

CAMPUS NEWS

Student exchange with Japan on the increase

The first group of exchange students from Japan under new agreements between Wollongong, Otaru University of Commerce and Hiroshima Shūdō University met with staff and students of Wollongong recently.

The reception also served as a farewell to the Wollongong students who will be studying in Japan on exchange this year.

The first Wollongong students studied in Japan under these new arrangements in 1994, three at each university and now the exchange has been reciprocated.

This year students from both Japanese exchange partners are in Wollongong.

From Hiroshima Shūdō University are Atsuko Higashi, Tomoko Kawaguchi, Miho Kurokawa, Shinsuke Nakamura, Yasuko Takei, and Noriko Tanaka.

From Otaru University of Commerce are Natsuko Aoyama, Kana Hoshino and Miwa Suzuki.

All of the students will be studying at the Wollongong English Language Centre during Autumn Session and subject to the level of English proficiency reached they will attend regular classes in Spring Session.

University of Wollongong students in the BArts(Hons) or BArts-BCommerce programs who are studying Japanese spend their fourth year of study in Japan.

With the assistance of University Mobility in the Asia Pacific (UMAP) bursaries, Wollongong has sent another three students to Hiroshima this year – Kellie Oldfield, Robina Wood and April Chou – and two to Otaru – Philip Oszurko and Velda Smith.



Natsuko Aoyama from Otaru chats about Japan with students who are about to go on exchange Jodie Stoyles, Ron Stewart and Phillip Oszurko.



Wollongong and Hiroshima Shūdō University exchange students: (from left) front - Robina Wood, Noriko Tanaka, Tomoko Kawaguchi. Back - Yasuko Takei, Kellie Oldfield, Atsuko Higashi.

The Australian UMAP program, funded by DEET, aims to improve the quality of higher education through increased mobility of students and staff, by developing links between Australian graduates and the next generation of business, government and education leaders in Asia and the Pacific.

Andrew Dolan-Brown returned from Hiroshima Shūdō University after a one-year exchange assisted by

a scholarship from the UMAP program.

Of his exchange Andrew said: 'It was great and the people were the best. I'd be so happy if I could bring back the people I met in Japan to Wollongong and live with them here. That would be perfect.

'I lived in a dormitory of 20 people – two Australians, one American and 17 Japanese students who knew how

Continued page two

Student exchange with Japan on the increase

From page one

to have a good time. It was very different but an interesting place to be.'

Under another new agreement signed with Wollongong, Sophia University in Tokyo will host three of our students.

Wen-Tjen Lim will be accompanied to Sophia by scholarship winners Ron Stewart and Jodie Stoyles.

Ron has received a Yokoyama Scholarship and has also been offered a

Rotary Ambassadorial Scholarship.

Yokoyama Scholarships are offered annually to Australian citizens who have a strong interest in and an ability to contribute to the development of mutual understanding and friendship between Australia and Japan.

A full National Asian Languages Scholarship will help Jodie Stoyles support her study in Japan.

When she returns, Jodie will have one more year of study in which she will complete her thesis.

She said she may even do her DipEd after that and become a language teacher. Jodie has been to Japan before and looks forward to returning.

After the HSC she spent one year working in Japan with her own dance troupe.

The University is continually increasing the number of links with Japan and expects to send exchange students to Obirin University (agreement already signed), Tsukuba University and Kobe University next year.



Work continues on the new solar-powered air-conditioning system

Solar-powered air-conditioning system commissioned

A solar-powered air-conditioning system has recently been commissioned in the Department of Mechanical Engineering.

Air-conditioning systems, large or small, usually employ conventional refrigeration machines to cool the air in a room.

This conventional technology not only uses a great deal of electricity, thereby increasing greenhouse gas emissions from power stations, but also uses expensive and potentially environmentally damaging refrigerants such as hydrochlorofluorocarbons (HCFCs).

The new system commissioned by Dr Paul Cooper and honours student Tony Chan is driven by solar hot water rather than electricity and employs an absorption refrigeration machine containing only a mixture of salt (lithium bromide) and water as its working fluid.

This research has been funded by the Environmental Research Institute, the



Department of Mechanical Engineering and Yazaki Australia.

The solar hot water is heated by solar collectors obtained by Dr John Montagner for his solar thermal energy system research.

The collectors are mounted on the roof of the Thermodynamics Laboratory of Building 7 and supply a hot water storage tank which in turn provides the energy to drive the Yazaki absorption refrigeration plant.

Through one of the many small miracles of thermodynamics this

unit takes hot water (at around 85°C) in at one end and produces cold water (down to 0°C) at the other.

The cold water is used to cool air in the laboratory.

The original lithium bromide refrigeration machine was donated by the now closed Solar Energy Research Centre of the University of Queensland and Yazaki Australia have now donated a second, new absorption machine together with a matching cooling tower.

The whole solar cooling system is being used as public demonstration of the technical viability of this environmentally benign technology and as a research tool for students to study and improve the efficiency of the solar air conditioning systems.

A paper on this project was presented by Dr Cooper at the Ecologically Sustainable Development Conference held at the University in December.

For further information contact Dr Paul Cooper 213 355.

They came from near and far...

On 14 February, 130 careers advisers from throughout the state attended the Annual Career Advisers Information Day at the University of Wollongong.

They explored the campus and met faculty and general staff so they would be well informed about the University of Wollongong when it came to answering students' questions about tertiary study.

