THE UNIVERSITY OF WOLLONGONG

CAMPUS NEWS

Distributed each Tuesday

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Editor: George Wilson, Tel. (042) 270391

14 July 1987

HALF-MILLION-DOLLAR GRANT FOR MICROWAVE DRYING PROJECT

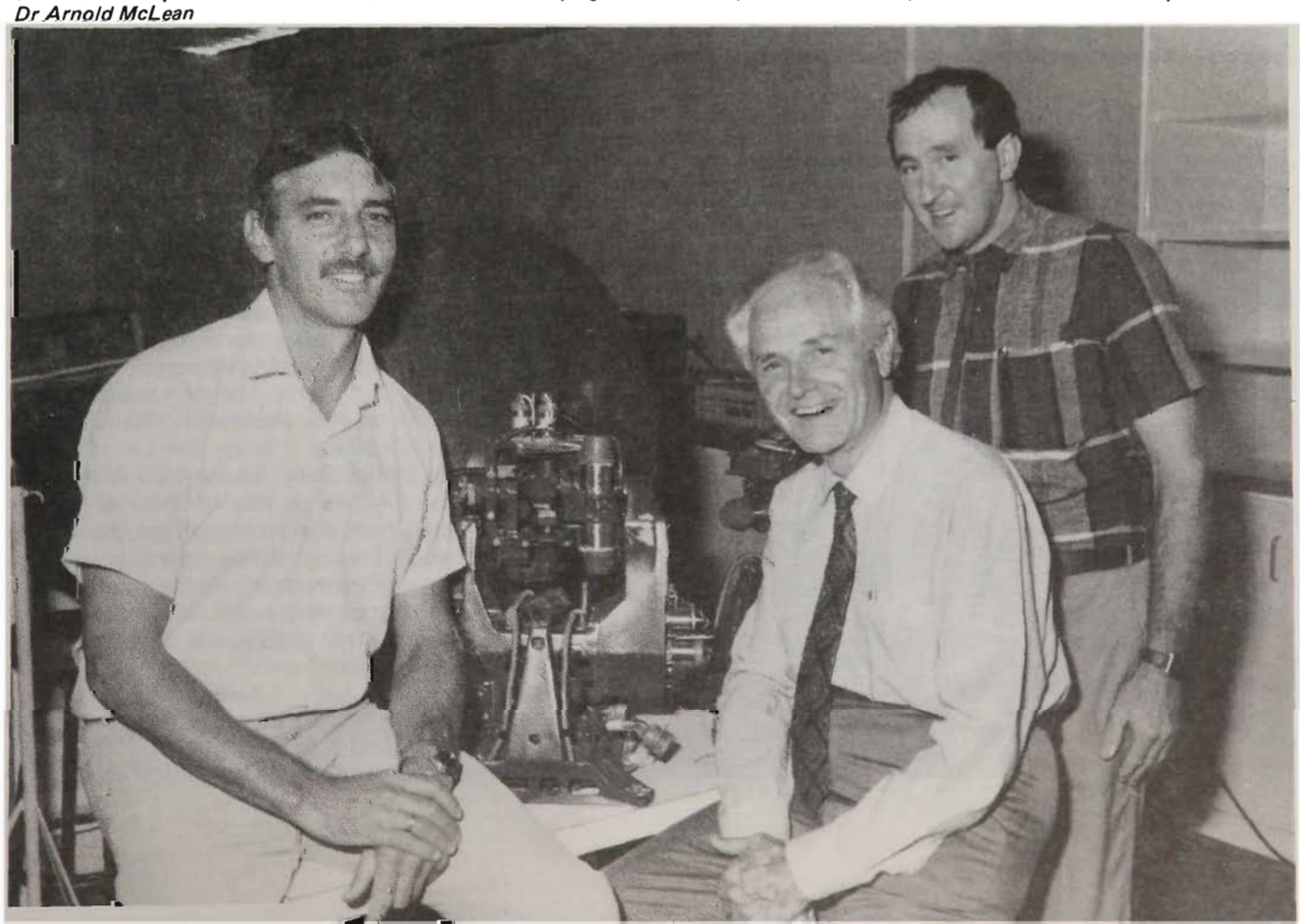
The University of Wollongong has received a grant for the sum of $454,900 (one of the biggest in the University's history) in support of the microwave drying research described in *Campus News* for April 7. The offer of support comes from the Australian Industry Research and Development Board of the Department of Industry, Technology and Commerce. The purpose of the grant is for the Microwave Centre to undertake a program of research into 'High-intensity smelting with microwave irradiation precursor treatments' under the Generic Technology Grants – New Materials Technology Scheme. The $454,900 grant is to be spread over three years.

The Microwave Applications Centre was officially opened by Mr Peter Cox, the NSW Minister for Industry and Small Business, Energy and Technology in March. The Centre was established with the support of Illawarra Electricity Pty Ltd and Industrial Microwave Applications Pty Ltd – a company based in Ryde, NSW. Administration of the Centre is through Uniadvice, the University of Wollongong's consulting company, and it has developed – very quickly – a reputation as a national leader in research into new applications of microwave technology for industry.

The Centre has in fact received statements of support from a number of major companies which have been quick to identify the potential for the applications to manufacturing and other production processes.

