Wilhelmsen Lines Australia on future shipping and trade developments with Asian ports. The meeting was of considerable importance because it coincided with the visit of the President of Wilhelmsen Lines, Mr Ingar Skaug, and Mr Gunnar Heinonen, Wilhelmsen's agent in Finland. Wilhelmsen Lines is one of the world's major shipping lines operating Roll on/Roll off carriers, and in 1995 the Line celebrates its 100th anniversary.

Further information:
Ross Robinson (042) 268915

**CTPA COMPLETES MAJOR
DARWIN STUDIES**

The Centre for Transport Policy Analysis (CTPA) recently completed the second of two major studies for the Committee on

Darwin (the Wran Committee). CTPA's first study concerned the evaluation of strategic development options for the port of Darwin. These options included the likely pattern of development with and without the completion of the Darwin to Alice Springs railway.

The second, follow-up study examined the likely trade capture and the extent of potential market areas for the port under a range of shipping and rail/road development scenarios. The analysis was facilitated by the application of CTPA's Multi-modal Freight Flow model which evaluates costs and movement options for a very large number of commodities moving from end-to-end locations by rail, road and shipping modes.

The Wran Committee is expected to report to the Federal Government in early 1995.

Further information:
Sophia Everett (042) 268843



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First aid-qualified cleaning staff – Vince Raschilla, Rusa Jovanovski and Richard Duckett

University cleaning crews multiskilling

The English-on-the-Job program has been running for two years as one of the Centre for Staff Development (CSD) programs under the Career Development strategy initiated by the Vice-Chancellor.

It is jointly funded through CSD and the NSW Government and taught by the Adult Migrant Education Service (AMES).

Most of the participants are part-time female staff from non-English-speaking backgrounds and this program reflects the University's commitment to career development for all members of staff.

With the support of this program, one participant, Rusa Jovanovski, has gained her First Aid Certificate and become the first female NESB First Aid Officer on campus.

Ms Jovanovski, along with fellow cleaning staff Richard Duckett, Vince Raschilla and Gary Kember, took part in the St John Senior First Aid program on their own initiative.

The participants, all full-time staff of the University, were awarded their Senior First Aid certificate after training and an exam.

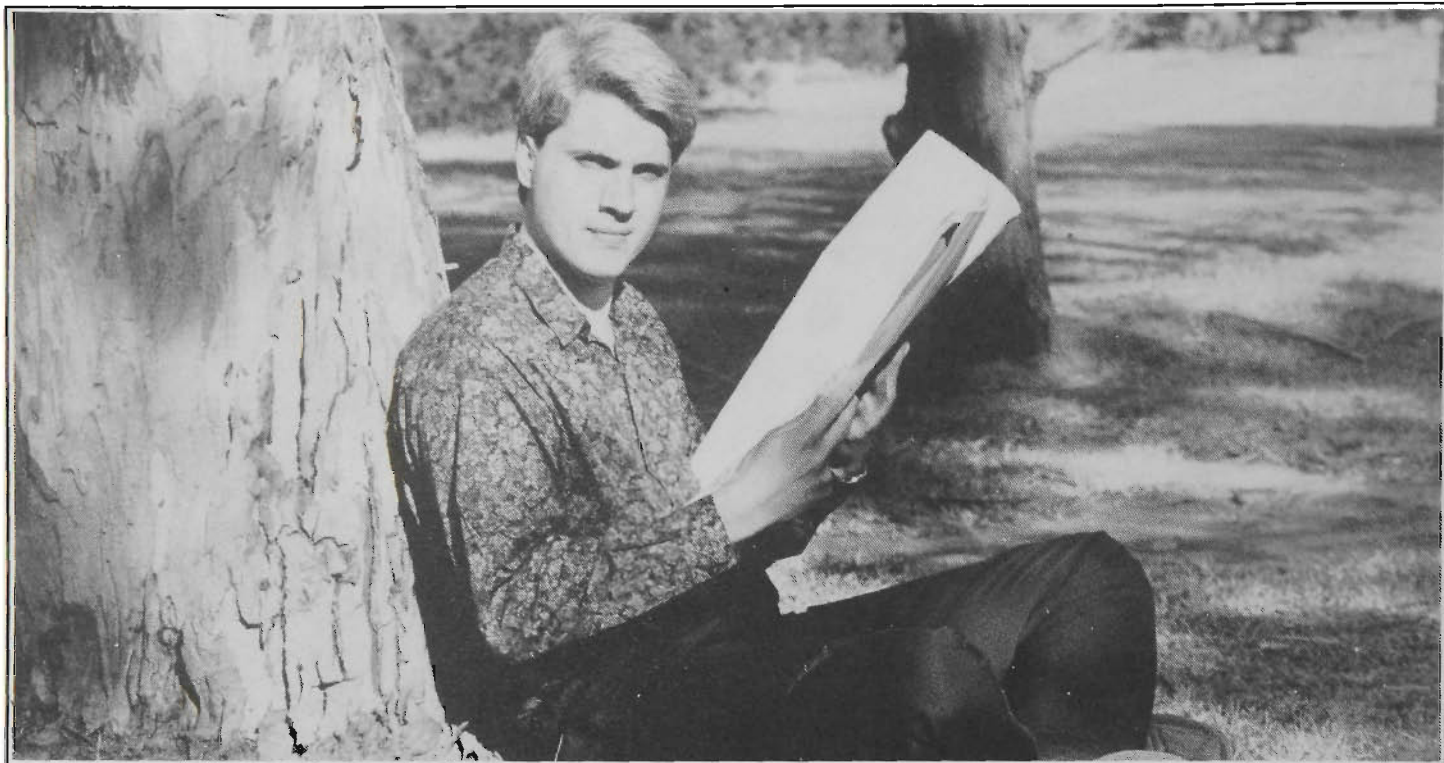
Mr Raschilla said that because the cleaning staff worked different hours

