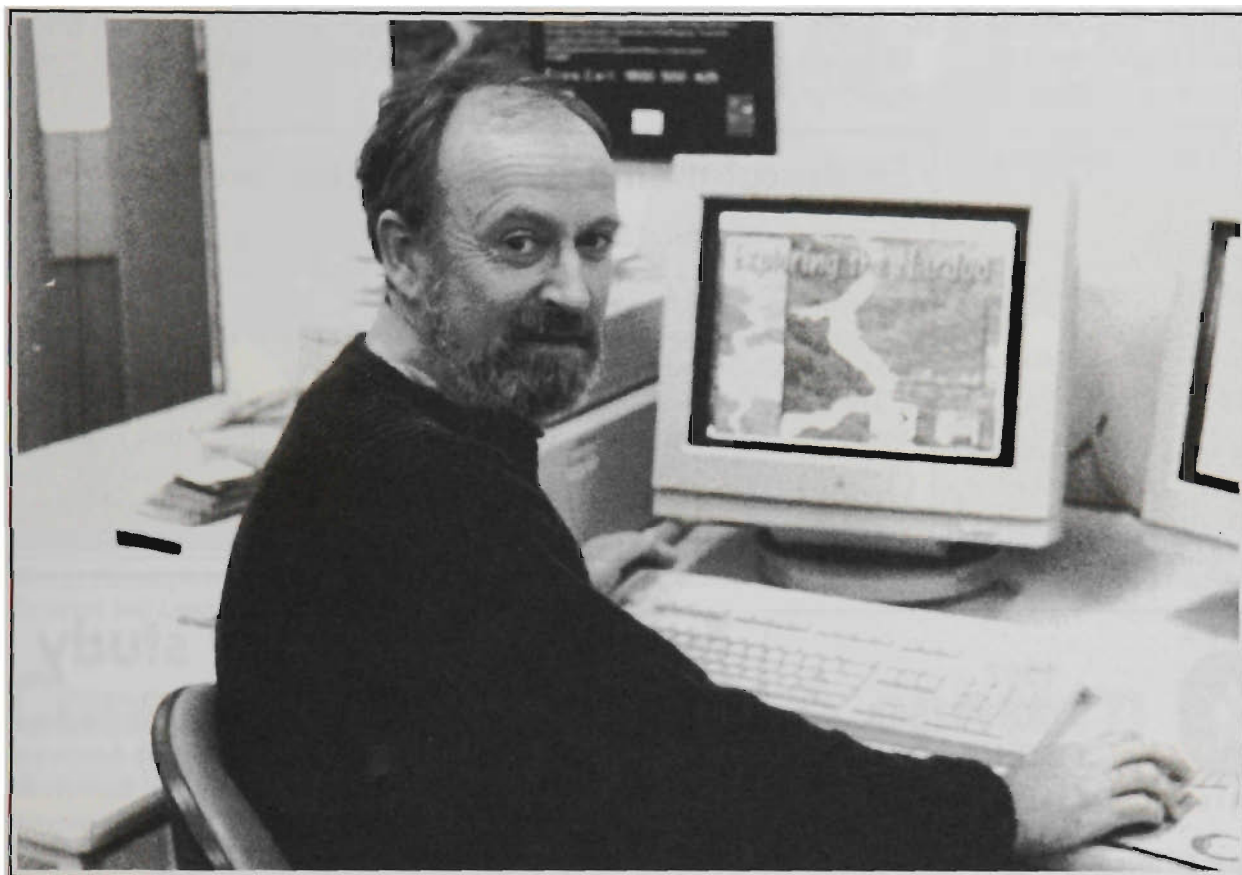


CAMPUS NEWS



Director of the Interactive Multimedia Learning Laboratory, Associate Professor Barry Harper, heads the team who produced 'Exploring the Nardoo'.

High profile for new environmental CD

The Interactive Multimedia Learning laboratory within the Faculty of Education has developed another investigative multimedia package.