Appointed by Uniadvice as Interim Director of the Centre, Howard K. Worner is an Honorary Professor of the University of Wollongong. He is a scholar with a lifetime of service to, and experience in, industry and as an academic. Also deeply involved in the project are Dr Arnold McLean, Dr Frank Paoloni and Professors Smith and Bradlow in the Department of Electrical and Computer Engineering, Professor Peter Arnold of the Department of Mechanical Engineering, Associate Professor Nick Standish in the Department of Metallurgy and Materials Engineering, and Professor Alan Cook in the Department of Geology.

Three of the key researchers into industrial microwave drying: from the left, Dr Frank Paolini, Professor Howard Worner, and Dr Arnold McLean



General Notices

RELAXATION AND STRESS MANAGEMENT

A new course will begin on Wednesday July 22 from 7 to 9 pm at the Northern Lounge in the Union Building. The basic program is of eight weeks duration and is divided into theory and practice.

Topics covered are the stress factors in the mind, emotions, body, nutrition, environment. Skills taught and practised are dynamic relaxation meditation, concentration, breathing, visualisation affirmations, Matha yoga.

The aim of the program is to teach participants the causes and effects of stress in their lives and to give them as many techniques as possible to manage stress under all circumstances and situations. The classes take a maximum of 20 people, so there is no lack of individual attention. Each night includes a period of deep relaxation.

The program will continue until mid-December. Cost of the basic eight weeks is $50, less $10 deposit then $7 for each separate evening.

It is entertaining, informative and very practical. All welcome. Bookings and enquiries — Jonathon, Active Development and Motivation, (042) 289704.

ACCIDENT RESEARCH CENTRE HEAD NAMED

Dr Peter Vulcan, Chief General Manager of the Victorian Road Traffic Authority, has been appointed director of the newly-established Accident Research Centre at Monash University.

The $1 million Centre was announced by the Treasurer, Mr Rob Jolly, and the Minister for Transport, Mr Tom Roper. It will be sponsored jointly by the Transport Accident Commission and the Road Traffic Authority.

NEW COURSE TO TRAIN THE COMPLEAT GENETIC ENGINEER

Whether exporting Foster's Lager or a bug to break down chemical wastes, a new postgraduate course at Monash will help ensure that Australia remains at the forefront of biotechnology.

The Master of Biotechnology degree, beginning in October, is the first interdisciplinary course of its type in Australia. It will teach participants not only about genetic engineering and the other techniques of modern biotechnology, but also about their application to industry, medicine and agriculture and the engineering and management considerations including legal and ethical issues.

The new course aims to train graduates who are starting a career in biotechnology and to educate working professionals about the potential of biotechnology, an area of research and application particularly relevant to Australia.

It will build upon the acknowledged expertise of the university and the CSIRO division of Wood and Chemical Technology in genetics, microbiology, biochemistry, chemistry, chemical engineering and administration.

The Master of Biotechnology is offered to honours science or engineering graduates as a full-time course to be completed in a year, but there is also provision to complete the course over two years.

Some places are still available in this year's course. Further information can be obtained from Professor Faine on (03) 5654820 or Dr Ian Prince of Chemical Engineering on (03) 5653449.

At the trialling of the Resources Material for Secondary Schools, reported on page 2 of 'Campus News' last week, are Mr Brian Rogers, and, from the left, Gillian Crowhurst, Damon McVicar and Kristin Sykes of Wollongong High School

CENTRE AWARDED $68,000 GRANT

The Centre for Studies in Literacy has been awarded a total of $68,000 for a Research and Development project aimed at improving the teaching of literacy in the secondary school system.

The grant comprises $23,000 from the NSW Disadvantaged Schools Program Committee and $45,000 from the Schools' Commission's 'Projects of National Significance' initiative.

The Centre for Studies in Literacy's brief is to 'work with three NSW high schools to develop as a package a transferable in-service course on literacy in secondary schools. The course will provide knowledge and skills to enable selected members of staff to become 'peer teacher developers' to inform and support fellow staff in acquiring knowledge and skills in literacy acquisition and development.'

The three disadvantaged high schools are Marrickville, Canterbury Girls and Shalvey.

Two members of the Centre, Brian Cambourne and Jan Turbill, have started trialling some in-service units with these schools.

In 1988, together with Peter Keeble, Bob Colvin, and Bevan Ferguson, they will begin to evaluate the impact of the Secondary Literacy In-Service Course (SLIC) using techniques similar to those which they developed in the 'Early Literacy In-Service Course (ELIC) evaluation.

PROFESSIONAL PLAY WORKSHOPS FOR LOCAL WRITERS

Two well-known Sydney directors and a troupe of eight professional actors have spent five days in Wollongong earlier this month developing scripts by local playwrights and conducting a play-writing session open to the public.

Phillip Keir and Kerry Dwyer were sponsored by the Theatre Board of the Australian Council to workshop plays by Joy Wiedersatz, Dianne Bates and Debra Keenahan.

The plays ***Wham Bam, Thank You M'am*** by Bates and Keenahan, and ***A Strange Way of Showing It*** by Wiedersatz were selected from a short-list of ten plays submitted to the directors, following a play competition conducted by The Illawarra Playwrights' Association. Twenty eight scripts were submitted by Illawarra playwrights from as far afield as Robertson and Nowra.

The selected plays were workshopped at the Bridge Theatre, Coniston (July 7 to July 10) and then each was presented at the theatre as performed public readings on Friday, July 10 and Saturday, July 11.

