Angry robots push boundaries

The University of Western Australia

by Lindy Brophy

ive young people sitting on the floor fiddling with Lego might look like students having fun.

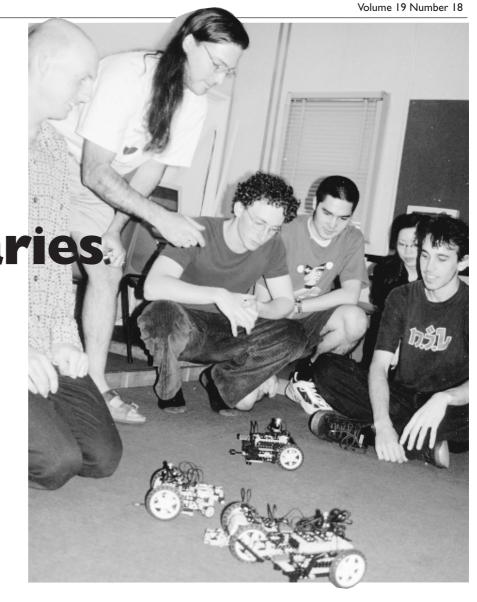
But this group is actually finding out how difficult it is to turn a psychological theory into a working model.

Dr Mike Kalish's Psychology 311 students have taken a simple theory, made it into a computer program and programmed battery-powered robots made from Lego to demonstrate and test the theory.

Their semester's work is a pilot program for what will become a second-year Cognitive Science unit next year.

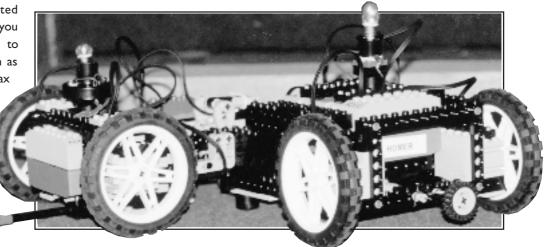
"The students chose an old theory of aggression in animals," Dr Kalish said. "Simply, it's this; if you have a goal but you keep getting thwarted, you get frustrated. If you get frustrated often enough in a short time, you get aggressive. Then you need to release that aggression. As soon as you've released it, you can relax again."

They had to write a computer program for the theory which was downloaded into their robots via an infra-red transmitter.



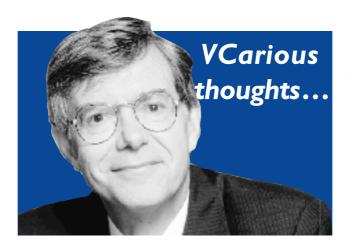
ABOVE:The class sets their robots in action: teaching assistant Ben Roberts, Dr Mike Kalish, Liam Ryan, Joe Addy, Pang Isha and Damian Giambazi.

BELOW: Two angry robots!



"1901 And All That"

aving now survived both the millennium events (and the now forgotten millennium bug) plus the Sydney 2000 Olympics, we are about to be faced with "2001" — notably a millennium celebration for those who feel this is the real beginning of the twenty-first century but also, of course, the Centenary of Australian Federation.



The bookstores are already filling with histories and polemics on the making of modern Australia and the nation we are or might be.

There will be a great range of events and public debates throughout 2001 and the Federal Parliament will even sit in the old Victorian legislative buildings to re-enact the 'birth of the nation'.

I have recently been a delegate to the national Federation Forum, held in the old Senate chamber at the old Parliament Buildings in Canberra, where the ghosts of our modern national history do seem to pervade the halls, rooms and corridors.

Quite eerie to sit in the seats of the Assembly and Senate, stand in the silence of the now empty Prime Minister's study, the old battle room of the Cabinet chamber and the abandoned 'party' or caucus rooms.

2001 may well turn out to be all public celebrations, yet more fireworks (are we not the fireworks nation of the globe?) and many speeches, which duly memorialise our modern history with a golden antiquarian sheen.

My own best hope for 2001, as came out of the Federation Forum, is that it will be the trigger to begin a national and local process of debate about the constitution — as it does or doesn't reflect a rather different nation, with different issues, than 1901 — and more broadly, about citizenship and rights. Healthy democracies should not be afraid of healthy debate. And, as citizens, we should claim that debate, and not just leave it to the politicians and constitutional lawyers.

In 2001, our UWA is 90 years old — not the magic centenary that will be marked in 2011 — but we, too, can be engaged in reflection on our structures and values and direction as an institution.

Happily, that process is already well under way. Before Christmas I hope the State Parliament will pass the amended UWA Act, which gives us a substantially reformed governing body from 2001. Moreover, within our University, we have been active in developing both an Operational Plan (to focus and secure our capacity as a quality higher education institution), an Academic Profile (to prepare our 'knowledge map' of programs and research for the new century), and the

projection of a possible new structural framework (based on 'schools' of knowledge and the professions) to which we can apply a more appropriate funding model.

In 2001 we can also revise the UWA strategic plan, to reflect a university in transition in a world of globalised transformation.

What does all this mean to each of us in our daily lives? We are all appropriately critical and questioning of yet more grand national visions, yet more university planning.

But, in the end, being an active citizen does give the opportunity of responsibility to have a say in the Australia we wish to live in, and hand to our children and the next generation.

Being a UWA staff member, UWA student or UWA graduate, does mean you are an integral part of our learning community, in which your ideas and contributions will be valued in the necessary task of ensuring the future of the University, and its mission, in a rather uncertain funding environment and an educational revolution of huge portent.

Onward to the future! And before we take ourselves too seriously, my irreverent sense of humour thinks of 1066 And All That whenever "2001" is mentioned. In that comic classic, all events are either A Good Thing or A Bad Thing, the errata says 'Read peasant for pheasant throughout' and, claiming to be a definitive account of the past, it ends cheerfully: 'After that history came to a .'

Jan S.

Professor Deryck Schreuder Vice-Chancellor and President vc@acs.uwa.edu.au

The sky's no limit for UWA

A UWA banner will rocket into space early next year on board NASA flight STS-102.

Australian astronaut Dr Andy Thomas has been assigned to the tenday mission and made an offer to the University, through his long-time friend and colleague, Professor Michael Norton, from the Department of Mechanical and Materials Engineering.

Each crew member is allowed to carry a few items into space on behalf of organisations other than NASA. The items are then returned to the organisations with documentation attesting to the fact that they have been in space.

