WOMEN IN MEDICINE

For many of us, five or six years of study would seem like a lifetime, but for some professions that's just the beginning. For many medical students, graduation marks the beginning of a long, hard specialist training program. A training program so demanding that noticeably fewer female graduates are choosing to embark on it.

Earlier this year, Newcastle University's Working Party on Women in Medicine held a seminar on Career Structure at the John Hunter Hospital. Particular emphasis was placed on combining work with a personal life during postgraduate training and specialist practice, an issue of increasing concern for the majority of medical graduates.

The Working Party on Women in Medicine was initially established to examine the problems of female medical students and attempts were made to arrange for medical students with partners and children to meet to provide a support structure for each other.

The idea failed. "We just couldn't set it up. The students were shy of each other and we soon realised that this would not be a successful avenue to pursue," committee member, Associate Professor Loris Chahl said. The group became aware that female medical graduates were particularly concerned about their career paths, with many believing that they could not pursue a specialist career path due to family constraints.

According to Professor Chahl, many women completing a medical degree want to take on specialist training. "Then the reality of the situation hits them," she said.

Dr Patricia Davidson, Director of Paediatric Surgery at John Hunter Hospital and Newcastle's only woman surgeon, adds to Professor Chahl's statement saying that "we would be short-sighted to see this as a woman's issue only". Many male graduates are also concerned with a life away from the hospital.

As higher qualifications are required in virtually all branches of medicine, formal training programs and postgraduate examinations are a necessary pre-requisite. Training programs may take as long as six years after graduating from the medical degree. This is the time during which many medical women would normally choose to have children and they are therefore presented with the problem of combining postgraduate training with a family.

A 1990 Graduate Survey conducted by Ros Cameron for the Programme Evaluation Committee of the Faculty of Medicine indicated that 63% of women in medicine felt that gender influenced their career choice, whereas only 14% of men felt that gender had an influence on their choice of career.

An increasing number of women are graduating from medicine; over the last two years, 53% of graduates from the Newcastle Medical School have been women. This has changed significantly since the first group of graduates in 1983 - of whom only 39% were female.

Despite the fact that a high percentage of women graduate with medical degrees, few of them pursue specialist training. According to Associate Professor David Powis, from the Faculty of Medicine, "specialist training is demanding and not compatible with child rearing".

To this end, the Working Party on Women in Medicine, held a seminar on career structure, with particular emphasis being placed on the difficulties associated with combining work with personal life during postgraduate training and specialist practice.

The seminar attracted an audience of 80% women and 20% men. It became increasingly obvious during the evening that the male contingent was equally concerned with child care and family commitments, as the female members of the audience.

Neil Spratt, a medical student undertaking a B.Med.Sci at Newcastle University, said that this was not only an issue for women. "Male doctors want a life beyond medicine too," he informed listeners.

Topics discussed included the relevance of research to postgraduate training, the
THE INTERNATIONAL COMPETITIVENESS OF AUSTRALIAN MANUFACTURING INDUSTRIES

Paul Kniest of the Department of Economics has recently completed the requirements for the award of a Master of Commerce degree for a thesis entitled: A Diagnosis of the International Competitiveness of Australian Manufacturing Industries. The thesis was completed during Paul's employment as a tutor in The Department of Economics at this University. His interest in the area of international competitiveness stems from his previous employment with the Bureau of Industry Economics (Canberra) and at the OECD (Paris), where he undertook a variety of research projects including an assessment of the economic impact of the Closer Economic Relations (CER) Agreement with New Zealand.

"It was important that the research was topical and relevant to current economic issues and not simply an exercise in research for research sake," Paul said. "While there have been many reports on and much has been written and spoken about this topic, it was apparent that no one had sat down and done a comprehensive analysis of the relationship between the structural characteristics of manufacturing industries and the degree of international competitiveness. The analysis presented in my thesis aims to at least partially fill this gap."

Paul emphasises that his research is not a test of trade theory as such, but rather an examination of those factors which are symptomatic of the level of international competitiveness, thus accounting for the use of the word diagnosis in the title.

When asked to describe the nature of the analysis, Paul had some delight in spelling out that it was "cross sectional rank correlation and single linkage agglomerative hierarchical cluster analysis". He points out that this is in the "supercalifragilisticexpialidocious" league, it sounds atrocious and really is precocious.

The results however, highlight a number of important aspects of the pattern of international competitiveness between Australian manufacturing industries. In particular, the importance of considering export and import competing markets as different and distinct and the need to analyse competitiveness on a bilateral basis are brought to the fore.

Paul feels that his results contribute to the understanding of international competitiveness of Australian industry and says that he would be more than happy to discuss them with any interested parties.

MEDAL FOR CHEMICAL RESEARCH

His work on the development of the Jameson Cell has won Professor Graeme Jameson from the Department of Chemical Engineering another medal, this one the Applied Research Medal from the Royal Australia Chemical Institute, the professional body for chemists, chemical engineers and industrial chemists.

The medal, awarded annually, acknowledges supreme recognition by his peers in chemical engineering and is one of several awards and citations to have come Professor Jameson's way recently.

VOLUNTEERS NEEDED FOR HOMELINK SCHEME

A community-based scheme aimed at helping some of the area's high school students is once again calling for volunteers.

The scheme, known as Homelink has been established because of the need in the community to support young people with special needs. It has been particularly successful in achieving its aims.

An initiative of the Hunter Caravan Project based at The University of Newcastle, the West Lakes Homelink program concentrates on assisting students in secondary schools. A similar scheme assists primary school pupils and their families in the Maitland/Cessnock/Kurri area.

Homelink operates as a liaison system between schools and the community and is now in its second successful year of operation. The program depends upon a caring group of volunteers to guarantee its success and this year, twenty people are needed to help secondary students who may be facing difficulties.

Co-ordinator of Homelink, Ms Barbara Pollock, said students are referred by the schools and families for many and varied reasons. Students can face many pressures both academically and socially and in many cases could benefit from the help that Homelink offers.

She said volunteers do not require any special training to help. They may be people who have children themselves, they may be grandparents or simply people with time on their hands, who feel they may have something to offer the local community.

A preparation course for volunteers will be conducted every Tuesday over seven weeks, between 10.30am and 2pm. The course commences on Tuesday, July 21, in the offices of the Department of Community Services at Toronto.

"After the course volunteers are required to spend one hour each week at the student's home. They will help with homework, time management, organisation and setting priorities for learning. The volunteers will also discuss with the students, any problems they may have, and get to know the family," Ms Pollock said.

"Homelink has been established because of the need to support our young people with special needs. A volunteer, through friendship and guidance can help a young person achieve more success at school. "Homelink is a community based scheme and is a way of bringing our schools and the wider community together. By volunteering, people can help our high school students the encouragement they need," she said.

For enquiries, please phone Ms Pollock on extension 6858.

By Jane Worthington
3rd year B.A. (Communications Studies) student on work experience with the Information and Public Relations Unit
WOMEN IN MEDICINE
Continued from p1

feasibility of obtaining adequate training while working shorter hours, issues of household organisation and the importance of the right partner.

Panel members discussed a range of possible lifestyles and according to Dr Barbara Young, Chair of the Working Party on Women in Medicine and Senior Lecturer in Pathology, "it was significant that each panel member had found a lifestyle, a partner, a family size and a career with which he or she felt comfortable".