It was featured recently on an ABC TV Quantum program.

Called 'Exploring the Nardoo', it has been produced cooperatively with the NSW Department of Land and Water Conservation with the intention of heightening public awareness of water resource management issues, particularly those related to inland river systems.

The IMML group has built upon the experience gained from their previous acclaimed software title, *Investigating Lake Illuka*, and has produced an interactive experience that supports the existing senior Biology, General Science and Geography related curriculum areas.

'Exploring the Nardoo' gives the user the opportunity to go back in time and travel along the river Nardoo in its pristine state last century through three time zones to its development-affected environment today and to investigate this mythical river's source high in the mountains through a changing landscape to the plains below – all in the comfort of the home, office or classroom.

Students can gather chemical and physical data and information while navigating up and down the river or through changes in time and gather public opinion on relevant issues through media reports.

Within the package students can enter a water research centre and access a rich resource of information through

recognisable metaphors of filing cabinets, books and charts.

An important part of the 'Exploring the Nardoo' resource is the available support for teachers wishing to use the software in their classes; including implementation ideas, worksheet templates, details of related curriculum ideas and suggestions for extending the use of the package.

'Exploring the Nardoo' was launched by the Minister for Land and Water Conservation, Kim Yeadon, at the Museum of Contemporary Art and had a Wollongong launch on the 26 June in conjunction with an open day held by Educational Media Services.

It is being distributed through Interactive Multimedia Pty Ltd, phone (06) 273 5405.

\$1.2 m Quality funds distributed

The University's excellent performance in the third round Federal government quality review process last year attracted additional funding of \$1,213,000.

The review was based on community service and research performance.

The distribution of these funds have been approved by the Vice-Chancellor after recommendations from the two committees set up to advise on appropriate projects.

The funds will be distributed as follows:

Community Service:
 Faculty of Law \$50,000
 Faculty of Health and Behavioural Science \$50,000
 Faculty of Creative Arts \$50,000
 Science Centre \$150,000
 IACT \$7500
 C Nyland \$13,500
 R Markey \$6500
 Workskills \$5000
 EEO-AIDS Awareness program

\$10,000

IRIS \$10,000

Theatre South \$10,000

Alumni \$10,000

Careers and Appointments \$10,000

Economics \$7500

Educational Media Services \$10,000

In allocating the funds the following guidelines were taken into account:

Recognition as a quality community service project in the 1995 quality

round, demonstrated relevance to the achievement of the community service objectives, capacity to achieve objectives of project and spend allocation within one-year limit and demonstrated relevance to equity groups.

Research:

Network upgrade \$500,000

Research database \$100,000

Distribution to all faculties for research-related staff training funds \$213,000.

Statistical methods for research workers

A course in Statistical Methods for Research Workers will provide an introduction to, or revision of, basic statistical methods for staff or honours and postgraduate students.

It gives the prerequisite knowledge for all people who consult the Statistical Consulting Service.

The next course will be led by Dr Ken Russell (Department of Applied Statistics) and will run during Spring Session, probably starting in week four or five.

The cost will be \$50. Contact Dr Russell through the department by e-mail to secure a position.



1997 CORAL SEA SCHOLARSHIP

The scholarship is for those wishing to visit the United States to:

- investigate a problem or development relevant to Australian business or industry; and
- contribute to Australian-American relations.

Applicants must be Australian citizens with relevant business experience and must hold a good Bachelor's degree or diploma. Applications are encouraged from those no more than 35 years of age. Award benefits include a travel allowance of A\$2,500 and a stipend A\$3,000 per month for up to three months.

Applications close 30 September 1996

For further information and application forms contact: Program and Development Officer, Australian-American Educational Foundation, GPO Box 1559, CANBERRA ACT 2601. Tel: (06) 247 9331.

Sponsors

Former United States Ambassador, Mel Sembler, Mallesons Stephen Jacques, South Corp Brewing Holdings Ltd, The Gandel Charitable Trust, BHP Company Ltd, Arthur Andersen, Coles Myer, and Coca Cola Amatil.