Sixteen advisers, who travelled a long distance, stayed at Kooloobong overnight and were extremely impressed with the security staff and their sense of ownership and care for the University.

Some of the advisers took part in the 'early bird campus tours', and were delighted with the state of the grounds, the facilities and the whole atmosphere particularly the 'smell of eucalyptus'.

For many advisers it was their first trip to the University and for those who have been here before they said they enjoyed the tours because each time they come there was usually something new and different to look at.

Speakers at the information day held in the McKinnon Building included Acting Vice-Chancellor, Professor Gerard Sutton; Pro-Vice Chancellor (Academic), Professor Christine Ewan; Dean of Creative Arts, Professor Sharon Bell; Dean of Science, Professor Murray Wilson; and Dean of Health and Behavioural Sciences, Professor Charles Watson.

Staff were allocated to sit with each table of advisers at lunch and were encouraged to promote the campus tours where the advisers or teachers can bring school groups to the University.

They were also given the opportunity to collect and order the new brochures that have been produced recently including undergraduate



Phil Priest (Delroy HS), Gary Brown (Dubbo South HS), Neville Smith (Narromine HS) and Paul Smith (Bulli HS)



Secondary School Links Program Coordinator University of Wollongong, Patricia Young, Esther Hanbury (William Clarke College Parramatta), Lyn Hart (Jannali HS), Rick Foster (Endeavour HS) and Kerry Barnett (Innaburra HS)

course brochures, the prospectus, and the Year 10 guide.

The Faculty of Creative Arts holds a variety of concerts and performances every Thursday from 12.30pm.

Take your lunch along and enjoy music, theatre, talks and readings by students, staff and visiting prominent artists.

These 'Art of Lunch' concerts, which have been run since 1988, will introduce a new dimension to your time at the University of Wollongong. Staff and students, as well as members of the public, are invited to attend.

Most performances take place in the Music Auditorium

Free entertainment at lunch-time

(Building 24 G06) with occasional events in the Hope Theatre or Faculty of Creative Arts Performance Space.

Performances planned for 1995 include concerts by Australia's leading cellist, David Pereira, the Conservatorium of Music Trio, and popular duo-pianists Roy Howat and Wendy Hiscocks as well as Creative Writing students reading from their works.

The program for March is in What's On on the back page. Watch *Campus News* for more details.



From left: Nicholas Andronicos, Michael Liew & Minh Hang

Student work on cancer recognised

Four of the Department of Biological Sciences PhD students in the Inflammation and Cancer Group, Mr Michael Liew, Ms Minh Hang, Mr Nicholas Andronicos and Mr Matt O'Mullane, have had their work recognised.

They won student bursaries covering full conference costs, to present their submitted work on the roles of cell-surface proteases in cancer malignancy and on inhibitors of this process at the seventh Lorne Cancer Conference in Lorne, Victoria last month.

The Lorne Cancer Conference is one of the outstanding international cancer forums.

Aboriginal Education Centre helps students settle in

A full orientation week from 13 February was a great introduction to university life for a group of Aboriginal and Torres Strait Islander students.

Offered by the Aboriginal Education Centre at the beginning of each year, the orientation program has a range of activities to assist new students.

It enables them to meet other students and support staff from the centre; find their way around the campus; develop skills to cope with studying and university life; and identify the people and structures that can support them with studies and personal needs.

'It's great knowing there are others as scared as yourself'

Students from past years have found this program extremely beneficial and as a result have come back to help run the activities which include barbecues, sporting activities, local area tours and meeting with people in the local Aboriginal community.

The support from students and staff assisting with the activities has been tremendous.

A group of third-year nursing students, Gail Sharman, Jeanine Squires



Peter Dabah from Cairns chats with fellow student Melissa Love, a second year Early Childhood Education student from Nowra.

and Gail Knell, acted as mentors and shared their experiences with the new students.

The faculties of the University were very supportive and the students had the chance to meet all of their tutors and assistants.

This is the first time the program has included cross-faculty contact for the students.

The students benefited from the introduction to lectures provided by Kim Draisma and Chris Stevens from the Learning Development Centre.

Many of them also indicated that they appreciate their orientation week being one week before the main University orientation as it

provides them with a comfort zone, the chance to identify support systems and 'it's great knowing there are others as scared as yourself'.

Of the students on the orientation program beginning study this year, five have enrolled in Nursing and one in Creative Arts.

Peter Dabah, a first-year Creative Arts student from Cairns, is here to study painting.

Peter previously completed a two-year TAFE course in painting and spent some time as an artist-in-residence at Flinders University, SA.

He wanted to 'come south' and thought that combining this with study would be a good idea.

Making new friends from overseas

One afternoon during Orientation Week more than 100 new international students were matched up with their Wollongong hosts for Autumn session.

This linking of students and volunteers is the basis of the International Friendship Program (IFP), jointly arranged this year by the International Office, Study Abroad and the International Committee for Overseas Students (ICIS).

The IFP is designed to promote cultural exchange between members of the community and individual international students.

It aims to provide students with a friendly contact while in Australia and to broaden their cultural experiences while studying at this University.

Some students are lucky enough to be paired up with people such as Bill Janes, a lecturer in Nursing who has hosted students through the IFP since its inception three years ago.

First students from Ethiopia and Wollongong's Dubai campus

Although his past students have all been American girls, this year Mr Janes will host the first Ethiopian exchange student to come to Wollongong, Ayalew Asfaw Shibeshi.