However, it became obvious from discussions that these things are not always easy to come by and many sacrifices must be made along the way.

Mary Anne Hocking, a graduate of Sydney University who is now working as a general practitioner in Newcastle, told of the satisfaction she derives from her career. While she acknowledged that general practice is the career that many find to be most compatible with a woman's caring role, she expressed concern about how she would be able to fit a family into her demanding life-style.

Maree Bellamy, a medico-legal adviser with The Medical Defence Union (MDU), vividly portrayed the realities of life for a woman who combines the roles of doctor and mother. Maree, who has been a country general practitioner and a dermatology trainee, chose to enter the medico-legal field while waiting for a Dermatology Registrar training-post to come through. Maree found that she enjoyed this line of work immensely and has been with the MDU ever since.

In order to keep in touch with the practical aspects of her profession, Maree works as a general practitioner in a Newcastle surgery on a regular basis. She outlined the difficulties of combining her two careers with her family and personal life and says that being able to afford hired help (Maree has a Nanny to help with the child-care and house-work) is a definite advantage.

Although the speakers were comfortable with their respective lifestyles, they acknowledge that a problem still exists for many graduates (women in particular) contemplating specialist training. So what solutions can be offered? Some may say that part-time specialist training is the answer. Schemes have been introduced by a number of specialties however, according to Dr Patricia Davidson, this too has its problems.

Patricia outlined the problems associated with part-time training for specialties and made particular reference to surgical training. "In order for you to see everything, you have to be there," she said.

And while she would not condemn part-time training, she does point out that the quality of training is of the utmost importance. "Part-time training has, in principle, been accepted by most specialties. The problem, however, is a practical one," Patricia indicated.

"Medicine doesn't happen in eight hour periods," she said, emphasising that part-time work also leads to a lack of continuity in patient care. "Training needs to encompass night and weekend care. You have to be able to study the pathophysiology of a disease," Patricia indicated, explaining that the beginning phase involves thought and anxiety, the middle phase comprises the testing and therapy and the final phase is the recovery.

An alternative to part-time training may be the introduction of post-graduate training programs to encourage women, who have left medicine to have children, to return to their careers. Patricia says that this belief reflects what should become part of the Australian ethos.

"People have to realise that age and maturity has something to offer," she said, adding that quality medical care requires the balance of men and women doctors of different age groups to successfully care for the vast range of patients.

A greater degree of flexibility in child care would certainly help. Medical students and graduates with children are unable to work nights unless they have a family support system, as the majority of child-care facilities do not allow for shift work.

The difficulties associated with combining a family with specialist training are many and cannot be easily overcome. It would seem that it is ultimately up to the individual to decide his or her priorities in terms of work and personal life.

Perhaps the only answer lies in the words of Dr Patricia Davidson:

"If you want to do things competently and well, you have to work your guts out!"

For profiles on Drs Patricia Davidson and Lynette Reece turn to page 11.

STUDENTS GIVEN A SECOND CHANCE

In a lively and inspiring speech delivered at the first Newstep Graduation Ceremony last month, 1991 Newstep student, Scott Goodwin, compared the Newstep experience to that of soldiers engaged in trench warfare. The bonding and cohesion, he said, was partly "provided by the relationships between the lecturers, tutors and students" and partly by the support networks the students established during the year.

The Newstep (Newcastle University Second-Chance Tertiary Education Preparation) Program was launched in 1990 with the assistance of DEET funding for 17-21 year olds who are not eligible for entry to University courses because of disadvantage. Successful completion of this one year program enables students to enter degree and diploma courses across most faculties of the University. Newsteps is offered by the Department of Community Programmes and provides bridging in numeracy, literacy, science, computing and study skills. To date, approximately 75 students have successfully completed the Newstep Program with a further 70 enrolled in 1992.

Master of ceremonies and Newstep Co-ordinator, Dr Ian Whitson, congratulated the successful students and welcomed guests. Deputy President of Academic Senate and Chair of the Newstep Committee, Professor Frank Clarke, presented the Newstep certificate recipients to the Vice-Chancellor, Professor Keith Morgan, in the presence of Newstep Committee members, Newstep lecturers and tutees, and family and friends of the graduating students.

Scott Goodwin paid tribute to Newstep staff for their support and encouragement and to the University for providing both himself and his classmates with a second chance. "We have all grown and developed both academically and personally, because of the second chance we were given and for this reason we are all grateful, each and every one of us, for the opportunity to gain access into undergraduate study".
BRINLEY NEWTON-JOHNS

The death of Emeritus Professor Newton-John on the morning of Friday July 3 in his 79th year deprives the University community of one of its best loved and most colourful members.

As an undergraduate in Cambridge in the middle of the thirties Brin was active in the life of his College Caius and a highly valued singer performing in concerts and oratorios put on by CUMS. Probably his most outstanding performance as a gifted undergraduate amateur was in the title role of the oratorio "Solomon", of which some elderly Dons in Cambridge still speak.

On going down from Cambridge Brin accepted a position as an assistant Master under the legendary Headmaster Roxburgh at the newly founded public school Stowe, which Roxburgh had established after the first World War. Given the attempt of the school to develop the personality of the whole pupil, Roxburgh no doubt found his musical abilities as attractive in a new young Master, as his First in Modern Languages and his expertise in spoken German. Whilst at Stowe he married the daughter of the famous physicist, Max Born, who had come to a Chair in Britain from Germany. With the outbreak of War, Brin was involved in top level intelligence work, particularly in the cracking of German codes at the defence intelligence centre at Bletchley. After his War services he returned to Cambridge as Headmaster of Cambridgeshire County High School. A number of his former pupils and retired colleagues still speak of him with much affection.

In 1954 he was determined to try a career in a new country and applied successfully for the Mastership of Ormond College in Melbourne which was then run by the Presbyterian Assembly of Victoria as a Residential College of Melbourne University for men, and also had associated with it the Ormond Theological Hall for training Presbyterian Ministers. As a Welsh Presbyterian by upbringing, Brin found this an attractive appointment and one which gave scope for his development skills and pastoral care of young people. Some years later matrimonial difficulties led him to prefer not to work for a Church Body. He then was appointed by James Auchmuty to be the Head of the Division of Arts in the newly developed Newcastle University College, a position to which he was appointed in 1958. Under him it was a pleasure to work as a Department Head in the Division of Arts. However, his greatest achievement in this role before Autonomy was in reconstructing the Humanities course as a distinctive cultural history course run quite differently from the University of New South Wales syllabus, but similarly designed to provide a indoctrination for engineering, architecture, commerce and science graduates in the other of the two cultures.

But even more important than his fine teaching as Head of the German Department and his wise policy regarding Arts and Humanities, was his personal warmth. He played an active part in the beginning of student drama in collaboration with the Biggins family and some early members of staff like John Stowell.

An active squash player until a hernia operation put him out of competitive play, he remained a keen supporter of all University clubs in our early days.