Treasury funds for study

The Centre for Multicultural Studies has been awarded a \$25,000 contract to examine how Commonwealth funds are distributed to the states and territories by the Commonwealth Grants Commission and to write a policy document for inclusion in negotiations over grants.

This arises from the fact that NSW is a big loser in this process, receiving a much smaller share of Commonwealth grants than would be the case if these grants were made on a population basis.

Effectively the costing procedures used ensure that large transfers are made from NSW and Victoria to other governments, particularly Queensland and the Northern Territory.

The objective of the project will be to examine how an argument can be mounted to reduce this transfer.

Some possibilities are the facts that more than half of Australia's Aboriginal population resides in NSW; that NSW takes by far the largest fraction of new migrants and has, overall, the largest proportion of people from non English-speaking background in its population.

All of these might be sources of what the Commonwealth calls 'expenditure disabilities' that increase the real cost of providing services and strengthens the NSW State Government's argument for an increased share of Commonwealth grants.

These possibilities will be explored through a combination of literature review, examination of quantitative databases and fieldwork interviews over four months by Michael Morrissey and Colleen Mitchell of the CMS.



Career Development Unit staff members (from left): Janene Sunderland, Amanda Howard, Pam Piela, Tina Rae, Tammy Zarebski and Leah Roulstone.

Career development: A concern to General Staff

More than 500 members of the General Staff responded to a survey conducted recently by the University on training needs.

One of the most frequent replies was that they did not know who to contact to discuss this issue.

The University of Wollongong began working on the implementation of a career development project in 1994 with the establishment of a Career Development Unit within the Personnel Services Branch in Administration.

This unit designs and delivers staff development programs in order to enhance the skills of staff, defines the responsibilities of supervisors for staff development, determines the needs of general staff through the analysis of surveys and feedback from courses, and monitors the participation in training opportunities for reporting and evaluation.

The unit also implements new or revises existing policies; initiates and manages specific projects; and supports changes to existing systems all

designed to improve the mobility of General Staff.

To this end a dedicated and experienced team has been established.

General Staff making initial contact with the unit probably will speak to part-time Administrative Assistants, Janene Sutherland or Tina Rae.

Tina has had 15 years' experience including working with the University of Sydney Cultural Diversity Training Program in their Multicultural Centre.

She looks after all staff development administration including nominations for courses, inquiries, and coordination of waiting lists.

Janene has worked with SkillShare, ASIO, the Australian Embassy in Washington and Barclays Bank and is undertaking a Bachelor of Social Science at Southern Cross University.

She administers study time, partial funding for external courses, and annual development reviews.

Pam Piela manages the unit as the Career Development Coordinator.

She started at the University in 1994 and is responsible for developing policies, systems and priorities for general staff career development, including the training curriculum, job rotation, annual appraisals, study time, assisted education schemes, development leave and international exchanges as well as managing the budget.

Pam has a Bachelor of Economics from Sydney University and a Master of Commerce in Human Resource Management from Wollongong.

Pam came to the University from AGL in Sydney where she worked for five years as team leader responsible for award restructuring, job evaluation, remuneration system design, competency-based career paths and had some involvement in enterprise bargaining.

Continued page four

Career development: A concern to General Staff

From page three

Leah Roulstone was appointed earlier this year as the Staff Development Officer.

She previously worked for the State Bank.

Leah conducts training needs analysis and designs and delivers a wide range of general staff courses including supervision, personal development and client service.

She has a TAFE Advanced Certificate in Training Development, a Graduate Diploma in Adult Education and Training from Wollongong University and is completing a Masters in Education also from Wollongong.

Project Officer Amanda Howard

was appointed to the University in 1993 to work on the University's Continuous Improvement Program.

She is now involved in integrating continuous improvement into the workplace, placing policies and forms for the Career Development Unit on Netscape and assisting with the coordination and design of TQM courses and financial and budgetary training. Amanda has a Bachelor of Arts from Melbourne University and a Master of Arts in International Relations from Wollongong.

