



Young doctors discover another dimension on deck

A five-day voyage on the sail training ship *Leeuwin* turned out to be a journey of discovery for a group of fifth year medical students.

Eight of them accompanied 24 adolescents and young adults with disabilities, not as their carers but as their shipmates, to sail, learn, live and play together.

Student Grace Phua said that none of the 32 'sailors' had any sailing experience. "So we were all learning alongside each other and encouraging our new friends to do things they might not normally try."

But the students agreed that they probably learned more from the people with disabilities. They said they learned what a pleasure it was to live and work with them.

"It certainly smashed all our preconceived notions of people with disabilities," said student Hesom Razavi.



"They were encouraging us to take on challenges, rather than the other way around," said student Gemma Carroll.

The Variety Club Challenge was an option chosen by eight fifth year students while others spent two weeks with the Royal Flying Doctor Service, the ambulance service, in clinics or in surgery. The students paid for some of their voyage themselves, with the University and Variety Club funding the balance.

"We feel so privileged that we were able to take this option and get to understand and appreciate people with differences," said Grace. "It is also very valuable for us as future doctors."

The young sailors, also supported by Variety Club, had disabilities including autism, epilepsy, psychological depression, Downs syndrome and hearing loss.



VCarious
thoughts ...



Government Funding & Self-reliance

One of the very positive aspects of our University is how we have managed to deal with major issues — external and internal — by a reasonable process of reasoned debate.

Indeed, I was proud of the way in which we developed the new academic profile and established the new faculty/school structure, through vigorous debate of the principles and policies, in which we listened to each other and came to a broadly consensus-based view.

This year of 2002 will present several challenges to UWA as a learning community. We will have to confront some big issues, which will test collegiality with hard choices.

One that is largely internal, but with significant external factors, will be 'EB', the new round of Enterprise Bargaining, as the old agreement runs out. We shall again advance in an inclusive and positive way in discussions with union leadership on campus, and involve all of you in appropriate open forums, led by the Deputy Vice-Chancellor, in his usual open manner.

But the fundamental issue which is likely to require our engagement as a community relates to the Federal Government's review of Australian higher education, which is about to begin.

Because the mode of the review will be a series of position papers, spread over the next six months, we will need to consider the propositions and develop a series of UWA responses. We shall put those papers before you through the Academic Board, open forums and the Web. There will be practical procedures for capturing your views and developing responses. Our Student Guild will be significant contributors as well.

Among the most contentious issues likely to be put before us will relate to a possible new funding framework and degrees of de-regulation of the system.

The hottest issue will probably relate to new ways of funding undergraduate places. The Commonwealth will be pressed hard to raise levels of basic funding of each HECS place and indeed to create more funded places (not to mention better indexation of costs and better infrastructure investments).

But in a public system of higher education which accepts the principle of 'user pays' (through HECS), and because of a mix of public/private benefits, several models are likely to be advanced for varying student contributions.

A simple step for Government would be to make available an option to universities of expanding the PELS scheme to include undergraduate enrolments. Universities could then operate full-fee places, on a PELS/HECS basis, to increase both their load and their revenues.

Other options include variations to the existing HECS model — eg to allow a 'Flexi HECS' in which universities would set new and higher levels of differential charges — covered by the Commonwealth HECS scheme — which more closely related real costs to student contributions. Student choice and university reputation would also be involved.

At UWA we have declined to support the current, up-front fee paying undergraduate option. And in that we are joined by the Universities of Queensland and ANU, from within the Group of Eight. But five of the Group of Eight now have adopted the option, along with eight other Australian universities (13 of 38, including Curtin and ECU), with over 4,000 Australian undergraduates paying a fee. Some 30 per cent of that number are at the University of Melbourne, reported to bring in over \$20 million to the University.

I personally believe strongly in the public good of public education, and I am admiring of the access and equity character of our system of 730,000 funded places — increasingly supported by HECS.

I am also more and more concerned over the fiscal pressures on our universities and our staff, and the gap which is especially growing between Australian research-led universities of excellence — such as UWA — and the global levels of funding at the best institutions of higher learning overseas.

Government needs to invest more in higher education. Yet, realistically, those public resources are not likely to be sufficient for us to work at the levels of international excellence that are imperative for our students, researchers and community.

A very difficult set of options will have to be confronted — about raising greater resources in our mixed funding model. We cannot afford simply to ignore possible new sources of funding in any new frameworks of policy. Excellence and equity should guide our principles and our budgets as we evaluate those options. This could be the most critical year in deciding the policy and funding frameworks for our universities since the 'Dawkins revolution' and the establishment of HECS.

