AIDS - SENSE AND ANTISENSE

AIDS is not going away.

Recently published figures on the incidence of the disease in Europe suggest that many more people will be infected before a cure is available. In Australia more than 2,500 people were reported to have contracted the illness up to June, 1991 and the rate is still going up.

Researchers at the University of Newcastle however are hopeful that they have discovered a facet of the mechanism through which the Human Immunodeficiency Virus (HIV-1) produces AIDS.

Dr Richard Brown who, with Mr Cliff Meldrum and Mr Stephen Cousins have been working on the puzzle since 1989, says the team's research, which is a spin-off from study into the interaction between the nervous and immune systems, may be the start of a new way of looking at virus host relationships.

"Viruses may take advantage of a specific interaction between two proteins within T-cells which are part of the body's immune system.

"If we know how the virus sabotages the cell, we can try to prevent that," he says.

The team's work at Newcastle has been published as a theoretical paper and has attracted attention in scientific circles because it could provide the answer to the puzzle surrounding part of HIV-1.

The paper, which presents an intriguing observation regarding the genetic code was published in the August edition of Medical Hypotheses. It outlines the interaction between HIV-1 and T-cells, and suggests a novel mechanism for the way they link.

Dr Brown explains that the genetic blueprint is stored on long molecules of DNA. This DNA is composed of two chains twisting around each other to form a "double helix." Only one of these chains in the helix is "read" while the other is not. The information read from the 'sense' chain is used to produce proteins and each protein is unique in the sequence of amino acids which compose that particular type of protein. Proteins are basically combinations of the 20 essential amino acids strung together in any order and containing any number of amino acids. This difference in amino acid sequence and number of amino acids in that sequence gives each type of protein its unique properties.

"While the 'sense' chain is readable by the cellular machinery, the 'antisense' chain is not," Dr Brown says. "However, if one reads this information despite this, an 'antisense' protein may be synthesised in the test tube."

"The excitement over the antisense proteins is that they appear to be able to inhibit the 'sense' protein from doing its job. For instance, the addition of the 'antisense' version of the pituitary protein adrenocorticotrophic hormone into a solution containing the 'sense' version of that protein, results in the 'antisense' protein physically binding to the 'sense' protein and thus inhibiting that protein's actions.

"It seems that the interactions of various protein hormones with their target cells also works in a similar manner. In this case the hormone contains a 'sense' sequence while the target on the cell, the receptor, contains an 'antisense' sequence. This relationship has been observed between proteins such as transferrin, follicle stimulating hormone, interleukin-2, and their respective receptors," he says.

Dr Brown says he and his colleagues wondered whether the same 'sense', 'antisense' interactions between viruses and their host may be important. Through their work they identified such a relationship between HIV-1 and one of its target cells, the T helper cell. Dr Brown says that a protein found on the surface of these cells, called the CD4 protein, appears to interact with a protein component on the outer surface of HIV-1, called gp120. It is already known that HIV-1 interacts with the CD4 molecule to enter helper cells and that infection is established this way.

"The interesting aspect of our finding is that the virus and the CD4 molecule may interact on the interior of the CD-4 bearing cells as well as on the exterior. (The CD4 molecule extends from the interior of the cell out into the exterior spaces on the cell surface)."

"This 'sense' 'antisense' binding site is also apparently occupied by another essential cell protein known as p561ck, which is important in activating the cell and for maintaining the CD4 molecule numbers on the surface of the cell. It seems that gp120 may compete for this site on the CD4 molecule and displace the p561ck protein. Disrupting the CD4-p561ck association..."
PRODUCTIVITY STUDY

Companies that involve workers and unions in key decisions through joint consultative arrangements perform better than those that lack such arrangements, a new study by The University Employment Studies Centre researchers has concluded.

The study, entitled "Industrial Relations and Workplace Productivity," by Michael Alexander and Dr Roy Green, was commissioned by the Federal Department of Industrial Relations. It was undertaken as part of ongoing research into the findings of the 1991 Australian Workplace Industrial Relations Survey (AWIRS), the largest survey of its kind ever undertaken in Australia, which covered over 2,300 workplaces in the public and private sectors. Dr Green was involved in setting up AWIRS, while working for the former Industrial Relations Minister, Ralph Willis.

"Our results certainly support the emphasis by the Government, ACTU and business groups on co-operation between management and unions at the workplace to secure long term benefits from enterprise bargaining," Dr Green said. "Indeed our study shows that the more effectively joint consultation is used, the more likely it is that workplace performance will be higher on a number of criteria, including efficiency and product quality," he said.

A summary of the study's findings said the internationalisation of the Australian economy over the past decade had focused attention on productivity and performance at the workplace, with widespread agreement that workplace productivity must be improved if Australian firms are to compete effectively. Yet, there is no agreement on what is meant by workplace productivity and how it should be measured, let alone improved, the summary said.

Alexander and Green used the AWIRS data base to test the hypothesis proposed by an alternative approach for Australian workplaces. The alternative theoretical approach, based on recent industrial relations analysis, recognises the "open-ended" nature of the employment relationship as opposed to the traditional approach. The traditional approach, based on the neoclassical production function, was rejected as it cannot encompass the process of production or the interaction between different elements of that process.

The study analysed the mechanism through which a Joint Consultative Committee (JCC) or Quality Circle (QC) improves performance, which in turn is measured in four different ways. This approach encompasses not only the presence of a JCC/QC in a regression, but also the method by which it was established and operates on a day to day basis, in order to identify the key factors in performance and productivity improvement.

The results demonstrated the importance of prior consultation with the groups to be affected by the introduction of the JCC/QC, and the very positive influence on performance of raising the intensity of collaboration between management and workers. In addition, collaboration that had a favourable impact on efficiency or productivity was also likely to improve product quality. The study also sounded a warning note, finding that companies that pursued short-term, cost cutting solutions at the workplace tended to perform less well overall than those which successfully negotiated longer term, dynamic efficiency gains.

In sum, the study found that, in assessing the trade union role in workplace productivity, studies that emphasised the relationship between performance and the intensity of collaboration were more soundly based than those using the traditional approach. This was true from both a theoretical viewpoint and in the light of the analysis of the AWIRS results, Alexander and Green found.

TEACHING GRANT SCHEME

SUCCESSFUL APPLICANTS - SECOND ROUND

Professor James Denham - Combined Oncology Departments  
"A problem-based approach to multi-disciplinary cancer management through the use of Small-Format Interactive Disc as a teaching medium"  - $9,595

Rochelle Harriet England - Holistic Health Studies  
"Stroke Education Resource Package"  - $10,484

Raymond Gregory Fairall - Applied Science and Technology  
"The Robot Sumou Project"  - $5,600

Rosemary Ann Warden - Medical Biochemistry  
"Development of a nutrition manual for undergraduate medical students"  - $4,500

Dr Ian Webster - Electrical and Computer Engineering  
"Implementation of real time digital signal processing systems to facilitate problem-based learning in Engineering education"  - $5,000

APPLICATIONS INVITED FOR THIRD ROUND

The Teaching Committee has funds available to support a Third Round of applications for Teaching Grants to encourage innovations in teaching and enhance teaching quality.

Staff are invited to submit applications for funding for eligible projects no later than 13 November 1992.

In the two prior rounds, the Committee made seed grants to some applicants and suggested to others that their projects be further developed before re-submission. The Committee is particularly interested in further applications from these staff, but will also welcome new applications.

Copies of the Guidelines and application forms are available from Ms Jeanie Curran, Secretary to the Teaching Committee, the Chancellery, ext 5301.

Intending applicants are also invited to discuss their proposals at an early stage with the Chair, Dr John Drinan or other members of the Committee.

AIDS

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reduces the ability of the cell to be stimulated by pathogenic organisms and increases the likelihood of the cell transforming, in the case of the T cell, into a malignant cell called a lymphoma, similar to those seen in people with AIDS," he says.

Dr Brown points out that this project, which draws together aspects of genetics and AIDS research, underlines the strength of interdisciplinary co-operation which may lead to serendipitous findings. He said that from informal discussions with overseas researchers, many ideas are generated which could have positive outcomes.
ENVIRONMENTAL LEGISLATIONS MAY THREATEN COAL INDUSTRY

Australia’s coal exports, worth $6 billion per annum, are strongly threatened by other exporting nations. The underlying reason: environment legislation. Environmental concerns are having (and will continue to have) a significant effect on coal use. In light of this, several new technologies are being developed overseas for electrical power generation from coal. These are more efficient than the current dominant technology using pulverised coal, and have a reduced environmental impact.

What does this technology mean for Australia’s coal industry? According to Professor Terry Wall from the Department of Chemical Engineering, we need, as a matter of urgency, to fully understand the behaviour of our coals in the emerging technologies. Professor Wall, in conjunction with the CSIRO Division of Coal and Energy Technology, is conducting a study to analyse the performance of several Australian coals, representing key export coals, from Queensland, New South Wales and South Australia under the gasification conditions used in the new technology.

“The information to be produced is vital to protect and enhance our export trade,” he said. “Australia’s major coal customers (including Japan which buys $1.2 billion worth of steaming coal per annum) need to develop and/or use new power generation technologies of significantly reduced greenhouse gas emission,” Professor Wall explained.

The two new technologies of greatest potential are using fluidised bed combustion and coal gasification. Of these, the integrated gasification combined cycle (IGCC) technology is well advanced in Japan, Germany, the UK and the USA. Professor Wall stressed that Australia must be involved in this technology as we depend on international companies for power plant technology.

Although he says there is no doubt that the new technology will be implemented in Australia, Professor Wall indicated that the next large power station will not be built in this country for another ten years. It is important, he says, to develop expertise in IGCC so that we may make an informed decision about new power plants in Australia during the next decade. “In fact, we need to design and operate a small power plant (say 100MW) before the construction of the new stations. In this way we can establish the best technology,” Professor Wall explained.

The new “environmentally friendly” technology cannot be incorporated into existing systems. But this does not pose a problem in Australia, Professor Wall said. “Our power stations are generally located in remote areas, away from other industries. This is not the case in many European countries,” he said, adding that the European markets for steaming coal will be driven by environmental concerns.

“In the light of these matters it is essential that we understand the behaviour of our coals in this vigorously developing new technology that will most likely become a major market for our thermal coals over the next decade,” he said.

“It is clear that coal users, exporters and researchers must work together in Australia to develop an understanding of the impact of coal properties, particularly Australian coal properties, and these emerging technologies.”

OBITUARY - STANLEY CHARLES BAKER

A former member of the University staff who had served the University throughout its formative years passed away recently. Stanley Baker retired in 1975 as an Associate Professor in the Department of Physics. At the time of his retirement, Stan Baker had spent about 40 years teaching Physics to post-secondary students in Newcastle.

Stan Baker obtained a Masters degree in Physics from Sydney University in 1934 and after a short stint as a school teacher, came to Newcastle as a Physics teacher in the old Wood Street Tech. He moved to Tighes Hill with the Tech and became the Head of the Department of Physics, a position he held through the introduction of the University college of the University of Technology, (then the University of NSW) to Newcastle.

With the development of autonomy, Stan stayed with the University. Stan Baker was obviously one of those members of staff associated with the University who had really moved with it through all the stages of its growth. In the course of his career he spent the war years developing optical instruments and fine tool gauges for Australian industry. He contributed to the development of the local electric light globe industry. He advised industry throughout NSW on the introduction and development of spectroscopy as a tool for analysis and control.