She previously worked with Coles Myer, Melbourne.

For the next six months the team will also be enjoying the support of Tammy Zarebski who is on a Job Skills

program.

Some of the most popular courses developed by the unit have been Introduction to Supervision, Leading Teams and Workgroups, Project Management and Cross Cultural Communications.

Taking into consideration the recent training needs analysis conducted by the Career Development Unit, the new courses to be offered for the rest of the year include Assertiveness Skills, Communication Skills, Resolving Workplace Conflict, Quality Assurance, Career Planning, Facilitating Quality Teams, Budgetary Management, Feedback Skills for Performance Improvement and Problem Solving Skills.

Funding for strategic defence link

Senior lecturer in Computer Science, John Fulcher, has been awarded second-phase research funding by the Defence Science and Technology Organisation (DSTO).

He will investigate the application of artificial neural network techniques to the analysis of oblique-incidence ionograms (radar soundings of the ionosphere).

The DSTO has committed heavily

to the Jindalee Over-the-Horizon project (JORN) in the last decade.

This JORN system, directed towards Australia's northern neighbours, will form a critical component of Australia's defence system into next century.

Charged particles in the ionosphere (located hundreds of kilometres above the earth's surface) reflect high-frequency radio waves, however not in the manner of a simple mirror reflector.

Central to the success of the JORN project is a knowledge of ionospheric conditions in order to accurately predict reflections of high-frequency radio waves transmitted from one site to a receiver a few thousand kilometres 'over the horizon'.

Total funding for the 12-month project amounts to \$47,500, which is split into two, one being for extension of techniques developed during the first-phase (1995) project, and the other for 'blue sky' (open-ended) research into the application of neural networks suitable for ionospheric work.

Mr John Fulcher leads a project team comprising one former and two current Honours students in the Department of Computer Science - Shane Richards, Marcus Hagenbuchner and Robert Fisher, respectively.

The latter two are investigating related topics as part of their honours thesis projects.

Liaison for this project is with Dr Chris Coleman, of the High-Frequency Radar Division.

Dr Coleman was formerly a senior lecturer in Mathematics at the University of Wollongong.

This project strengthens the pre-established links between the Department of Computer Science and DSTO - in particular Dr Phillip McKerrow's collaborative work with Dr Douglas Kewley in sensor fusion and sonar echolocation.

WEERONA TUTOR IN RESIDENCE

Weerona College is seeking applications from students of the University of Wollongong, currently enrolled in a postgraduate degree or in an advanced stage of their undergraduate degree, for a residential based position of tutor. The appointee must be able to communicate well with undergraduate students both individually and in small groups and be able to demonstrate a sensitivity to student needs. Experience in living in a university student residence and knowledge of the aims and activities of a collegiate residence are desirable, as is previous experience in academic tutoring.

The successful applicant will be required through a weekly, evening and weekend roster to provide academic, administrative and social support to undergraduate residents. Applicants should also be aware that this position will be advertised in the Illawarra Mercury on 20 July 1996. Further information can be obtained from George Mickhail on 214 619. Reference CM96-266. Closing date 27 July 1996. Remuneration by nominal residential charge for full board to end of academic year (1/12/96).

Please provide four copies of your complete application, addressing selection criteria and employment history. Include name and addresses of three referees with fax or e-mail address.

Address application to:
Personnel Officer, Confidential Appointment
Quote Reference: CM96-266
Mail: University of Wollongong NSW 2500
E-mail: c.mcivor@uow.edu.au
Fax: 042 213700
WWW Information: <http://www.uow.edu.au/>

Equality of employment opportunity and a smoke-free work environment are University policies.

Creative Arts student to study in Venice



Erin Kelly

Third year Creative Arts student, Erin Kelly, has gained admission to the Conservatorio Statale di Musica in Venice for one year's singing tuition from the end of 1997.