Very fortunately, we have a culture of considered and creative debate in confronting great challenges. And in overcoming them.

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

UWAnews

EDITOR/WRITER

Lindy Brophy

Tel.: 9380 2436 Fax: 9380 1192 Email: lindy.brophy@uwa.edu.au

EDITOR-IN-CHIEF

Colin Campbell-Fraser

Tel: 9380 2889 Fax: 9380 1020 Email: cam@acs.uwa.edu.au

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Graduates map out their careers



ABOVE: Sonny Tham, Paul Williams, Adrian Yau (standing), Daniel Harvey and Jason Hutchens (seated) make up the innovative IT company Amristar

RIGHT: Charlie Gunningham (front) and Nick Streuli have had a huge success with Amristar's software



Seven UWA graduates and their two companies are behind an outstanding commercial success in the real estate business.

Charlie Gunningham and Nick Streuli, the founding directors of real estate search service aussiehome.com, are the first commercial users of a unique interactive Web mapping system, developed by five graduates of Electrical and Electronic Engineering.

The five young engineers who comprise the company Amristar, Dr Paul Williams, Jason Hutchens, Daniel Harvey, Adrian Yau and Sonny Tham, developed i-delve, a revolutionary technology for serving spatial data online.

Charlie and Nick both came from overseas to do the MBA and both of them had a hard time finding a house to buy.

"We came up with the idea of a real estate search company and we visited several Geographical Information Systems (GIS) consultants and finally found success with Dr Julie Delaney in Geography. She advised us and we started off with an American system but, after two years, we threw that away and went with i-delve and we're thrilled with the results," Charlie Gunningham said.

The company has thrived, with listings from 75 agents, including agents in Broome and Melbourne. About 1600 people a day visit their site which not only shows the houses that are for sale or for lease, but also their location in relation to the rest of the metropolitan area, their distance from schools, hospitals, police stations, golf courses, elderly people's services and more.

The creators of i-delve are five innovative young men who say their company is funding their postgraduate studies. Paul Williams has already received his PhD, Jason Hutchens has

submitted his on artificial intelligence.

All five were members of Professor Yianni Attikiouzel's Centre for Intelligent Information Processing Systems and had worked together on projects as undergraduate students. Adrian Yau and Sonny Tham combined their engineering degrees with studies in commerce.

"Amristar is a structure in which to pursue our interests," said Jason Hutchens. "We are an innovation company interested in projects that involve creativity. i-delve is the first of our research projects to come to commercial fruition."

It is an advanced Web mapping applications that was showcased at the recent WA Land Information Society conference, the biggest GIS-specific conference in Australia.

"WA is a leader in Geographical Information Systems and it's great to be developing technology in an area in which our state is already at the forefront," Jason said.

Paul Williams said further applications of i-delve could be to track vehicles, such as the city's CAT buses, or ships off the WA coast.

"We are looking at developing i-delve for government departments involved in planning or land management, and for public utilities – anybody with wires or pipes in the ground could benefit from this system," he said.

The system overlays vectors on aerial photographs that enable a computer to understand a picture that is rich in information. It is essentially an interface for navigating a Web site with spatial information.

"It is important to give the user an impression of interacting with the map," said Jason. i-delve zooms smoothly in and out of geographical locations without the user having to wait for new images to be loaded.

Visit the two companies' sites at aussiehome.com, www.amristar.com.au and www.i-delve.net

First the experience then the degree



Newly graduated lawyers Neil Fong and Sue Gordon have an important role in the Aboriginal community this year

Sue Gordon was the first full-time magistrate appointed to the Perth Children's Court. She was also the first Aboriginal magistrate in WA.

But she wasn't the first in her family to become a lawyer. Her son, Michael Lundberg, took that honour when he graduated in 1994. It was in that year that Mrs Gordon decided that she too would study law. Although there was no requirement for her to do so, she had been appointed to the Children's Court without formal qualifications, and the Children's Court Act of 1989 had increased magistrates' responsibilities.

Last week, she graduated. Although Michael, who is now a senior associate with Mallesons, was interstate and unable to celebrate her graduation with her as she celebrated his, Mrs Gordon was joined by her own associate, Neil Fong, who is the executive officer in the government inquiry she is conducting.