Staff members such as Stan Baker have helped lay the foundations for the high quality of tertiary education now available to students in Newcastle. At their time of employment it is doubtful if any of them would have foreseen the size of the University of which we are now part. They could not have foreseen the range and quality of the research and scholarship we now regard as normal. Yet we must never forget that we owe much to the staff who were with the University along with Stan Baker. They laid a foundation on which we must continue to build.

We regret their passing and dedicate the University of today as a memorial to their efforts. We extend our sympathy to Stan’s wife and children.

R.J. MacDonald
Professor of Physics
DISTANCE EDUCATION SEMINAR

A program developed to provide teacher education to remote Aboriginal and Torres Strait Islander communities has enormous implications for education in the future, a visiting academic said at a University of Newcastle seminar last month. Mr Patrick Brady, Director of the Remote Area Teacher Education Program (RATEP), said the multimedia, computer assisted learning approach was a very focused powerful medium that provided an incredibly efficient teaching method. Speaking at the Centre for the Advancement of Learning and Teaching staff development seminar, Mr Brady said RATEP was the most significant educational innovation since the invention of the printing press.

RATEP uses multimedia courseware to allow Aboriginal and Torres Strait Islander teachers in remote communities to update their qualifications through an articulated set of awards offered by James Cook University (Townsville) and Cairns College of Technical and Further Education. Preparation and delivery of the courseware is based on Computer Assisted Learning processes augmented with video, workbooks and teleconferencing. Leaders of the remote Cape York Peninsula and Torres Strait settlements called for teachers from within their communities and various approaches to achieve this had failed. Students who travelled to city campuses either failed or did not return to their communities. Outpost campuses were very expensive to provide and there was difficulty providing the infrastructure, Mr Brady said. And with the average cost of providing a house for a teacher on remote islands around $200,000 and the difficulty of getting the young teachers assigned to teaching posts to stay long enough to take advantage of learning the culture, the need to educate community teachers was strong.

"When I arrived at Townsville in January 1990, there were no development computers, no-one knew what computer language to use, what training was necessary," Mr Brady said. "We had no sites, grave doubts about whether there was electricity and phones on some of the islands and no students. But by July, the first students were oriented at Townsville and the course was operating by August," he said. RATEP has 100% success rate with the first 8 Torres Strait Islander students, who were fully admitted as qualified teachers last month. During the course of their studies, the students have been to the Townsville campus only twice, for orientation and for ten days of special study. Work for all subjects has been completed at study sites at Yorke and Badu islands, under the supervision of two tutors. RATEP now operates in 7 sites, with 60 students enrolled.

The Remote Area Tertiary Education Centre (RATEC) is the unit that formulated the coursework and is willing to work in partnership with institutions, departments, agencies and industry on training and education packages. RATEC combines interactive computer programs using courseware based on processes using Macintosh computers, CD-ROM players, PLI drives with Authorware Professional as the main scripting language. Students are able to study from Open Learning Centre facilities equipped with Macintosh computers, a FAX machine, teleconference phones and modems. The courses are prepared by curriculum writers and academics working closely with technical designers and programmers. The mode of delivery is ideal to train health workers, local government administrators, rangers, corrective services officers and other professionals. The Cairns team is working on a literacy package for the Department of Employment, Education and Training and the James Cook team is preparing staff development packages on Social Justice and Technology for teachers with the Queensland Education Department.

RATEC's approach can change the power relationship between teacher and learner and offers a completely new method for staff development. It offers an effective means of accountability to the students, taking knowledge delivery out of the privacy of the tutorial to the public arena of the computer screen. With governments increasingly squeezing education resources, while at the same time demanding more certification, new technology provides a solution, Mr Brady said. "This technology allows us to do all the things we thought were great in the 1960s, including introducing open universities, enabling a change in the role of teachers and empowering students," he said. The factory floor, community hall or an outstation can be the classroom of the future.

"This sort of delivery challenges universities, pedagogically, economically and administratively, challenging their whole parameters. Universities, as do schools, have an enormous amount of restrictive practices," Mr Brady said. "Academics have got away with murder for years and this will put their teaching and knowledge delivery under focus. It will release many of them to do research, others will be module writers and some will continue teaching," he said.

Mr Brady was accompanied at the seminar by Professor Melvin Lang, who is visiting research associate at James Cook University. Professor Lang, on sabbatical leave from the University of Hawaii, works on a similar distance education project, the Hawaii Interactive Television System (HITS). He described the results of an assessment study he had undertaken on RATEP that indicated that external students had performed as well as those on campus. His study had also tried to assess staff reactions to the new learning method.
FRIENDSHIP THROUGH TECHNOLOGY

The phone rings. You turn the radio down to answer it and yell out to the kids to turn the television down in the nearby family room. It is your sister calling from Europe. She could just as well be in the next room her voice is so clear. You marvel at the advances in technology which have brought us the sounds of FM radio, the clarity of cable television, and the convenience of facsimile machines and telephones (in various shapes and sizes).

But much of this technology is not yet available to a very large percentage of the world's population. Indeed, one of Australia's closest neighbours, Indonesia, with a population of 185 million, has a very under-developed telecommunication system.

With this in mind, executives from The University of Newcastle Research Associates (TUNRA), recently travelled to Indonesia to investigate business opportunities for the company's Industrial Electronics Division. The expertise and technology associated with satellite tracking and control is sought after by this fast developing country.

The 12 day visit to Indonesia was undertaken by Mr Stephan Wellink, TUNRA's Manager of Technology Development and Mr Ian Dick, Manager of TUNRA's Industrial Electronics Division. The itinerary included meetings with Indosat, PT Telkom, The National Institute of Aeronautics and Space (LAPAN), PT Rintis Sejahtera (part of the largest Indonesian conglomerate, the Salim Group) and PT InterTel (part of the second largest Indonesian conglomerate, the Astra Group).

The follow up visit will take place in early December; TUNRA plans to be an exhibitor in February 1993 at the 5th International Telecommunications and Business Communications Systems Exhibition Conference in Jakarta.

According to TUNRA executives, a great deal of preparation was required before departing for Indonesia. Studies of the countries culture, economy and methods of doing business were undertaken. At a seminar in Sydney on "Doing Business in Indonesia", presented by the Australian-Indonesian Business Council, the group from TUNRA met the Commercial Consul-General of Indonesia, Mr Saleh Tjakraamidjaja. Mr Saleh proved to be extremely helpful, giving sound advice and contact information.

• In appreciation, a specially commissioned bronze sculpture was presented to Mr Saleh recently. The company's Chief Executive Officer, Mr Karel Grezl, was of the opinion that something unique was needed as a token of gratitude to individuals who had been of assistance to TUNRA, particularly during the preparations for the Indonesia trip.

TUNRA commissioned Mr Vlase Nikoleski, a sculptor at The University of Newcastle, to produce a limited number of individually crafted bronze sculptures entitled "Launch" which have the inscription "Friendship through Technology". To date "Launch" has been presented to Mr Saleh Tjakraamidjaja, to OTCJakarta (Mr Robert Webster), to PT Telkom, the Indonesian domestic telecommunication carrier (Mr Sahala Silalahi) and AUSTRADE Jakarta (Mr Paul Cooney).

OSTUTOR

Ostutor, a guide to learning the VAX/VMS operating system, has been produced by Malcolm Williams of the Department of Mathematics. A book and computer package, Ostutor was formulated to provide computer and textual material to assist those wishing to learn the system.

The virtual memory system (VMS) is widely used on digital computers and Mr Williams wanted to formulate an accessible vehicle by which people could learn it. "The idea behind it started about two years ago when I was involved in teaching the Diploma in Computer Studies," Mr Williams, of the Division of Quantitative Methods said. "This sort of work was used extensively in that course and I began to think of a new method to teach the system," he said.

The material can be used by staff to enhance their own knowledge or as a means of instructing students using a largely "self-teach" approach. The software is available on the University's VAX Cluster and can be accessed easily. The book is available from the Co-op Bookshop at $6.00 (80 pages). The computer package presents the same topics as the book. The tutorial exercises in the package supplement those presented in the book and provide the user with immediate feedback. The book is an excellent reference for users of the VMS operating system, staff (academic and general), students and researchers.

A sequence of topics considered appropriate to various levels of learning is developed in Ostutor. Mr Williams recommends using the Ostutor book as well as accessing the computer package.

The system is a "turn-key" one. As soon as the user logs in, the package begins execution. Similarly, when you quit the package you are immediately logged out. To use the computer package follow these steps:

* If accessing the software through a terminal server, type CC
  - If accessing the software through KERMIT from a personal computer (PC) directly connected to the network, type CALL CC
  - At the Username prompt type: OSTUTOR
  - At the Password prompt type: TEACHUS.
UNIVERSITY RECEIVES $2.91 MILLION

The University of Newcastle has received a total of $2.91M in research grants for 1993 from the Australian Research Council. $2.08M has been made available to fund projects initiated from within the University itself by the interests of individual members of the staff. The research funded involves work in the sciences, engineering, mathematics, humanities and social science.

$339,000 has been awarded to fund projects which involve collaborative work with industry. Since the Research Council matches the industry input on a dollar for dollar basis, these grants mean the University will also benefit by an additional $339,000 (or more) from industry.

$500,000 was given to the University to fund smaller projects developed by the academic staff. These grants are determined internally by the University.

The success rate of the University for new grant proposals is close to 25%. This is to be compared with a national average of about 18%. The University's success in attracting funds for 1993 has meant the University is now ranked 11 in the overall ladder. This is an improvement of at least one place over its success in 1992.

New grants of particular note are:

- $40,000 to Dr E von Nagy-Felsobuki in Chemistry for studies of special helium molecular clusters;
- $40,000 to Dr R Boyd in Geology for studies of non-marine sediments and coal in coastal areas;
- $40,000 to Dr G Willgoose in Civil Engineering for studies of the relation of run-off and erosion to land topography;
- $55,000 to Professor D Hill in Electrical Engineering for studies of security of supply in large power systems;
- $60,000 to Dr M Fu in Electrical Engineering for studies of means of extracting useful information from systems which are constantly changing;
- $130,000 to Professor R Antonia in Mechanical Engineering for two projects studying turbulent flow in fluids;
- $65,000 to Dr G Kuczera in Civil Engineering for studies relating to the estimation of flood frequencies in tidal systems;
- $80,000 for Professor R Melchers in Civil Engineering for studies relating to the structural serviceability of masonry and reinforced concrete buildings;
- $58,000 to Dr D Smith in Civil Engineering for studies of the motion of fluorides in clay soils;
- $32,000 to Associate Professor R Heath in Psychology for the development of models relating to human cognition.

The University has had all of its existing grants continued for a further year of funding. This amounts to approximately $1.3M for 1993.

WETLANDS DESIGN COMPETITION

The winners of the wetlands design competition organised by the University's Landscape Committee have been announced. The competition was open to final year architecture students who were invited to submit designs for the University's own wetlands area.

Students were asked to provide a sympathetic landscape treatment that might be used in future development of the University's wetlands. The wetlands, located behind Scobie's Heath, are gradually being transformed from an area of choked swampland to a network of interlocking ponds and islands that will support bird-life and provide a unique and attractive feature of the campus landscape.