Most significant was his love of Classical music, which was heard belloving through the old Arts building every day from his loud speaker system. Many who are still on the staff will recall that day in November 1960 when he opened the still unfurnished Tighes Hill Union Building by playing Beethoven's Ninth to a crowd of staff and students sitting on the floor one lunch hour. In 1965 he married Val Cunningham, a former concert pianist and then manager of our Co-op Bookshop. She and their two children still live in Sydney. Both of the latter have obtained excellent degrees at their University. Brin's daughter by his first marriage, Olivia, was fortunately able to visit him only a few days before he died.

With Autonomy he was appointed Vice-Principal and Deputy Vice-Chancellor to assist James Auchmuty in the development of the new University. Consequently other steps had to be taken for the Headship of the German Department and David Mowatt from Alberta was appointed to the Chair, but Brin himself was given a personal Chair in Spoken German. Unhappily his administrative duties much restricted his teaching activity; a matter he much regretted. As Vice-Principal, Brin was in charge of student services and was extraordinarily helpful to the Union and Sports Union. It was typical of his affection for his old staff that he came up two years ago for the 70th birthday of his former Amenities Officer, Harry Bradford.

In 1973 Brin felt that he would like to retire early to pursue his own interests. His wife Val was then embarking on a most outstanding career as a consulting psychologist and found she needed to move to Sydney with the children and this led to a decision to separate. Some years ago Brin married his third wife, Gay, with whom he has been extremely happy in a charming flat in Manly overlooking Harbour and Ocean. There, Gay pursued novel and script writing whilst Brin gave many broadcasts on the Sydney FM music program, with splendid comments one would expect from so devoted and cultivated a lover of the classical composers.

Brin enjoyed a rich and wonderfully varied life and gave much happiness and encouragement to a large number of people in the course of it. We regret his passing much, but we do so with gratitude and pride. It will be source of happiness to Convocation that he was able to attend this years Newton-John Dinner in such splendid form.

"A number of his former pupils and retired colleagues still speak of him with much affection."

Page 4
STABILITY OF POST-MINING LANDSCAPES FOCUS OF UNIVERSITY-LED RESEARCH PROGRAM

Factors affecting open-cut mines are the focus of a major research initiative being undertaken by Dr Garry Willgoose, of the University's Department of Civil Engineering and Surveying.

Dr Willgoose is a crucial member of a research team examining the problems of post-mining landscapes associated with open-cut coal mining.

He will be working with the Department of Agriculture and the Department of Mining and Metallurgical Engineering at the University of Queensland.

The Queensland Department of Primary Industries, the Queensland Coal Industry and the Australian Coal Industries Research Laboratories are also heavily involved in the project.

The aim of the $1.7 million program is to define the most economic post-mining landscapes for erosion and water quality control for open-cut mines and to develop computer-based tools for designing future landscapes.

Dr Willgoose's role is to use his "digital terrain, run-off and erosion model" and his computer-generated "landscape evolution model" to assess the long-term stability of various post-mining landscapes.

He will lead a team from the University of Newcastle who will link the most successful erosion and run-off models and digital terrain models to a computer-aided design package developed by a team from the Australian Coal Industries Research Laboratories led by Mr David Haneman.

Dr Willgoose said the intention of this collaboration was to produce a computer-aided design system that would allow mining companies to design post-mining landscapes that meet guidelines for erosion control set by regulatory authorities.

He said the specific objectives of the research program were:

- to determine the critical combination of degree and length of slopes that would result in acceptable erosion control for a range of spoil, soil and vegetative cover combinations;
- to establish the relationship between the quality of run-off water and spoil properties, topographic parameters and vegetative cover;
- to assess the suitability of models for erosion prediction and;
- to develop a process for the computer-aided design of stable post-mining landscapes.

The project leader, Associate Professor Clive Bell, from the Department of Agriculture at the University of Queensland, said the project was addressing one of the major issues facing open-cut mines.

The use of draglines produced a landscape consisting of a series of parallel spoil piles, with with slopes approaching 75%.

Such landscapes are generally re-contoured to improve stability against water erosion, but up until now there has been minimal scientific data available for use in this phase of the rehabilitation.

A small change in the topographic parameters or degree or length of slope can have a major impact on the cost of the re-contouring operation, which can amount to as much as $20,000 per hectare.

He said the research program would define the critical landscape parameters for erosion control and, in doing so, would enable companies to reduce the cost of spoil handling to achieve acceptable erosion control.

"The first phase of research will involve assessment of sediment and water movement over instrumented plots and catchments at the Curragh, Oakey Creek and Goonyella mines. Erodibility assessment with a rainfall similar at these and other participating mines and laboratory erodibility studies will also be conducted," Dr Willgoose said.

The $1.7 million program is being supported by BHP Australia Coal Ltd, MIM Holdings Ltd, Pacific Coal Pty Ltd, Callide Coalfields Pty Ltd, Capricorn Coal Management Pty Ltd, Curragh Qld Mining Ltd, representing 15 open-cut mines in Queensland, and by a Coal Research Development and Demonstration grant from the Commonwealth Department of Primary Industries and Energy.

Dr Willgoose said: "A feature of the ambitious project, which resulted from the combination of two similar, but initially independent grant applications to the Commonwealth Department of Primary Industries and Energy, has been the cooperative manner in which the research partners, the coal industry and the regulatory authority, the Queensland Department of Resource Industries, have developed the proposal, which addresses the concerns of both industry and government."
GEOLOGIST AIDS FORENSIC INVESTIGATION

A Newcastle University Geology lecturer is assisting the NSW Police Department with investigations into a murder case in Sydney.

Dr Collin Murray-Wallace says that such a "unique application of Geology" has assisted police enquiries in the past. Analysis of microfossils in the pyjamas of a murder victim in Adelaide, led to the identification of the murder site.

Following the discovery of a body on the western bank of the Georges River in Sydney last October, Dr Murray-Wallace was asked to analyse sediment found in the laundry tub of the accused's house. A blanket, believed to have been used to wrap the body of the murder victim had been washed in the machine, with the sediment having been deposited into the tub during the rinse cycles.

Dr Murray-Wallace's job was to analyse the nature of the sediment and compare it to the Georges River sediment to ascertain whether there were any similarities. According to Dr Murray-Wallace there are problems associated with this type of analysis.

"Much of the Sydney region is represented by Hawksbury sandstone," he explained. "As a lot of rivers drain through the same body of rock, it is difficult to say with certainty if that sediment is exactly the same. You could argue that the sediment may be found along any river in the Sydney region," he said.

Dr Murray-Wallace acknowledged that a further complication lay in the fact that a washing machine will selectively sort the sediment and particles such as clay will be removed in the rinsing process.

He is, nevertheless, "moderately confident" in his work and in the conclusion he has reached. A report has been submitted to the Police Department, however Dr Murray-Wallace was unable to provide further comment as a court case is pending.

Dr Murray-Wallace has been lecturing in Geology at Newcastle since October 1990. The main focus of his research centres on the development of the Australian coastline over the last two million years. Dr Murray-Wallace commented that a study of previous changes to the coastline will assist in the understanding of present day environmental changes.

He stated that not only does geology provide an important source of mineral wealth, it can also tell us a lot about how the environment works. No doubt, geology will have a further role to play in forensic investigations also.

THEFT: A CONCERN FOR SMALL BUSINESS OWNERS

In these difficult economic times, owners of small businesses are looking at ways of increasing their profit margin, cutting down on waste and improving their business operations. One of the areas of concern for small business owners is theft, a factor which affects their profit margin and causes considerable distress.