to most academic and administrative staff, they felt it was important to have first aid qualifications.

He said they had not much use for their first aid skills so far, but if and when the time comes they will be well prepared for most situations.

The next step in multiskilling which they all look forward to is a five-day course in Occupational Health and Safety.

Representatives from the University, CSD and AMES will join with participants of the English-on-the-Job program at a certificate presentation in the Union Function Centre, Rm 1 from 8.45am on 8 December.



Associate Professor Andrew Schultz

Associate Professor Andrew Schultz, a senior lecturer in Music Composition at the Faculty of Creative Arts, has won the 1994 Australian Performing Right Association (APRA) award for Contemporary Classical Composition of the Year.

APRA announced its annual music awards at the Regent Hotel in Sydney on Monday, 21 November.

Associate Professor Schultz won the award for his piece for large orchestra *The Devil's Music (Contrafactum II)*.

The ABC with the Australia Council commissioned *The Devil's Music*, which had its first performances in 1993 by the Sydney Symphony Orchestra, conducted by Jakov Kreizberg.

Associate Professor Schultz de-

Andrew Schultz's *The Devil's Music* wins APRA award

scribed the 22-minute concerto for orchestra as 'a roller-coaster ride in the Gothic wild ride tradition'.

With many references to his other works, *The Devil's Music* is strongly programmatic, as the titles of some of its sections suggest: *The Gap*, *Enchantment*, *Orsanmichel with Busker*, *durch Sturm und Wind*, *Burlesque*, *Chimera*, and *O tu angelica socia...*

The APRA awards cover the range of music making in Australia and New Zealand from pop music to scores for television and film.

Associate Professor Schultz was also nominated in the Film Score of the Year category, for his score for the opera film *Black River*, directed by Kevin Lucas (1993), and recently broadcast on SBS.

Associate Professor Schultz is working on the final stages of a three act opera, 'Going Into Shadows' for the Lyric Opera of Queensland and Sydney Metropolitan Opera, as well as works for the Australia Ensemble, Synergy, Dean Olding and the Hunter Orchestra.

Wollongong to celebrate One World Festival

The University of Wollongong is the host venue for the One World Festival on Saturday, 10 December from 10am to 11pm.

Festival coordinator Murray Symons invites the whole community to 'treat yourself to the best of all worlds and come visit Wollongong's One World Festival'.

This event is envisaged as a meeting place for a diverse range of ideas and endeavours.

The festival will feature a free live music show with some of Australia's most popular entertainers, ranging from country singer Col Buchanan to

Pixie the Fiddler and the Furry Animals, and a line-up of some of the best local and ethnic performers the Illawarra has to offer.