The design brief required students to integrate the many aspects of the wetlands, including its conservation values, the desire for a "people-friendly" place for relaxation and the role of the wetlands as a resource for future environmental study. The participants responded with a range of creative and imaginative entries which impressed the judges.

The first prize was split between two submissions. Martina Shelly and Richard Stutchbury were recognised for their sensitive design approach and workable solutions. Their entry included the siting of a light-weight pavilion over the water to create a venue for recreational and educational use. The other winning entry was submitted by Sharon Francis and Bill Dowzer. The judges were impressed by the boldness and imagination of this entry which included a tall observation tower in non-natural materials which would certainly attract attention to the wetlands.

Second prize was also split between two entries. Sharon Mullin was recognised for her thoughtful approach to the landscape design, including the careful use of native species and the variety of events planned for the site. Joint runners-up Stephen Jones and Marnie O'Rourke were awarded for their imaginative and original concepts. The entries will be on display in the Chancellery in early November.

MINISTERIAL VISIT

The Assistant Minister for Education, the Honourable Kerry Chikarovski, recently visited the University's Central Coast Campus. Ms Chikarovski's portfolio includes responsibility for the State Government's involvement in WEA and Tertiary Education. She was invited to inspect the WEA, Central Coast Campus Community College and University premises.

Mr Paul Davis, Director of the Community College, informed Ms Chikarovski of the current and planned programs of the college. Dr Les Eastcott, Pro Vice-Chancellor (Development) of the University, spoke of the University's building program and informed Ms Chikarovski of the concepts behind the master plan for the site. Warden of the Central Coast Campus, Associate Professor Michael Ewans outlined the academic planning and the degree and diploma programs scheduled for introduction.
DELINQUENT OR NEGLECTED?

Being made a ward of the State in Australia often cause neglected or abused children to be drawn into the prison system, research by Dr Kerrie Carrington of the Department of Sociology has revealed. In her PhD study, entitled *Manufacturing Female Delinquency*, Kerrie found that girls from Aboriginal communities and housing commission areas of Sydney were massively over-represented in the delinquent population for NSW. Of these girls, many were also state wards. Self-report studies indicated that delinquent behaviour was much more uniformly spread throughout the adolescent population. Through her research, Kerrie found that working-class and Aboriginal girls were channelled into the juvenile justice system in 3 major ways; through the policing of truancy by schools, through the policing of working class youth leisure forms (i.e. hanging around the streets, pool rooms and shopping centres), and through the policing of impoverished families in Aboriginal communities and housing commission areas.

Kerrie said that while resources went into policing functions, there was very little going into support or back-up for children removed from their family situation. Although welfare workers had good intentions Kerrie feels making a child a state ward often has disastrous results.

For her research, which won her an award for the best Sociology PhD in Australia, Kerrie selected 1,046 records of girls born between 1960-64 (held at the Youth and Community Services Department) who had a criminal entry. She then collected the criminal dossiers, ward files and case notes of 59 girls from the larger sample (6 of whom were Aboriginal), most of whom were chronic re-offenders appearing before the Children's Court, on average 5 times each, during their adolescence. Thirty six of the 59 chronic offenders in Kerrie's sample were made state wards at a very early age. As state wards these girls were catapulted into a spiral of being brought before the children's court for the most petty misbehaviour, Kerrie said. One state ward Kerrie examined, appeared before the Children's Court charged with assault and malicious injury to Government property simply for throwing a piece of toast at the house-parent which also hit the kitchen wall. One third of the female wards in Kerrie's study ended up in detention centres for absconding from ward establishments, in many cases for simply trying to return to the families from whom the Department had taken them.

Kerrie found that very few of the offences committed by the girls were serious or involved violence and the girls rarely posed a threat to the community. Yet 19% of the girls appearing before the Court on welfare complaints were committed to detention centres compared with 6% for those appearing on criminal charges. Girls appearing before the courts on welfare complaints, that is for non-criminal conduct, were given more severe penalties than those appearing for criminal offences. In one-fifth of cases, girls in need of care or protection from the state are sent to detention centres, Kerrie said. They are punished not helped, she said.

While Kerrie's PhD study included statistical data up to 1987, she has recently updated it to 1990, for a book, called "Offending Girls - Sex, Youth and Justice", due to be published by Unwin and Allen next year.

Many things had changed in the welfare system since the study was undertaken, with the Family and Community Services Department shifting the emphasis to child sexual assault and ending the policing of truancy, Kerrie said. Legislative reform followed the departmental shift, with criminal and welfare legislation being separated for the first time, she said. However, many of these positive moves had been reversed under the Greiner Government, with former education minister, Terry Metherell, re-introducing the policing of truancy. This followed comments from Police Minister Pickering in the media in 1988 that truancy had emerged as a leading social problem. "There is little doubt that young people playing truant are contributing in large measure to certain categories of crime, including such offences as car theft and breaking and entering," Mr Pickering said.

In a recent submission to the NSW Legislative Council's Standing Committee on Social Issues, Kerrie suggested some solutions to the child welfare/juvenile justice nexus. The first was to introduce mechanisms of accountability over those who administer the policies, legislation and institutions. While acknowledging the 1987 Children Care and Protection Act had made it more difficult to forcibly remove aboriginal children from their families, it still hinged on the discretion and goodwill of district officers working in the area of child protection, she said. Her second suggestion was to provide more family support policies and services of a non-stigmatising kind, such as child care, rental assistance and so on. To reduce the state ward population, and thereby the delinquent population, the state should provide adequate support, housing, education and life opportunities to those children who ended up as state wards, she said.

In conclusion, Kerrie told the Standing Committee she was not suggesting a radical policy of non-intervention in family life but rather that children whose families are genuinely abusive need non-punititive alternatives to the family, such as long term youth accommodation. They also need secure and adequate sources of income support, she suggested. Child policies currently do not offer this kind of assistance, Kerrie said.

**RESULTS**

**END OF YEAR FINAL EXAMINATION RESULT NOTIFICATION ARRANGEMENT**

End of year final result notifications will be mailed to students between **THURSDAY 17 AND FRIDAY 18 DECEMBER 1992**. Final result lists will also be displayed progressively by Faculty as soon as they become available from Wednesday 16 December in THE HUNTER BUILDING CONCOURSE.

If you have not received your final result notification by **MONDAY 21 DECEMBER**, you will be able to view them in the Concours area.
ARE YOU IN CONTROL?

Few people would have considered the float valve in their toilet cistern to be a carefully engineered control system. Invented thousands of years ago, this rather homely example of a control system illustrates the diversity of the work undertaken by engineers in the area of Systems Control. Other examples include the control of high performance helicopters, aeroplanes and boats; as well as nature’s own control systems displayed daily in human and animal movement and behaviour.

An expert in the area of Control Systems and Signal Processing, Professor Bill Levine is currently visiting the University’s Department of Electrical and Computer Engineering. Professor Levine is a professor of Electrical Engineering at the University of Maryland, College Park, USA. (His office is 11 miles from the White House.) The reason for his visit: to write a book on Control System Design, together with Professor Graham Goodwin and Dr Stefan Graebe, both from the University’s Department of Electrical and Computer Engineering.

While much has been written about this field, Professor Levine says the existing literature does not adequately cover the design aspects. “I think that there has been a lack of this sort of book. There are plenty of books that cover the theoretical aspects of control systems, but the design aspects and applications have not been covered well,” he explained.

The proposed publication will take the format of a text-book aimed at advanced undergraduates or postgraduate Electrical Engineering students. “We hope to produce a book that will teach someone with 10 years experience in the field something new, but will also be a helpful tool for shiny new graduates,” he said. The book, he says, will enable the “hands on, greasy fingered engineer” to understand the theory, while the graduating student won’t be lost when confronted with the hardware of the industry.

While Professor Levine does not agree with the “theory vs practical” debate, he does acknowledge that Australian engineering courses are “fairly practical”. He stresses, however, that a sound understanding of fundamental theories is necessary before the more practical aspects can be explored.

Professor Levine is particularly interested in nature’s control systems as exemplified in humans and animals. By way of example he explained that an interesting control system is seen in posture regulation in humans. “Imagine you are standing in a bus travelling between the University and the city. If you did not automatically regulate your posture, you would fall over at the first turn,” he explained.

Professor Levine went on to explain that some Parkinson’s Disease patients exhibit a peculiar failure in their posture regulation system. “They may be standing still and then suddenly take rapid little steps backwards, the kind of thing you or I would do if we started to fall backwards,” he said. “But they are not falling, it is actually a failure of some sort in their control system.”

While the average person may consider control systems found in the world of engineering as extremely complex, Professor Levine says that evolution has developed some very good control systems that scientists do not understand. “We are working on several projects in an effort to understand how these systems work,” he added.

Professor Levine’s interests extend beyond the “evolutionary” control systems. He is currently working on a project related to the “X 29”, with the American company, Grumman Aircraft. He explained that the “X 29” is an experimental aircraft designed with the wings facing backwards. Professor Levine’s project involves studying the effects of increasing the angle of attack of this aircraft beyond that of existing military aircraft. One can only guess at the consequences of this for future air combat.

A further area of study, also in the field of aviation, involves the extremely complex control systems present in high performance helicopters. Professor Levine explained that as helicopters become lighter and faster, increasing demand is placed on their control systems. “We have to modify the control systems to keep pace with aircraft design,” he said.

Professor Levine is accompanied on this trip by his wife Shirley, whose talent has not gone unnoticed. (She has already had her photo in the Telegraph Mirror). Shirley is a professional puppeteer and has given several free performances for some of Newcastle’s disabled children. Back home, Shirley spends much of her time performing for audiences around the country. Shirley makes her own puppets and, while in Newcastle, is learning to make marionette puppets. Asked about the control systems of these puppets, Professor Levine answered, “That’s her secret”.

TRUST FUND BURSARIES FOR 1993

Applications are now open for the 1993 Jean Gilmore, Themie Baddams and the AFUW-SA Inc Trust Fund Bursaries. These bursaries are open to women with a good Honours degree or equivalent to assist with study or research towards a Masters or PhD degree at an Australian university. There is no restriction on field of study.

The aim of these bursaries is to assist women to undertake and complete higher degrees and to encourage advanced scholarship and original research by university women. The value of each bursary is up to $6,000. The bursaries are intended to cover associated costs such as equipment costs, field trip or research expenses, thesis publication costs and dependent care expenses because of study commitments.

Applications are open to women who are not in full-time employment or on fully-paid study leave.

Application forms are available from the Postgraduate Studies and Scholarships office (Hunter Building) or from the Followship Trustee, the AFUW-SA Inc Trust Fund, GPO Box 634, Adelaide SA 5001. The closing date for applications is 28 February 1993.
UNILINK ACCESS AND LIAISON PROGRAM

Each year hundreds of high school students are faced with the agonising question: what should I do when I leave school? Decisions are very often based on economic and distance constraints, as well as perceptions (false or otherwise) about what it really like to find a job, attend a TAFE college, or study at university.

Only 15 percent of Australian school leavers go on to further study at university. In some schools the percentage is much lower. Students choose to enter the workforce at the end of Year 10, often due to a lack of information about the alternatives.