The week of workshops was made available by a grant

NEW HOME FOR ILLAWARRA ACADEMY OF SPORT

The Illawarra Academy of Sport has moved. The Academy's new administrative office is located on the ground floor of building 8 (the 'old' University Administration Building).

The Academy recently announced the appointment of its first full-time Administrative Director, Mr George Anderson, who joins Mrs Anne Treue who has been the Administrative Assistant/Secretary at the Academy for 11 months.

The Illawarra Academy of Sport was officially launched in December 1985, after several years of planning by a committee including representatives of the state and local governments, The University of Wollongong, the regional community and local sporting groups. The Academy enjoys the endorsement and support of the Australian Institute of Sport and is in close liaison with the regional governing bodies of each sport.

The Academy started in January 1986 with the basketball, gymnastics, hockey and netball squads. At present, nine coaches and 76 athletes are involved in these programs. The current board of management meets regularly to review the sports programs, consider the introduction of further sports and develop policy.

The Academy's programs aim to:

1. Provide opportunities and encouragement for talented Illawarra sports persons to achieve excellence in sport;
2. Provide sports science testing and evaluation services for talented sports persons; and
3. Develop innovative programs for the improvement of sport in the Illawarra region.

Academy athletes are selected from the five Illawarra Council areas of Wingecarribee, Shoalhaven, Kiama, Wollongong and Shellharbour, and both training and competition programs are conducted throughout this region.

Financial support required to implement the Academy's programs comes from the state and local governments and generous sponsorship by The University of Wollongong and many other local organisations and business houses.

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of $5,280 from the Theatre Board of the Australia Council in an effort to encourage arts development in the Illawarra area.

In 1988, as the result of funding by the Bicentennial Committee, the Illawarra Playwrights' Association will be presenting an evening of local plays at the new Wollongong Performing Arts Centre.

For further information, contact Dianne Bates, Secretary TIPA on 272207.

PR CONFERENCE

A Public Relations Conference will be held at Mitchell College, Bathurst, on Saturday July 25.

Leading Sydney practitioners such as Jane Jordan (Jordan Hardingham) will conduct workshops and seminars, which aim to give students a better understanding of PR, as well as building up contacts between the groups for future work experience and employment.

Registration will be at 11.30 am for a midday start. The conference is open to all interested people. The cost is just $4.

After the conference there will be a dinner at 7.30 pm. Guest speaker will be 'Diamond' Jim McClelland. Will all interested parties please send $13/head to Mitchell Public Relations, PO Box 618, Bathurst, 2795; cheques made out to Mitchell Public Relations, please.

Further information — Scott Bolles (063) 315763 or Jenni Muir (063) 316880.

ABORIGINES WEEK

The Aboriginal Education Unit on campus is celebrating National Aborigines Week from September 7 to 11.

Activities for the week will include:

Monday 7 — Flag-raising ceremony by the Aboriginal students on campus.

Tuesday 8 — Aboriginal Story Teller in the Aboriginal Education Unit.

Thursday 10 — Videos in the Northern Lounge between 9.30 am and 3 pm.

Friday 11 — An Aboriginal Week Ball will be held in the Union Hall with pre-dinner drinks at 7 pm. Tickets are limited to 200 at $18 each and can be purchased only through the Aboriginal Education Unit in D10. Contact Janice Wilson. Anyone is welcome.

REMEDIAL MASSAGE

For relief of tension come to the Sports Association or phone 281873, Monday, Wednesday, Friday, Saturday, Sunday.

eeo news....

ILLAWARRA CLUSTER GIRLS' AWARENESS DAY

During the week Monday June 29 to Friday July 3, the University was host to Year 10 girls from south coast high schools attending the Illawarra Cluster Girls' awareness Day, funded by the Participation and Equity Program.

This is the second year this Awareness Day has been held at The University of Wollongong, and the popularity of the program can be seen by the numbers that attended — 900 girls from 11 schools in 1986; in 1987 over 1100 girls from 14 schools.

The aim of the program is to make girls aware of the need to consider wider career options including those in non-traditional areas of employment, and also to raise girls' awareness that they can successfully undertake a career as well as raise a family.

The program began each day with a keynote address, followed by five alternating workshops on topics such as Your Rights at Work, Professional Maths and Science, Technical Careers, Trade Careers, and Service Careers.

After a break for lunch, sessions were held on Family and Career. All sessions were led by female role models from the Wollongong area; the organisers are indebted to the management of the Illawarra County Council, BHP Slab and Plate and Coated Products Division, who released staff from duties so that they could attend and lead the sessions. In all, 65 female role models from the community were present at various times over the five days.

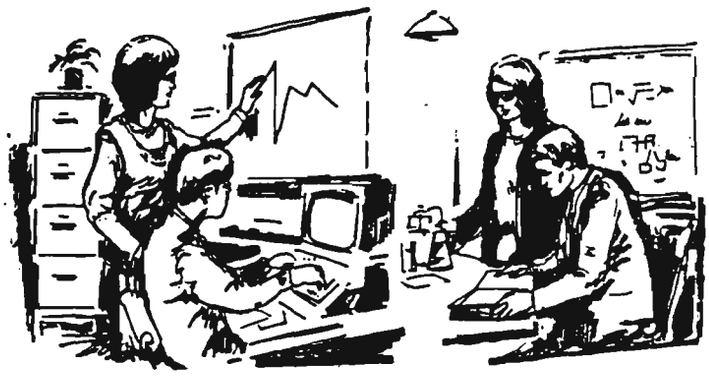
This program, I feel, is a good example of EEO long-range initiatives.