The Welsh-Australian choir, Macdonian and Filipino dance and music ensembles will present elements of their cultures and sharing in the festivities of the day.

Highlights of the One World Festival include an expo with more than 50 exhibits, children's activities, a healthy dining area and workshops on topics as varied as hang-gliding, vegetarianism, green technology, human rights, the environment, meditation

and Reiki healing.

Prime Minister Paul Keating is one of the supporters associated with the One World Festival.

In a recent statement, he said: 'These events remind us of what is possible if we work together in a common cause for a more secure and peaceful world'.

Tickets for the festival are \$8 adults, \$3 children or \$16 for a family ticket. All proceeds from the One World Festival will go to both the Wilderness Society and Amnesty International.

Enquiries: Murray Symons, phone (042) 266 812, or Kay Clarke, Union Functions Office, ext. 3781.

PE students brave the river rapids



Adventurous PE students off to tackle the Murrumbidgee

A recent trip to Burrinjuck Dam saw a group of third year PE students tackling the rampant rapids of the Murrumbidgee River.

The main objective of the three-day trip was to develop students' kayak skills in Grade 1-2 rapids and in doing so, obtain the Basic Skill Award from the Australian Board of Canoe Education Inc.

For these future physical and health educators, the canoeing certificate provides evidence of skills in canoeing safety, river hazards, precautions, and rescue skills which are of vital importance when taking school students on outdoor education canoeing expeditions.

Of the 40 students who took part in the trip, most had

never experienced canoeing in rapids.

Initially, most students were hesitant, however by the final day they were all showing confidence in demonstrating most of the basic skills within the rapids.

With guidance from the Dean of Education, John Patterson, and lecturers Gary Wilsmore and Michael Searle who have all had canoeing experience in New Zealand, the students were reassured that they would be rescued within seconds if they became pinned in the rapids.

PE student Constantine Mavis said: 'The trip proved to be an adventurous learning experience transforming all involved into instant canoeing legends. The only drawback was that the trip lasted only three days'.

International conference on codes and information security

The Department of Computer Science at the University of Wollongong hosted a major international conference, Asiacypt'94, dedicated to the applications of cryptology, from 28 November to 1 December.

Asiacypt'94 was sponsored by the University of Wollongong, in cooperation with the International Association for Cryptology Research.

Cryptology, although mostly related to computer science and communication theory, crosses all boundaries and is an interdisciplinary field that brings together math-

ematicians, computer scientists, engineers, physicists and lawyers.

Three international keynote speakers addressed the conference:

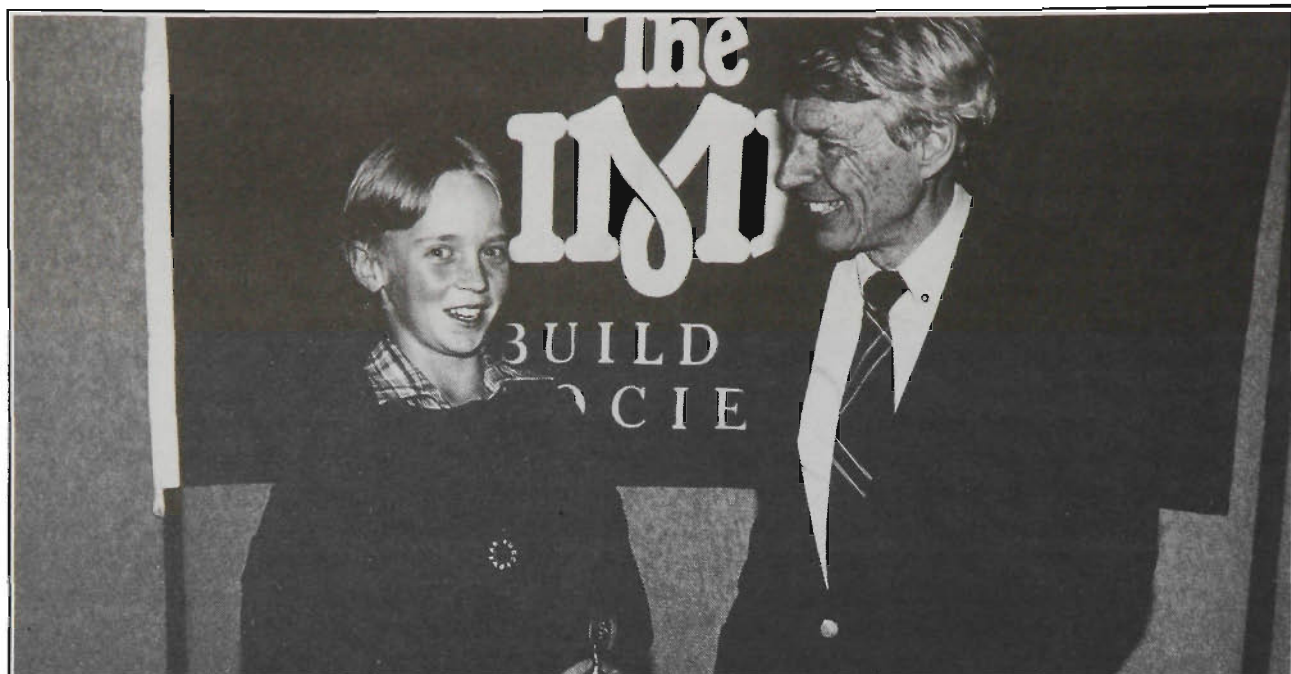
- Thomas Beth, the Director of European Institute for Systems Security (EISS) and Professor of Computer Science at the University of Karlsruhe, Germany;
- Hideki Imai, from the University of Tokyo, Japan, who has established one of the strongest research centres in Coding Theory and Cryptography; and
- Catherine Meadows, from the US