In an effort to provide senior high school students with enough information to enable them to make informed decisions about their career, The University of Newcastle has initiated a unique program known as Unilink. The brainchild of The University’s Student Equity Unit, the program has the backing of the Department of School Education.

Six regional schools, identified in the Department of School Education’s “Staying On” program as having especially low transition rates, have been targeted. These are Cessnock, Gateshead, Kurri Kurri, Mt View, Swansea and West Wallsend. However, “Unilink” also refers to access and liaison activities with many other schools in the region.

Unilink coordinator, Cathy Sidebottom, outlined the aims of Unilink: “We hope to provide students with practical academic skills, information and motivation so that they can effectively prepare for their Higher School Certificate.”

Through talks with current University students and staff, high school students in years 10, 11 and 12 will gain an understanding of university courses, student life and higher education in general. “We want to encourage a positive view of higher education with students and their families,” Cathy explained.

An outstanding feature of the program has been the appointment of student role models. Specially selected and trained ex-students from each of the six core high schools visit their schools and talk informally to senior students about their university experiences.

“These visits motivate and inform students about higher education as an option,” Cathy said, adding that role models are issued with a kit containing careers information and more general information beneficial to high school students.

In addition to providing role models, the Unilink program also offers parent/student evenings at the targetted schools. Representatives from Austudy, Unilink and the University’s Equity Unit meet with parents and students to discuss university entry requirements, courses, career prospects, bridging courses, HECS and Austudy allowances.

Through Unilink, high school students are also provided with the opportunity to visit the University campus.

In 1993, the Unilink program will be extended to a number of schools on the Central Coast.

While Cathy acknowledges that academia isn’t for everyone, she hopes that Unilink will at least provide Newcastle and the Hunter’s high school students with the information and support they need to make an informed decision about their future.

CHEAP, NASTY & JUICY

A September 1992 vintage, plastic fermented chardonnay probably wouldn’t win any prizes at the Paris wine show, but judges at the Biology Department’s recent wine tasting weren’t thinking of Paris when sampling a selection of wines bottled in the Department’s own “cellar”.

With names like “Forbid n Ferment”, “Adam’s Downfall”, and “Really Rotten Rose”, the wines displayed all the characteristics one would expect. Bottled by the likes of the “Bottom of the Harbour Estate”, “Magic Mushies Winery” and “Shonky Estate”, it was a case of “drink at your own risk”.

The wines were made by 3rd Year Biology students during their microbiology term. Under the watchful eyes of Dr Hugh Dunstan, the students were taught the intricacies of bacterial growth dynamics and fermentation technology, basic microbiological processes in the food and beverage processing industry. Hugh explained that students (apart from having a bit of fun) gained valuable information about many of the aspects involved in the industry.

“The course teaches students how microorganisms are utilised in the industry,” he said. “They also develop an understanding of the importance of quality control and hygiene, and of the legalities involved in labelling products.”

Hugh added. Students were also asked to calculate the alcohol content of their wines, which involved measuring the specific gravity of the product before and after fermentation.

The importance of correct labelling (for the consumer’s own protection?) was highlighted on the labels designed by the students. The winning white, “Cheap, Nasty and Juicy”, had this to say: This sumptuous blend of delectable ingredients, which include the finest Just Juice apple juice, nutrient salts, peptolytic acid and added sugar will undoubtedly tantalise even the most conservative taste buds. Ideal for the budget conscious, this unique and versatile wine can also be used as nail polish remover, to unblock sinks and drains and to clean engines. Others listed the ingredients as sugar, peptolytic enzyme, nutrient salt, tannic acid, citric acid and tartaric acid. “9.5% toxic” was marked on one label.

Judges commented that this year’s wines were a considerable improvement on the 1991 vintage. Some even went so far as to say they were “drinkable”. But all washed the “home brew” down with a drop of 1990 Hunter Valley chardonnay. So, did the students actually learn how to make a good wine? Hugh smiled as he explained that the secret to making good wine is a delicate blend of “experience and witchcraft”.

Apart from indulging in a bit of viticulture of their own, students were able to witness the making of “real” wines during a field trip to selected Hunter Valley vineyards. Since the visit, the Department has been approached by a vineyard looking for graduates to work in its quality control division. Wine lovers may rest assured... strict supervision is guaranteed!"
AUSTRALIA’S GREAT BUSH POET

They said he was a “simple singer” and compared him to the English “peasant poets”. He led a bush lifestyle and lacked a formal education, but John Shaw Neilson, in his simplicity, captured the true spirit of the Australian bush. Born in Penola, South Australia, in 1872, Neilson is now regarded as Australia’s finest lyrical poet.

Newcastle’s own crusader of Australian literature, Dr Cliff Hanna from the Faculty of English, says he is almost a member of the Neilson family. Cliff has studied Neilson’s poetry for 21 years and admires him enormously “as a man and as a poet.” Cliff was introduced to Neilson’s poetry while studying English at this University. “As I remember I arrived late for the first seminar of the year and of course that was when students chose which writer they wanted to study. Neilson was left over,” Cliff recalls.

Cliff won a scholarship to continue his studies and says he wanted to study an American poet. “But Norman Talbot, to his enduring fame said ‘You should work on Neilson’,” Cliff said. His first article on Neilson appeared in 1972 and was part of his postgraduate thesis. Between 1973 and 1975 Cliff collaborated with Ruth Harrison from Melbourne and John Burrows, now Professor Emeritus, and Director of the Centre for Literacy and Linguistic Computing, in trying to date the poems - a task more difficult than would first appear.

Most of Neilson’s poems were written in school exercise books which also served as family ledgers and many of these books were incorrectly dated by his brother, Frank Neilson, after the poet’s death. “The manuscripts were in a disorganised state. Some of the earlier editors had changed poems without the poet’s knowledge,” Cliff explained, adding that they spent many hours trying to “recover” original poems. Describing the challenge they were confronted with, Cliff says, “We needed a step ladder and a pair of sandals to get through it”.

In 1990 Cliff published a book-length study of Neilson’s poetry entitled The Foible of Spring, which, he says, endeavoured to dispel the “simple singer” image. In 1991, Cliff published John Shaw Neilson: Poetry, Autobiography and Correspondence, which contained a collection of his poetry, a selection of his correspondence, an edited version of the autobiography and an interview with members of his family. It is a comprehensive volume which, for the first time, published Neilson’s poetry in chronological order.

Cliff knows Neilson’s work intimately. “It has got to the stage now where, if I come across a new poem, I know instinctively what year the poem was written,” he said.

Cliff’s work has not gone without recognition. He has been commissioned by the Australian Academy of the Humanities to publish a complete edition of Neilson’s poetry. John Shaw Neilson is the first Australian poet to be honoured in this way. Cliff’s previous volumes, together with the earlier work with Ruth Harrison and Professor Burrows, have put some order to Neilson’s chaotic manuscripts and have made the current study possible.

The project will involve compiling all of Neilson’s manuscripts and all of the published poetry in chronological order from 1889 to 1942, and annotating it with any reference he made through his various letters, his autobiography and through comments to journalists.

Upon completion of the volume, the reader will be able to take a poem from the first draft and follow it right through to the finished product. Two versions of the book will be published, a hard cover complete edition for libraries and a popular condensed edition.

Cliff recalled an anecdote which he says describes Neilson accurately. “He was working for a farmer and had been asked to chop some trees down. Upon returning to the site, the farmer asked Neilson why he hadn’t started work. Neilson replied that he had started talking to the trees and they had become such good friends that he didn’t have the heart to cut them down.” Here was a man who didn’t see any division between human and animal or between human and inanimate. To Neilson, the whole of nature was alive.

SMALL BUSINESS
AT CENTRAL COAST CAMPUSS

Michael Christie, a lecturer in Management at the Central Coast Campus, has received an award for a paper presented at a major Conference on Small Business held recently in Sydney.

Mr Christie’s paper was titled “New Directions for Small Business Education and Training” and was based on observations of some of the best trainers in small business management.

As a specialist in the area of management training for small business, Mr Christie sees this as an area of very real concern for the Central Coast region.

The Conference on Small Business is an annual event, representing academic specialists, practitioners, small business owners and government officials from around Australia. The award to Mr Christie is thus a very significant recognition of the work being done in this area on the Central Coast.

Mr Christie’s paper identifies the need to document the best available training practices for other educators and trainers to follow. “Small business owners should know these practices so that they can be sure they have their most serious training needs met,” Mr Christie said.

“Small business owners should know these practices so that they can be sure they have their most serious training needs met,” Mr Christie said.

The best trainers concentrate on the practical problems of small business owners. They know how to ask questions and how to listen, to ensure that the real needs of small business become the focus of the training programs.”

Mr Christie said this is the sort of approach that is being developed in the management subjects taught at the Central Coast Campus, where special emphasis is to be given to the problems of small-to-medium scale business.

“I am pleased to see the Campus growing in a way that recognises the unique business character of the region,” he said.
For many Australians, summer has traditionally meant long, lazy days at the beach, swimming, walking or reading while soaking up the sun's rays. But times are changing. The message is getting out: repeated exposure to the sun causes skin damage, premature aging and skin cancer.

For teenagers (and some who believe they are still teenagers), messages such as these are difficult to understand. After all, wrinkles are something your grandmother has, and of course, you won't get skin cancer, or will you?

Marie Williams from the Department of Curriculum Studies was making sure that her PE/Health students were informed about the risks associated with repeated exposure to the sun's damaging rays at a recent Gala Touch Football Day. Although the day was organised to increase the interaction between students and staff, Marie says that her underlying theme was "skin health awareness".

The Cancer Council's "slip on a shirt, slop on the sunscreen and slap on a hat" campaign has been extremely successful in promoting skin health and skin awareness. Marie followed this theme and even convinced Sid the Seagull to join in the day's events. Tony Tripodi from the Cancer Council was unable to attend the Gala Day, however donated tubes of 15+ blockout. Tony encourages young people to wear protective clothing, hats and sunscreen during the summer months. "Skin cancer is not the only risk associated with exposure to the sun. Skin damage and premature aging is a very real consequence of sun exposure and young people must be made aware of this," he warned.

The tubes of sunblock donated by the Cancer Council were issued as prizes for the "silliest hat" competition. Peter Verrydt, a third-year PE student, and Jayne Hoddinott, a first-year student won the men's and women's sections respectively, while Peter Dal Santo, a fourth-year student won a "me-no-fry" t-shirt donated by the Centre for Health Advancement, for his efforts in helping to organise the day.

Marie says that PE/Health students must act as role models, especially when coaching or teaching young children. "They have to lead by example," she said. "Children need to be informed at an early age about the risks involved in sunbaking, or spending hours in the sun without adequate cover."

According to Marie the Gala Day was very successful and will be repeated early next year. Despite one accident (a student dislocated his shoulder in the first game), the touch football matches went well. The closely contested final was played between the Mayfield Mutants and the Kotara Kittens. With names like that, the odds would have to be on the Mutants - did the Kittens ever hope to win?

O.T. WEEK

Occupational Therapy is a health science profession which is concerned with assisting individuals to develop independence in their lives. The focus is on analysing the clients occupational performances and goals in their activities of daily living at home, at work and at leisure and on assisting clients to adapt to their environment and cope constructively with daily tasks and interpersonal relationships. Individuals whose coping abilities have been impaired due to physical trauma, emotional trauma, developmental disabilities, psychological problems or disease at any age are included in the Occupational Therapist's caseload.