"Andy says that such items usually become a source of great inspiration to young people," Professor Norton said. On this flight, leaving on February 15, the crew will be going to the International Space Station to undertake assembly tasks. Dr Thomas will be operating the robotic arm as well as doing an EVA (space walk) to install some components on the outside of the station.

He and Professor Norton spent their undergraduate days together at

On his first flight, Dr Thomas took a

boomerang from the South Australian

Museum and, on another occasion, a

piece of the original Endeavour, from a

Queensland museum.

He and Professor Norton spent their undergraduate days together at Adelaide University and did their PhDs there at the same time, working in a similar project area: boundary layer turbulence.

Last year, Professor Norton nominated Dr Thomas for an Order of Australia which he received in January this year.

The University is having a lightweight silk banner made especially for the space flight which Dr Thomas will stow in his flight kit, then present it back to us on his return.



Dr Andy Thomas (extreme right, back row) when he flew with the space shuttle, Endeavour, in 1996.

Industry problems send engineers back to drawing board

wo young women are working on solutions which could potentially save industry significant sums of money.

Melinda Hodkiewicz and Joanna Sikorska-Kelly are PhD students at the Centre for Acoustics, Dynamics and Vibrations in the Department of Mechanical and Materials Engineering with connected projects in the area of condition and performance monitoring.

Their work, aimed at predicting mechanical engineering problems before they occur, is supervised by Professor Michael Norton.

They are researching new methods of looking after the maintenance of mechanical plant and all their data collection is done in co-operation with industry.

"It's very practical research, very industry-focused," said Ms Sikorska-Kelly, who has returned to study after five years in industry. She worked for Shell as a maintenance engineer after finishing her undergraduate degree at UWA.

Melinda Hodkiewicz and Joanna Sikorska-Kelly do most of their research in the field rather than the lab.

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Angry robots push boundaries

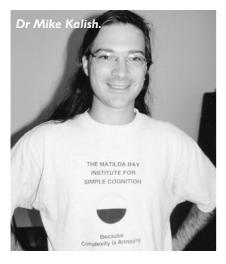
The robots are programmed to steer clear of collision with any other hard surface. If they hit the wall of their arena, or each other often enough, they become aggressive and release their aggression onto each other or the wall.

"The students will then evaluate the project: whether the model was a valid implementation of the psychological construct. If so, the model was correct," Dr Kalish said.

"It's a great lesson in what happens to a vague theory when you try to turn it into a model!"

One of the students said it was very difficult but worth the effort.

"You learn so much about the theory you are addressing because of the detail you need to turn it into a computer program. It's much better than just talking about it," said Damian Giambazi.



When the students have completed their evaluation, they will write up the project and present it to second-year Psychology students.

Dr Kalish said he had applied to the Centre for the Advancement of Teaching and Learning for financial support for the robot project.

"As far as I know, we are the only university in Australia who's doing this type of teaching," he said.

The project will be reversed for Cognitive Science students next year. Dr Kalish will program the robots, then the students will have to work out what the program is. He said the learning objective was to work out why formal models were made in Cognitive Science.

Continued from page 3

Industry problems send engineers back to drawing board

Mrs Hodkiewicz has been in industry even longer: 12 years in the mining industry, including eight years with Barrick Goldstrike Mine in the US, after completing her undergraduate degree at Oxford.

Professor Norton says they are two of the most motivated PhD students he's had. They simply see the benefit of working in the industry before tackling a PhD.

"It's unusual for people like us to come back to study after working as engineers, but we can both see that these projects will give us more flexibility in our careers, Ms Sikorska-Kelly said.

"They are two of the most motivated PhD students Professor Norton has had."

Her research is directed towards predicting when mechanical seals are going to fail (a potential disaster in hazardous areas like petroleum, aerospace and nuclear power).

"Until now, there has been no warning of a failure until it happens. So I'm looking at methods of predicting, using acoustic emission techniques," she said.

Mrs Hodkiewicz is further into her research which makes use of vibration techniques to detect low-flow conditions in centrifugal pumps.

"If the flow is too low, it sets up a vibration that can damage pump

components. We are developing methods of characterising the vibration to assist in identifying the low-flow condition," she said.

The use of acoustic emissions is also breaking new ground in being applied to machinery.

Both women are pleased to be working on finding solutions to real problems they experienced in their fields.

"Jo had lots of problems with seals in refineries and I experienced plenty of low-flow problems in the mining industry," Mrs Hodkiewicz said.

"It's great to have that focus to keep you going with your research," she said.

Mrs Hodkiewicz has been collecting data in collaboration with UWA's Office of Facilities Management, WaterCorp, BP, Alcoa and Blakers Pumps. She is sponsored by a grant from the Alternative Energy Development Board.

Ms Sikorska-Kelly is currently working on her research with NASA and is hoping to do her testing at the Kennedy Space Centre in Florida, made possible by Professor Norton's connections with NASA. She will also carry out some of her work in refineries in Australia.

After their years out in the field, both women are pleased to be continuing working with industry, rather than carrying out tests in a laboratory.

"This University has made a real move to bridge the gap between academe and industry," Ms Sikorska-Kelly said. "It's gearing itself more to this practical sort of research and I was delighted with the support I received when I came back and said I wanted to do this sort of practical PhD."



There are times when all of us have challenging issues to deal with. When personal or work related issues make life difficult, the University has an Employee Assistance Program (EAP) to help staff manage these issues more effectively.

The EAP is a professional, confidential counselling and consultation service. The services of Davidson Trahaire are available FREE to you and your family for up to six sessions a year.

For appointments, please ring Davidson Trahaire on 9382 8100 or if urgent 9480 4847 (24 hours). Their offices are located at Suite 11, 100 Hay St, Subiaco. Further information can be obtained at www.admin.uwa.edu.au/sho

UWA news ______ 5

Native bees feel the migrants' sting



The bees we see buzzing around our gardens bear little resemblance to our Australian native bees.

Zoology PhD student and bee expert Dean Paini (*pictured*) says that, if they saw a native bee, most people would probably think it was a fly.

"They are small and black and look more like flies than the

introduced yellow-and-black striped honey bee, and they don't sting," he said.

Mr Paini has been studying the "poor relation" of the bee family, looking at the impact the European honey bee has on our native bees and their reproductive patterns.

"There has been practically no research done on native bees so it's difficult to work out just what impact the honey bees and the past 50 years of commercial honey-making in WA has had on native bees, because we don't know what their populations were like before the honey bee was introduced," Mr Paini said.

During a winter experiment at Greenhead (50km north of Jurien), Mr Paini ran a project while the commercial beekeepers had their hives in the area.