Naval Research Laboratory, Washington, DC., who is working in the Centre for High Assurance Computer Systems. She is Program Chair of the 1995 IEEE Symposium on Security and Privacy.

From 99 submissions received, 30 papers were selected for presentation from 19 countries.

Apart from highly technical papers some are extremely relevant to contemporary society, for example Efficient Electronic Money and How to Prevent Buying of Votes in Computer Elections.

Henry Elbourne-Binns from Exeter Public School receives his award from Mr David Waters, Chairman IMB Board.



The presentation of certificates and awards to outstanding students in the recent IMB-University of Wollongong Junior Mathematics Competition was held in the City Pacific Concetta Room on 15 November.

The winners are the top four percent of Year Six students from the 125 schools who entered the competition, mainly from the South Coast Department of School Education Region, but also including private and Catholic schools.

The competition, run by Ray Crawford from the Faculty of Education, attracted 1350 entries this year.

Forty-four students, some from as far away as Batemans Bay, were present to receive their Outstanding

IMB-University Junior Maths Competition awards

Certificates and IMB investment accounts from Associate Professor John Patterson.

The top student this year with a score of 90 percent is Henry Elbourne-Binns from Exeter Public School.

In the competition entitled 'Year Six Primary School Boys are better at Mathematics than Year Six Primary School Girls', 32 out of the 44 pupils to receive awards were boys and all but two of the 30 questions in the competition were found to be easier by the boys.

This is in contrast to recent observations of HSC results in which there has been no difference between the results or the girls have done slightly better than the boys.

This is the 14th year the IMB and the University of Wollongong have sponsored the competition which aims to identify and encourage young mathematicians.

The University then invites interested students to join enrichment groups for secondary pupils which are run by the Mathematics staff at the University.



Associate Professor John Patterson presents Cassie Wallace of Batemans Bay with her certificate



Researching physical activity and the ageing

It has been predicted that by the year 2030 the elderly will be the fastest-growing segment of the population and the number of people aged 80 years or more will have increased by more than one million.

Unfortunately, most of the Australian elderly population suffers from a variety of chronic diseases that are expected to increase in the future.