Students from the Occupational Therapy Course set up a "hands-on" display on Tuesday, 27 October and Wednesday, 28 October, to illustrate various components of occupational therapy. The display included examples of home modifications and splints; grip strength testing; hand/foot co-ordination assessment; a wheel chair obstacle course and a "guess the assistive device" quiz.

The 3½ Year Occupational Therapy Course has been operating at Newcastle University for 3 years and the first graduates are due to leave in July 1993.
INTEGRAL URBAN HOUSE

A unique Newcastle project called the Integral Urban House (IUH), supported by lecturers and students from several University faculties, has received a $10,000 grant from the Federal Minister for Resources. Allocated under the Local Energy Efficiency Projects (LEEP) scheme, the grant is awarded to enable groups at the local community level to address, in practical ways, the need for improved energy efficiency, particularly in management of the environment.

The IUH will contribute to this goal by renovating an existing urban dwelling and retrofitting it with energy and water saving devices, applying climate control design aspects and the principles of permaculture and waste minimisation. The house will be used for community education and research. Certain aspects will be monitored by the University to research energy, water and waste conservation.

The grant from the Department of Primary Industries and Energy will initially be used to produce educational kits and displays, signage, printing and promotion of the project. The IUH working group are awaiting Newcastle City Council allocation of a suitable property to undertake the project. The house will eventually be open to the public for inspection with demonstrations being conducted on-site.

Further information on the Integral Urban House can be obtained from Irene Munro, lecturer in Applied Life Sciences on 21 6678 or the president of the project, Simon Smith on 68 1031.

ABORIGINAL ART

Outback Art, run by aboriginal art and craft dealers Carolyn and Roy Ryan, offers viewing, by appointment, of aboriginal art. The gallery specialises in corporate and cultural exchange gifts and can be contacted by writing to PO Box 315, Merewether, 2291 or by calling 63 3229, Fax. 63 6057.

UNIVERSITY HOSTS JOURNALISM CONFERENCE

The 1992 Journalism Education Conference, to be held at the University, 29 November - 2 December, will address a number of vital issues.

"The media have to report and analyse a rapidly changing world," says Frank Morgan, Head of the Department of Communication and Media Arts, who will be the Conference Director. "They must also survive those changes, which are as much cultural as economic or political."

Communication and the media are also central to foreign relations, trade and international development. For this reason, the Department of Foreign Affairs and Trade, through its International Seminar Support Scheme, has made a grant of $20,000 to assist senior journalists and journalism educators from the Pacific to participate in the Conference. Delegates representing the Pacific Islands News Association, the Pacific Islands Broadcasting Association and the South Pacific Forum Secretariat will come from Papua New Guinea, Fiji, Samoa, the Marshall Islands, Vanuatu, the Solomons and Tonga.

Mr Morgan, who is an Honorary Fellow of the Asia-Pacific Institute for Broadcasting Development and a Media Consultant to both the South Pacific Commission and Unesco, observes that too often the Australian media get into the news, rather than just reporting it. "Sometimes it's due to technical and professional problems. More often it's a failure to take account of the cultural context. The outcomes of this Conference will hopefully benefit the Australian media as much as the Pacific media."

Closer to home, issues relating to pay-tv, television aggregation and the provincial press will also be on the agenda.

Late registration is available by contacting Pam Dellbridge on (049) 216633. Session rates will be $20. A few tickets are also available for the Conference Dinner on the S.S. South Steyne on Tuesday 1 December at $75 all inclusive.

SHAKESPEARE EXHIBITION

The Auchmuty Library is presently hosting an exhibition entitled "William Shakespeare 1564-1616". One of the British Council's travelling exhibitions, it consists of approximately 280 publications, 23 audio tapes, 6 videos, a microfilm of "Shakespeare in context" and a set of 29 illustrated, full colour posters which provide pictorial documentation of Shakespeare and his times.

The exhibition will be on display in the Foyer until Friday, December 4.
A SUMMER OF CREATIVITY

Are you interested in writing, outdoor art, sculpture, music, “life directions” or birdwatching? If so, then the Department of Community Programmes at The University of Newcastle invites you to attend one of their innovative Summer Schools or weekend workshops.

Join award winning Central Coast writer Carol Mana, as well as Jean Talbot, Robert Jones and Pam Jeffery at the Morpeth Weekend Writer’s Camp to be held from Friday, November 27 to Sunday, November 29 at the Morpeth Conference Centre.

Whatever your writing ability, you will benefit from the pleasant surroundings and stimulating company, as the tutors provide a diverse range of ideas in both poetry and prose. Numbers are limited and early enrolment is advisable. Phone 21 6017 or 21 5356 for further information.

SMITHS LAKE - ART, AQUATIC STUDIES AND BIRDWATCHING

January 10 to 16

Perhaps you too are a frustrated artist? If so then the Smiths Lake Outdoor Art Summer School will provide an ideal environment to express your artistic talents. Herbert Heinrich and Anne Young, both environmental artists and teachers, enjoy using the great outdoors as their classroom. Together with the other tutors they will provide you with all the stimulation you need!

Those who are fascinated by the aquatic environment will find few better spots along the eastern seaboard than Smiths Lake and nearby Seal Rocks to indulge their interest. Dr Brian Conroy, Senior Lecturer in Biology will lead you on a discovery tour of the rock platforms at Seal Rocks. All activities will be leisurely, with the emphasis on discovery in the company of an informal and fun group of likeminded amateur ecologists.

The Myall Lakes in summer present a large variety of birds in the environments of heathlands, littoral rainforest and coastal dune systems. Experience the thrill of searching for, and sighting, specific species with Fred van Gessell, founding member of the Hunter Bird Observers Club. Fred will show you how to identify and band birds and discover some of their habits and movements. Binoculars essential!

A WEEK AT TOCAL

January 18 to 22

Spend a week at the C.B Alexander Agricultural College (TOCAL), located 21 kms north of Maitland, and explore the absorbing topic of “Life Directions” through relaxation, visualisation, poetry, art, dance and discussion. Join David Saloman (BSc.Dip.Ed.Dip Herbal Medicine) as he takes you through a course about life as an adventure!

Treat yourself to five days of painting at the “Artists at Work” workshop led by Ron Hartree.

TOCAL is situated on a rise overlooking a classic Australian landscape, just the right place to relax and let your creativity surface.

If drawing and painting aren’t your thing, try sculpture, drama or music. Why not explore the history of the Hunter Valley from one of its most historic towns? The Department of Community Programmes Summer School activities offer something for everyone. For more information contact the Department on 21 5383 or 21 6017.

REGIONAL EXHIBITIONS

Visiting exhibitions from Tasmania and Victoria are currently on display at the Newcastle Region Art Gallery.

Place and Paradox: Contemporary Tasmanian Furniture is an exhibition of work by 11 Tasmanian designer/makers. All are well known in Tasmania for producing daring, innovative and challenging pieces of furniture. With a long tradition of fine wood craftsmanship, Tasmanian furniture design has developed a unique aesthetic. The exhibition features pieces made specially for the tour, and combines traditional and more high tech manufacturing techniques.

Interpretations: The Woven Language of the Victorian Tapestry Workshop is an exhibition aimed at alerting a wider audience to the significance of tapestry for the future of Australian art. Centuries old, the art of tapestry involves weavers working closely with the artist to create a unique work of art. Artist Ross Moore says: “The tapestry is not just a blow-up of a painting but a living presence. An artistic statement in its own right.” The exhibition demonstrates the achievements of the Victorian Tapestry Workshop to date.

Both exhibitions run at the gallery until November 29, with guided tours held each Sunday from 2.15 to 3.00 pm. Admission to the exhibitions is free. Enquiries can be made by calling 29 3263 or Fax. 29 6876.

HELLO DOLLY!

Metropolitan Players Inc, by arrangement with Tams Witmark Music Library Inc, present Nola Wallace in Hello Dolly at the University Drama Theatre from November 18 to December 5. Directed by Julie Black, from the Michael Stewart book, the play features music and lyrics by Jerry Herman and costs $10 (or $8 concession). Dinner and show are available on Wednesday and Friday nights for $30 per person. Bookings can be made by calling 48 6131.
INAUGURAL GEOLOGY POSTGRADUATE WORKSHOP

Participants in the PhD Workshop including members of University Geology staff; Geraldene Mackenzie, Bill Landenberger and Robin Offler

Postgraduate students from Geology and Earth Science Departments in universities throughout New South Wales contributed to a one-day workshop held recently in the Department of Geology. The purpose of the workshop, attended by 35 people, was to give PhD students the opportunity to present a 30-minute paper on their research to their colleagues.

The idea for the workshop was spawned by a similar style of meeting held annually in Victoria, where postgraduate students meet, present papers, and generally discuss their research and associated problems. Positive action to organise a similar style of meeting in NSW was initiated by Associate Professor Robin Offler early this year.

The variety of abstracts submitted reflected the diverse nature of geology as a subject, and the many sub-disciplines that postgraduate students pursue in the course of their research. A small volume of abstracts, produced by the Department of Geology, was distributed to all participants.

Unlike special meetings, which serve to keep students up to date with the latest research in their chosen field, this workshop served to broaden horizons. The chance to meet students from elsewhere in the state, to discuss research and directions, and to further develop communication and presentation skills, combined to make this day of great benefit to all. The positive outcome from the meeting has ensured the continuity of this idea into an annual event, with a meeting for next year confirmed, to be run by the Geology Department at Wollongong University.

CPA RESEARCH GRANT AWARDED

An accounting lecturer from the Department of Commerce, Mr Ron Day, has received a grant from the Australian Society of CPAs (Certified Practising Accountants), to undertake a research project. The CPA Research Grant Scheme is an initiative of the Society to help encourage accounting research and assist new accounting academics in developing a research profile. Ron received one of 8 CPA grants awarded, from a strong field of 32 applicants in 1992.

Ron's project, conducted jointly with Jim Psaros of the Commerce Department, will examine the consistency of accountants' judgements in determining control in compliance with the Australian Accounting Standards Board (AASB) standard 1024: Consolidated Accounts. It also aims to provide an indication of the operational effectiveness of certain guidelines outlined in the Standard which are meant to assist in making such judgements.

The results of the study may provide practitioners with some insight into the application of the new standard and may indicate the need for future amendments to the standard to improve its operational effectiveness in general, and its consistency in particular.

Ron joined the Commerce Department as a lecturer in 1991, after 13 years in accounting and teaching. He completed his Master of Commerce in Accounting at the University of New South Wales in 1989. His research interests are financial accounting, regulation of accounting and external reporting. He plans to gather the data for his standards research from accountants, through discussion groups held by the Society of CPAs, of which he is an associate member. Ron will complete the Society's CPA course at the end of the year.

Details regarding the 1993 CPA Research Grant Scheme will be available in the New Year. Applications for the 1993 grants will close on July 31, 1993.
NEW EDUCATIONAL AIDS IN MEDICINE AND SCIENCE (NEAMS) TRUST

Invites applications from Australian Medical and Science Faculty staff for a grant (up to $10,000) to further the aim of the Trust to develop educational aids (such as new computer simulations, interactive video presentations, etc) which will substantially reduce or abolish the need for the use of animals for teaching purposes.