Ayalew's interest in horses led to him being matched up with Bill who runs horses on his property near Goulburn.

Ayalew is studying for his Computer Science degree specialising in software for the next three years.

He found out about the University of Wollongong through the UNESCO library and the Australian High Commission in Nairobi. Ayalew said: 'I came here because I admired the University and Eric Meadows (Director, International Office) for his quick and excellent reply to my letter.'

Volunteers from ICIS were at the IFP function sponsored by the IMB.

Vice-President of ICIS, Innocent Magaya from Zimbabwe, was there to meet other international students like himself such as Amy Becklenberg from Indiana University, Bloom-



Innocent Magaya from Zimbabwe chats with Amy Becklenberg from Indiana



ABOVE: Bill Janes meets his student, Ayalew Asfaw Shibeshi from Ethiopia

RIGHT: Enid and Arthur Sherwin with Hery from Madagascar.



ington. Innocent has been in Wollongong for a year and is in his final year of the MBA program.

Many ICIS members also act as hosts including Enid and Arthur Sherwin whose student is Ralainony Manantena Herison (Hery).

Hery, from Madagascar, will be in Wollongong for two years studying Computer Science. He completed the first year of his degree at the Institute of Australian Studies in Dubai which is a campus of the University of Wollongong.

Already Hery is loving the adventure of being on exchange and he has bought a new bike so he can ride everywhere.

He chose Wollongong because after looking at England, Australia and the US for exchange possibilities he decided that Australia offered one of the best standards of education and Wollongong looked beautiful between the mountains and the ocean.

Wollongong graduate Anthony Catanzariti will have lots of stories to exchange with Christine Ryan MacEwen from the University of North Carolina, Chapel Hill during this year.

After going on exchange to Chapel Hill in 1989, Anthony decided to 'repay the favour' of his wonderful hosts

in America by becoming involved in the IFP. He had such a great time in America that his six-month exchange evolved into a year.

Anthony is now an English teacher at Berkeley HS and is hosting two students through IFP, Christine Ryan McEwan and Ronald Hsu, an MBA student from Taiwan.

The International Office are still happy to accept hosts for the IFP for autumn session. Hosting an international student merely involves making contact with your student two or three times during the session: perhaps to share a meal, go to a barbecue or to the movies.

Local participants have found the experience of friendly contact with an overseas student very rewarding.

If you are learning a foreign language, have travelled overseas, or intend to travel, this is a good way to learn first-hand about a particular country, culture and language and to develop a friendship at the same time!

There are many students wishing to join the program from the US, Sri Lanka, Papua New Guinea, Hong Kong, India, Fiji, Tonga and Turkey.

They're waiting to meet you! If you are interested please contact Denise Hull at the International Office, phone (042) 213 173.



From left: Managing Director ITC, Jim Langridge; Mrs Volk; Shannon Satherly; Scott Blacklock; Megan Lyall; Megan Ryan; and Director of the International Office, Eric Meadows

California, Sweden and 'Dorothy Country'...

Encouraging students to broaden their experiences through the Student Exchange program is an important part of the University's culture.

In supporting this program, the Illawarra Technology Corporation (ITC) awards scholarships to outstanding students.

All of this session's recipients have performed exceptionally well in their courses achieving at least a distinction average.

At the scholarship presentation, Managing Director of ITC, Jim Langridge, said it was good to see that part of our thinking now is the idea of travelling for education.

His reminder to the students that they are role models and ambassadors of this exchange program was reiterated by Director of the International Office, Eric Meadows, who also told the students to 'Spread the word about us (Wollongong) because we are unique'.

Scholarship recipients who are overseas studying this year include Shannon Satherly, a postgraduate Creative Arts student, who has gone to the University of Kansas, Lawrence for one year.

One of the essential items Shannon has packed in her bag is a selection of photos of the beach because as she said 'there are no beaches in Dorothy Country'.

Shannon looks forward to studying

part-time at the Kansas City Art Institute, part-time at the University of Lawrence, while also getting some lecturing experience in her field of sculpture.

She said she chose Kansas because: 'It's a visible art world and as my interests are in sculpture, I will be following a tour of art criticism of Australian exhibits.

'Sue Rowley from the Faculty of Creative Arts is one of the curators of this exhibition and she will be an easily accessible contact for me.'

Another beach lover who will miss waking up each morning to views of Bombo Beach is Megan Lyall, a Bachelor of Education (Primary) student, who has gone to Berkeley, California.

Megan has always been interested in going on exchange and is now in the fourth and final honours year of her degree.

She said she chose Berkeley because: 'It is the finest institution in the world for education and I am really looking forward to combining study and travel whilst living in an American university college.'

Although Dianne Volk had already left to join her sister in New York Dianne's mother was able to accept the ITC Scholarship on her behalf.

Dianne, a Graduate Diploma in Science (Computing) student is spending six months in Illinois, Urbana-Champaign.

Her sister, Sandra, is a previous scholarship winner and is at the University of Riverside, California studying for her Computer Science degree.

Dianne will be joined in Illinois by another Wollongong student, Scott Blacklock, a Bachelor of Engineering (Computer) student.

Scott said: 'I used to think that only strange or rich people went on exchange, but after going to the States to visit a friend who was on exchange I thought it looked like a fun way to study.'

While studying part-time, Scott has been working for Illawarra Electricity on a cadetship.

As part of this he is allowed to study for one year full-time and that is what he will be taking advantage of this year.