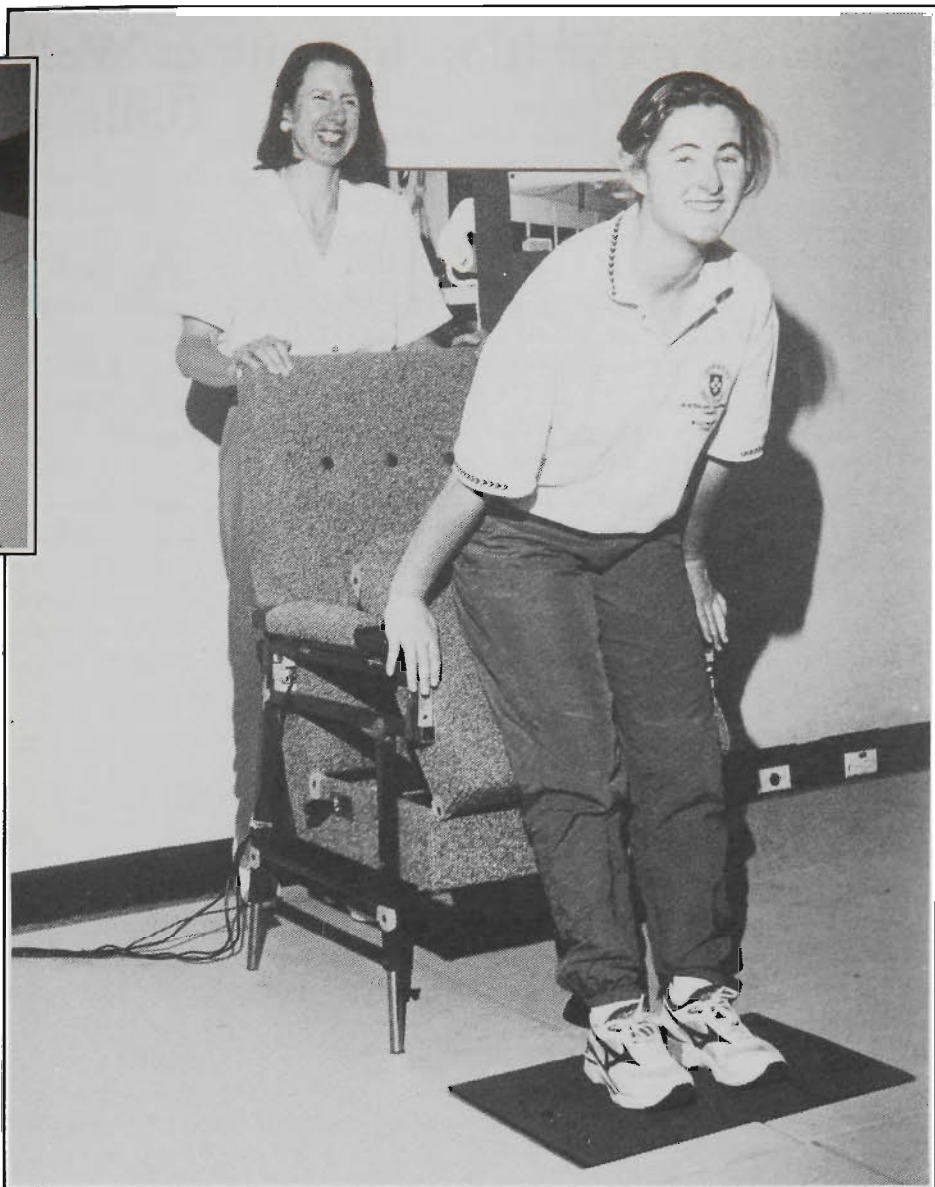
Clearly the identification of effective preventative strategies for offsetting the increasing health problems accompanying the ageing of the Australian population is critical.

The Department of Biomedical Sciences at the University has set up an Ageing Group to undertake a range of research activities that will lead to an understanding of the influence of regular chronic exercise on the physiology and health of ageing individuals.

They have completed several cardiovascular, thermoregulation, respiratory, musculoskeletal and orthopedic studies.

One study, undertaken by honours student Bridget Munro in conjunction with the Institute of Rehabilitation and Allied Health at the Illawarra Regional Hospital, investigated the effects of using an Eser Ejector Chair on elderly patients suffering from rheumatoid arthritis.

Aids such as this chair are vital to



Supervisor of the program Julie Steele and honours student Bridget Munro try out the Eser Ejector chair before wiring up a volunteer (INSET) for testing.

many elderly people to enable them to retain their independence.

The ejector chair is commercially available and uses a spring-loaded action to gently assist the individual to rise from a seated position to standing upright.

Twelve elderly female patients diagnosed with rheumatoid arthritis volunteered to assist.

Trained 65-year-olds are 80 percent fitter than undergraduates!

When they rose using the ejector chair, the forces generated at their feet and the forces they applied to the arm rest were measured.

Muscular activity was also recorded for both the upper and lower limbs.