APPLICATIONS CLOSE 31 DECEMBER 1992

Further information and application forms are available from The NEAMS Trust, PO Box 516 Darlinghurst NSW 2010, Telephone (02) 360 7114.

INNOVATIVE COURSES OFFERED AT NEW CENTRE

The BHP Hunter Chemical Computing Centre located in the Department of Chemistry at The University of Newcastle was opened recently by the Director of the BHP Research Newcastle Laboratories, Dr G Belton.

The Centre has been established with $48,000 donated by the Broken Hill Proprietary Company Limited, with additional funding for fitting out of the Centre coming from The University of Newcastle.

The Centre contains a network of 15 IBM compatible 386SX processor based personal computers using state-of-the-art software and a computer projection panel for teaching. It is designed for small group teaching for classes of up to 15 persons, and is directed towards science graduates already in the workplace and to trainees, particularly in chemistry.

The Head of the University's Department of Chemistry, Associate Professor Geoff Lawrance, said that with a grant of $38,300 from the NSW Education and Training Foundation, courses aimed at training chemists in the use of personal computers as part of their professional workplace skills have been developed. He said that most commercial courses which teach skills in the use and application of computer software are directed towards the business user rather than the scientist.

"The innovative courses developed by the Centre are directed towards the scientist, with appropriate relevant examples introduced as a basis of the training."

"The Centre will also have a role in the training of new graduates in the future," he said.

Associate Professor Lawrance said that the first formal course offered by the Centre will commence immediately. He said the facility could not have been established without the support of both BHP and the NSW Education and Training Foundation. He noted particularly the efforts of Dr Dom Swinkels, formerly of BHP Research, in facilitating establishment of the Centre.

"Computers not only allow scientists to be more productive in their work but also provide them with better means to communicate their results," Dr Belton said.

"I anticipate that various BHP industries in the region will make use of the Centre, and that the courses will be attractive for staff training in technologically-based industries generally."

Support of the Centre by the Royal Australian Chemical Institute has been reinforced with a cheque presented to the Centre by the Chairperson of the Newcastle Section of the Institute.

Further courses are planned by the Centre and will be open to all chemists and other scientists and technologists.

FOR SALE

The Department of Physical Planning and Estates is calling for tenders for the sale of a Battery charger, S.T.C. model 50/20/30, 50 volt DC at 20 amps. For more information contact Mr J. O'Donohue on 21 6509.

The Printery has for sale, by tender or inter-departmental transfer, a Printer Epson LQ1070 Dot Matrix Unit. For more information contact Mr David Heggart on 21 6662.

Tenders close at 11 am on November 20 and should be clearly marked "Tender for equipment" and addressed to The Purchasing Officer, Purchasing Department, The University of Newcastle, 2308.

The University reserves to right to reject any or all tenders.
AIRLIE WINS INAUGURAL WARDEN’S AWARD

A farewell dinner organised by Evatt House for its final year students resulted in a pleasant surprise for a long time resident, Airlie Pearson.

Airlie, an Art Education student from Tamworth, received the inaugural Warden’s Award for outstanding contribution to Evatt House.

Airlie’s win was greeted enthusiastically by the large audience which attended the dinner in the Brennan Room.

The Warden, Dr Bernie Curran, said Airlie was selected because of her involvement in Evatt House since it took its first students in 1990. Airlie had been a Resident Assistant and Senior Resident Assistant and been heavily involved in both the sporting and community aspects of the residential college.

Airlie’s award was one of a number presented at the dinner at which the Chairman of the Board of Directors, Mr John Peschar, and Deputy Vice Chancellor (Administration), Mr Lance Hennessy, presented the awards. Nearly all Evatt House residents attended the function.

Dr Curran said the past year has been very busy for the residential college and that he hoped extensions currently under construction would be ready for enrolments next year.

The extensions will take Evatt House’s total accommodation numbers from 147 beds to 200 beds.

He said Evatt House in the past year had inter-collegiate wins in tennis and rugby and a draw in squash. The inter-block trophy went to G10 while all round sporting participation trophies were won by Yo Antill and Ray Handley.

'92 EXHIBITION DESIGN

The inaugural “graduate” show from the fledgling Design Department successfully marked the coming of age of the degree course when it was held early this month. '92 Exhibition Design represented the work of Year 4 students in Graphic and Industrial Design degree courses and was funded entirely by industry and community supporters of the design program.

Graphic Design senior lecturer, Allan Morse, said the exhibition grew from the need to establish a sense of identity for the degree courses. “I believe this is a watershed year for the course as we have achieved a sense of reality and purpose as a fully fledged and professional unit,” Allan said. The design degree students from both disciplines have successfully marketed their skills to the business community, attracting over 20 companies to become Patrons of Design at the University.

Held at the Newcastle City Hall on November 9 and 10, the exhibition constituted professional corporate design folios from the Graphic Design students, from concept through to full pre-press production artwork, while the Industrial Design students' work also began with a concept, demonstrating the drawings and renderings leading to prototypes and design models. “The very shapes of the products we use in everyday life is determined by designers, from the way our cars look, to the shape of a lipstick or the appearance of a beautiful coffee table book,” Allan said.

Many of the 31 design graduates have full-time employment to go to in the weeks following the show, demonstrating their level of professionalism. The exhibition was also shown at Paperpoint in Sydney on November 12 and 13, allowing the students' excellent work exposure to a wider audience.

NEW GRIEVANCE ADVISERS

The University has recently appointed a new panel of Grievance Advisers, after a process of calling for expressions of interest and conducting two days of training. These people replace the Grievance Advisers appointed some time ago, (although several Advisers are continuing appointments, having re-nominated).

The new Grievance Advisers are

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<td>Simon</td>
<td>Computer Science</td>
<td>6067</td>
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<tr>
<td>Mr Bob Berghout</td>
<td>Mathematics Department</td>
<td>5546</td>
</tr>
<tr>
<td>Ms Catherine Davis</td>
<td>Conservatorium of Music</td>
<td>294231</td>
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<tr>
<td>Dr Diana Day</td>
<td>Centre for Environmental Studies</td>
<td>5556</td>
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<td>Mr Robert Milan</td>
<td>Staff Office</td>
<td>5271</td>
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<tr>
<td>Dr John Rodger</td>
<td>Biological Science</td>
<td>5705</td>
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<tr>
<td>Ms Sue James</td>
<td>Faculty of Medicine</td>
<td>5678</td>
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<tr>
<td>Ms Marie Govers</td>
<td>Professional Nursing</td>
<td>6316</td>
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<td>Ms Nanette Bryant</td>
<td>Counselling Service</td>
<td>5801</td>
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<tr>
<td>Ms Helen Parker</td>
<td>Careers &amp; Employment Officer</td>
<td>5588</td>
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<tr>
<td>Ms Anita van der Wal</td>
<td>CIT Building</td>
<td>5890</td>
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<tr>
<td>Ms Lianne Flynn</td>
<td>Social Work</td>
<td>5946</td>
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<tr>
<td>Mr Bob Weir</td>
<td>Student Division</td>
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Any Grievance Advisers may be approached; staff are not confined to the person located in their Faculty or geographical area. If the Grievance Adviser you first approached is unable to see you for any reason, he or she will suggest the names of others you may contact. Students may contact a Grievance Adviser on staff-related matters.

While the EEO Unit remains available to assist any staff member with an EEO related grievance, we encourage people to use Grievance Advisers wherever possible, not only for EEO-related matters but for other matters, such as problems with the allocation of tasks, conflict with fellow workers, or difficulties with other work or study-related matters. The procedure is totally voluntary and operates outside any formal (disciplinary or other) personnel systems, so you have nothing to lose by giving it a go!

Susan M Jones
EEO Co-ordinator
TENNIS COURTS OPENING

The long awaited synthetic grass tennis court complex was officially opened by Mrs Hilary Morgan last month. In uncharacteristic October sunshine Mrs Morgan unveiled a plaque marking the culmination of a five year struggle to make the courts a reality.

Officially approved by the University Council in 1987, plans for the complex had been plagued by financial and logistic problems that prevented the project from coming to fruition before this year. In his opening address Professor Barry Boettcher likened the problems to the progress of a typical 1950s tennis match, that went backwards and forwards, backwards and forwards. One of the barriers to developing the courts had been the proposed route of Highway 23, Professor Boettcher said. “If the Highway had followed its proposed route, we would now be standing in the middle of it,” he said from centre court. “We are delighted that eventually the ball landed at one end of the court and that we are at the end where it landed. We are all extremely pleased the courts are here and that they are of such a high quality,” Professor Boettcher, who was standing in for Sports Union President Dr Bernard Curren, said.

Mrs Morgan, while saying she had been good at sports, admitted tennis was not her game, saying she believed it must be a hazardous game because of the need to confine it to a caged arena. While acknowledging it had taken many years to plan and build, Mrs Morgan praised the courts, saying they would be a valuable addition to the University campus.

The 4 court complex, with lighting and a shed, had been built in 2 stages, Executive Officer of the Sport and Recreation Office, Adrian Larkin said. Situated on the eastern side of the campus, opposite the Hunter Building, the site of the courts had been excavated in 1990. The building work began in January this year, with the first game played on April 25. The shed was completed in June and the lights erected in July, Adrian said. The total cost of the complex had been around $380,000.

“The philosophy of the Sports Union is to develop a wide range of facilities for students and staff to use at an affordable price,” Adrian said.

The captain of the University Tennis Club, Graeme Steverson, presented a gift to Mrs Morgan and thanked her for opening the new courts. “On behalf of the tennis club, I want to say what a marvellous facility we have here, we are the envy of all the clubs in the region,” Graeme said.

Adrian larkin said the evergreen synthetic grass with sand in-fill courts gave a true bounce and played at medium speed (neither too fast nor too slow). After consulting competition tennis players on campus, he believes the Sports Union has succeeded in coming up with a good surface. “With the growth of synthetic grass courts a few years ago, many players decided to go elsewhere for a better service. I hope with the development of the courts, which are right up there amongst the best in the region, that staff and students will stay and play at the University,” Adrian said.

The official opening of the courts culminated in exhibition matches at noon, followed by a luncheon. Professor Boettcher acknowledged the contributions of Hugh Floyer, who he described as the driving force behind the courts, John Johnston of Physical Planning and Estates for the site presentation, and Peter Stevens, the ground curator, saying the attractive landscaping was a perpetual reminder of his service.

SPORTS MASTER PLAN

Sporting facilities on campus are inadequate and a master plan for future development of sporting facilities needs to be developed, Sport and Recreation executive officer, Adrian Larkin, said. Amalgamation, while adding greatly to student numbers, has added no new facilities and the University is now involved in a massive catch-up, Adrian said. Physical Planning and Estates, the Physical Education Department, the Sports Union and the University Administration are all co-operating to formulate a plan to develop sporting facilities on campus, he said. “We are conducting a mini-competition with architects to come up with an overall design or concept plan,” Adrian explained. “When we agree on one that provides the best solution to our site problems, we can proceed with it.”

The successful architect will need to consider energy saving systems, water reticulation, parking and other problems imposed by the limited space available for development. “Our major need is not for small components but for major developments including a massive increase in indoor sporting space,” Adrian said. “This needs a planned, not an ad hoc, approach.”