Peg MacLeod
EEO Co-ordinator

ILLAWARRA MUSIC CLUB 1987 CONCERT SERIES

Friday August 28 — University of Wollongong Union Hall at 8 pm. Illawarra Mercury National Operatic Aria Competition Semi-Final.

Saturday August 29 — Wollongong Town Hall at 8 pm. Illawarra Mercury National Operatic Aria Competition Grand Final Concert.



Staff Roundup

DO FINANCES BAFFLE YOU?

To assist staff in understanding the University's financial system, a seminar will be held on August 19. During the time an overview will be given, as well as specifics such as budget allocation, making purchases, having accounts paid, how fines are processed, understanding the monthly reports, transferring funds, and updating commitments. The seminar will be particularly useful for those responsible for all or part of the accounting function in this area.

If you wish to attend this seminar, please complete the blue nomination form for staff training activities, available from the Personnel Services Branch. Venue and time will be advised following nomination. Nomination closes August 7.

Further details: Wendy Raikes, ext 3946, or Alison Hart, ext 3485.

PERSONNEL BECOMES COMPUTERISED

Commencing July 1 a new integrated payroll personnel system will be introduced.

Due to the necessity to parallel-run the existing and new system for approximately two months, payroll cut off times will be crucial and strictly adhered to.

As a reminder cut off times are:

Permanent Payroll. Any changes or variations to reach Salaries not later than noon on the Monday following a pay day. For overtime not later than noon on the Tuesday following pay day.

Casual Time Sheets. Time sheets to reach Salaries not later than noon on the Tuesday preceeding pay day.

Part-Time Teaching. Returns to reach Salaries not later than noon on the Monday preceeding pay day.

STAFF SURVEY

In line with the computerisation, staff who have not received, or who have not yet returned a completed staff survey are requested to contact Miss J. Hickey, ext 3935, from Personnel Services Branch.

Prompt return of the surveys would be greatly appreciated.

Further details from Bob Hogarth, ext 3934.

VANCE AWARDED SCHOLARSHIP AND DEVELOPMENT LEAVE

David Vance, the University's Music Development Officer, has been awarded a scholarship by the Italian Government to study conducting at the Accademia Musicale Chigiana. David left for Italy two weeks ago and plans to take up the scholarship for this and next month.

In conjunction with the scholarship, David has been awarded a period of Development Leave to allow him to first, visit a number of other musical centres in Italy and Austria, and secondly, to work on his BMus thesis in England studying the Benjamin Britten archives and visiting other prestigious institutions. David will return to the University in late October.

The Development Leave for General Staff scheme has been operating over three years now, and David's award brings the total number of staff participating to ten. Development Leave may be taken either in Australia or overseas, and is intended to enable a staff member to complete a program of study and/or visits of mutual benefit to both the staff member and the University. Generally, the period of leave will not exceed three months. A contribution to travel and other costs may be available.

Full details of the terms and conditions of Development Leave are available from Wendy Raikes, ext 3946.

CURRENT VACANCIES

† Secretary, Computing Science, closing date July 17
† Clerk (limited term), Business Services, Financial Services Branch, closing date July 17
† Senior Administrative Officer Grade 1, Business Services, Financial Service Branch, closing date July 17
† Clerk Grade 1/2 (Debtors Clerk), Financial Services Branch, closing date July 17 (re-advertised)
* Lecturer (limited term), Economics, closing date July 17
* Lecturer/Senior Lecturer in Drama (limited term), English, closing date July 17
* Lecturer/Senior Lecturer (tenurable or limited term), Languages, closing date July 17
* Lecturer/Senior Lecturer in Statistics (tenurable or limited term) (2 positions), Mathematics, closing date July 31
* Lecturer in Quantitative Psychology (limited term), Psychology, closing date July 31
* Lecturer (tenurable or limited term), Science and Technology Studies, closing date July 31
* Associate Professor (tenured), Computing Science, closing date July 31
* Lecturer/Senior Lecturer (tenurable or limited term), Computing Science, closing date July 31

Further details: for those vacancies marked †, Gary Graham, ext 3935, for those vacancies marked *, Ross Walker, ext 3934.

STAFF CHANGES

NEW STARTERS
Ms C. Boua, Translator, History and Politics
Dr J.C. Trinkle, Lecturer, Mechanical Engineering
Ms M. Leonard, Library Technician, Library
Mr R.M. Howard, Visiting Teaching Fellow, Electrical and Computer Engineering
Ms I.M. Romanova, Lecturer, Health Sciences
Dr B. Ellem, Lecturer, History and Politics
Dr B.R. Jefferies, Research Fellow, Mathematics
Dr C.J. Hallinan, Lecturer, Health Sciences