A one-day seminar/workshop to address this issue, organised by the Department of Community Programmes, proved to be both interesting and informative, and provided many answers for owners of small businesses.

The seminar was conducted by Mr Garry Taylor, Director of the consulting firm, Human Resources Development, which has a large number of corporate clients throughout Australia.

Organiser of the seminar, Mr John Hill, from the University's Department of Community Programmes, said the key topics discussed included: the most common signs of employee stealing, tricks of the credit card thief, strategies to reduce the incidence of shoplifting, evaluating current cash management procedures, actions necessary to take during an armed hold-up and actions necessary to take after an armed hold-up as well as "shrinking" in small business.

FRIENDS OF THE UNIVERSITY

Preparations for the 1993 Book Fair are well underway. Donations of books, magazines, records, CD's and sheet music would be most appreciated. Please phone Beverley MacDonald (616303) for further information.

We can arrange for the books to be collected or, if convenient, they can be left in the loading bay of the Department of Physics marked "Attention Friends".

University; Dr Walter Freeman who pioneered the study of complex behaviour Hogeweg who has modelled self-organisation in a vast range of biological systems. Offers of papers are now requested for the conference. Deadline for submissions - July 31, 1992.

For more details contact Terry Bossomier on (06) 249 2465 or David Green on (06) 249 2490, or send email to complexsystemsommitus@anu.edu.au.
RETURN VISIT FROM WORLD AUTHORITY ON ALEXANDER THE GREAT

During the months of August and September, the Department of Classics will host the eminent historian and fellow of Clare College, Cambridge, Professor N.G.L. Hammond as a guest lecturer.


Professor Hammond was a tutor at Clare College, Cambridge before and after World War II. From 1954 to 1962 he was headmaster of Clifton College in Bristol and from 1962 to 1973 was Professor of Greek at the University of Bristol. Since then he has spent lengthy periods as a Visiting Professor at the Universities of Wisconsin, Oregon, Minnesota and Pennsylvania in the United States and at Auckland in New Zealand.

During World War II, N.G.L. Hammond attained the rank of Lt. Colonel in the British army. His exploits in occupied Greece, Syria and Crete were recognised by his awards of CBE, DSO, and officer of the Royal Hellenic Order of the Phoenix. His stature as a scholar and teacher has been recognised in his election as a F.B.A.

Professor Hammond taught the young Godfrey Tanner at Cambridge and this connection has occasioned his previous visits here as external examiner in Classics, Mrs Hammond will accompany her husband here and hopes to resume friendships in the Archivists section of the Auchmuty Library. Mrs Hammond is deeply involved in the private correspondence of Jane Austen.

Professor and Mrs Hammond sailing on Lake Macquarie

CONVOCATION PROUDLY PRESENTS PROFESSOR ADRIAN PAGE’S INAUGURAL LECTURE

"THE LESSONS FOR MASONRY FROM THE NEWCASTLE EARTHQUAKE"

Thursday July 23, 12.30pm
Lecture Theatre K202, Medical Sciences Building

A series of Inaugural Lectures was instituted by Convocation to invite Professors to introduce themselves to our graduates and members of the campus community, whilst informing us about the recent developments in their areas of specialty.

Professor Adrian Page has been a Lecturer in the Department of Civil Engineering and Surveying since 1971. He has gained international recognition from work conducted in Scotland, Canada and Australia, and is also a member of professional bodies in Australia, Britain and the United States.

Professor Page has won several awards including the RW Chapman Medal awarded by the Institute of Engineers, Australia for the most important contribution to the science and/or practice of structural engineering in the discipline of Civil Engineering.

The Newcastle earthquake has been the most expensive natural disaster in the history of Australia, causing damage to buildings in excess of 1 billion dollars. Professor Page has played an integral role in the assessment and design of buildings as a result of the earthquake.

Professor Page’s lecture will largely consist of slides taken immediately after the earthquake, demonstrating its devastating effects.

The programme for the event is as follows:

12.30pm Lecture
1.15pm Lecture concludes with question time
1.30pm Light refreshments in foyer next to Lecture Theatre

The lecture is free and everyone is welcome to attend.

For further information, please contact Ms Alison Kinder on 216464.

BOOKS, BOOKS, BOOKS

Professor Keith Morgan draws the winner with Ms Pat Whitelaw looking on

For those who enjoy reading the odd book or two, or others who find themselves continually buying new books for study, the prospect of twelve months supply of vouchers would sound extremely enticing, to say the least. At the University’s Co-op Bookshop that is exactly what a recent competition was offering!

It was the first of its kind run by the Co-op Bookshop. Book buyers were keen to enter, with well over two hundred entries received. The competition, which was open to anyone who bought books from the Co-op Bookshop during the month of June, was offering monthly vouchers to the same value as the amount spent and was part of a promotional campaign for all university Co-op Bookshops.

The number of people buying books had increased during the month, as the usual discount of 13% was raised to 15%. "It was a particularly good time to run the competition," Ms Pat Whitelaw from the Co-op Bookshop said.

The competition winner, Ava Sabrina Yu, was drawn by the Vice Chancellor, Professor Keith Morgan. Unfortunately, Ms Yu had purchased books to the value of only $3.95. Professor Morgan laughingly suggested that, at this rate, a number of winners could be drawn. However, as in any competition, there can be only one winner.

Although Ms Yu will now be able to purchase books to the equivalent value every month for twelve months, she may wish to let her monthly totals accumulate over the twelve month period to enable her to purchase a more expensive book at the end of the year. Failing this, she will be entitled to a discount of $3.95 each month.

Ms Whitelaw pointed out that people often spend $100 or more on books, so there is no doubting how a competition such as
NEWCASTLE UNIVERSITY MAY LEAD NATION IN ENVIRONMENTAL MANAGEMENT

According to Dr Diana Day, Newcastle University has the potential to lead Australia in environmental research, planning and management. She expressed the opinion that ours is a very unique region, not only do we have a University with a lot of talented people, we also have many regional industries and environmental planning bodies concerned with air quality, water quality, contamination and environmental health.

"Everyone in the Hunter is concerned with the environment," she said, adding that the University was a good place to put that concern to work. As many of the environmental problems and challenges faced by Australia already exist in the Hunter, the opportunities for the University are numerous.

Dr Diana Day, a member of the Board of Environmental Studies and Senior Research Fellow at the University's Centre for Environmental Management, is herself a graduate of this University. Diana obtained an Honours Degree in Geography and a Diploma in Education from this University before moving on to the University of New England where she undertook a PhD in the field of Fluvial Geomorphology.

During and after her PhD, Diana spent a total of four years "in the rain", setting up instrumented catchments, and monitoring rainfall, run-off and water chemistry. "I quickly got sick of that," Diana recalls, "and moved to Canberra where I was invited to join the ANU's Centre for Resource and Environmental Studies". Diana and many co-workers started a project entitled Factors Limiting Coal Production in the Hunter Valley which was funded by the then National Energy Development and Demonstration Council and the ANU.