Adrian hopes the plan will be finalised so construction of the first phase of the master plan can commence by the middle of next year. He said the first priority will be a large auditorium that will include at least two basketball courts, a weight and circuit area, an aerobics room, office accommodation for Sports Union and Sport and Recreation staff and some storage space. Other proposed developments would be a 50 metre indoor swimming pool and provision for field sports, with the time scale determined by how the chosen architect phases the development, Adrian said. “With students now worse off in terms of sporting facilities per person than they were 10 years ago, we need an overall plan to meet the essential requirements over the next 20 years,” he said.
REGISTRAR RETIRES

The Academic Registrar, Mr John Todd, will retire from his position, departing before the end of November. At the October Academic Senate meeting the Vice-Chancellor, Professor Keith Morgan, thanked Mr Todd for his excellent service to the Academic Senate and the University over his career spanning almost 25 years on campus. Deputy Vice-Chancellor (Administration), Mr Lance Hennessy, described Mr Todd as a "tower of strength" in the complex and sometimes difficult negotiations leading up to amalgamation.

"Post-amalgamation, he has conducted the affairs of Student Division with considerable success and in particular, has made a significant contribution to the re-organisation and development of improved student systems. He has established a sound base upon which his successors can build," Mr Hennessy said.

The University Secretary, Phillip Alexander, conveyed the best wishes of the University Council to Mr Todd. The Council expressed appreciation of Mr Todd's outstanding period of service, originally in the University, then at the established a sound base upon which his successors can build," Mr Hennessy said.

Mr Todd plans to relax and enjoy reading, listening to music and getting some more exercise when he retires.

ADMINISTRATIVE JARGON

The following extract is taken from a letter received by a University researcher, advising the researcher that an application for support had been unsuccessful:

"Although your application referenced above was recommended for approval by the National Advisory Development Council at its September 21-22, 1992 meeting, the relative merit of your proposal when compared with other applications will not permit us to make an award. Therefore, we are administratively inactivating your application.

We appreciate the time and effort you spent on preparing the application. Any further applications which you may wish to submit will receive our full consideration."

Dean for Research at the University, Professor Ron MacDonald, assures us that our internal jargon has not yet reached the limits of this response.

EDUCATION FOR A GLOBAL SOCIETY

An international conference, Education for a Global Society, will be held at the University of Western Australia from July 4 to 9, 1993. Arising from a conference in Russia on "Teachers as Global Change Agents", the conference will focus on the development of teacher-training programs which provide teachers with a global perspective, a universal orientation and competence in developing and evaluating curriculum materials.

Abstracts of approximately 500 words should be sent to the conference secretary before December 20, 1992. Please contact Marjorie Tidman on (099) 412 472 or Fax. (099) 411 170; or write to PO Box 1044, Cannarvon WA 6701.

END OF YEAR FINAL EXAMINATION RESULT NOTIFICATION ARRANGEMENT

End of year final result notifications will be mailed to students between Thursday 17 and Friday 18 December 1992. Final result lists will also be displayed progressively by Faculty as soon as they become available from Wednesday 16 December in THE HUNTER BUILDING CONCOURSE.

If you have not received your final result notification by Monday 21 December, you will be able to view them in the Concource area.

LIBRARY HAS A NEWCAT TO REPLACE ITS ALLEYCAT

The Library has recently purchased a state of the art computer system from Innovative Interfaces Inc of Berkeley California. A replacement for its dear old ALLEYCAT system that has served the University faithfully for the past 12 years, the new system will go under the local name of NEWCAT.

The new online catalogue, which is the tip of the iceberg that is visible to the Library customers, has many advanced features not available from Alleycat:

• a beautiful screen design that makes the catalogue very easy to use;
• NEWCAT never gives up on you - if you ask for 'Sydney' it will list the nearest items, including all the entries with 'Sydney' spelled as it should be;
• if you can't guess what subject pigeon hole our cataloguers have used for a book then put in your best guess and NEWCAT will search for those words and give you a list of possibles - choose one of these and ask for all the other items with the same subject heading, or all the items nearby on the shelf;
• you may choose to go straight in under Subject rather than the cruider Word approach, and here NEWCAT guides you to the right term, for example, we have three books under 'Kidney, artificial', but NEWCAT also suggests that you may want to look under 'Haemodialysis' where there are a further 40 books;
• NEWCAT contains full entries for the whole Library collection (all libraries) and shows you the ones at your library first;
• at the NEWCAT terminal you can make suggestions for purchases or improvements to Library services and you can check Library hours or branch out to catalogues at other NSW universities. In the near future we hope you will also be able to issue your own loans and even search for periodical articles.

That's the tip of the iceberg. Underneath the water NEWCAT gives us enormous efficiency advantages in loans management, in ordering books, in maintaining the catalogue and in "checking in" periodic issues - we receive about 50,000 issues a year and have to chase those that don't arrive. All these staff savings will translate into better services for the customer and into more staff working directly with you. The last module of NEWCAT (Loans) goes "live" after Christmas. In the meantime some of the public catalogue terminals have been converted from ALLEYCAT to NEWCAT. Try them. We think you'll be impressed.

Tony Mayes
Deputy University Librarian.
NEUROSCIENCE GROUP SEMINARS
NOVEMBER/DECEMBER, 1992

Friday 20 November
Dr Judy Black
Department of Pharmacology
University of Sydney
“AIRWAY SMOOTH MUSCLE IN ASTHMA: CURRENT CONCEPTS AND RESEARCH”

Friday 27 November
Assoc. Prof. Simon Gandevia
Department of Clinical Neurophysiology
Prince Henry Hospital
“MICRONEUROGRAPHY AND THE NEURAL MECHANISMS IN KINAESTHESIA”

Friday 4 December
Dr Chris Holland
Gordon Craig Laboratory, Department of Surgery University of Sydney
“VAGAL AFFERENT REFLEXES IN CANINE MEGA-OESOPHAGUS”

Friday 11 December
Dr Chris Ho Hand
Gordon Craig Laboratory, Department of Surgery University of Sydney
“VAGAL AFFERENT REFLEXES IN CANINE MEGA-OESOPHAGUS”

Friday 18 December
Mr Peter Johnston
Discipline of Clinical Pharmacology
The University of Newcastle
“THE ROLE OF TACHYKININS IN OPIATE WITHDRAWAL”

Friday 24 December
CHRISTMAS LUNCHEON
Venue: Committee Room, MSB. 12.30pm
Convenor: John Heath
Telephone: 215620, 215608

DUBLIN EXCHANGE

The world is entering an “age of unemployment” in which vocation and career guidance may involve preparing people to find an identity separate to work, an Irish academic visiting the Psycho-Social Health Department believes. Dr Jim Chamberlain, a senior lecturer in the area of counselling and psychotherapy at the University College Dublin (UCD), is on academic exchange with Dr Jack Schumaker, who has corresponding and reciprocal areas of interest. “There was a time when work was perceived as a person’s main route to identity...but now I’m not sure it has the identity forming role it did,” Dr Chamberlain said. New technology was mainly responsible for unemployment levels of 11% in Australia and 20% in Ireland, and the 3-1/2 million people unemployed in Britain, he said. “We can not just consign all these unemployed people to a faceless, vacuous role where they get nothing but put downs.” The emphasis of careers guidance had shifted to counselling, Dr Chamberlain said, with life skills training a major concern for counsellors. “In the 1960s, thanks mainly to the input of American theorists, the notion of guidance changed, with emphasis not just on careers but on personal development,” he said.

Dr Chamberlain, with his wife Odran, has been in Newcastle since June and leaves on November 14. He agrees with Irish Prime Minister Mary Robinson, who said on her recent visit to Australia that this country was not unlike Ireland. “Ireland is trying to establish its identity as a young country in Europe and likewise Australia is establishing itself in south-east Asia. Like Ireland, Australia has had to come to terms with its relationship with England. I think as the new Australia emerges, it will define itself as a Republic,” Dr Chamberlain said. While in Australia, Dr Chamberlain has continued his role as Secretary-General of the International Association of Educational and Vocational Guidance (IAEVG), trying to establish stronger links with Australia’s guidance professionals. The IAEVG encourages research in the field, providing a forum to evaluate projects, and acts as a conduit for information through its newsletter, Dr Chamberlain said. The Association also acts as an advisory body for international organisations such as UNESCO, the European Commission and the International Labour Office.

He and Odran, who works as a part-time lecturer in the Psycho-Social Health Department, have enjoyed their Australian sojourn, travelling to Cairns and snorkelling off the Barrier Reef, sailing on Lake Macquarie and indulging in a bush BBQ on a Hunter Valley property. Living at Bar Beach, they have enjoyed the beauty of the beaches and were particularly impressed that no-one is allowed to own them or fence them, as is the case in many European countries. Dr Chamberlain paid tribute to the Department of Psycho-Social Health Studies, saying it was efficiently run by a dedicated group of people. He thanked his colleagues for their hospitality and friendship. While they would feel a tug at leaving Australia, the Chamberlains were anxious to see if the 3 of their 4 children living at home had left them with a house to return to.
POSITIONS VACANT

VICE-WARDEN
IRENE HALL RESIDENCE (FIXED-TERM)
INTERNATIONAL HOUSE
(POSITION NO A261/92)

The University is seeking applications from interested men and
women for appointment to the position of Vice-Warden of the Irene
Hall Residence, which is a unit of International House, providing
catered accommodation for approximately 250 residents. The
residents are male and female and a mix of Australian and
overseas students.

The Irene Hall Residence is the former Irene Hall Nurses Home
of the Royal Newcastle Hospital, and is situated in the central
business district of Newcastle adjacent to Newcastle Beach.

The Vice-Warden will provide leadership within the Irene Hall
Residence and is also responsible to the Warden of International
House for its overall management. The Vice-Warden will be assisted
by a Manager, a Deputy Warden and appropriate administrative and
residential staff.

ESSENTIAL:
• University degree.
• Demonstrated experience in dealing effectively with young people.
• Interest in the welfare and educational advancement of students
  including overseas students.
• Relevant pastoral/educational or organisational/administrative
  experience.

DESIRABLE:
• Higher degree or progress toward higher degree.
• Experience in a University residential community.
• Willingness and capacity to seek affiliation with an academic
department within the University.

GENERAL:
The initial appointment will be for two years, with the possibility
of extension to five years. If possible the appointee should take up
duty by 1/1/93.

The appointment will be a fractional one, the duties of the Vice-
Warden occupying two thirds of the time of the person appointed.
The appointee will be expected to devote the balance of time to
academic pursuits and will be encouraged to seek or maintain
affiliation with a department within the University.

Accommodation: It is essential that the Vice-Warden occupy the
Vice-Warden’s flat within the residence which is provided rent free.
In addition ten free meals per week will be provided in the cafeteria
if required.

For further information contact Associate Professor Noel
Rutherford telephone (049) 21 6966.

Salary: $38,608 p.a.

Applications close: 16 November 1992

ENVIRONMENT OFFICER
THE UNIVERSITY OF NEWCASTLE UNION

The Union intends appointing, on a scholarship basis, a student
of the University to fill the above position, effective from the
commencement of First Semester 1993.

The successful appointee will work with the Union’s Environment
Committee and Union staff to research and advise on environmental
matters relevant to the Union’s operations, and to assist in
implementing environment policy.