The findings from this study indicated that the seat height and the use

of the ejector mechanism were significant in relation to the forces generated and the amount of movement required, and that careful instructions on the best way to use the chair for each individual was beneficial.

Another recent study by the Ageing Group has shown that older trained cyclists and runners had nearly twice the fitness of untrained older individuals.

Those active 65-year-olds were also 80 percent fitter than untrained Wollongong undergraduates!

The group has also been looking at the role of muscle activation rate in response to external stimuli and the affects of ageing on respiratory control.

Further developments of the group will include a focus on the role of lifestyle such as exercise and diet and genetic factors on disease and the characteristics of dementia and elderly group dynamics.

Regional exhibition blooms at Wollongong City Gallery over summer

Wollongong City Gallery is the site of a major exhibition, *Illawarra: The Garden of New South Wales*, which will continue until 8 January.

The exhibition was opened by Emeritus Director of the Art Gallery of South Australia, Mr Daniel Thomas, and is sponsored by Illawarra Electricity.

This major regional show is jointly curated by the Gallery's Assistant Director, John Walsh, historian Michael Organ and lecturer in Printmaking at the Faculty of Creative Arts, Ken Orchard.

'The Garden of New South Wales' was first coined by Governor Bourke in 1834 to describe the Illawarra.

The term reflects the paradise of the exotic rainforest environment that dominated the region before the development of the present cities and towns.

Rare colonial works from the gallery's collection, together with artworks borrowed from public and private collections throughout Australia, show the rich and inspiring landscape that existed here when European settlers arrived in the early 19th century.

Wollongong City Gallery will hold a series of Arts-to-Lunch talks during the exhibition, to give visitors the opportunity to discover what the region was like during those colonial days through the rich visual history presented.

An adventurous bus tour along various roads to viewpoints from which artists such as Eugene von Guerard and Conrad Martens pictured the Illawarra was held on Saturday, 3 December.

Enquiries: Public Programs Officer, Wollongong City Gallery, Gina Fairley, phone (042) 287 500.

Located on the corner of Burelli and Kembla Streets, Wollongong, the Gallery is open: Tuesday-Friday 10am-5pm; weekends and public holidays noon-4pm. It is closed Mondays, Good Friday, and Christmas, Boxing and New Year's days.

University Christmas arrangements

Close-off dates for Accounts section

The Accounts section will close off on Wednesday 14 December.

All transactions will be included in the 1994 accounts providing the necessary and complete documentation is received by Financial Services by the close-off date. For purchase orders, both the acquittance and the invoice must be received in Financial Services by close-off.

Central store stocktake

The central store will be closed on 15 and 16 December, 1994, for the annual stocktake.

Any stores issued after stocktake will be charged against 1995 accounts.

Providing stocks are available, all requisitions received in the store by 9 December 1994 will be processed against 1994 accounts.

Requisitions received after that date but before stocktaking will be processed and included in 1994 accounts only if time permits.

Requisitions should not be submitted for amounts in excess of normal replenishment stocks as the store will operate in January 1995 to enable units to obtain stock required in 1995. The store will operate normal hours during January.

Cashier's hours over Christmas

The Cashier's Office will open 9.30am-4.30pm on all normal working days, except Friday 23 December, when the office will close at noon.

All creditors and casual salary cheques must be collected no later than 10.30am on this day.

Uncollected casual salary cheques for the period ending 29 December will be posted on the afternoon of Friday 23 December.

Student enquiries

The Student Enquiries Counter in the Administration building will be closed from noon 23 December until 3 January, when it will reopen at 9am.

Campus News is published weekly on Wednesdays. Send material, preferably by Microsoft Mail or on disk, to E-Mail account 'Campus News' by noon on Monday of the week before that of publication.

For any other enquiries contact the Editor, Gillian Curtis (042) 21 3926.

Campus News has a circulation of 3000. It is distributed on campus to staff and students. 1000 are mailed to the community and overseas including schools in Illawarra, southern Sydney and Canberra; local, Sydney and Canberra media; Friends of the University; business representatives; MPs and numerous individual requests.

What's On

Long Gallery

Until 7 December: BCA Graduating Exhibition. For further information contact Elizabeth Jeneid, phone (042) 21-3048.

This issue of Campus News is the last for 1994.

The next edition will be published in January after the holiday break.

We wish you a happy and safe Christmas period.

Stop Press