Although she has just finished her first year, Megan Ryan has taken up a big challenge to continue her Creative Arts studies in Sweden.

Megan will be studying Swedish Culture and Society and particularly hopes to look at Art and Literature in the historic town of Uppsala.

Megan is from Mittagong and her dream to be on exchange in Europe because she wanted to learn another language has come true.

Her family are used to the idea because her brother who studies at UNE, Armidale is on exchange in Santa Barbara.

Thirty years ago, as an honours student at Sydney University, Dr Robyn Iredale from the Centre for Multicultural Studies, had the opportunity to participate in the Freedom Ride to protest against racism in some parts of NSW.

The busload of 32 students, led by the young Charlie Perkins, consisted of a range of people from different political, religious and other perspectives.

Many of these people met up again recently for a reunion.

The common thread that held them all together was the desire to draw attention to the discrimination facing Aborigines in Australia.

They highlighted some of the most overt racist practices prevalent in the 1960s – the banning of Aborigines from some clubs, pubs, public swimming pools and shops.

Walgett was the first town on the ride to attract national attention after a picket of the RSL club over its colour bar. Feelings were running high at the end of the day, so they decided to move on towards Moree.

The incidents at Moree gained na-

30 year reunion for Freedom Riders

tional coverage – Aborigines being banned from the public swimming pool, except for school swimming events or if the colour of their skin was not too black.

In those days people talked about half-castes and quarter-castes, and officials spent considerable time debating the percentages.

When they gathered to celebrate 30 years since the Freedom Ride the questions on everybody's mind were: 'Did the ride have any effect?' and 'Have things really changed?'

One of the interesting things about the reunion was the continuing commitment of most of the participants to social change.

Dr Iredale said: 'In answer to the first question, I knew such basic things as being counted in the Census changed in 1967 as a result of a referendum.

'The Freedom Ride was probably partly responsible for alerting many non-Aboriginal Australians to the humiliating position in which many Aborigines were living.

'Not be counted as part of the population was almost as bad as the fiction of *terra nullius*.

'At the reunion, however, I heard a number of Aborigines talking about the change that they had experienced after the ride.

'They realised that they did not have to live on the river bank in a tin shed forever, even though their parents told them that that was their lot.

'They began to speak up and talk back to whites.

'They no longer had to accept the institutional racism that Andrew Markus describes so well in *Civilising Savages*.

'The situation for Aborigines now is that they no longer face the overt racism that was prevalent in the '60s.

'The *Racial Discrimination Act 1975*, the establishment of ATSIC, the *Native Title Act 1994* and the Native Title Tribunal, and other administrative and legal mechanisms have been instituted to try to ensure the absence of discrimination.'

New links for Link program

The Secondary Schools Link Program, located in the Faculty of Education from 1989 to 1994, is now part of the Planning and Marketing Division.

This year the Program Coordinator, Patricia Young, will be working closely with the University Course Adviser, Liz Hilton, as part of the overall schools liaison program of the University.

The Student Role Models will be employed to act as campus tour guides as well as in their usual role of talking to the high school students in small groups about university life.

The Link Program will be expanding to include visits to schools in the southern Sydney area as well as all local and Southern Highlands schools, with the emphasis on Year 11 and 12 students.

Schools will also be encouraged to take advantage of visits to the University on a campus tour or as part of the 'Go For A Day' program in which the high school student tags along with a role model for a day.

STUDENTS REQUIRED Secondary Schools Link Program

Are you a second year student of the University?
Would you like to tell high school students all about University and share your experiences with them all while earning \$13.58 per hour?

Apply to be a student role model. It's a really rewarding job!

What do Student Role Models do?

- Attend training sessions on presenting material to students
- Visit high schools and speak with students about tertiary study
- Assist in the evaluation of the program when its completed
- Act as guides for campus tours