An interest in early music, opera and the Italian language contributed to this opportunity, but mainly it was the quality and potential of her singing talent that attracted the attention of the authorities at the Conservatorium in Venice.

Erin attended school in Moss Vale and Newcastle and did not discover until Year 11 that she could sing.

She decided to study at the Faculty of Creative Arts because she liked the opportunity to undertake studies in a variety of specialisations.

She has sung with the University singers and was in the recent 'Mozart's Requiem' concert with the BHP Training Orchestra. She also appeared in 'Evita' at the Illawarra Performing Arts Centre.

Erin is thinking about doing an honours year next year before she goes to Venice and would also like to do a course in teaching English as a second language so she can earn a living in Italy.

In the meantime she is approaching various organisations in an attempt to gain scholarships or sponsorship to help her with her costs while overseas.

Positive moves to encourage women in leadership

A report on an AVCC Women in Leadership Program has led to initiatives being made by the EEO Office to promote more women in leadership roles.

Linda Tapsell from the Department of Public Health and Nutrition was sponsored by the Vice-Chancellor to attend this conference.

A follow-up briefing by Ms Tapsell was arranged by the EEO Director Christine Hayward.

Ms Tapsell gave an enthusiastic report to a group of 35 women representing a good cross-section of general and academic staff.

Acting Vice-Principal Administration, Peter Wood, and Professor Jack Goldring from the Faculty of Law and Chair of the University's Education Committee also attended.

The meeting was chaired by Pro Vice-Chancellor (Academic), Professor Christine Ewan.

The aim of the course was to develop the leadership capacity of women in universities at both an institutional and national level to provide greater diversity in leadership, creativity and problem solving resources.

Issues facing women in the higher education sector were outlined, including the implications of funding cuts to universities and their potential impact on women; the industrial relations climate; women and leader-

ship paradigms; quality assurance as a way out of entrenched practices which disadvantage marginal groups; and the participation of women in meetings as being one of the key areas in which influence and diversity can be enhanced.

Ms Tapsell was particularly impressed with the quality of the women who addressed the conference.

They included Leigh Tabrett (Office of Higher Education); Carolyn Allport (National Tertiary Education Union); Phyllis Tharenou (Monash University); Carmen Luke (University of Queensland); Eleanor Ramsay (University of South Australia); Barbara Van Ernst (Deakin University) and Lynne Watts (AVCC Staff Development Program).

Ms Tapsell said the workshop was an 'empowering experience'.

'It did not focus on what was lacking in women, but rather provided a clear path of support and encouragement, coupled with a recognition of what had already been achieved and the potential which is yet to be tapped,' she said.

In discussion, two important issues were raised:

1. The need to develop strategies to ensure that the burden of committee

work was shared between women on campus.

The University committees were generally seen as having reasonable representation of women, but it was suggested that further refinement were required. Some women were over-burdened with such work. Others would like the opportunity for more involvement but were unsure about how to become involved.

2. The need for women to have input into cuts in the tertiary sector and how decisions could impact on women and equity programs.

Ms Hayward wishes to hear from women in the general and academic streams who are interested in this issue, prepared to work together and will be available to meet for an hour every fortnight for eight weeks to develop an options paper.

The aim is to have a small group of academic and general staff that is interested, diverse and available working intensively on the issue for a limited period of time.

Contact the EEO Unit if you are available and want to be involved.

Contact Ms Tapsell by e-mail or phone 213 152 if you would like copies of any of the papers or to discuss the workshop with her.

Engineering student dispels a myth

Fourth year Civil/Environmental Engineering student Steven Lloyd has put up a convincing and award-winning argument that 'Engineers are not boring'.

Steven won the 1995 National Young Engineers Public Presentation Competition held at the National Engineering Conference in Darwin earlier this year.

He gave a humorous and satirical

speech that won him a trophy and \$3300 in prizemoney.

Steven nearly did not enter the national competition because the other competitors looked so good.