The inquiry into response by government agencies to complaints of family violence and child abuse in Aboriginal communities, known more simply as the Gordon inquiry, has been an onerous task for Ms Gordon and Mr Fong, who was seconded for six months from the Department of Indigenous Affairs.

Mrs Gordon studied for eight years and Mr Fong studied for five years and they are now celebrating their achievement of completing a Bachelor of Laws degree.

Mr Fong said that he did not agree with the direction of some of the legal advice he was getting in his position in the Department of Indigenous Affairs and decided to study law so he was able to form his own legal opinion. He completed his degree while working part-time for the government and helping raise two young children with encouragement from his wife Paula and extended family.

During Ms Gordon's study, her husband died and she nearly withdrew from her course. But her sons reminded her that she told THEM she would finish, so she did.

She was encouraged by many people including her eldest son, engineer Darren Lundberg, other mature aged law students and Aboriginal law students she met while at UWA.

The Gordon inquiry is due to be completed at the end of July, at which time Mrs Gordon and Mr Fong will return to their substantive positions – this time armed with their degrees.

Another first for UWA's sports science

John Bloomfield, one of the fathers of Human Movement at UWA, has been honoured by the University of Queensland.

UQ awarded Emeritus Professor Bloomfield with the first honorary doctorate bestowed on a sports scientist in Australia.

Using his experience at UWA, he had helped UQ set up their school of human movement 14 years ago and had undertaken several small consultancies for UQ since then.

Now retired, Professor Bloomfield has recently written a book, *Sporting Success: Australia's Story*, which chronicles Aussie sport from 1803 to the Sydney Olympics.

"The children of the convicts adopted sport as a way of climbing the social ladder, as sport, particularly cricket, was very important to the English," he explained.

"They became a real force in Australian cricket and you can trace their progeny right down to the late 19th century when Australia was consistently at the top of world cricket."

John Bloomfield — "an honorary doctorate for services to sports science and medicine, both academic and professional"



25 years on ...

The Mavaddat family is an outstanding example of the Baha'i faith, which advocates peace and encourages education for women.

Matriarch Nina graduated last week with her Masters of Education (by thesis), encouraged by her daughters Nasim and Nahal, who both have PhDs in medicine.

She will now embark on her own PhD, the last in the family of five to do so.

The family were refugees from Iran, and Nina says she and her husband Rafie, a former senior lecturer in Electrical and Electronic Engineering, could never have educated their children without the terrific support from UWA.

"Nasim won a scholarship to do her PhD which then paid for her to spend two years at Stanford, something we could never have afforded on our own," she said. "Then Nahal won a scholarship from UWA to do her PhD at Cambridge.

"We are so grateful to the University for helping our family to achieve its dreams."

The Baha'i faith is the only one in the world that specifically encourages education for daughters. It is because a girl will grow up to be a mother and so the first educator of the next generation.

"If we educate women, we will achieve peace," said Nina. "No educated woman wants her children to die in war."