Upon leaving this position, Diana worked for the NSW Department of Water Resources for three years before taking leave to return to Newcastle University to take up her present position. Her task here - to review the University's current environmental activities (teaching, planning and research), to make proposals for the future and to "help make it happen".

She remarks about the incredible assortment of talent existing within the University in the area of environmental research. In a recent edition of the University's "Environmental Newsletter" (17(2):2, June 1992), Diana writes: One aspect that stood out in the Survey was the sheer number of extremely diverse research projects in environmental science, engineering and management across the University. It became obvious that the University had indeed a rich resource of environmental expertise, much of which was formerly "hidden" to the wider University and the outside community.

Diana outlined some of the interesting research projects currently being undertaken at the University, including the effects of scientific technologies on public health, blood lead levels in Boolaroo, skin cancer and protection of school children and conflict resolution in environmental planning.

Diana's report, entitled Proposals for the Future for Environmental Management and Science, has been circulated on campus to Deans and others involved in environment teaching and research. The report will also be considered by the University Senate and Council over the next few months.

The report states that the academic community world-wide has responded to the need for environmental planning by implementing new teaching courses and encouraging environmental science and management research.

Diana's recommendations, if accepted, will certainly pave the way for The University of Newcastle to become a leader in environmental studies.

In her report, Diana recommends possible changes to undergraduate courses, however states that she is primarily concerned with the development of postgraduate courses and the University's environmental research. "My bottom line is that I believe the University needs a Chair in Environmental Management," Diana indicated. "If we don't achieve that I think we will have missed a big opportunity because the whole community is galvanised around the environment. It is a major issue in all sectors now," she added.

Diana stressed that the University has the talent and the focus, however needed the vital academic leadership, credibility and vision a Chair would provide, to develop the environmental management area. "While we have a number of specialists in the environment area, we need a new professional appointment to give a much needed academic focus to research and development in the environmental management field, especially in the natural resources management and regional environmental planning," Diana said, adding that that person would also play an ambassadorial role to link up more closely with outside organisations in the region, the state, the nation and globally.

According to Diana, the University will need to look very closely at developing training courses for public sector groups. "There are so many things we can do," Diana said enthusiastically. "We can, for example, have short term training courses for government organisations - particularly in the area of environmental management; a number of government agencies have already expressed interest."

Diana believes that the future for environmental planning is unlimited. She is currently talking to industry and community leaders in an effort to let them know what the University has to offer now and what it can potentially offer in the future.

In her report Diana writes that the time is right for The University of Newcastle to "demonstrate vision, action and flexibility by capitalising and developing further its resources in research and teaching in the environmental management and science field".

Dr Diana Day, helping to "make it happen"
CLIFFS, ROCK PLATFORMS AND MUDBRICK HOUSES

The University's Department of Community Programmes will be holding a number of interesting and informative courses over the next three months.

Already underway is a course entitled Introduction to Geology in which students will learn to identify a wide range of rocks, minerals and fossils as well as obtaining an increased understanding about the environments in which they are formed.

If you have an interest in Geology but have missed the introductory course, then join the Field Excursion to be held on Sunday, August 16, as the group explores the Geology of the Newcastle Coast.

The Group, guided by Earth Sciences lecturer, Joe Whitehead, will investigate the rocks exposed in cliffs and rock platforms along the classic coastal outcrops from Nobby's Head South via Nobby's Beach, Newcastle Beach, Shepherds Hill and Merewether Beach towards little Redhead Point.

No previous geological knowledge is necessary. Early enrolment is recommended as only a limited number of places are available.

A one day tour to 'Earthways', the mudbrick home of Brian and Sally Woodward, will be conducted on Sunday, September 20.

Set in the beautiful Wollombi Valley, the home is made of mudbricks with stone footings, mudbrick floor and recycled windows and doors. Termite resistant native timber has precluded the need for poisonous sprays. Solar electricity powers the usual range of electrical appliances and a composting toilet recycles human waste and reduces water consumption.

According to course organisers, this demonstration day would be invaluable for anyone with ideas of building in mudbrick, using passive solar technologies, looking for design ideas which are environmentally based; or students of architecture wishing to become acquainted with this growing trend in building technologies.

Other novelty excursions currently planned include a visit to Beltree, a historical rural estate at Gundy; a four-wheel drive trip down the Great North Road and a sailing adventure on the Hawkesbury River aboard the majestic William IV.

For further information on courses or excursions offered by the Department of Community Programmes, telephone 215358 or 215551.

THE LASER HAS ARRIVED

Professor Keith Morgan and Dr John O'Connor examining the new Laser

PHOTOGRAPHIC COMPETITION EXTENDED

The closing date for TUNAC'S photographic competition has been extended to August 17. Twenty entries have, so far, been submitted, however more are needed if the exhibition in the Great Hall Foyer is to be a success.

So come on - get those cameras clicking. The theme University People and Places allows for a lot of imagination and scope. The entries we have received certainly reflects this!

The prize money is definitely a drawcard - $500, $200 and $100 in the officially judged competition, as well as in the "People's Choice" competition.

Perhaps you already have a funny, interesting or dramatic photo of University people or of an event. If so, have it reprinted in a 20 x 25cm format, mount it on white card and submit it. It's as simple as that!

Remember to include an extra, unmounted print, which will remain the property of the University and may be included in a future photographic essay on the University.

We hope to make this a biennial event and are relying on you to make this year's competition and exhibition a success. Why not use this opportunity to express your interpretation or view of the University.

You may even win one of those lucrative cash prizes!

Entries should be submitted to the University's Information and Public Relations Unit by Monday, August 17. And yes, you may submit as many entries as you wish!
THE LOVE OF THE NIGHTINGALE
A play by Timberlake Wertenbaker

First performed by the Royal Shakespeare Company, Stratford-upon-Avon, in 1988, The Love of the Nightingale received much critical acclaim from reviewers. The following year, Wertenbaker became one of the few playwrights to have two plays running concurrently in the West End, The Love of the Nightingale and her other highly acclaimed production, Our Country’s Good, which explores the issues surrounding the convict staging of the first play in Australia.

The Love of the Nightingale is a complex, feminist treatment of the Ancient Greek, Tereus/Procne/Philomel myth taken from Ovid’s, “Metamorphosis”. Wertenbaker has deconstructed the original myth to provide a post modern, multi-layered exploration of society and concludes that nothing much has changed in the last several thousand years. Wertenbaker juxtaposes classical mythical tragedy with the questions and problems of our modern world. A Greek chorus asks “Why are little girls raped and murdered in the carparks of dark cities?” Both men and women must address such problems.

The Love of the Nightingale’s powerful message is that only through questioning can a vigilant society remain healthy. We must all speak out against injustices, oppression, violence and male domination in war, politics and the atrocities inflicted on women.

The Newcastle University Drama Department presents what promises to be a spectacular, stylistically eclectic and pan-historic staging of Wertenbaker’s play as its mid-year production. Directed by Helen Fletcher with a cast of twenty-five actors, musicians and dancers, the production combines the talents of students from Newcastle University, the Hunter Regional Dance Company, the Newcastle Conservatorium of Music and dance students from Whitebridge High School.