But he is glad he did and 'would love to do it again, it was brilliant', he said.

He would not hesitate to encourage other students studying engineering or recent graduates

to enter, and would be happy to talk to anyone contemplating entering the 1996 competition due to start soon.

Steven grew up in Canberra and attended Canberra Boys Grammar School.

He came to Wollongong to study engineering and obviously it has been a rewarding experience for him.

20th Combined Annual Meeting of PROFESSIONAL SOCIETIES AND INSTITUTES OF THE ILLAWARRA*

Speaker

Professor John Morrison
BHP Professor of Environmental Science
University of Wollongong

WATER: OUR COMMON FUTURE?

Water is an enigma. This apparently simple and ubiquitous molecule, having unique properties that are not yet fully understood, is the most abundant compound at the Earth's surface, yet human beings and other animals suffer and ultimately die in many places because of either an absolute absence or an inadequate supply of water of suitable quality. This paradox is nowhere more apparent than in Australia, which, as an island continent is surrounded by water, yet, with the possible exception of Antarctica, is the world's driest continent.

This talk will consider a number of environmental aspects of water, e.g. the quantities available, uses, distribution, human impacts, climate change, and water quality. Specific attention will be given to quality of drinking water and the new national guidelines, including environmental, engineering, health and economic issues.

Date	Wednesday 31 July	Time	6pm for 6.30pm
Venue	Union Function Centre, University of Wollongong, Kemira Rooms 3 and 4	RSVP	By Friday, 26th July Dr Stephen Ralph Dept. of Chemistry Phone: 214286

* Including:

The Royal Australian Chemical Institute (Host)	Australasian Institute of Mining and Metallurgy
Institution of Engineers, Australia	Australian Institute of Steel Construction
Institute of Metals and Materials Australasia	Australian Institute of Management
Australian Society of CPAs	

ALL WELCOME

The latest - fluffy lighters

Each year Young Achievement Australia fosters a Business Skills program for tertiary students, designed to provide experience in operating a company.

This year MANIYAC, a company formed by the 1996 University of Wollongong Young Achievers, has produced a fluffy lighter aimed at the fun-loving individual!

Have you seen, touched, caressed your Fluff yet?

Fluff, as the name suggests, are small, fluffy and basically irresistible.

These lighters come in a variety of crazy fabrics from the Leopard Look to Cow Wear, others colours include black, purple, blue and rainbow!

Just picture a candle-lit dinner for two. You will be able to impress with your very own Fluff, a great way to start a conversation.

Or at a barbecue, helping out with your irresistible Fluff.

Get in fast. They are on sale at University Union Shop or Uni Tavern.

Contact (042) 297 332 and order so you can light your own Fluff.

Discussion groups

During Spring Session the Postgraduate Resource Unit will be the venue for several Wednesday lunchtime discussions on issues of academic interest.

The are:

Week two: Presentation skills.

Week three: Dealing with stress.

Week four: TQM and continuous improvement.

Week five: Neural networking and its various applications.

Week six: Preparing for exams.

Week seven: Writing an effective CV.

Week eight: Structuralism and beyond (this is not an Engineering subject).

Bookings would be appreciated on ext. 3326.

ITShop customers are big winners

Four customers of the University's ITShop were happy recipients of new ColourStyleWriter 2500 ink-jet printers as part of a promotion Apple Computers ran earlier in the year.

Each customer who purchased an Apple branded computer was entered into the draw for the free printers.

Eva Ip, who is studying for her MBA, was ecstatic about winning the printer and will use it to help her through her course.

Bernard Sullivan is studying Graphic Arts and will find the colour capability of his new printer extremely useful.

With numerous essays due next session in History and Politics, Niny Borges will no longer have to wait for a printer in the student labs.

Pam Dunne was equally excited about her new printer.

The Director of ITS, Mr Greg Naimo, and the ITShop Co-ordinator, Mr Allen Chang, presented the prizes to the four students.

The ITShop is the technology deployment arm of ITS for staff and students on campus.