"While honey bees are present, native bees can't get at the pollen and nectar. But we haven't worked out yet why there were so few native banksia bees around. It is either because they simply didn't like the nests we made for them (native bees are solitary and very few form their own hives); there are naturally very few in this area; or their numbers here have been suppressed over 50 years of honey bees being brought to the area."

Mr Paini recently returned to Greenhead with a Japanese film crew, who was making a documentary about pollination in Australia.

An experiment last summer, where Mr Paini simulated the presence of feral honey bees, indicated they did have a negative impact on the native bees, but he will repeat the experiment this summer. Meanwhile, he is collecting honey and pollen from both types of bees, to see what flowers they have visited, to work out if honey bees and native bees are visiting the same species of plants and hence, if they are in competition with each other.





Native bees: Banksia bee (LEFT) and megachile aurifons (RIGHT) ... only a few out of more than 1000 species have a sting.

The (right) French connection

f Jean-Paul Sartre had known French Studies Associate Professor Andrew Hunwick, he might have passed his Agrégation exam at the Sorbonne.

The Agrégation is a high-level competitive exam for the recruitment of teachers at the Université de Paris-IV Sorbonne and Associate Professor Hunwick has been invited to give a lecture next month to students studying for the exam. (Jean-Paul Sartre failed the exam at his first attempt while Simone de Beauvior passed first time!)

"It is quite an honour for a mere 'foreigner' like me to be asked to lecture these students," Dr Hunwick said. "Having done my doctorate at the Sorbonne would probably have something to do with it."

He said students hoping to become secondary teachers could sit for the Agrégation in several different areas. His lecture is for students taking the exam in French literature and philosophy.

The subject is Diderot, Le Rève de d'Alembert: les echanges de Diderot et d'Holbach (a dialogue between Diderot and D'Holbach on D'Alembert's Dream).

"D'Alembert's Dream, a set text for this year's Agrégation exam, questions accepted conventions and presents a surprisingly modern view of life, sex and morality from a materialist standpoint.

"Both Diderot and Baron D'Holbach were atheists, having both originally been materialists."

Associate Professor Hunwick has specialised in the writings of d'Holbach, editing one of his books in both French and English.

With his love of the French language, he says he is pleased that Australian students still seem to be



Associate Professor Andrew Hunwick with one of his favourite Europeans, composer Hector Berlioz.

interested in French, rather than choosing to study languages from countries closer (geographically) to home.

He will present his lecture in the Grand Amphithêatre at the Sorbonne on November 30.

One card the smart way to go

he University Card will bring the campus a step closer to the cashless society.

The new Smartcard will next year replace most other cards used on campus for a range of purposes including building access, identification, photocopying, library borrowing, sport and recreation centre membership, and guild membership.

The new card will have a chip on which you can load a monetary value, for use anywhere on campus where you might otherwise use cash, including the refectories, the sport and recreation centre and photocopying.

At first, you will need to bring cash onto the campus to load it onto your card, but eventually, it should be possible to incorporate an EFTPOS link.

The new cards will be white with a gold chip, an ID photograph and a barcode on the front, and a colour photograph of the University and the river on the back.

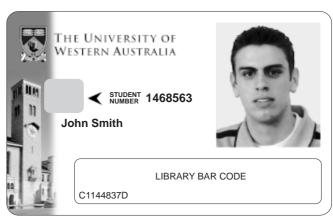
It will be issued free of charge and all students and staff who now have library, photocopy or access control cards will automatically receive one early next year. It will come with a guide on how to use it.

Other staff who would like a University Card (it may have a different name) can apply, also free of charge, for one.

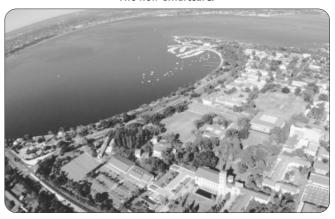
Geoff Bartle, the card's project manager, engaged by UWA in May last year from DMR Consulting, said that, in replacing several old cards, the new card was a much cheaper solution for the University.

"The base cost of the cards is significantly lower than the total of the different cards currently produced on campus, and replacement cards, if they are lost or damaged, will also be cheaper for staff and students," he said.

Mr Bartle has been working with a team from the Office of Facilities Management, the Library, the Guild, the Sport



The new Smartcard.



and Recreation Association, the Registrar's Office, Administrative Computing Services, Human Resources, Student Administration, Financial Services, Legal Services and Publications to create the best solution.

A management committee has been formed with representatives from these departments, plus a representative from the Departmental Managers Group, to guide the implementation of the card. The Staff Association has also been consulted.

Universal Card Systems (Unicard) has been chosen to supply, install and maintain the system on campus. $\label{eq:continuous}$

If you have any queries about the new card, you can call Geoff Bartle on ext. 1938 or email him at gbartle@admin.uwa.edu.au.



The Governor does the taste test on Currie Hall's Christmas fare.

Christmas comes early to Currie Hall

The new Governor's first visit to UWA found him sampling a Christmas dinner in front of several clicking cameras. His Excellency, Lieutenant General John Sanderson, was launching Mission Australia's annual Christmas Lunch in the Park.

This year, the turkey, ham and trimmings are being prepared by Sodhexo Food and Management Services, the caterers for Currie Hall, and cooked and packed in the Currie Hall kitchens. Currie Hall principal, Daryl Foster, hopes the arrangement will continue into the future. "It's great for the University to be involved in the community like this," he said.

The Mission hosts a Christmas lunch every year for up to 2000 people in Wellington Square, near Queen's Gardens. As Perth City Mission regional manager Anne Russell-Brown said, the lunch is not just for those who cannot afford a Christmas celebration but for those who are isolated or lonely.

The rest of the community can help make Christmas special for these needy people by donating gifts or cash. Hundreds of volunteers ensure a successful day and, from now on, the University will be part of that success.

UWA news

Words swim in beach-ma

A n extended email correspondence between friends has developed into a book of observations from the beaches of both sides of Australia.

Art historian and senior lecturer in the School of Architecture and Fine Arts, Dr Richard Read, and his former colleague, visual artist Nola Farman, continued their friendship via email when Ms Farman resigned from teaching at Curtin School of Art and moved to Sydney to freelance.

They both swim daily and their correspondence naturally moved towards observations and descriptions of the ocean, their experiences, the memories, even the people they met or saw daily on the beach.

"During study leave in the first half of this year, it was a delight after the rigours of academic writing during the day to go for a dip then return to my computer and swap swimming stories with Nola in the evening," Dr Read said.