The appointee will be responsible to the Executive Manager, Stan
Barwick, and will be expected to contribute eight hours per week
during each semester.

The appointment is for 1993 only, and the position will be
re-advertised in October 1993 for a new appointment in 1994.

The Union will reimburse the appointee’s H.E.C.S. payment at
the end of each semester, on satisfactory appraisal of performance.
The General Service Charge will be reimbursed on request, as
will an amount of up to $120 per semester for text books relevant
to the student’s course.

The total value of the scholarship is approximately $2,500.

Applications should be directed to:
The Executive Manager
The University of Newcastle Union
Callaghan NSW 2308

or may be delivered to the Union Office on Level 5 of the Shortland
Union building.

They should include personal details, a resume, and an indication
of the areas in which the appointee feels that he/she may be able to
assist the Union.

Applications close at 5.00pm on Friday 27 November, 1992.

ACADEMICS STUDY
THEIR OWN TEACHING

The University of Technology, Sydney, will offer a Graduate
Certificate in University Teaching and Learning for academic staff
in 1993. The project work of academic staff enrolled in the course
will focus on their own teaching.

According to course coordinator, Dr Keith Trigwell, participants
from a range of academic disciplines will reflect on, and further
develop, their teaching skills. Projects chosen include case studies
and evaluations in laboratory teaching, the quality of assessment in
Engineering and the use of learning contracts in Design education.

The Graduate Certificate is a one year part-time course that is
structured to meet individual needs and is an excellent professional
development opportunity for academics. It involves workshops and
project work and is assessed by negotiating projects and assign-
ments.

The course is run by the Centre for Learning and Teaching
(CLT) at the University of Technology, Sydney. Applications from
practising academics are currently being accepted.

For further information contact Dr Keith Trigwell on
(02) 330 2200.
Bulletin is your magazine. It is therefore important for you to tell us what you want to read, how often you would like Bulletin to be published and the format you think it should take. Please complete this report card and send it to the editor, Sonja Duncan, in the Public Relations Unit, Chancellery. All constructive comments will be considered!

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GENERAL COMMENTS ________________________________

I would prefer Bulletin to be published

☐ fortnightly

☐ every three weeks

☐ monthly

I think Bulletin should be aiming to ________________________________

I think Bulletin could be improved by ________________________________

Uninews should differ from Bulletin by ________________________________

I am happy with the new format of Bulletin

☐ Yes

☐ No

Name (optional) ________________________________

Department ________________________________
**LETTERS TO THE EDITOR**

Dear Editor,

Lead poisoning of our children has again entered the news, with tales of excessive levels recorded in children in various Sydney suburban areas.

In all areas tested, the levels have been far in excess of U.S. standards and are even in excess of the very lenient Australian standards. But what of all the children in other areas who have not been tested, it is likely that they are also the victims of lead contamination.

Studies have been done of children between one and five years in areas around and near inner city Sydney and the results have shown that thousands of these young children (over half of those tested) are at risk because of excessive levels of lead in the environment. High blood levels of lead have been proven to impair children's intellectual levels.

But to be honest, lead contamination is just one of the risks facing us, as pollutants and chemical exposure become more and more prevalent in the society in which we live. And these problems are not just restricted to city dwellers. Risks of chemical and pesticide exposure are also a real danger for those who live in or near rural areas.

As Dr Megan Shields stated in the Introduction to L. Ron Hubbard's *Clear Body Clear Mind* (a book outlining the Purification Program - a program designed to flush toxins and drugs from one's system), "Drugs, toxic chemicals, pesticides and other life hostile elements pervade the society in which we live. Other than choosing to live in a sealed environment, cut off from the remainder of the race, there is no way a person can avoid exposure to these toxic influences."

So it is time that we all, for our own and our children's sake, start calling for tighter measures to be enforced on chemicals and other pollutants currently used in our society, because at present the future does not look bright unless drastic changes are made now.

Sincerely,

Judy Wilson
Church of Scientology
Sydney.

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Dear Editor,

I enjoyed your article on Dr Who (Hu) very much and while it was written in a light hearted vein I must correct a serious error on your part. Your second sentence stated that "He is supervised by Associate Professor Brian Fraser" when in fact Mr. He is supervised by Associate Professor John O'Connor and it is Dr Hu who is supervised by Associate Professor Fraser. To add insult to injury you do not mention poor He again in your article but only talk about the achievements of Hu. Now in the Chinese language He is actually pronounced not as He but as Her which leads directly to the whole point of this letter which is to point out for your benefit and that of your readers that in actual fact Hu is not He who is Her. I hope this clear up any confusion.

John Foster
Physics Department.
### OFFICE FOR RESEARCH

Further information and relevant application forms are available from the Office for Research - Ph 215305

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### SCHOLARSHIPS

Information on the following scholarships may be found posted on the Scholarships noticeboard in the concourse of the Hunter Building or is available from the Scholarships Office, Hunter Building (Tel. 216544).

**COMMONWEALTH GOVERNMENT OF AUSTRALIA**

**SCHOLARSHIPS FOR POSTGRADUATE STUDY IN AUSTRALIA**

Awards for students from Canada, New Zealand and United Kingdom to undertake postgraduate study in Australia. Not stipulated

**UNIVERSITY OF QUEENSLAND VACATION SCHOLARSHIPS 1992-93**

Supervised research for 8-12 weeks in the December/February period. 18 November 1992

**JOHN CONRAD JAEGGER SCHOLARSHIPS - THE AUSTRALIAN NATIONAL UNIVERSITY, CANBERRA**

Special scholarships for PhD research to be undertaken in the Research School of Earth Sciences. 30 November 1992

**PHD SCHOLARSHIPS AT THE UNIVERSITY OF NEW ENGLAND, ARMIDALE**

Outstanding opportunities for postgraduate research in sustainable tree-pasture ecosystems. 1 January 1993

**THE ANTHONY JOSEPH PRATT/FCO SCHOLARSHIP, BRITAIN**

1-year Master’s course in a subject relevant to the paper recycling/packaging industry.

Applicants must be Australian citizens. 31 January 1993

**AMERICAN ASSOCIATION OF UNIVERSITY WOMEN EDUCATIONAL FOUNDATION 1993-94 FELLOWSHIPS AND GRANTS**

Postgraduate study awards for women who have demonstrated scholarly excellence. Preference will be given to women with a proven commitment to the welfare of women and girls through prior civic, community, or professional work. Minority women are strongly encouraged to apply. 1992-1993

**VICTORIA UNIVERSITY OF WELLINGTON, NEW ZEALAND**

Postgraduate scholarships are available across all disciplines in 1993. 16 November 1992

**JAMIESON AWARDS - AUSTRALIAN FEDERATION OF UNIVERSITY WOMEN - NEW SOUTH WALES**

Awards for women students in Science, Arts, Engineering, Architecture or Agricultural Science, Medicine or related field. Applicants should be completing final or honours year of their courses. 3 February 1993

**THE PACKER SCHOLARSHIPS / THE KATER SCHOLARSHIP - CAMBRIDGE AUSTRALIA**

Postgraduate awards open to Australian citizens wishing to pursue courses of research leading to a PhD at the University of Cambridge in subjects deemed relevant to Australia’s needs. 30 April 1993

**CHICKEN MEAT RESEARCH AND DEVELOPMENT COUNCIL**

Applications from Australian citizens are invited for Undergraduate Research Scholarships and Junior Research Fellowship Awards. The awards aim to attract people of high calibre to work on projects of relevance to the chicken meat industry. Dec. 1992-1993

**AUSTRALIAN VICE-CHANCELLORS’ COMMITTEE**

Opportunities for Australian students to undertake studies or research of French literature, language and civilisation (social, historical, political and cultural issues). 31 December 1992
TROPICAL ENVIRONMENT SUMMER SCHOOL

James Cook University will host its third Tropical Environment Summer School during the 1992-3 summer break. The program is designed to provide a better understanding of a variety of environmental topics across a range of disciplines. This year the program emphasizes University accreditable intensive courses designed for postgraduate students and graduates working for government agencies. It includes the following courses:
- Caring for Country: Conservation in Aboriginal Environments
- Principles and Practices of Protected Area Management
- Coastal Zone Management in the Tropics
- Environmental Remote Sensing
- Geographical and Land Information Systems
- Ecological Principles and Methods Applied to Tropical Systems
- Plants of the Tropical Rainforest

Students can take the courses on a complementary basis with the permission of the University. Courses average 5 contact hours per day with the inclusion of workshops and field work as necessary. A certificate of attendance will be issued to all students and University credit points awarded to those who complete the assessment satisfactorily.

Courses are subject to a minimum enrolment, with a ceiling set on numbers for most courses, so prompt enrolment is advisable. Most University credit points are available at a University college. For further enquiries, please contact Mrs Kay Maddison on (077) 81 4325; Fax. (077) 79 5717 or write to Tropical Environment Summer School, Environmental Studies Unit, James Cook University, Townsville, QLD 4811.

LABOUR HISTORY CONFERENCE

An invitation is extended for papers and expressions of interest for a National Conference in Labour History to be held in Newcastle on June 25 and 26, next year. Submissions should be made by the end of December, in writing to Bob James, C/- Department of History, or C/- Hunter Labour History Society, 3/79 Tudor Street, Hamilton 2303.

BOOKS, READERS, READING

Miles Franklin called it 'kangarooing' when she did it rapidly. Many women of her time felt guilty about doing it at all. Men were seen to take it far more seriously.

Reading in this country is the subject of the 1992 issue of the journal Australian Cultural History, this year titled 'Books, Readers, Reading'. Many facets of the theme are examined in the collection of 12 articles and any avid reader is likely to find something of interest.

In the article titled 'If Mother caught us reading....' the recurrent perception from both sexes is that men did the 'serious reading' while women read 'trashy things in snippets, if at all.

Women themselves were likely to deny that they were readers because being a good housekeeper implied that one would not have the time for such 'idle' pursuits.

The journal is edited by Deakin Professor of Australian Studies, David Walker and printed by the University's Book Production Unit. The current issue was co-edited by Julia Horne and Martyn Lyons.

'Books, Readers, Reading' is available now for $13. Back issues, including 'Australian percep­tions of Asia' and 'Travellers, Journeys, Tourists' are available for $10.

To order the journal contact Professor Walker in the Faculty of Humanities, Geelong campus, Deakin University, telephone (052) 271364 or fax (052) 272018.

THE UNIVERSITY OF NEWCASTLE CONVOCATION, SPORTS UNION AND UNIVERSITY UNION

Proudly present

PROFESSOR GODFREY TANNER'S FAREWELL

on Thursday 19 November 1992

You are cordially invited to attend either the Farewell Drinks being held in the Tree-house, Shortland Union Building, commencing at 6.30pm; and/or the Farewell Dinner commencing at 7.30pm in the Brennan Room.

Tickets are on sale now from the University Union. For further enquiries, please contact Mrs Kay Maddison on 683 993 or ext 6013.

If you are unable to attend, but would like to sign the card, it is available in the Shortland Union Building in the Union Functions Office, Level 4, Shortland Union Building.

Come along and say goodbye and good luck to one of our longest serving and most renowned University Professors.

249 GALLERY

presents a photographic exhibition by Kathy Triffitt
November 23 - December 6

"Self - Documentation Self Imaging People living with HIV/AIDS (1988- )"