Program dates

Training: 8-19 May

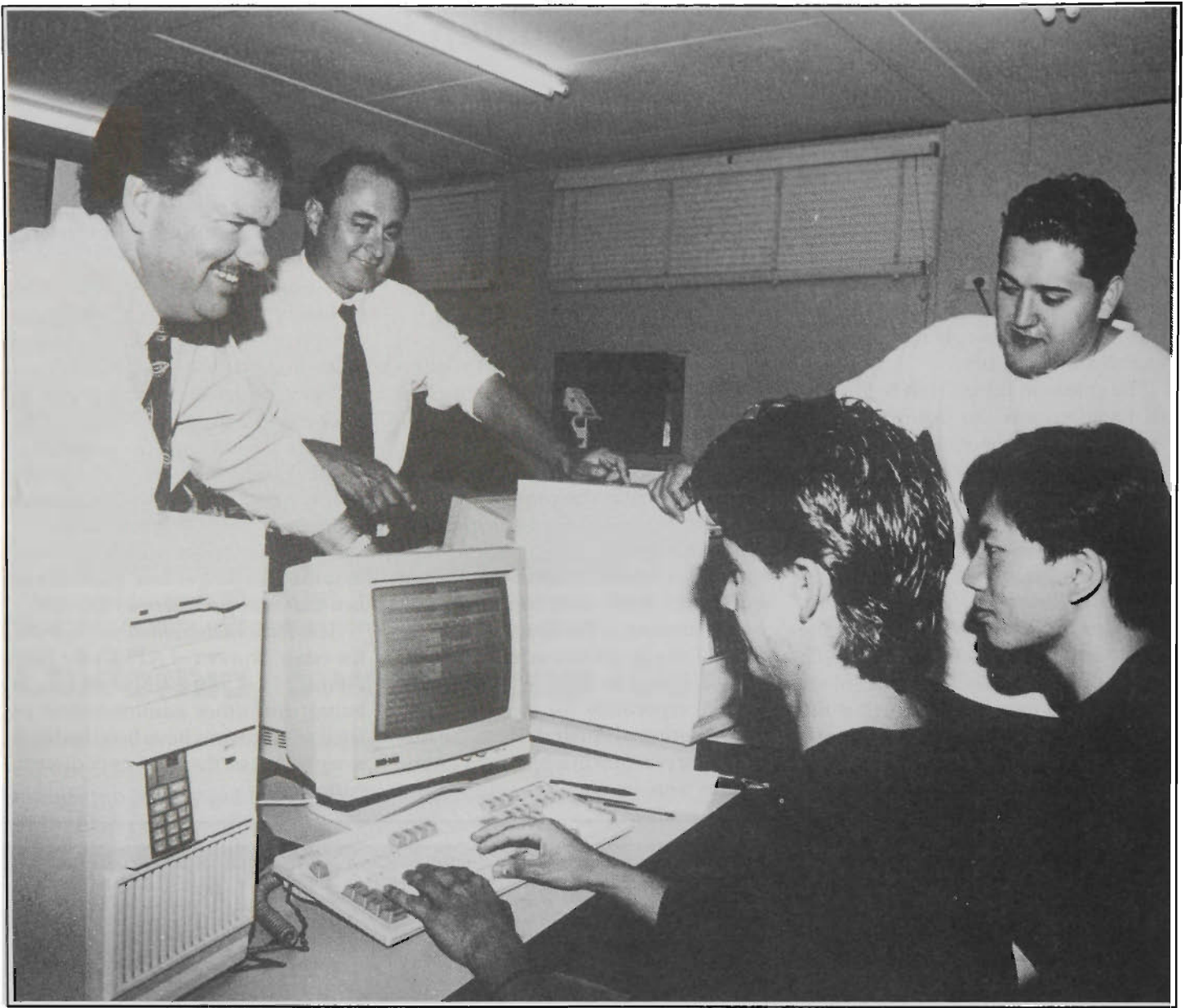
Visits: 22 May-9 June; 24 July-8 September

Where do you apply?

Application forms available from the Halls of Residence, SRC Office, and Planning & Marketing (upstairs in Administration).

For further information see Patricia Young, Program Coordinator, Planning & Marketing, Administration Building (36).

Tel (042) 213 980



Stephen Bates and Aidan Myers of Cruickshank Technology Pty Ltd with civil engineering students Erick Cordero, John Lee and Carlos Luppi

Civil and Mining receives \$100,000 software for teaching and research

Cruickshank Technology Pty Ltd has provided maintenance management software with a commercial value of \$100,000 to the Department of Civil and Mining Engineering for teaching and research.

The package, MAINPAC, is an essential competitive tool that allows industries to manage maintenance workloads more efficiently and effectively.

It adopts a proactive and preventive maintenance approach rather than a reactive one.

MAINPAC is a proven success in more than 50 different Australian industries including public utilities, defence, mines, transport, hospitals and manufacturing and process industries.

According to Dr Ernest Baafi, of Department of Civil and Mining Engineering, who initiated the installation of MAINPAC software on behalf of the University, MAINPAC consists of seven modules.

These include a plant register – database and cost his-

tory, an asset register – accounting data and depreciation schedules, job control – planning, forecasting and managing jobs, inventory – warehouse management and purchasing, catalogue – linked to inventory module, conditioning monitoring – predictive maintenance linked to job control module, and project planning – critical path method linked to job control module.

Some of the benefits of implementing MAINPAC are overall reduction in maintenance and operating costs, reduced inventory value, effective preventive maintenance allowing time to plan and avoid crisis management, captured costs and provision for job history analysis for corrective maintenance. According to Dr Baafi, MAINPAC provides a feedback loop in maintenance planning and control and will be used to research cost effective maintenance programs together with the local industries as part of research activities of the Geo-Environment-Mine Engineering Research Centre.

Wollongong contributing to World Wide Web

The Department of Electrical and Computer Engineering at the University has recently set up and maintains an educational Mosaic Home Page to provide services for the global Internet community.

However, some background to the avalanche of information superhighway terminology first may help the computer unsophisticated appreciate the story.

The enormous volume of electronically-stored information (the tip of an iceberg compared to the amount of information that will be stored in the future) requires efficient and 'user-friendly' retrieval systems to encourage and facilitate the wide usage that this valuable resource deserves, rather than it being restricted to determined experts.

World Wide Web (WWW or Web for short) is a network of documents or portion of documents linked together.

The information, in the form of text, sound, graphics and movies, can reside anywhere on the global network.

A WWW document page, written in HyperText Markup Language (HTML) format, consists of text and images interspersed with citation (or anchors).

Each citation appears highlighted (and underlined) in WWW browsers.

A click on a citation text transfers you to another file which is more than likely stored in another computer in your local or regional area network or even in another country.

A conventional book only allows you to work through the information in a linear fashion.

You are restricted to reading each page or skipping paragraphs or pages if you don't need the information.

WWW document pages are organised in a series of vertical and horizontal 'layers' you can work through in several directions, charting your own course depending on the information you require.

Text is combined with graphics, sound and colour to make the journey pleasurable and the information understandable.