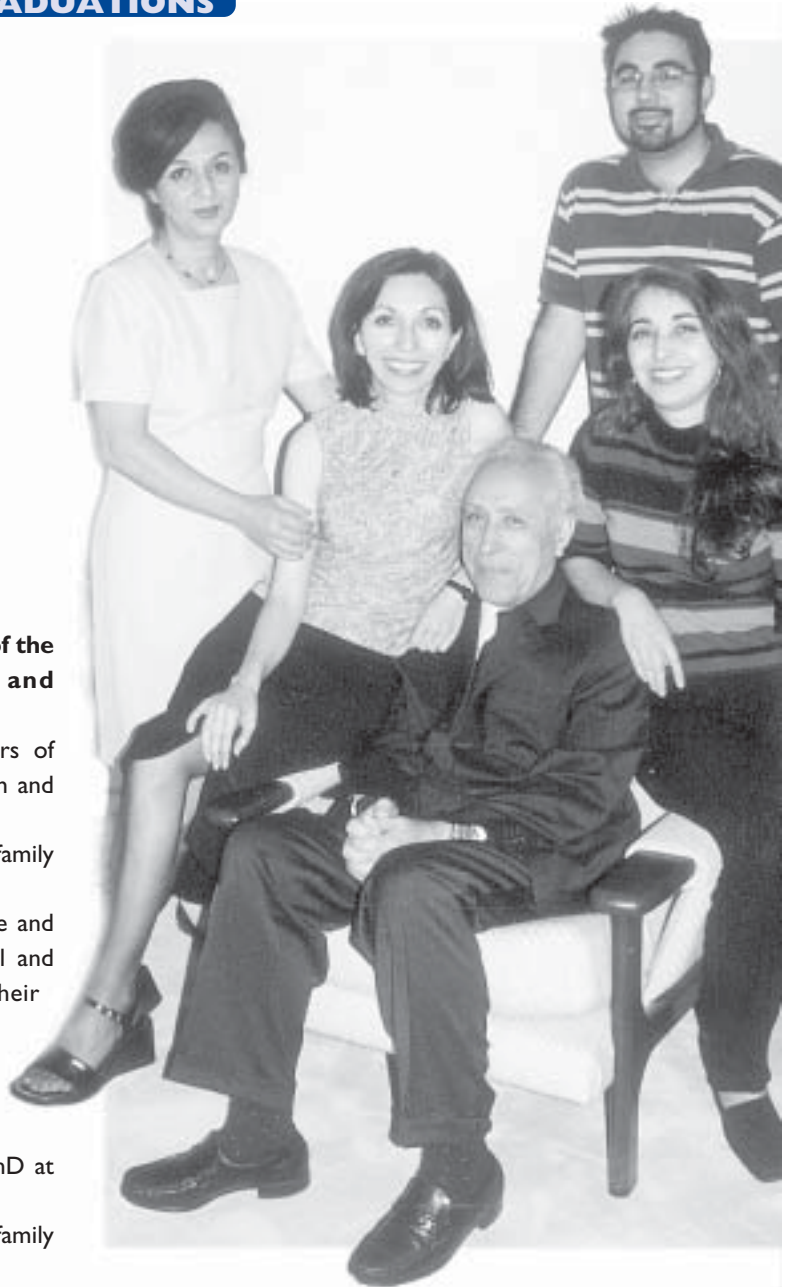
Nina's thesis, supervised by Dr Marnie O'Neill and Dr Anne Chapman, looks at perspectives of Baha'i women of the influence of their religious beliefs on their educational and professional achievements. She hopes to extend her study for her PhD.

Nina, Rafie and the girls were in Australia in 1977 with Rafie, then a professor of engineering at Shiraz University in Iran, on a visiting fellowship at the Australian National University.

The revolution erupted while they were in Canberra and members of their faith were being persecuted and gaoled in their native country. They could not return, so applied for refugee status and, after the birth of their son Navid and a few years in Adelaide, the Mavaddat family came to Perth.

Nasim and Nahal both studied medicine at UWA. Nasim is now doing postdoctoral research at Cambridge in immunology where her younger sister Nahal has just completed her PhD in neuropsychiatry. Nasim visited her family in Perth for Easter.

"I went to Cambridge with a scholarship from UWA so I'm



Nina Mavaddat with her family, son Navid (back), husband Rafie, and daughters Nasim (left) and Nahal (right) — three Dr Mavaddats and two more on the way

hoping I can spend a year or two here, to contribute something, but it just depends on what's available here,' Nahal said.

Navid has just made a start this year on his PhD in computer science, also at UWA.

"You may wonder what inspires us to such high achievements," said their father Rafie.

"We all believe, in spite of the situation in the world today, that there is a glorious future for humanity, once people realise that they are one entity. And what will bring that about is two things: The first is education in science, technology, medicine — the intellectual achievements of mankind. The second is the spiritual side of man — the moral and the ethical side and the feelings towards the rest of humanity.

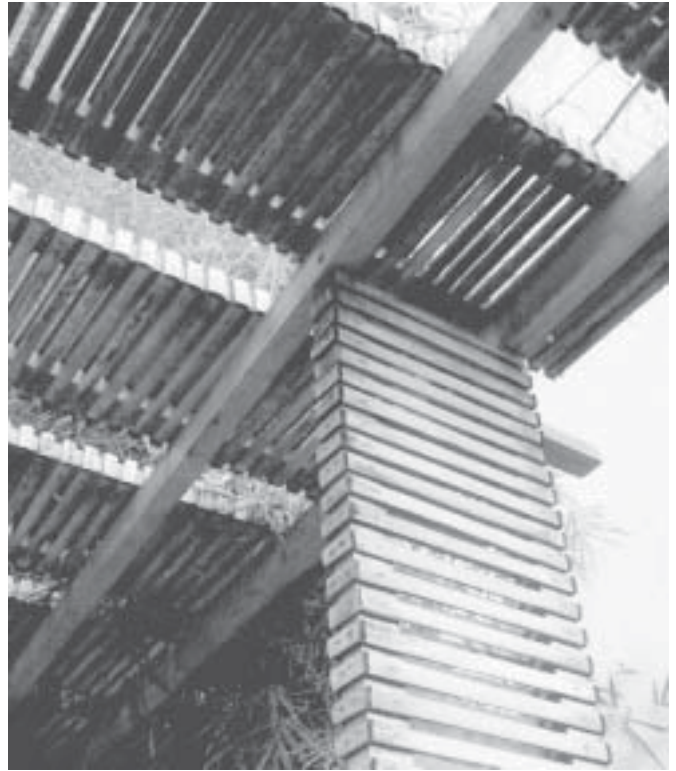
"We feel that each family must strive to contribute to both of these areas, to do their best to bring about the unity of mankind. One without the other is meaningless. Religion without intellectual development breeds fanaticism and, if you exclude religion from scientific endeavour, it leads to materialism."