TRANSFER/PROMOTION
Mr O. Curtis, Lecturer, Health Sciences

DEPARTURES
Mr B.A. Shorten, Teaching Fellow, Economics
Miss C. Zelinsky, Graduate Assistant, Student Services
Ms J.J. Sheridan, Secretary, Economics
Mr B.S.P. Perera, Teaching Fellow, Electrical and Computer Engineering
Dr A.R.M. Young, Lecturer, Geography
Dr K.G. Russell, Senior Lecturer, Mathematics
Dr H.B. Bendall, Lecturer, Economics
Mr H. Henley-Martin, Garden Labourer, Building and Grounds
Ms A. Connor, Office Assistant, Student Services
Mr J. Lajoie, Caretaker, Buildings and Grounds (retired)
Ms I Glossop, Cleaner, Buildings and Grounds (retired)
Ms S.E. Corderoy, Internal Auditor, Business Services

Research Funds

The following sources of research funds are now available to members of academic staff. Further information including application forms may be obtained from Annette Read (ext 3386) or Ian Strahan (ext 3079). Intending applicants are reminded that all research applications must be forwarded through the Office of Research and Postgraduate Studies.

NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL – TRAINING FELLOWSHIPS, C.J. MARTIN FELLOWSHIPS

The NH&MRC have invited applications for the following training fellowships:

C.J. Martin postdoctoral fellowship – Biomedical sciences
Australian postdoctoral fellowship – Biomedical sciences
Neil Hamilton Fairley fellowship – Clinical or community medicine (including social and behavioural sciences)
Australian Applied Health Sciences fellowship – Clinical or community medicine (including social and behavioural sciences)

Applications close with the University on July 20.

PUBLIC TRANSPORT CONSULTANTS

The Urban Transit Authority of NSW is seeking expressions of interest from all consultants with particular expertise in public transport strategic and operations planning.

Submissions are required by July 24.

AUSTRALIA COUNCIL – LITERARY AWARDS

The Literature Board of the Australia Council has invited applications for support of Literary Magazines and Writers in residence in tertiary institutions.

Applications close with the University on August 1.

AUSTRALIA COUNCIL – ARTS/CRAFTS AWARDS

The Crafts Board of the Australia Council has invited applications for the following programs: Grants for Professional Development; Grants for Exhibitions and Access; Grants to organisations; Grants for craft-related activities.

Applications close with the University on August 1.

PUBLIC HEALTH RESEARCH IN ABORIGINAL HEALTH

Research applications are invited in the area of Aboriginal health issues of relevance to the Aboriginal community. The major priority areas are: Nutrition and related problems; Cardiovascular diseases; Diabetes; Living conditions and health; Sexually transmitted diseases; Infections; Aboriginal women's health.

Applications close with the University on August 14.

CSFP, AEAP AND GREEK VISITING FELLOWSHIPS – 1988/89

Applications are invited from Australian Educational Institutions seeking to nominate eminent scholars and other distinguished people from overseas to visit Australia in 1988/89. A small number of Visiting Fellowships will be available under the Commonwealth Scholarship and Fellowship Plan (CSFP) for experts from Commonwealth countries, under the Australian-European Awards Program (AEAP) for experts from European countries, and under the Australian-Greek Awards Program for experts from Greece.

Applications close with the University on August 31.

ARTS AND CRAFTS FELLOWSHIPS

The Commonwealth Foundation and the Commonwealth Institute are seeking five artists or craftspeople to receive Fellowships. The Fellowships are worth up to 6,000 pounds each and are tenable for up to 9 months.

Applications close on October 1. Applications proposing a Fellowship located at the University should be forwarded to the Office of Research and Postgraduate Studies by September 16.

THE SPENCER FOUNDATION

The Spencer Foundation supports research that gives promise of yielding new knowledge leading to the improvement of education. The Foundation is interested in a wide variety of disciplinary and interdisciplinary approaches, though by direction of its charter it gives emphasis to the behavioural sciences. The Foundation provides support for Research Grants, Small Grants, Predoctoral Fellowships and Postdoctoral Fellowships.

Applications may be lodged at any time.

Scholarships and Prizes

JEAN DENTON MEMORIAL SCHOLARSHIP IN EARLY CHILDHOOD EDUCATION

The Jean Denton Memorial postgraduate scholarship has been established to advance knowledge in Early Childhood Education or a related field.

Applications close on September 11. Applications proposing a scholarship located at the University should be forwarded to the Office of Research and Postgraduate Studies by September 4.

EDGEWORTH DAVID MEDAL

The Edgeworth David Medal is awarded by the Royal Society of New South Wales for distinguished contributions by young scientists. Nominations are called for the names of suitable persons by September 30.

PREVIOUSLY REPORTED IN CAMPUS NEWS

Name	Internal Closing Date
Rural Women's Access Grants	July 20
Teaching Company Scheme	August 3
Australian Academies and Royal Society – UK Visits	August 18
Harkness Fellowship	August 31
Japanese Fellowship – Matsumae Foundation	September 16
Australian Academy of Humanities – Travel Grants	September 30
History of Culture in Australia Prize and Award	September 30
Cambridge Benians Fellowship	October 1
James N Kirby Foundation	October 19
World Bank Fellowship	October 19
AVCC Visiting Fellowships for Australians	October 19
Edinburgh Institute – Humanities Visiting Research Fellowships	November 16
Clive and Vera Ramaciotti - Travel Grants	Any time
Earthwatch	Any time
Criminology Research	Any time

friends
Campus Community Interface

Mr Malcolm Booth (seated) Chairman of the Friends Project Committee, signs the legal agreement with the NSW Bicentennial Council. He is watched by Mr Peter Welch, Chairman of the Board of Illawarra Newspaper Holdings Ltd

MAJOR NEW SCULPTURE

There is more news on the project between the Friends of the University of Wollongong and the ***Illawarra Mercury,*** which have combined to sponsor a major sculpture in the region.