"It seemed to imbue my 'serious' writing about literatures of visual art, which often concerns the ocean, with greater suppleness and nascency."

When Ms Farman, already the author of two books, suggested they turn their conversations into a book, Dr Read was concerned that their correspondence would become self-conscious, but found that he soon forgot about the book in their daily e-chats.

Earlier this month, when Ms Farman was visiting Perth, they presented a selection of their correspondence at the Lawrence Wilson Art Gallery, as part of the Institute of Advanced Studies' Land Place Culture Identity program.

"I recognised a rhythm and richness in our correspondence," Ms Farman said. "The difference in our voices — Richard's academic tone and mine quite different — created it, and I saw that it could make a fascinating book."

Dr Read writes about Port Beach and Ms Farman about Clovelly Bay, where she lives overlooking the ocean.



Richard Read and Nola Farman edited their correspondence from 150,000 words to 14 pages for their presentation.

"I think email has revived the art of letter writing. The mailbox has become institutionalised and full of bills and official letters. But we tend to email our friends more often than we used to write to them," she said.

She describes their conversations as a complementary weaving of words and ideas.

"Richard is more scientific in his observations: I'm more emotional. He's the anchor man and I'm the bungee jumper. We are the Zen master and the wild card!"

Their book will be called Float Cards.





Old Shell oil posters and Brazilian woodcuts illustrated the IAS presentation.

Tuesday 31 October

LAWRENCE WILSON ART GALLERY FLOORTALK

"Lionel Lindsay". Well known for his arch-traditionalist and antimodernist writings but overshadowed by his more famous brother Norman, Lional Lindsay was also a consummate draughtsperson. In association with the current exhibition of etchings by Lionel Lindsay, Dr Stephanie Green will give her perspective on Lindsay's background and ideas. Ipm, LWAG.

HUMAN MOVEMENT AND EXERCISE SCIENCE WORKSHOP

"Children with movement difficulties". This workshop is designed for parents, teachers, coaches and other health professionals who work with children. Speakers include Beth Hands, Helen Parker, Janet Summers and Kerry Smith. 7 to 9pm, HM and ES Lecture Theatre. Cost: \$40.

INSTITUTE OF ADVANCED STUDIES FREE LECTURE

"Dancing stars, gravity's captives", Prof Joseph Taylor, Princeton University (Nobel Laureate in 1993); "Einstein's theory at the crossroads", Thibault Damour, Academie des Sciences (Paris). 7.30pm, Octagon Theatre.

Thursday 2 November

ZOOLOGY SEMINAR

"A new solution to the riddle of the extinction of all American megaherbivores", Dr Antoni Milewski, FitzPatrick Institute, University of Cape Town. 4pm, Jennifer Arnold Lecture Theatre.

Friday 3 November

BIOCHEMISTRY SEMINAR

"The insulin-like growth factor system and cancer in 2000: problems and prospects", Dr John Wallace, Adelaide University. Ipm, Reading Room (1.24), Biochemistry Building.

ACCOUNTING AND FINANCE WORKSHOP

"Financial analysts' reactions to alternative preference share classifications and covenants", A/Prof Trevor Wilkins, University of Queensland. 2pm, Research Centre, Accounting and Finance, Rm 1.93, First Floor, Economics and Commerce Building.

Campus Diary

UWANGUS is published fortnightly. Information for the publication dated 13 November should be forwarded to Joanna Thompson, Publications Unit, ext 3029, fax 1162, email: uwanews@publishing.uwa.edu.au

NO LATER THAN 5PM ON I NOVEMBER

Media enquiries to Public Affairs on 9380 2889.

Unless a restricted audience or charge is specified, all the events/exhibitions listed here are free and open to all and may attract media interest.

GOODBYE HOLLYWOOD SENIOR HIGH SCHOOL

A farewell cocktail party for the closure of Hollowood Senior High School and launch of the Hollywood History will be held on Friday 10 November from 6.30 to 11pm at the school. All past staff, students and friends of the school are invited. Cost: \$25 per person. For further information, please contact Rosemarie Burger on 9388 3834.

NEUROLOGICAL EXPO 2000

A Neurological Expo will be held at SCGH and the Australian Neuromuscular Research Institute on 14 and 15 November from 9am to 5pm each day. Thirty-eight research, medical and care organisations will feature an exhibition and a lecture program of 28 speakers, and ten keynote addresses will be held. There is no charge and everyone is welcome. For more details please ring Linda on 9380 4495.

HONOURS RESEARCH CONFERENCE/ HUMAN MOVEMENT AND EXERCISE SCIENCE

Thursday 9 November 9am to 3.30pm

Dept. of Human Movement and Exercise Science, Parkway Entrance No. 3, Lecture Theatre

Timetable Overview: Commencement 9.00am

Morning Tea 10.50am Lunch 12.50pm Finish 3.20pm

Session Format: 10 minutes Presentation time

10 minutes

7 minutes question and 3 minutes change-over

Assessment Format: Graded Assessment = 100%

25% Thesis Examiner

25% Supervisor

10% Research colloquium oral presentation

20% Research methods or other unit in sub-

discipline area

20% Selected unit in sub-discipline area

Wednesday 15th November, 2000 9am to 3.00pm

Dept. of Human Movement and Exercise Science, Parkway Entrance No. 3, Lecture Theatre

Timetable Overview: Commencement 9.00am

Morning Tea 10.50am Lunch 12.50pm Finish 3.00pm

Session Format: 10 minutes Presentation time

10 minutes

7 minutes question and 3 minutes change-over

Assessment Format: Graded Assessment = 100%

20% Dissertation Examiner 12.5% Supervisor(s)

7.5% Research colloquium oral presentation

15% Selected unit in program (x 4)



HORMONES AND CANCER SYMPOSIUM

Thursday 9 November 2 to 5pm

WAIMR Lecture Theatre
B Block—OEII Medical Centre

2pm Prof Robert Matusik

Director of Urologic Research,
The Vanderbilt Prostate Cancer Centre, Vanderbilt University
Transgenic animal models for prostate cancer

2.45pm Prof Edward Gelmann

Director, Lombardi Cancer Centre Prostate Cancer Program, Chief, Division of Clinical Sciences, Department of Oncology, Georgetown University, School of Medicine

NKx 3.1—A prostate specific homeoprotein with suppressor activity

3.30PM AFTERNOON TEA

4pm A/Prof Richard Pestell

Department of Medicine and Developmental and Molecular Biology,
Albert Einstein College of Medicine,

Director, Program in Hormone Responsive Cancer Nuclear Receptor Mutations in Breast and Prostate Cancers

5PM DRINKS

Proudly sponsored by



The Western Australian Institute for Medical Research



For further information: A/Prof Peter Leedman, Phone: 9224 0252

A/Prof Richard Pestell

Albert Einstein College of Medicine, New York

Ipm Wednesday 8 November Mary Lockett Lecture Theatre, OEII Medical Centre

New insights into breast cancer from transgenic analysis of cell-cycle proteins

Richard Pestell is a medical graduate of UWA. He is currently Assistant Professor, Department of Medicine and Developmental and Molecular Biology and Director of the Program in Hormone Responsive Cancer at Albert Einstein College of Medicine, New York.