Newcastle University Drama Theatre
July 21 to August 1 at 8.00pm
Tickets $10.00 and $6.00 Concession

JAMESON CELL...
Continued from p2

His research subject is the science of bubbles, more specifically the ways in which bubbles can provide a means of separating particles from suspensions in water, by flotation. Professor Jameson researched and developed a device known as the Jameson Cell, which uses bubbles to collect valuable minerals from wastes and impurities.

The medal was presented at the 75th Anniversary Dinner held in May by the President of the Institute, Professor Frank Larkins. The citation stated that Professor Jameson had been selected for the honour for his contribution to Chemical Engineering in particular his innovative research culminating in the development of the Jameson Cell.

"The device is useful in the treatment of coal and metallic ores, and also in the treatment of wastewaters," Professor Jameson said.

"Flotation can be used to remove suspended oil and grease particles from streams which may find their way into the environment. It has particular relevance today where these problems have to be dealt with quickly and efficiently in the most cost-effective way.

"I am honoured to have been presented with this medal which recognises many years of effort. I am also delighted that through my research, which gives me a great deal of enjoyment, I have been able to contribute to the advance of science and technology," he said.

MUSICIANS ON A WINNING-STREAK

Students and staff members of the Newcastle Conservatorium of Music have been on a winning streak in nationwide music competitions.

Catherine Davis, lecturer in piano at the Newcastle Conservatorium, was recently selected as one of four national finalists in the keyboard division of the ABC Young Performers Award. Miss Davis played the Ravel G Major Piano Concerto in the competition final with the Melbourne Symphony Orchestra in the Melbourne Concert Hall.

Appointed to her position at the Conservatorium in 1991, Miss Davis has given recitals in London and South East England, Ireland, Sweden and the Channel Islands as well as throughout Australia. In England she was employed as accompanist for the London Philharmonia Orchestra, BBC Symphony Orchestra and Royal Philharmonia Orchestra, and was also a soloist, chamber musician and accompanist on Yehudi Menuhin’s Live Music Now scheme.

Conservatorium student, Phillip Tweed and his wife Jodi, were also flown to Melbourne and won their heat of the nationwide New Faces competition, singing their own composition, a Christian song called I Believe in You. Phillip and Jodi form one of only seven acts out of the 600 initially auditioned to get through to the final which will screen on Sunday, 19 July.

Don’t miss their performances during the 1992 Keyboard Festival, 24 - 29 August, at the Conservatorium!

BOOKS, BOOKS, BOOKS...
Continued from p7

this could help with book costs. "There was a woman here last week who spent $200 on books and I was hoping she would win, it would have been fantastic," Ms Whitelaw said.

"Judging by the sheer numbers of entries in the competition there is no doubt that it will run again in the future." For the rest of us - let's hope so!

by Jane Worthington
3rd year B.A. (Communications Studies) student
on work experience with the Information & Public Relations Unit
STATISTICS: Newcastle University Medical School has, this year, received a record number of applications. A total of 1949 applications, from every state of Australia (as well as 12 from overseas) have been received. The male to female ratio of applicants is almost equal, with 48% of applicants being male and 52% female.

Associate Professor, David Powis, from the Faculty of Medicine, indicated that applicants will be undergoing Psychometric testing in August and September. "The tests form part of our personal qualities assessment and we're basically looking for those non-academic qualities that we think ought to be present in doctors." These qualities include the ability to problem solve, to reason logically and to make decisions appropriately. Of the 1949 applicants, 250 will undergo interviews and 64 will be accepted into the course.
STAFF ASSOCIATION EXECUTIVE

The following members of UNSA (Unregistered), UNSA (FAUSA Registered) Branch have been elected to the 1992 Executive:

- **PRESIDENT**: Dr Bill Warren, Education
- **VICE-PRESIDENT**: Mr Jock McQualter, Education
- **SECRETARY**: Dr Duncan Macdonald, Economics
- **TREASURER**: Dr John Rodger, Biological Sciences
- **COMMITTEE**: Ms Jo Gaha, A/P Colin Keay, Dr Kathryn Robinson, Mr Ken Lee, Ms Liane Flynn

SCHOOLS VISIT DAY

More than 4,500 HSC students visited the University in July to gather information about the wide range of tertiary opportunities offered.

The majority of the visitors came from the Newcastle and Hunter Valley Region, however many travelled from the Central Coast, Sydney, the mid-north and north coasts and the western parts of the State to take part in the lectures and hands-on displays.

The University's Prospective Student Liaison Officer, Ms Julie Swain, said that with more than 60 undergraduate courses in a wide variety of disciplines, the University was a very dynamic and diverse place.

"We expect a lot of interest in new courses starting next year. These include the combined Law degrees which will enrol 60 students and the Bachelor of Speech Pathology which will enrol 25," she said.

Ms Swain added that the Schools Day provided a great opportunity for students to see how a university works and to experience the atmosphere of the campus, as well as enabling them to research their options for a future career.

MIXING TECHNOLOGY SYMPOSIUM

A symposium organised recently by the Department of Chemical Engineering, in conjunction with the Newcastle Chemical Engineering Group was a resounding success both for the Department and those who attended.

The convenor of the event, Dr Nafis Ahmed from the Department of Chemical Engineering, said the symposium was the first of its type devoted solely to this topic in Australia and attracted more than 50 participants from the mining, pharmaceutical, food, chemical and other process industries from all over the country.

One of the highlights of the Symposium was that Professor Alvin Neinow, who holds the Rhone-Poulenc Chair in Biotechnology at the University of Birmingham, took the opportunity to be part of the meeting as the keynote speaker. Professor Neinow is considered to be one of the world authorities on mixing and is keenly interested in the gas-liquid mixing work being carried out in the Department of Chemical Engineering. His visit was the result of an invitation extended to him by Dr Ahmed when he visited Birmingham in December last year.

Various aspects of mixing were covered in the Symposium, with special emphasis on gas-liquid and solid-liquid (suspension of solids) systems. Seven formal papers were presented, with ample time for general discussions and opportunity for audience participation.

Dr Ahmed said that considering the diverse interests and expertise of the participants, most areas of mixing were covered. He said the most pleasing feature of the meeting was the enthusiasm of the participants as observed by some of the seasoned members of the audience.

"Mixing is increasingly being recognised as a Science rather than an 'art', and it may be the right time to propose the idea of regular meetings for practitioners in this field in Australia," Dr Ahmed said.

"It seems it will come to fruition. The most positive outcome of the meeting has been the decision to form a 'special interest' group on mixing in Australia, with meetings at regular intervals," he said.

Dr Ahmed was elected to convene a committee to commence work in this direction and offers of financial assistance were forthcoming from a number of companies.

"This offers us the opportunity of establishing The University of Newcastle as the acknowledged centre for mixing research in Australia," Dr Ahmed added.
**RED NOSE DAY**
**AUGUST 28**
**BEING A LITTLE SILLY IS A BIG HELP**

Approximately 500 babies die from Sudden Infant Death Syndrome (SIDS) every year in Australia, however the cause of SIDS is not yet known. Over 4 million dollars has already been allocated for research activities. Red Nose Day ensures that this research can continue - there is still so much to learn. Not only has Red Nose Day created widespread public awareness of SIDS, it has also broken down many barriers for families who have suffered a cot death. By supporting Red Nose Day you can help solve the SIDS mystery and provide necessary counselling and support for families.