The sculpture will be on the theme of Flight and will commemorate the work of local scientist and aviator Lawrence Hargrave of Stanwell Park, the only citizen of Wollongong to have appeared on the national currency. He shares the $20 note with Kingsford Smith.

Mr Malcolm Booth, a Director of the Friends of the University and Chairman of its Project Committee, signed the legal agreement on June 29 at a ceremony in the Wollongong City Gallery. The agreement is with the New South Wales Bicentennial Council which, together with the Australian Bicentennial Authority, is providing the funds with which to commission a sculptor.

Funds are to be provided under the Visual Artworks Commissioning Program of the Australian Bicentennial.

Mr Booth will chair the selection committee which has called for expressions of interest from local sculptors; that is — sculptors either living, or with a studio, in Wollongong.

The deadline for expressions of interest is July 27. The Selection Panel will then choose one or two, but no more than three sculptors who will be invited to submit a maquette, design and working drawings together with the cost of construction. Each of these sculptors will receive a fee of $500.

The winning sculptor will be announced on September 4 and he or she will receive a commission of between $8,000 and $9,000 to supervise the construction of the sculpture which will be on or near the University of Wollongong campus.

The cost of materials and labour is expected to be in the vicinity of $100,000 and the first donation towards these costs will be made by the ***Illawarra Mercury*** which has pledged an amount of $30,000 towards the project.

The Friends, under the leadership of Malcolm Booth, will raise the remainder either in the form of materials, cash or labour.

The project must be completed by October 1988.

COMMONWEALTH BANK HIGH SCHOOLS CHESS TOURNAMENT

The 1987 Commonwealth Bank High Schools Chess Tournament was held on Sunday July 5 in the University Union.

Eight teams entered, four from Wollongong High, the defending champions, and one each from Hurlstone Agricultural High, Sarah Redfern High, Minto High, Warilla High and Warrawong High.

At the end of the day Wollongong High no. 1 team had tied with Sarah Redfern High on two separate play-offs. The Tournament Director, George Meldrum, therefore decreed that because of failing light and the arrival of parents, and the departure of buses and trains for the homeward journey, the winner would be decided on the toss of a coin.

Friends Executive Officer, Giles Pickford, flipped the 20 cent coin and declared Sarah Redfern High the 1987 champions. Team members J. Luque, L. Rogers, J. Cowell and H. Mera took home the Commonwealth Bank Perpetual Trophy and the trophy for the best team from the Macarthur Region plus $25 for each player.

Wollongong High won the trophy for the best team from the Leisure Coast Region plus $25 for each player and Hurlstone Agricultural High the trophy for the best team from the Sydney Region.

Best individual male score and the $25 prize was won by M. East of Warilla High and the best individual female score and prize was won by L. Barker of Wollongong Primary School who played in the Wollongong High no. IV team.

The Executive Officer of the Friends congratulated all players on a fine exhibition of talent and announced that the 1988 Bicentennial Commonwealth Bank High Schools Chess Tournament would be held on Sunday July 26 at 1 pm in the University Union Cafeteria.

PROGRAM OF EVENTS AND MEETINGS

July:

Friday 17 — Community Involvement Committee, 5.30 pm, New Town Hall Committee Room.

August:

Sunday 9 — Town v Gown Rugby Match (Gown defending champions), University Oval No. 2.

Wednesday 5 — Graduates Group, 6 pm, building No. 36 room 303

Wednesday 12 — Projects Committee, 5 pm, building No. 36, room 303

Friday 14 — University Day Address, 6 pm, Union Hall.

Job Vacancies

Details of the positions listed below are on file in the Planning and Marketing Office, on the second floor in the administration building.

Adelaide	Research Fellow, Teletraffic Research Centre
	Lecturer/Senior Lecturer in Public Health Health Policy, Department of Community Medicine
ANU	Postdoctoral Fellow/Research Fellow, Department of Experimental Pathology
	Postdoctoral Fellow/Research Fellow, Department of Immunology
	Postdoctoral Fellow/Research Fellow, Department of Microbiology
James Cook	Professor of Education (2 positions), School of Education
Monash	University Librarian

Seminars

2ND OPEN SEMINAR SERIES THE BRAIN AND LEARNING

Venue: 20.4 (Pentagon 4)
Date: Friday July 17, 3.30 – 5.30 pm
Speaker: Professor Les Goldschlager, Department of Computing Science, Monash University
Topic: In What Sense Can Deterministic Machines be Said to Have Free Will?
Deterministic Machines with Free Will would be completely inconsistent to a traditional philosopher. It will be argued that both our feeling of free will, and the existence of free will, are consistent with determined machines, provided the complexity issues in computation are taken into account.