Bali by design

Two Honours students in landscape architecture are designing a new village centre for Ubud, in Bali.

It is the first step in developing a teaching and research program in Bali for the Faculty of Architecture, Landscape and Visual Arts.

Lisa Archer and Renee Romyn, supported by senior lecturer Grant Revell's expert guidance, spent three weeks in Ubud over the summer, getting to understand and appreciate the local culture and Hinduism. They looked at different design spaces,



**OutReach
Environmental
Design Teaching and
Research Program
in Bali**

talked to local architects, experts on Hinduism and local university staff and learnt the principles of Balinese design.

Apart from their cultural induction, their main objective was to find a design project. The Balinese government has a master plan for the village centre in Ubud and the students decided they would submit their ideas for the same area, including the market, the palace and Monkey Forest Road.

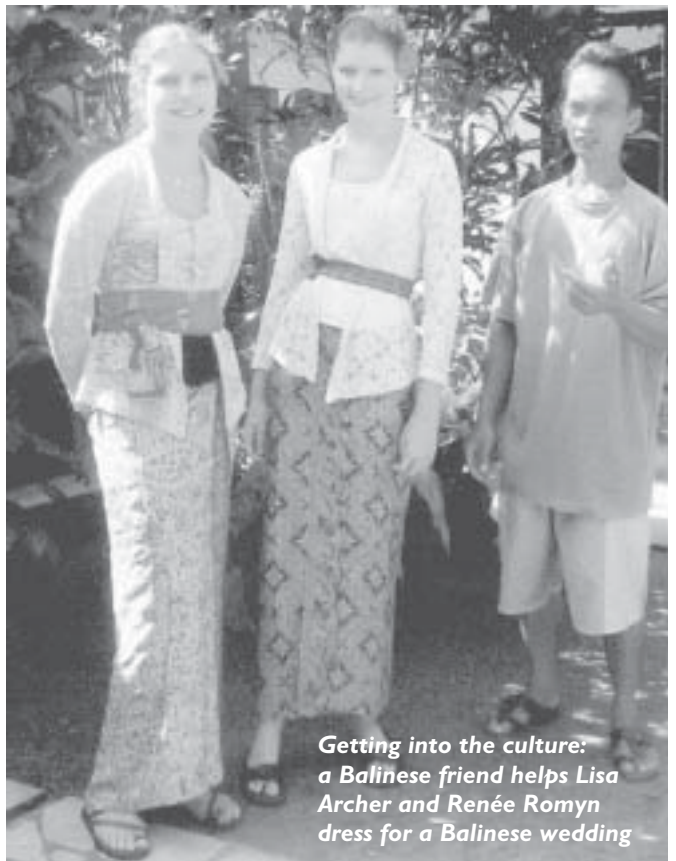
"We don't expect our ideas will be used," said Lisa Archer. "But we hope that the locals will see that we understand their design principles and that we are sympathetic to their culture."

"It's just the first step," said Grant Revell. With a research background in Bali, Mr Revell has been keen for the OutReach Environmental Design Teaching and Research Program in Bali to get started.

"One of the objectives is to teach students how to go into a foreign place, to learn the culture and to create the right designs for those people. They need to learn sustainable environmental design in a non-western cross-cultural setting.

"We chose Bali because, apart from my research connections there, it is in a region in which our graduates should eventually feel comfortable working," he said.