Dr Pestell heads a rapidly growing programme of cancer research at Albert Einstein College of Medicine. His laboratory is contributing substantially to our rapidly improving understanding of normal cell growth, cancer growth and spread of tumour cells. The laboratory's particular emphasis is on cancer in hormone responsive tissues, such as breast, prostrate and adrenal. The lecture will be of particular interest to researchers in the areas of cell-cycle control, intracellular signalling and control of gene transcription.

Enquiries: A/Prof D. A. Joyce Phone: 9346 2569

University Department of Pharmacology Clinical Pharmacology and Toxicology, SCGH Clinical Pharmacology and Toxicology, PathCentre

The School of Architecture and Fine Arts and The Institute of Advanced Studies at The University of Western Australia invite you to the Western Australian premiere of

City of Dreams

the collaboration of Marion Mahony and Walter Burley Griffin

When the brilliant and fiery Marion Mahony, the first registered woman architect in the world and the longest serving designer in Frank Lloyd Wright's practice, married landscape architect and architect Walter Burley Griffin, it was the beginning of one of the most outstanding artistic collaborations of the twentieth century. This visionary American couple won a controversial international competition in 1912 to design the new Australian capital in Canberra. Although the city of their dreams was never built, the Griffins chose to stay in Australia. This fascinating documentary explores their unconventional approach to life and architecture, and their lasting impact on Australian culture.

Directed by Belinda Mason and produced by Gaby Mason and featuring commentary by Christopher Vernon, Senior Lecturer in Landscape Architecture (UWA). A Film Australia National Interest Program. Produced with the assistance of the Australian Broadcasting Corporation to be introduced by Mr Patrick Beale, Head School of Architecture and Fine Arts with a small exhibition on the Griffins' association with Western Australia at

7.45 for 8.00pm on Thursday 30 November 2000 at the Octagon Theatre

Refreshments will be available after the screening.

RSVP by 23 November to tawhite@cyllene.uwa.edu.au or phone 9380 2114, tickets: gratis



Obituary

Graeme Yates

(1944-2000)

Dr Graeme Yates, Senior Research Fellow in the Department of Physiology, died suddenly on Friday October 13. His friend and colleague, Associate Professor Don Robertson, pays him tribute.

Graeme Yates was a world leader in hearing science, but his path in the early years was not a smooth one.

Although identified early as a student with great academic talent, it was seven years after leaving high school, after a period as an industrial chemist, that Graeme entered UWA in 1967. Graeme obtained a BSc with honours in Physics in 1970. He then undertook postgraduate studies in Physiology in the field of auditory biophysics.

After completing his PhD, Graeme left Australia for the UK with his wife and three daughters to take up a post at the new MRC Institute of Hearing Research in Nottingham, where he was responsible for setting up the physiological



research laboratory. The Yates family returned to Perth in 1982 where Graeme took the post of NHMRC Senior Research Officer in Physiology, continuing his investigations into the fundamental physical forces that determine inner ear function in health and disease.

Graeme became a Senior Research Fellow in 1991 and at the time of his death was being considered for promotion to Principal Research Fellow status.

Graeme Yates became an indispensable member of the Auditory Laboratory and the Department of Physiology. He was a key member of the team that won a then unprecedented four successive rounds of NHMRC Program Grants and also attracted major research funding in his own right.

His many and varied scientific endeavours were held in high regard by colleagues throughout Australia, Britain, Europe and the United States and he was making new and exciting advances in understanding inner ear physiology until the time of his death.

Graeme's research was characterised by a profound grasp of the physical principles underlying physiological phenomena and to the last, he was a person to who less gifted colleagues could always turn for clarification and advice.

Graeme was also an avid and skilled enthusiast for the application of computers in data acquisition and analysis and gave unstintingly of his time and expertise, setting up and maintaining computing and network facilities in the Department of Physiology, and advising on computing and electronics problems.

Graeme Yates' constant willingness to contribute to the common weal was evident also in other spheres. He was a teacher of undergraduates in Physiology and contributed specialist lectures and laboratory classes to the Department of Physics' course in Biophysics. He was a member of the planning group for the Master in Clinical Audiology course at UWA and was a foundation member, Secretary, Treasurer and Chair of the WA Division of the Australian Acoustical Society. From 1997 to 1999 he was Federal President of the Society.

Graeme Yates took an active role in issues related to primary and secondary education and served on numerous school and education department committees. He had a special interest in science education and the related areas of music and acoustics and he contributed to teacher development and distance education in these subjects.

He was Convenor of the 1994 Churchlands Senior High School Music Tour of the US, and was intensely proud of the outstanding achievements of the students. On top of all his other achievements, Graeme was a devoted family man. His love for and immense pride in his family and the encouragement and support he gave to their academic and career development was evident to all who knew him.

Graeme died suddenly while undergoing treatment for a long illness. All his colleagues and friends, who will miss him forever in their lives and their work, offer their deepest sympathy to his wife Marilyn and

daughters Jennifer, Katherine, Elisabeth and Carolyn for their terrible and irreplaceable



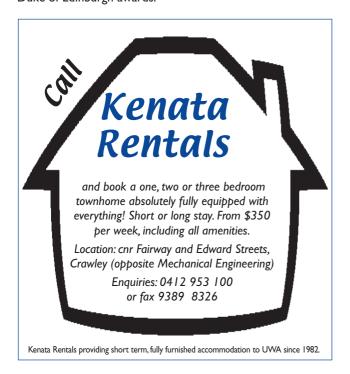
nything with the word forensic in it is a big drawcard right now.

Forensic science seems to be enjoying huge popularity so zoology student Michelle Harvey should have no trouble in attracting audiences for her talks on forensic entomology, or the habits of blowflies on corpses.