Peter G. Burton
Co-ordinator, ext 3505

DEPARTMENT OF PHYSICS – SCHEDULE OF COLLOQUIA

Speaker: Dr Lindsay Tassie, Department of Theoretical Physics, Research School of Physical Sciences, Australian National University, Canberra
Time: Thursday July 16 at 12.30 pm
Place: Physics Lecture Theatre (Building 18, Room 118)
Topic: Strings and the Universe.
String theories of particle physics will be reviewed, in particular the string with supersymmetry called the superstring. Ordinary matter is thought to be built from tiny pieces of superstring. Consideration of the rotation of astronomical objects leads to the scenario that the Universe has evolved through a hierarchical breaking of very large rotating pieces of superstring so that the early Universe was not made of atoms but of continuous matter. Atoms appear only after the string has broken down into the smallest possible pieces.

DEPARTMENT OF BIOLOGY – BIOMEDICAL EVENING SEMINARS 1987

Each Seminar will be preceded by a char grill dinner at 6.30 pm in the Union Bistro. Those interested in attending the dinner should contact Dr E.J. Steele before the designated evening so that appropriate bookings can be made. Seminars will begin at 8 pm in Lecture Theatre G.19, Building 35. This series is sponsored by the Department of Biology and the School of Health Sciences. The assistance of Dr Stephen Anderson is acknowledged.
Wednesday July 22 – Associate Professor A. Lee, School of Microbiology, University of NSW
– Campylobacter pyloridis: dyspepsia and ulcers - Fact or Fiction.

DEPARTMENT OF PHYSICS – SCHEDULE OF PUBLIC LECTURES

Held in Pentagon 3 (building 20.3).
Thursday July 30, 8 pm – Dr Barry Allen, Applied Physics Division, AAEC, Lucas Heights – Neutron Diagnosis in Therapy for Wasting Diseases and Cancer.

NOW – THE CENTRE FOR WORK AND LABOUR MARKET STUDIES (CWALMS) CALL FOR PAPERS

A seminar and general meeting of the Centre will be held on September 4 during the mid-session break at this university.
Papers are invited from Centre Associates and other interested people in the broad subject area of 'Changing Patterns of Work'. Three will be chosen for presentation on September 4.
Interested parties should contact Dr Ray Markey, Department of Economcis, ext 3734 or Di Kelly, Department of Economics, ext 3655.

SCHOOL OF CREATIVE ARTS POSTGRADUATE SEMINAR

Venue: Pentagon 5
Date: Friday July 24, 2.30 – 5.30
A joint presentation on issues relating to gender and art. Presented by Sally-Ann Macarthur, Sue Rowley and John Storey. All welcome.
Further details from Ron Pretty, ext 3867 or 3985.

DEPARTMENT OF ECONOMICS INDUSTRIAL RELATIONS SEMINAR

Topic: Industrial Relations and Human Resource Management
Speaker: Dr Greg Bamber, Director of Research, Durham University Business School. He is a part-time arbitrator for the Advisory Conciliation and Arbitration Service (ACAS) and is currently Visiting Fellow, Melbourne University. His publications include ***Militant Managers?*** (1986) and he is joint editor of ***International and Comparative Industrial Relations: A Study of Developed Market Economies*** (1987).
Date: Wednesday July 29
Time: 2.30 pm
Place: Room 19.206
Further information: Ray Markey, ext 3734, or Di Kelly, ext 3662.

FACULTY OF ARTS INTERDISCIPLINARY SEMINAR SERIES

Speaker: Val Plumwood, Macquarie University
Topic: A defence of degendering: a critique of gynocentric feminist theory
Time: Thursday July 16, 12.40 pm
Place: Building 19, room 241.
Further information: Brian Martin, 270763 or 287860.

Advertisements

NATIVE PLANT SALE

Due to the lack of nursery space the Landscape Department will offer some species of native plants for sale. Costs will be at wholesale prices – 50 cents for tubestock through to $4 for advanced plants. Plants will be for sale on July 15, 16 and 17 only. For further information contact Martin Bramston, Landscape Supervisor, ext 3594.

DICTAPHONE REQUIRED

The Planning and Marketing Unit would be interested in pressing into service a used dictaphone which might be surplus to requirements.
If you have a unit in good working order, but is gathering dust, please contact Elisabeth Hilton on 3027 and perhaps we can strike a bargain.

TO LET

Penthouse in Wollongong, near hospital. Two bedrooms, good outdoor living – three balconies, one with barbecue. Two bathrooms. Lockup garage. Long lease. Telephone ext 3081, after hours 288669.

Concerts, Exhibitions and Entertainment

STUDENT PRODUCTION CHOSEN TO HEAD–UP NATIONAL FESTIVAL

The recent student production of Arrabal's ***Fando and Lis,*** directed by third year student Jade McCutcheon, was seen by Ken Healey, Assistant Director of NIDA. He was impressed enough to request that this play be made visiting production at the Festival of Australian Student Theatre at James Cook University in September.

To help in sending the cast and crew to the festival, a Special Benefit Performance of ***Fando and Lis*** will be held on Friday July 24 at 8 pm in the Music Auditorium.

To provide a full and interesting program, two music students will present a piano recital to open the performance. These are second year student Bergrid Ferreira, and third year student April Sampson-Kelly.

For this special double-bill, with supper provided, book through The School of Creative Arts, Jan Kemper, 270985 or Jenny Stewart, 270987.

Tickets: $10 and $6 student concession.

School of Creative Arts students in 'Fando and Lis' are, from left, Michael Miller (Mitaro), Don Francis (Toso), Luke Burke (Namur), Cleofe Puglisi (Lis, in the pram), and John Bonner (Fando)

THIRD TWILIGHT CONCERT FOR 1987 UNION HALL – FRIDAY JULY 17 AT 6 PM

Robyn Cantle, soprano, and Susanne Powell, piano.