THEATRE **SOUTH**

A Festival
of short
comedies by

6 great
plays
over 2
fantastic
nights

July 18
to Aug 10

Bridge
Theatre
Bookings
296144

Wendy Richardson
Alan Ayckbourn
Tom Stoppard
Tennessee Williams
Timothy Daly
& Elizabeth Coleman

Six
of the
Best



General

Meeting dates for the Human Research Ethics Committee and the Animal Ethics Committee for this year are: Human Research Ethics Committee: 23 July, 20 August, 22 October, 19 November, 17 December. Animal Ethics Committee: 21 August, 20 November. Agenda items are due two weeks before meetings. Enquiries Karen McRae, Office of Research, by email or on ext. 4457 on Tuesday, Wednesday or Thursday.

The Campus Alumni Bookshop is open on the second and fourth week-ends of each month (Saturday and Sunday 1-5pm). Come and browse through a wide selection of preloved textbooks and fiction. Location: Campus East, Cowper Street, Fairy Meadow (opposite Science Centre). All proceeds directed towards Campus projects. Donations of material are invited. Enquiries to Alumni Office, phone 213 249 or 291 951.

Cell and Molecular Seminar Series: Held on Wednesdays in the Department of Biological Sciences (Building 35), University of Wollongong. Dates: 31 July, 21 August, 18 September, 23 October, 30 October. Inquiries: Associate Professor Ted Steele, Associate Professor Ross Lilley, Associate Professor Mark Baker, Dr Mark Walker, Ms Wendy Russell, Dr Ren Zhang or Dr Mark

What's On

Wilson, phone (042) 213 013, fax: (042) 214 135.

Creative Arts

Creative Arts productions '96

Each year students and staff in the Faculty of Creative Arts produce a diverse range of performances. They are presented in numerous venues across the campus depending on the nature of the performance.

Following is the provisional timetable for this year. Watch *Campus News* for confirmation and more details.

Graduation Production - 11-14 September, Hope Theatre and 18-21 September, Newtown HSPA, director Jany Hayes, producer Jeff Kevin and assistant producer Jacqui Clarke.

Classic Production (Shakespeare, Marlowe, Jonson etc) - 23-26 October, directed by John Senczuk and Jeff Kevin, Performance Space, Black Box Production.

Australian One-Act Plays or excerpts - 4-8 November, Kate Newey, Sharon Bell, Peter Shepherd possibly to direct. Performance Space.

Art of Lunch

Every Thursday during session, from 12.35-1.25pm.

Venues are the Hope Theatre, Un-

ion Hall Foyer and Faculty of Creative Arts Music Auditorium. Brochures and information are available from Marilyn Meier, ext. 3990, and Jenny Fullerton, ext. 3996.

Long Gallery

5-28 July: Naidoc Show

2-25 August: TAFE staff exhibition, 'Baskets' - Charlotte Drake Brockman and Virginia Kaiser. Student works - a selection

29 August-29 September: Estonian Works on Paper, Baltic States exhibition curated by Ethnic Arts Council.

11 October-9 November: Postgraduate Show, Brenda Palma/ Bert Blazen (glass), Ju-Lan Huang. Travelling Box Show - Miniature tapestries by British artists.

15 November-7 December: BCA Graduating Exhibition/Honours student works.

University Social Club

Become a member and enjoy a variety of social events. A chance to meet others across the campus. Contact Jim McKee by email or ext. 3376.

Stop Press

Women and Research Network meeting

As a result of the half-day research career needs-analysis workshop on 30 May, a Women's Research Network is to be formed.

The organisation meeting will be held on 30 July in the Union Function Centre - Rooms 1 and 2.

Associate Professor Kate Blackmore will speak to the group on her role as the Nursing Department's Research Facilitator and Peg MacLeod will provide an overview of the obstacles, needs and solutions generated at the May workshop.

Further information and reminders will appear on e-mail and departmental notice boards in the next few weeks.

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 3500. 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.