Ms Harvey, completing her honours year under the supervision of Dr Ian Dadour, has just won a Rotary Ambassadorial Scholarship. It is for one year's study to work at any university of her choosing. She has decided to undertake her course of study next year in South Africa, but she must also address Rotary gatherings before she goes, while she is away and when she returns.

"Rotary wanted somebody who not only had a good academic record, but could be an ambassador for Rotary, so part of the criteria was community service and leadership skills," Ms Harvey said.

She has been involved with Guides Australia, has coached and umpired cricket and has achieved gold, silver and bronze Duke of Edinburgh awards.



She completed her undergraduate degree, a combined BSc and BA at the University of Queensland and says it was only in her final year that she decided what she wanted to do.

Ms Harvey came to UWA to work with Dr Dadour, an acknowledged expert on forensic entomology.

Her scholarship will allow her to spend 12 months at the University of Pretoria, home to one of the world's top veterinary science and biosystematics schools, where she will be looking at the molecular systematics of blowflies on corpses.

"I'm hoping to start my PhD next year and this work will form part of my research," she said.

Dr Dadour said Ms Harvey would be privileged to work with Professor Clarke Scholtz, the Head of the Department of Forensic Science and do case studies with Dr Mervyn Mansell, from the Agriculture Research Council.

"The scene-of-crime (SOC) opportunities are much greater in South Africa than in Australia and there are fewer problems there with students attending SOCs, as there are here," Dr Dadour said.

"One of the benefits of working in South Africa is that we share some fly species but some of these flies are actually genetically and behaviourally different and come to a corpse at a different time," he said. "This experience will be a great start for Michelle to expand her knowledge and contacts globally."

The scholarship is worth US\$25,000.

KEEP BUYING THOSE TICKETS!

The Lotteries Commission of WA has recently made another generous contribution to scientific and medical research at UWA.

Almost \$600,000 was provided to purchase a scanning electron microscope and laser microdissection equipment.

The laser microdissection facility is the only one of its kind in the southern hemisphere and will allow microscopic regions of tissue to be precisely delineated and captured for analysis. It cane be used in a wide range of fields including in-vitro fertilisation, cloning, cancer research, animal development, botany, agriculture, engineering and biopolymer research.

The scanning electron microscope will allow for extensive research on various cell types and parasites.

earning first aid and resuscitation techniques should not be considered a one-off thing.

People should train in cardiopulmonary resuscitation (CPR) and first aid every five years. This is one of the recommendations following a study by the University Department of Emergency Medicine into the community's competency, retention and confidence in CPR and other first aid skills.

It also recommended that they do regular refresher exercises to retain competency and confidence.

Study co-ordinator Hanni Gennat said that 70 per cent of people who had once learned CPR said they felt confident about using their skills but



Learn it once — you WILL forget it

many of them were stunned when faced with a practical situation.

The Australian Rotary Health Research funded study surveyed 803 Western Australians by telephone and found that a high percentage (64 per cent) had trained in CPR. And 30 per cent of those surveyed had completed a senior first aid course.

One hundred of them were asked to participate in an assessment of their skills at Sir Charles Gairdner Hospital, to compare their practical skills with their perceived competence and confidence rating.

"We found that most of them retained first aid skills much better than CPR," Ms Gennat said. "They made a lot of errors in performing CPR, especially those who hadn't trained within the past five years. We

were surprised how much people had forgotten."

The study found the overall level of CPR competency in the community to be low. Furthermore, peoples' attitudes varied when it came to the decision to perform resuscitation on friends or strangers.

Of the respondents, 91 per cent said they would definitely perform mouth-to-mouth on a close friend or relative but only 47 per cent said they would definitely do it for a stranger. They cited risk of disease transmission as the primary factor discouraging them.

Ms Gennat said the study had generated extensive information on CPR training in WA and that further results would be published in scientific journals in the near future.



Have your say on campus future

major development of the Cooper Street block and University housing between Everett and Caporn streets are possibilities for the future development of the campus.

The Draft Campus Plan Review 2000 was released this month, a plan that seeks to retain the ambience, beauty and function of the campus, while providing scope for future development.

The Vice-Chancellor, Professor

Deryck Schreuder, said the development plan reflected the findings of a review committee established last year.

"The University has a huge obligation, as custodian of this national asset, to ensure that appropriate planning and design features are fully considered so that the essential elements are retained in a context driven by the challenges of a contemporary society," he said.

The draft plan suggests extending the basic structure (green spaces and an internal pedestrian precinct) off campus with more green spaces and pedestrian paths that



link Broadway to the river foreshore through the campus.

Public comment on the draft plan is invited and particularly encouraged from University staff, graduates and local residents who value the campus facilities and resources.

The plan is available through the main UWA web site. To make a submission, please email campus review@admin.uwa.edu.au or fax ext 1038.

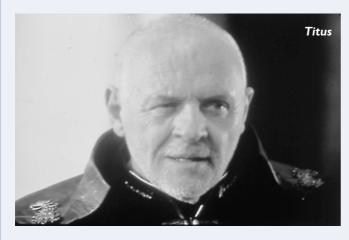
CDs and printed copies of the draft plan are available from the Visitors' Centre and the Office of Facilities Management. Printed copies only are also at University House, the Reid, EDFFA, Biological Sciences and Medical Centre libraries, and the council offices and libraries of Nedlands, Subiaco and Perth councils.

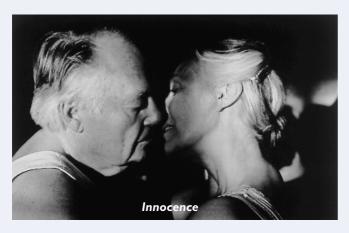
Comments and suggestions are invited until November 17. The anticipated date for release of the final plan is December this year.



A world of cinema on campus







ou can save thousands of dollars on your annual trips to the world's film festivals by sinking into a deckchair at the Somerville Auditorium this summer!

Many of the films, carefully chosen once again by that Festival stalwart Sherry Hopkins, have either won major international awards or the critics say they should have.

The Perth International Arts Festival's Lotteries Film Season begins on Monday December 4 with an English comedy from the director of *Brassed Off* and *Little Voice*.

Purely Belter is the story of two Newcastle boys, broke and from the wrong side of town, who won't give up on their dream of a season football ticket. But their money-making schemes all go awry. This should appeal to anybody who's ever been desperate to get to an AFL Grand Final. ('Belter' is slang for fantastically brilliant.)