Buy your Red Nose or Possum Badge ("I couldn't possumly wear a Red Nose") from Donna Booth, Postgraduate and Scholarships Office, Hunter Building, or Anne Burtoft, Information and Public Relations Unit, Chancellery.

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**FOCUS ON**

**CERAMICS & PHOTOGRAPHY**

If you haven’t yet been to WATT SPACE to see the latest exhibition - FOCUS, there is still time!

The exhibition, which features works by three very diverse artists, Jan Downs, Faye Neilson and Emil Goh, will close on July 27.

Jan Downs, ceramicist, won The Newcastle University Union inaugural acquisitive prize in 1991.

Faye Neilson’s ceramic works explore aspects of a personal female spirituality and the use of fire as a symbolic means of purging or purification.

Emil Goh is known for his installations and photography. His photographs concentrate on the aesthetics of composition and the human torso.

Experience FOCUS at WATT SPACE, Thursdays to Mondays from noon to 6.00pm.

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**STUDENT ENQUIRIES**

From July 24 until further notice, the Student Enquiry Counter, located in the foyer of the Chancellery building, will close at 3.00pm on Friday afternoons, to enable counter staff to undertake staff training and development.

Friday afternoon closure will be reviewed before the beginning of October and counter hours will be extended to provide a 9.00am to 5.00pm service over the busy admissions and enrolments period, from a date to be determined.

According to Ms Wallom, Assistant Academic Registrar, this arrangement will enable counter staff to be better equipped to provide a high quality service to students and other clients.

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**The French Club**

Invites You To A
**10 Day Late Bastille Day Dinner and Masked Ball**

Friday July 24, 8.00pm
Irene Hall, Newcastle
Enjoy A Three Course Meal for only $10.00
Dress must be in the colours of the French Flag
Masks will be provided!

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**"SUCCESS & ETHICS"**

**ARCHITECTURE NEWCASTLE THEORY WEEK 20 - 23 JULY**

Conflict often arises between perceptions of success and perceptions of ethical behaviour. The subject of ethics embraces an array of cultural, social, philosophical and religious considerations. So does the subject of success and the two subjects can sometimes be seen to be synonymous (Florence Nightingale) and sometimes mutually exclusive (the pirate Morgan). The program therefore considers the shifts in association between the two terms in relation to several contexts.

The potential heavienss of the theme has been offset by engaging only RELUCTANT SPEAKERS who should manage to get well off the subject and make the events entertaining, enjoyable and relevant to ALL STAFF AND STUDENTS particularly all those of us who are neither successful nor ethical.

For details contact the Faculty of Architecture on ext 5771.
ADVERTISEMENTS

FOR SALE

One set of Rola roof racks, to suit Magna Station Wagon (not current model). Includes instructions and fixing tool. Asking $150 ono (new price $200). Please phone ext. 5411 or 43 9217.


Kreepy Krauly pool cleaner in as new condition. Used once. New price is $600, prepared to sell for $400. Please phone Cee Pattison on ext. 6457.

Dynastar (Omega) Dynosoft 180 cm skis, Salomon 626 bindings. Rossignol stocks, Salomon SX 70 boots 345 (size 9). All in very good condition. Skis waxed and ready to go. $235. Please telephone 48 7037.

Exercise bike $100 ono. Queen size futon mattress $150. Both in excellent condition please telephone Ext 5735 or 61 3105 after hours.

Pianola in very good condition, with seat and 26 rolls. A bargain at $1600. Phone Allan Milgate on ext. 6399.

Word processing - assignment, thesis etc. Ring Julie Coppens on 907145.

Are you an academic who needs accommodation in Newcastle for two nights a week? I have a small room with a great view. Please telephone 29 1016 (H) or ext. 6012.

Are you a clean, energetic female looking for a place to live? I have a room to let in Mayfield, close to public transport, hospital and shops. $70 per week. Please phone Gill on ext. 6460.

Charming 2/3 bedroom brick home - partially furnished, includes fridge, TV and washing machine. A quiet residential address with pleasant neighbours close to Blackbutt Reserve and Blackbutt Shopping Centre. Lockup garage. Small pretty garden requiring minimal maintenance. Available late July for up to 6 months rental. $180 a week but negotiable for the right tenants. For enquiries please telephone 216433, or 633764 after hours.

Heritage listed Terrace House. Renovated, freshly painted, 4 bedrooms. Long lease available. $165 per week. Ring Raoul Stogaus on ext 3691, or 526238 after hours.

Visiting UK Academic seeks exchange accommodation in Newcastle for 4 months (July-October 1992) Anyone going to the U.K. and interested in exchanging houses may wish to contact: Dr R Bradnock, Springwood, Martinsend Lane, Great Missenden, Bucks HP16 9HR Tel: 0494 890977.

Fabulous, spacious, 3 bdrm furnished house and garage with leafy surroundings and vege patch. Quiet area with friendly neighbours. Close to Uni bus stop, walking distance to Cardiff Shopping Centre and trains. Non-smoker with a happy disposition required to share with 26 year old female. $50 per week. Please phone ext. 5526 or 565404 after hours.

PRIME REAL ESTATE 25 Sq Block Veeer Residence, 3 Bedrooms plus sunroom, sunken lounge dining room, self contained 1 bedroom flat, garage 50ft x 20ft plus 3 car lock-up garage. Adjacent to University. Walking distance to Stockland Mall. Birmingham Gardens. Phone 559961

COMPUTER USERS FORUM
FRIDAY JULY 31 2.00 PM
PARKROYAL GREAT HALL

A computer users forum is to be held at the end of July, will provide an opportunity for any computer user to raise matters of concern relating to computers or computing at the University.

Do you have problems you would like discussed? Please advise Mr Bruce Cheeks Department of Management or Mr Peter Lewis, Secretariat Division (email: sep@cc) of any agenda items, preferably via a brief written comment on the matter or difficulty.

LETTERS TO THE EDITOR

Dear Mr Editor,

While it would appear that Dr Roger Coldwell is fishing for irate responses (and probably chuckling mightily to himself in the process), one aspect of his latest thrust deserves a serious response.

"Editor" does not mean "man who edits"; it means "one who edits," "Editress", meaning "woman who edits", is an acceptable form whose popularity is diminishing. There is seldom a good reason for a job title to indicate the sex of the person holding that job, and the few good reasons do not apply to the job of editing.

I think that Dr Coldwell likes to regard himself as the figurative old dog. I believe that he can actually learn new tricks, but enjoys pretending that he can't.

Ifhe is serious in his recent patronising accusations, let us hope that he eventually accepts his ability to learn new tricks. (To forestall accusations that I am equating sexual equality with trickery, I hasten to point out that I am using a metaphor.) If, as I rather suspect, he is combining a little gripe with a big stire, he should take note that he has raised more hackles than it was worth, and he would do well to let the matter fade.

Love, Simon

Dear Madam,

Re: University Rugby League

Our liking for free-flowing kegs of V.B. at the Blackbutt Hotel (sponsor) is only matched by our free-flowing play on the football field. Yes, Newcastle University has a gun Rugby League side. We are, at present, equal leaders of the NSW State Amateur Rugby League Competition (Tertiary League). Outright leadership has, unfortunately escaped us due to two postponed games.