Additional chunks of information are continually being added, drawing on resources available all over the world.

The wealth of information available on the Internet is tremendous.

The most user-friendly tool needed to explore it is available free of charge.

Various kinds of very useful tools such as search engines, lists and sensitive maps are available on the Web.

They can help you find and get the information you need. People with no previous experience can quickly catch on, and soon become an expert navigator of the Information Super Highway.

Now, back to the Electrical Engineering announcement.

A World Wide Web Archive for Power Engineering Education has been created in the Department of Electrical and Computer Engineering by Dr Parviz Doulai.

This Home Page is the first of its kind, aiming to foster information sharing and cooperation among Power Engineering educators worldwide.

It also serves as an information repository for CAL/Multimedia projects in place at Australasian tertiary engineering schools.

This, among other things, makes the Home Page suit the regional interests of academic institutions in the Asia-Pacific.

This archive has specific pages for Power Engineering teaching and learning resources and research and development reports in engineering

education in general.

Electrical engineering education in particular has its own page along with a listing of selected contributions presented in regional power systems and engineering education conferences.

Also provided are links to other electric power systems and engineering education Internet sites (WWW, FTP, Gopher for example) all around the globe as well as information about relevant upcoming conferences.

The new University WWW Archive also provides pointers to two separate Pages that have been developed to introduce the Department of Electrical and Computer Engineering and Faculty of Informatics to the Internet community.

The WWW Archive for Electric Power Engineering Education has been registered through submission to the 'NCSA What's New Page' and major WWW catalogs.

It has also been announced globally by postings to relevant WWW Usenet newsgroups and engineering education list-servers.

All three Home Pages currently appear in the Australian Web Server list. This represents the first three University of Wollongong entries on the list.

Dr Doulai said this task could not have been implemented without the cooperation of the Information Technology Services staff.

Help medical science

If you have a family history of non-insulin dependent diabetes mellitus (NIDDM) then you may be at risk of developing NIDDM.

STRESS may also affect your susceptibility to developing NIDDM.

The Biomedical Science Department is conducting a study to examine the role of stress and other factors contributing to a high-risk profile for developing NIDDM and cardiovascular disease later in life.

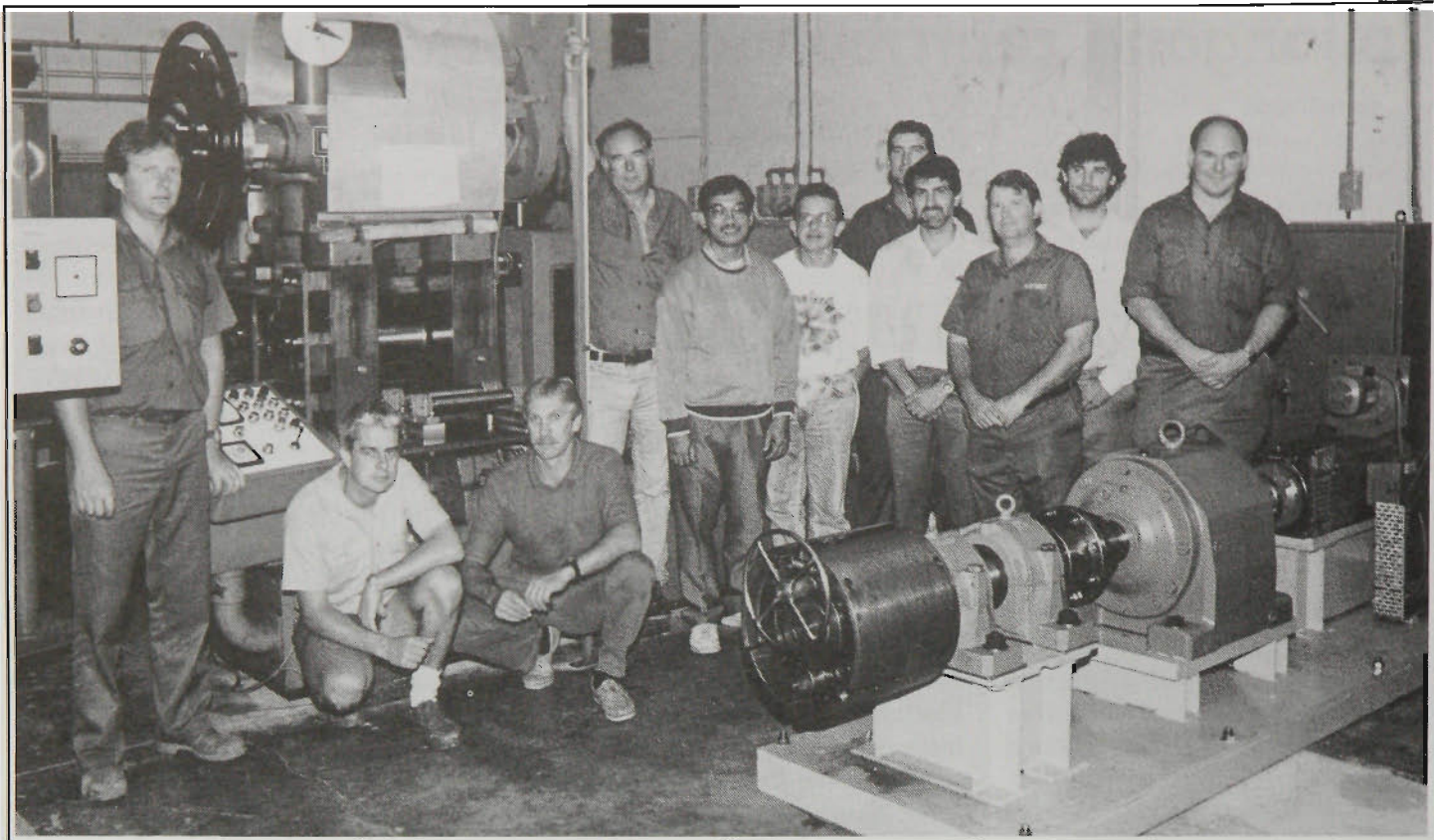
If one of your parents or grandparents has NIDDM and you are aged between 20-35 and are not presently diagnosed as a diabetic you are eligible to participate in this study.