The second program has two shorter films, the second is a 90-minute documentary from the US called *Mr Death: The Rise and Fall of Fred A. Leuchter, Jr.* It scrutinises the bizarre career of execution technologist Fred Leuchter, employed by the US Penal system as an expert in gallows, gas chambers, electric chairs and lethal injections. Critics have called it an electrifying and chilling study in job satisfaction!

The first film for 2001 is the Australian premiere of another film from the UK, *This Year's Love*, a romantic comedy set in London's Camden Town. It's been called "British filmmaking at its very best . . . brilliant, funny, moving" and it should be perfect for the silly season.

Another love story, this time home-grown, is directed by Paul Cox (A Woman's Tale and Lonely Hearts). Innocence stars Julia Blake and Bud Tingwell as teenage lovers who meet some forty years later to discover their feelings have not changed.

It's won three major film festival awards but missed out on Cannes although it's one that the critics insist should have won.

General Titus and hundreds of Roman soldiers return from their bloody campaign against the Goths in *Titus* (UK). Described as King Lear meets Hannibal Lecter, it features Anthony Hopkins and Jessica Lange.

The final film, screening from March 19 to 25, is from Iran, from the director of last year's hit *Children of Heaven*.

The Colour of Paradise also deals with children, telling the story of a blind boy and his father and celebrating the life and colour of the northern highlands of Iran.

All films start at 8pm and tickets are available at the door. They screen from Monday to Sunday for nearly three months, with only Christmas Day excepted.

Peaceful gathering

UWA will host a two-day symposium with the theme Cultures of Peace.

The Australian Academy of Humanities' conference is based on UNESCO's International Year for a Culture of Peace and international speakers will explore issues of reconciliation, tolerance, respect, co-operation and globalisation on societies.

Professor Frank Broeze from the Department of History is convening the symposium, from November 2 to 4.

Academics, students, and interested public are welcome to attend the Symposium lectures and discussions. The cost is \$30 for each individual morning or afternoon session (\$100 for the full symposium).

More information and the full program is on the academy Web site: www.asap.unimelb.edu.au/ahh/

CLASSIFIEDS

FOR RENT

FULLY FURNISHED AND EQUIPPED two bedroom townhouse in Subiaco. 10 min. cycle to UWA or 25 min. walk via Kings Park. Near to train and bus. \$200 p/w. Available from 15 December 2000 to 31 December 2001. Call Jim on ext 1749 or email seamus@cyllene. uwa.edu.au

BEAUTIFUL FULLY FURNISHED AND EQUIPPED apartment, very spacey with a great view, three brms, two baths, study, two parking spaces, reverse-cycle a/c, large balcony, in Shenton Park close to UWA, shops and parks. \$250 p/w, available 9 December to 30 June 2001. Contact Thomas on ext 1763 or email braunl@ee. uwa.edu.au

BEAUTIFUL FOUR-BEDROOM HOUSE in top street in Booragoon. Fully furnished and equipped. Close to Garden City, Aquatic Centre and schools. Has a/c and security alarm, beautiful garden and courtyard. Available from mid-December to end of March 2001. Rent negotiable. Contact nii@ecel.uwa.edu.au

FOR SALE

LARGE JARRAH DINING TABLE, 170cm round, good condition \$550. Solid teak coffee table, 'Old Empire' style, 200cmx80cm (approx.), good condition \$450. Contact Kate on ext. 3955 (w) or 9443 8851 (h) or koffer@ecel.uwa.edu.au

SEA KAYAKS (x 2). Plastic unbreakable boats that perform well in surf. Skirts, jackets, paddles. One as new, one demonstrator. Roof rack also available. \$3200 the lot or will split. Call ext 1783 or 9386 1069 (a/h) or email consid@cyllene.uwa.edu.au

TOYOTA CELICA 1994/5, manual (dual headlights). 82,000kms, in excellent condition with full service history. Electric windows, a/c, power steering, new battery. \$19,500 ono. Call 9364 7093 or 0410 698 712.

DAIHATSU APPLAUSE XI, 1991, white, auto, a/c, power steering, fuel injection, 4-wheel disc brakes, immobiliser, low kms, one owner, regular service, 6 months reg., immaculate cond. \$6800 ono. Call 9447 0632.

WANTED TO RENT/HOUSESIT

HOUSESIT/SHORT-TERM RENTAL WANTED for UK Professor seeking accommodation in Perth for his family (wife and two adult daughters) from 18 November to 8 January 2001. Housesitting would be ideal but willing to pay rental and meet costs. Contact Andrew on 9470 5613.

HOUSESITTING wanted from mid-December for three to six months but can negotiate with owners if for a shorter period. Have housesitting experience. Please contact Fiona on 0417 473 536 or by email at ftaylor@ecel.uwa.edu.au

HOUSESIT/EXCHANGE/RENTAL furnished accommodation wanted for visiting law academic and family (two small children) for six to ten weeks sometime between March and June 2001. Preferably close to UWA. Willing to exchange a three brm house in Wellington, NZ. Contact Claire.Baylis@vuw.ac.nz

HOUSESWAP WANTED by couple from Nottingham, England for couple of weeks (or any period agreed). Email Malcolm at Malcolm. Pritchard@nottingham.ac.uk

HOUSE TO RENT WANTED by British academic couple who are visiting UWA. House with air-conditioning wanted between January and February 2001. Non-smokers, prepared to water plants and feed pets etc. References available. Also possible exchange with delightful house in central North Oxford, close to university. Please contact dorothy.bishop @psy.ox.ac.uk



Redundant Equipment for Sale

ITEM	PRICE	AGE	COND.	CONTACT	EXT
PowerMac 8100/80, 16MG RAM/IGB HDD,					
CD, Apple Colour Monitor	\$280	_	2	Leslley	3092
Forma -70 Freezer	Offers	_	2	Rosalie	9224 0227
Macintosh Powerbook 540c	Offers	_	2	Mark	1405
Sun SPARCsystem 630MP	Offers	_	2	Mark	1405
Macintosh LC 630	Offers	_	2	Mark	1405
2x I5" Apple Monitor (M2978)	Offers	_	3	Mark	1405
2x I4" Apple Monitor (M1787)	Offers	_	3	Mark	1405
4x I4" Apple Monitor (1212)	Offers	_	3	Mark	1405
2x 14" NEC Multisync 2A	Offers	_	3	Mark	1405

Bids should be accepted by Monday 13 November with departments to have first option

Departments are reminded that all University equipment available for sale must be advertised in the **UWA**News. Receipts should be PeopleSoft account coded 490 (computing with barcode), 491 (non-computing with barcode) or 493 (items with no barcode). If equipment has an existing barcode please contact extension 3618/2547 for details.