Sporano Robyn Cantle was pronounced by critics as 'The standout ... a strong, clear and very fine voice" in her New York debut as Gianetta (L'Elisir D'Amore).

A DipMusEd graduate and Sydney Conservatorium 'Student of the Year' (1976), Miss Cantle was the 1977 winner of the ABC Instrumental and Vocal Competition.

The award of an Opera Foundation Scholarship to The Juilliard School, and an Australian Council Fellowship sponsored her postgraduate study, and for the past decade Miss Cantle has been residing and performing in New York.

Program: Giunse alfin il momento ...; Al desio di chi t'adora K.577 - Mozart; Dans un bois solitaire - Mozart; Oiseaux, si tous les ans - Mozart; Seven songs from the Italienisches Liederbuch - Wolf; Twelve poems by Emily Dickinson - Copland; Three songs - Walton.

Admission $4, $2 concession. Tickets can be obtained at the Union Office, or by phoning the Union 297833 or ext 3782.

Tickets will be on sale at the Union Box Office at 5.30 pm.

SCAW CONCERTS 1987 – CHANGE OF SCHEDULE

The concert originally scheduled for Friday July 24 has been transferred to Friday August 21. The concert originally scheduled for Friday August 21 has been postponed until 1988.

Program items for Friday August 21:

Dixon – Champagne Flutes; Three Emily Dickinson Songs.

Maxwell Davies – Renaissance Scottish Dances.

Bedford – With 100 Kazoos.

Inquiries: Wayne Dixon, ext 3586, home 297518.

BOOK REVIEW

From the Times Higher Education Supplement, 5 June 1987.

Heat Conduction by James M. Hill and Jeffrey N. Dewyyne.

Dr Jim Hill is a Reader in the Department of Mathematics at Wollongong University; Dr Jeff Dewynne obtained his PhD at Wollongong under the supervision of Dr Hill and is now at Oxford University.

No subject has more extensive implications for the progress of industry and the natural sciences (from microprocessors to power stations to the universe) than heat transfer: like gravity, the action of heat penetrates all bodies and spaces. When the body is not at a constant temperature, heat flows from the hotter to the cooler parts. The problem of propagation of heat then becomes the determination of the temperature at each point of a body at a given instant, supposing that the initial temperature is known.

There are three distinct mechanisms by which this transference of heat takes place: conduction, in which heat is transferred by relative motion of portions of the heated body; and radiation, in which heat is transferred directly between distinct portions of the body by electromagnetic radiation. Hill and Dewynne's book focuses on conduction.

The originator of the modern physical and mathematical theory of heat conduction was Joseph Fourier (1768–1830). Though remembered primarily as a theoretician, Fourier certainly appreciated the need for experimental investigations; and his fundamental understanding of physical concepts enabled him to formulate the general three-dimensional heat conduction equation and the general expressions for the conditions to be satisfied at the surface of a body.

The classical treatise on the ***Conduction of Heat in Solids*** by H.S. Carslaw and J.C. Jaeger is a reference book rather than an undergraduate textbook. It presents a very concise account, with arguments being very abbreviated or simply not given, of the theoretical developments in the conduction of heat until the early to mid-20th century. The aim of Hill and Dewynne's book is to support an undergraduate course for third-year students in applied mathematics, science and engineering; and this it does very successfully.

The first chapter provides the general background to heat conduction, including the historical development and a very apt section on the probabilistic derivation of the one-dimensional heat equation. Chapter two involves a rather lengthy review of the mathematical techniques required for the later chapters. It spends a long time on such topics as simple Laplace transforms and Fourier series but simply produces the modified Bessel functions with no further comment.

Chapters three and four present the exact analytical solutions for specific problems, using the Laplace transform and Fourier series techniques respectively. This is standard material but it is well presented. Approximate analytical solutions are outlined in chapter five, although it is a pity that the authors devoted a full chapter to this topic. As they state, 'the astute reader will readily agree that a good deal of this procedure is somewhat arbitrary and that the final approximation is by no means unique'.

Chapter six contains a very concise account of the three numerical methods of solution: finite differences, finite elements, and boundary element methods. Only solutions to one-dimensional problems, however, are presented, together with some sample Fortran subroutines. Again, some space is wasted in this chapter introducing the mathematical idea of order, whereas in the examples at the end of the chapter the student with a weak background in matrix theory will struggle to grasp how to calculate the eigenvalues of the given matrices. Although this chapter is complete in itself, it could have been substantially enhanced had a general two-dimensional problem been considered, so that the reader could have seen some of the advantages of the finite element and boundary element methods over the more conventional finite difference methods. Space could have been made for this inclusion by a reduction in the general and mathematical introductions in the first two chapters which take up one-quarter of the book. A final chapter presents a very nice exposition of some exact solutions involving a phase change.

The book contains some good clear diagrams, which should give the student a better understanding of the analytical and numerical solutions. Despite my criticisms, the authors have achieved their aims in producing a good intermediate undergraduate text to the classic work of Carslaw and Jaeger.

Review by D.B. Ingham, professor of applied mathematics and director of mathematics for engineers and applied scientists at the University of Leeds.