Our playing strip (similar to Queensland State of Origin jumpers) along with our playing style has earned the side an awesome reputation amongst Amateur Rugby League ranks throughout NSW. The side is basically comprised of ex Rugby Union players and Rugby League players who enjoy playing their football on Saturdays.

To date we have had only one loss (due to over-confidence) and every other game we have won by more than 20 points. Our highest win to date has been 54 to 2 over NSW University just recently. The team is a well-balanced side with a hard working, mobile pack of forwards and a brilliant backline.

Our season will end on August 1st, with hopefully, "touch wood", a Newcastle University victory in the Grand Final. The season end is earlier than normal due to a World Cup Amateur Rugby League competition being held in Australia during August.

A worthy mention is our Under 20's side who, at full strength, are also a great side, but, unfortunately, numbers in recent weeks have dropped off due to exams and semester break, costing the team some wins.

Anyone interested in attending our "Fun and Games" night, please contact James Whiting on 295845.

Yours in sport,

Lucky Carathanassis PR Officer
Further information and relevant application forms are available from the Office for Research - telephone 215305. This list is also circulated to all Heads of Department on a fortnightly basis.

<table>
<thead>
<tr>
<th>GRANTING BODY</th>
<th>Closing Date to Office for Research</th>
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<tbody>
<tr>
<td>Rhone-Poulenc Fellow - Grant for Scientific Visit to France-1993</td>
<td>24 July 1992</td>
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<tr>
<td>Under the Bede Morris Fellowship Scheme</td>
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<tr>
<td>Australian Pharmacy Research Centre Major Research Project</td>
<td>24 July 1992</td>
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<tr>
<td>Expressions of Interest for research into Cost Benefits or Cost Effectiveness of Pharmacy Services</td>
<td></td>
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<tr>
<td>The Asthma Foundation of New South Wales Research Grants</td>
<td>3 August 1992</td>
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<tr>
<td>Australian Retinitis Pigmentosa Association</td>
<td>4 August 1992</td>
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<tr>
<td>Research funding relevant to the causes, treatment and cure of Retinitis Pigmentosa (RP).</td>
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<tr>
<td>Dairy Research &amp; Development Corporation</td>
<td>5 August 1992</td>
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<tr>
<td>Preliminary submissions for dairy research proposals</td>
<td></td>
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<tr>
<td>Sudden Infant Death Research Foundation</td>
<td>6 August 1992</td>
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<tr>
<td>NH&amp;MRC Research Program Grants</td>
<td>18 August 1992</td>
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<tr>
<td>Designed to provide guaranteed support over five years for a research team that normally comprises several outstanding established investigators</td>
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<tr>
<td>New South Wales State Cancer Council</td>
<td>18 August 1992</td>
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<tr>
<td>Grants in areas including quality of life, psychosocial needs and support services for cancer patients</td>
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<tr>
<td>ARC Small Grants and RMC Project Grants</td>
<td>21 August 1992</td>
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<tr>
<td>AOTC Telecom Fund</td>
<td>21 August 1992</td>
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<tr>
<td>Grants for projects, publications and conference/seminars in non-technical social and policy research in telecommunications</td>
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<tr>
<td>Australian Rotary Health Research Fund</td>
<td>21 August 1992</td>
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<tr>
<td>Applications in the field of 'Adolescent Health'</td>
<td></td>
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<tr>
<td>Canadian High Commission - Canadian Study Awards</td>
<td>21 August 1992</td>
</tr>
<tr>
<td>The Canada-Australia Institutional Research Award, CABIRA-$25,000.</td>
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<tr>
<td>The Faculty Enrichment Award Program, FEP-max $5,300. The Faculty Research Award Program, FRP-max $5,300.</td>
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<tr>
<td>Scientific Exchanges with Japan - 1993/94 Australian Academy of Science</td>
<td>25 August 1992</td>
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<tr>
<td>To support collaborative research between Australian and Japanese scientists</td>
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**FELLOWSHIPS, CONFERENCES & PRIZES**

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<tr>
<th>FELLOWSHIPS AND PRIZES</th>
<th>Closing Date</th>
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<tr>
<td>Postdoctoral research in the science and technology field</td>
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<tr>
<td>ARC International Reciprocal Research Fellowships Program (France)</td>
<td>18 August 1992</td>
</tr>
<tr>
<td>Recipients are nominated by researchers or institutions in the host country. Research areas for this award are the humanities, social sciences, natural sciences or engineering</td>
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<tr>
<td>The Harkness Fellowship</td>
<td>21 August 1992</td>
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<tr>
<td>Four fellowships tenable for between 12 &amp; 21 months and includes return airfares to the US, living &amp; family allowances &amp; travel. Open to men &amp; women in any profession or field of study</td>
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**NO SET CLOSING DATE**

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<tr>
<th>FELLOWSHIPS AND PRIZES</th>
<th>Closing Date</th>
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<tr>
<td>Local Government Association of South Australia</td>
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<tr>
<td>Small research project of $2,000 or less in any field, of general benefit to Local Government in S.A.</td>
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<tr>
<td>Alexander Von Humboldt-Stiftung Sponsorship Programme: Humboldt Research Fellowships For Foreign Scholars</td>
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<tr>
<td>Awarded to highly qualified scholars of all academic disciplines, up to 40 years of age, for post-doctoral research project of their own choice in the Federal Republic of Germany; Max Planck Research Awards for Foreign and German Scholars; Research Fellowships for German Scholars.</td>
<td></td>
</tr>
<tr>
<td>The British Council Travel Grant Scheme</td>
<td></td>
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<tr>
<td>Under this scheme British specialists are assisted to visit Australia. Approx 100 travel grants are awarded each year.</td>
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</tr>
<tr>
<td>The British Council Academic Links &amp; Interchange Scheme (ALIS)</td>
<td></td>
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<tr>
<td>Provides international airfares for the staff of universities and other degree awarding bodies in Australia and Britain to visit each other.</td>
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<tr>
<td>The British Council Visitors Scheme</td>
<td></td>
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<tr>
<td>Intended to assist Australian professionals on visits to the UK</td>
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Page 15
Formed in 1969, TUNRA is the consulting and commercial company of the University of Newcastle. TUNRA offers the following expertise and services to academic and professional staff:

- Commercial advice
- Contract negotiation
- Financial management
- Project Management
- Intellectual property assessment
- Marketing
- Professional indemnity insurance

TUNRA is ready, willing and able to assist individuals or groups to secure successful technical and commercial features.

Please telephone 67 1811 or fax us on 67 4946
We are willing to assist you!

THE UNIVERSITY OF NEWCASTLE RESEARCH ASSOCIATES LTD
ACN 000 710 074

The Newcastle Conservatorium of Music will celebrate 40 years of performing and teaching during its

1992 Keyboard Festival

Young musicians are encouraged to enter the Festival competitions, with prizes of $1000 for piano, harpsichord and organ performance and the $5000 Jean Boyan prize for Piano Composition up for grabs.

Entries for the competitions close on July 31

Experience the
40th Birthday Celebration Performance of Handel's Messiah
Saturday, August 29

Tickets Available at the Conservatorium and Civic Theatre (phone charge 29 2261)

Details of events & competition available from Wayne Sheean on 29 4133

Life begins at 40