CONDITION refers to the general condition of item (I = as new; 2 = good; 3 = serviceable; 4 = unserviceable). AGE refers to the nearest year.



The Board recently announced that UniSuper had consolidated its internal operations to provide its members with a single superannuation fund to emphasise flexibility, simplicity and quality service.

The merger of the investments and administration operations of SSAU and TESS is expected to happen over the next 12 months. Eventually, UniSuper expects to provide a wider product range for members, particularly those who are TESS only members, although it is too early to announce details.

UniSuper Chief Executive Ron Champion, said the phenomenal growth of both schemes had been the result of generous employer contributions, above average investment returns and their growing membership base. In particular, SSAU has been in the top quartile of the InTech survey of market-linked pooled funds over the last five years, having averaged 14.2 per cent. TESS credited 15.6 per cent to member accounts for the 1999-2000 financial year, one of the top rates among the industry funds.

"While compulsory choice of fund has not arrived, the increasing level of public interest in financial services means that we have to be even more responsive to members in the future. UniSuper will concentrate on providing members with flexibility, increased control over their savings and quicker access to up-to-date information about their superannuation. Streamlining our administration process is an important focus in our business strategy," Mr Champion said.

For further information, please contact:

Ron Champion, Chief Executive, UniSuper Management Pty Ltd Level 37, 385 Bourke Street, MELBOURNE VIC 3000 Telephone: (03) 9691 4102



Advertising Rates

Full page	\$550
Half page	\$275
Quarter page	\$138
Eigth page	\$88
Sixteenth page	\$72

All bookings to Joanna Thompson, Publications Unit Phone: 9380 3029 Fax: 9380 1162



AUSTRALIAN AGENCY FOR INTERNATIONAL DEVELOPMENT (AUSAID)

Ms H. Deighan and Associate Professor D. Ladbrook, Social Work and Social Policy: "Pathways and partnerships in entrepreneurship, by the community for the community" — \$155,000.

BUREAU NATIONAL DE METROLOGIE LABORATOIRE PRIMAIRE DU TEMPS ET DES FREQUENCE

Dr M. Tobar and **Dr A. Luiten**, Physics: "Fountain frequency standards" — \$57,498.

GRAIN RESEARCH COMMITTEE OF WA

Dr W. Cowling, Plant Sciences, and and **Dr H. Yang**, CLIMA: "Verification of a new molecular marker technique in lupins" — \$5000.

MEDICAL RESEARCH FUND OF WA

Dr K. Eidne, Medicine: "Elucidation of the molecular basis of sperm-egg recognition by random peptide phage display technology" — \$35,000.

OFFICE OF ROAD SAFETY, DEPT OF TRANSPORT

Ms L.Cercarelli, Public Health: "Roadwatch plan of work, 2000-01"— \$250,000.

RURAL INDUSTRIES RESEARCH AND DEVELOPMENT CORP.

Associate Professor S. Kailis, Plant Sciences: "Establish protocols and guidelines for table olive processing in Australia" — \$ 67,758.

Watch out for more Research Grants and Contracts in the next issue of UWA News.

WAIGHS

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from a New Academic Profile to a New Organisational Structure

Professor Alan Robson, Deputy Vice-Chancellor

Staff of the University would be aware that we are in the process of redefining our academic profile to ensure our continuing international competitiveness.

Already I am receiving responses to the

Academic Profiles document (http://www.acs.uwa.edu.au/reg/internal/sec/apindex.htm). Once our academic direction is clear then some organisational restructuring will follow to support the change. Discussions about this should start later this year.

I am aware that any change creates a degree of uncertainty, particularly if people are not clear about the personal implications. I would like to address some of the questions that may be in people's minds.

In the profiles statement we have identified six principles to guide the restructure; it is the implications of the fourth that I would like to refer to specifically—"The basic academic units/cost centres in the structure should be fewer and larger than the present departments".

Creating larger units has both an academic and a resourcing rationale. Increasingly, new fields of knowledge are interdisciplinary and multidisciplinary. We need to have a structure that encourages synergy to fulfil the promise of

our new profile. But we further need to ensure that the resources expended on the organisation's human and physical infrastructure are used effectively. In particular we need to diversify the skill base of staff, particularly those in departments and faculties where the new profile will take root.

Planning and budgeting have become essential tools in all areas of the University. It is no longer appropriate to assume that academics who take on the headship on a rotating basis will have these skills at a sufficiently professional level; they need further support.

To address these new responsibilities I see two things happening; firstly, it is quite likely that the roles and duties of some people on the general staff, particularly in the faculties, will be altered. Secondly, I anticipate that new roles will be created.

It is not the intention of the University to make people redundant, although it is quite likely that some positions will become so. In our agreements with staff unions we have committed to no net job losses. Indeed our focus on growth should see staff numbers grow over the next decade. It is likely, however, that some people may need retraining to undertake their new roles or that they may be redeployed to another part of the University. For many people this will offer wonderful new opportunities.

This approach is very much linked to our employment philosophy as articulated in the recently certified Enterprise Agreement with academic staff (although it pertains equally to general staff). I quote:

The University of Western Australia is committed to the direct employment of staff and will, whenever practicable, fill positions on a tenurable/tenured or ongoing basis. Where circumstances exist to justify employment under other conditions, the use of fixed term contracts will be promoted in preference to casual employment.

This approach has sound business logic. We offer ongoing employment whenever possible to maximise individual commitment to The University of Western Australia. We believe that to attract high quality staff in a highly competitive national and international labour market we must offer attractive salaries and conditions, including job security.

In tandem with our commitment to job security is linking salary increases to our capacity to pay. We have created a contingency arrangement based on income that should deliver guaranteed minimum increases to staff while ensuring that the University continues to operate responsibly. But the government's lack of financial commitment to the higher education sector continues to be enormously disappointing and frustrating in our efforts to deliver excellence.

Change will continue to be a feature of the higher education landscape as we respond to a rapidly changing external environment. And there is much to be excited about. As events unfold over the next months we are committed to using enterprise bargaining as a tool through which organisational change can be facilitated.

As further change is proposed I welcome your comments either through the feedback link already established for the Academic Profiles document (acaprofile@admin.uwa.edu.au) or by letter. I also remain happy to visit faculties and departments on request.

...the last word