All participants will be reimbursed for time and travel (up to \$50).

For more information please contact Ms Rhoda Lucas or Dr Lee Astheimer on 21 3023. Please leave a message on the Voice Mail if unanswered (available outside business hours also).

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OF
WOLLONGONG

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Coordinator of the Research Centre of Steel Manufacturing and Processing, Associate Professor Kiet Tieu, with Wally Cardillo's experimental rolling mill

Successful commissioning of experimental rolling mill with tension control

A technical officer from BHP Packaging Products, Wally Cardillo, has successfully designed and commissioned a tension control system for an experimental rolling mill at the University.

The project was for Mr Cardillo's final year thesis in Mechanical Engineering which he completed successfully in December 1994 under the supervision of Associate Professor Kiet Tieu.

The rolling mill was purchased by the Faculty of Engineering for research projects in the Departments of Mechanical Engineering and Materials Engineering, and in particular by the members of the new Research Centre of Steel Manufacturing and Processing at the University.

The Centre is coordinated by Associate Professor Kiet Tieu.

Before Mr Cardillo's project, strip was manually fed to the mill which does not truly represent true cold-rolling conditions.

The new tension control system includes a coiler and an uncoiler which automatically feed the strip into the mill.

As well as designing and commis-

sioning the tension control system, the project involved collecting data on friction and lubrication condition at the strip-roll interface.

The project objectives were to simulate hot and cold rolling on the experimental rolling mill, and to validate different mathematical rolling models.

The total expenditure for the purchase and installation of the tension control equipment and data acquisition was \$117,000 with \$90,000 coming from Mechanical Engineering, and \$27,000 from BHP Steel SPPD and other local companies.

Mr Cardillo received assistance from several individuals and companies to complete the project within the 12 months' limit which is quite a formidable task.

Those who helped were Giovanni d'Alessio from BHP Steel SPPD, Mike Campell from BHP Engineering Survey, and Roger Wylangowski from BHP Steel Non Destructive Testing.

From 50 CAD drawings, the fabrication, machining and balancing were enthusiastically provided by Stuart Watkins and Ron Marshall and oth-

ers from the Mechanical Engineering workshop, BHP Packaging Products repair Shop, Kevin Jones from Henry and Jones Pty Ltd, and Chris Harrigan from Fleetbilt Industrial Services.

Wolf Kornek from Stuart OilTech Pty provided the lubrication system and particle analyser.

Rolling materials were supplied by BHP packaging products, and University personnel Tony Kent and Keith Maywald (Mechanical Engineering), and Ron Kinnel and Albert Bult (Materials Engineering) assisted with hot and cold rolling tests and data acquisition.

The project was completed successfully and the tension control equipment is now fully operational.

Many projects in collaboration with BHP Steel are being carried out on this mill.

Other companies including Davy International and Comalco have also shown interests in these projects.

'Without Wally's drive, ability and excellent project planning, the project would not have been completed successfully and on time,' Professor Kiet Tieu said.

International maritime specialist available for seminars

Professor Alastair Couper will arrive in Wollongong on 24 March to be a Visiting Fellow with the Centre for Maritime Policy until the end of April.

Professor Couper is a former Head of the Department of Maritime Studies and International Transport at the University of Wales and Dean of the International Maritime Uni-

versity in Malmo in Sweden.

He is regarded as one of the world's leading experts in the general area of oceans policy.

His particular interests at the moment include port environmental management and the coastal zone, marine resource management of island areas, international policy-making for the marine environ-

ment, safety and health of seafarers, and educational and training needs for maritime activities.

The Centre for Maritime Policy is arranging a program for Professor Couper and would be pleased to hear from anyone interested in a seminar in these areas.

Contact Sam Bateman, Manager, Centre for Maritime Policy.

At it launches into its 15th successful year, Theatre South is offering a great subscription program for 1995.

Each of the outstanding successes that Theatre South has put on in the last 15 years were written by one of the writers represented in the new 1995 season, David Williamson, Katherine Thomson and Wendy Richardson.

The opening of the season was celebrated on February 22 with a taste of what the five all-Australian plays have to offer.

Emphasis this year is on comedy and the action gets underway on 16 March with an innovative work called *Lips* starring famed ventriloquist Chris Kirby and his co-star The Doll. In late April, comes *Barmaids*, written by Katherine Thomson. It is a play about the raucous and funny life of the long-suffering Aussie barmaid.

Renowned playwright David Williamson brings us *Sanctuary* in July.

A year of laughs

Williamson explores the life of an old, boozing, investigative journalist and his battle with a prying, young biographer.

An intriguing new comedy, *Happy Families*, by Simon Hopkinson and Helen O'Connor, follows in September and is a co-production with the Riverina Theatre Company.

The season finale *That Christmas in '75*, by Wendy Richardson, focuses on the daily lives and dramas of four families in one of the suburbs of Wollongong.

This year the theatre is also running the Saturday Club for children. All matinees start at 1.30pm and discounts are offered for adults.

Phone the theatre on (042) 296 144 for more details.

chris kirby in
Lips
A death defying comedy
by **C.M. Covington**
march 16 to april 1

David Williamson's
SANCTUARY
july 27 to august 12

...that Christmas in
Nov 23 to Dec 9
75
by **Wendy Richardson**

Barmaids by **Katherine Thomson**
april 27 to may 13

Happy Families
by **Simon Hopkinson & Helen O'Connor**
Sept 14th to 30th

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THEATRE SOUTH

Union Activities

The following is a list of Union activities and entertainment held throughout March. All members of the Union, students and staff are invited to attend.

- 8 March: Lunchtime, Simpletons, playing on the lawn, free. Evening, UniMovies - 'The Mask' and 'Ace Ventura, Pet Detective'
- 9 March: Evening, Welcome Mat, Drop City and Ashtray Boy playing in the Uni Tavern, free
- 15 March: Lunchtime, Cantolibre, playing on the lawn, free. Evening, UniMovies - 'The River Wild' and 'Clear and Present Danger'.
- 16 March: Evening, Skunkhour, Trout Fishing in Quebec, The Strange - in the Uni Tavern. \$5 members, \$8 guests.
- 20 March: Evening, CD launch at Wollongong University Campus, Function Room 1.
- 21 March: Evening, Hunters and Collectors and Custard, playing in the Union Hall. \$14 members and \$16 guests.
- 22 March: Evening, UniMovies - 'Forrest Gump' and 'Searching for Bobby Fischer'.
- 23 March: Evening, Hoopsnake and Renegade Funk Train - in the Uni Tavern, free.
- 24 March: Uni Movies - 'Three Colours White' and 'Three Colours Red'
- 29 March: Lunchtime, Cactus Child, on the lawn, free. Evening, UniMovies - 'Priscilla, Queen of the Desert' and 'Army Intelligence'.
- 30 March: Evening, Bubacca, playing in the Uni Tavern, free.
- 31 March: Evening, Sydney Symphony Orchestra performs 'Three Men and A Grand Orchestra' in the Union Hall. \$29 adult and \$23 concession.
- 3-7 April: Heritage Week.
- 4 April: Exhibition and smorgasbord in the Bistro.
- 6 April: Market Day with bush band.

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

- 27 April: Band Competition Heat 1, Uni Tavern.
- 1-5 May: International Week.
- 11 May: Band Competition Heat 2, Uni Tavern.
- 25 May: Band Competition Heat 3, Uni Tavern.
- 27 July: Band Competition Final.
- 7 August: Union Art Award.
- 4-8 September: Union Week.
- 8 September: Union Dinner.

General

The Campus Alumni Bookshop will open on the second and fourth weekends of each month. Come and browse through a wide selection of preloved textbooks and fiction. 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 (anytime).

- 10 March: Join Engineering Alumni for an evening of social discourse and merrymaking. Staff, students and alumni are very welcome. 6.30pm. Sports Lounge, Recreation and Sports Association. \$10 per head - cocktail food to be provided (\$8 student concession). BYO drinks.

Long Gallery

Exhibition program for 1995:

- 20 February-26 March: Texts from the Edge, Tapestry and Identity in Australia.
- 30 March-28 April: Postgraduate Show - Marilyn Walters, Binghui Huangfu, Enis Tan, Ron Stewart - Prints.
- 4 May-28 May: Print Show - 5 School Exchange Portfolio. University of Wollongong; University of Florida, Gainesville; West Virginia University; Indiana University;

Purdue School of the Museum of Fine Arts, Boston. Cambodian Textiles from the collection of Neil Manton. Monoprints: Jane Hall.

- 1-25 June: Mumblings - Patricia Prociv, Fiona Davies, Davida Wiley. Country Blues - watercolours Jelle van den Berg; Landscape Aspects - Vivien Haley block and mono prints on fabric.
- 29 June-30 July: NAIDOC Exhibition - Works by Aboriginal artists.
- 3-27 August: Artist Made Furniture.
- 1-24 September: Postgraduate Works - Eileen Dillon Smith, Marcie McConville, Enis Tan, Taskin Gencag, Hue Lin Zhu, Alan Spackman.
- 2 October-5 November: Archaeologies: Structures of Time - Diana Wood Conroy and Sharon Marcus. Reciphering - Katharine Nix. Pathways - Paper works by Ian Arcus.
- 13 November-10 December: BCA Graduating Exhibition.

Art of Lunch

- March 9: Work in progress, presented by writer Ron Pretty.
- March 16: Readings from recent work, Creative Writing students in readings from their recent work.
- March 23: Duo-pianists Marilyn Meier and David Vance play Gershwin.
- March 30: Completed Works, Media Arts students from the Faculty of Creative Arts will show their completed works from 1994.

Stop Press

IMB Competition winners

During enrolment and orientation, the IMB University branch held a competition open to students at the University.

The winners are:

- 1st prize, \$500 voucher, Emma Greenhalgh.
- 2nd prize, \$300 voucher, Mark Kelton.
- 3rd prize, \$200 voucher, Jonathan Lewis.