Other objectives of the program are: to create viable partnerships with Balinese university communities and industry groups; to foster student learning exchanges across local village community and institutional settings; to provide environmental



*Getting into the culture:
a Balinese friend helps Lisa
Archer and Renée Romyn
dress for a Balinese wedding*

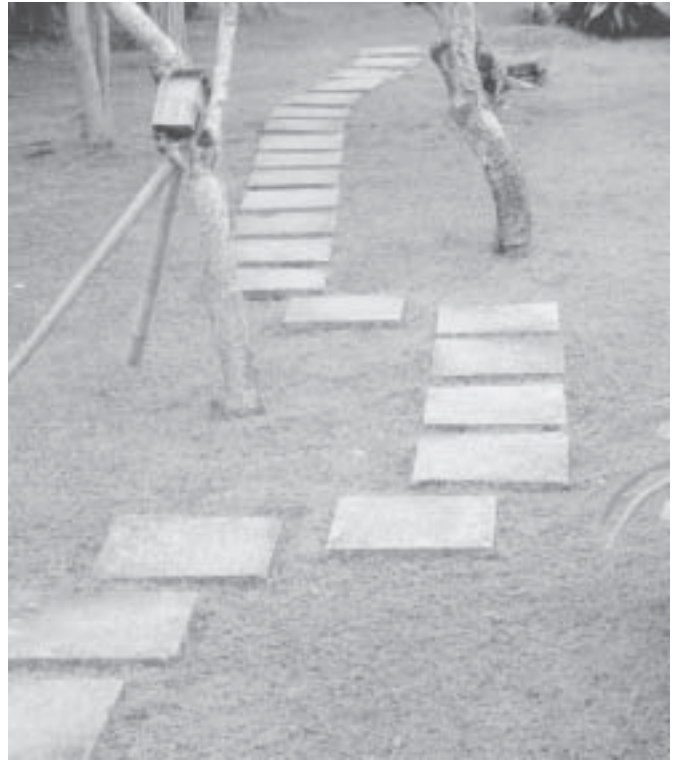
design teaching, research and community service to the developing needs of local village communities.

Faculty members have discussed the proposals with university and community colleagues in Bali and are hoping to be involved in other local environmental design projects – both speculative and real – that will broaden the education objectives for both Balinese and UWA students, as well as improve the quality of life for the local indigenous Balinese village participants.

Lisa Archer and Renee Romyn's honours design project focusses on the impacts of tourism on cultural land design within the Gianyar Regency. While in Bali, they met the Prince of Ubud and they hope to be able to return to Ubud before they complete their project to share their work with the locals.

Mr Revell said he hoped the OutReach program could eventually see individual undergraduate and postgraduate UWA students and staff carrying out design-related research projects in Bali.

Other initiatives could include a travelling studio where a whole inter-disciplinary class of UWA students could visit Bali and undertake a design project in association with host institutions, design business groups and local communities.



learning and working on the holiday island

“As the program progresses, a student exchange arrangement could be developed where Balinese design students would be encouraged to undertake their studies at UWA,” he said. “And, probably a long way down the track, we love to establish a design studio facility which could eventually be built within a participating village community and act as a clearing house or community resource centre for local sustainable environmental planning and design-related programs.”

The first step, Lisa Archer's and Renee Romyn's honours project, was partly funded by the Faculty but also generously supported by UWA's Institute for Regional Development.



“We want to thank Neil Drew and Liz Scott from the Institute for their financial help. It has been a most successful initial step towards developing a vision,” Mr Revell said. “The willingness of Lisa and Renee to learn and to be inducted into another culture has been fantastic.”



Lisa and Renee discuss their project with senior lecturer Grant Revell



UWA IN GERALDTON

LEFT: The combined universities' centre for rural health

UWA is spreading its wings northwards, with a fledgling centre established this year in Geraldton.

The University's Co-ordinator of Regional Programs, Dr Beverley McNamara, said the Geraldton venture was different from the Albany model, as it was part of a combined university centre.

Curtin University of Technology and Edith Cowan University are sharing accommodation, facilities and Commonwealth Government funding with UWA, and they are operating from the home of the Combined Universities Centre for Rural Health.

The delivery of the first year units (four arts and one computer science) is the same as that in Albany: lectures are made available on the Internet, lecturers visit once each semester and there are resident tutors in Geraldton for each unit.

"It's a small start and we're still feeling our way," Dr McNamara said. "But the University is very keen on making UWA accessible outside the city and outside the western suburbs."



Dr Beverley McNamara, co-ordinating regional programs in Geraldton and Albany

She said that, like Albany, the Geraldton centre provided a leaping-off stage for school leavers who didn't want to leave home as soon as they completed school. It helped them with the transition to the UWA campus when they did move and it meant a great saving for their families if they could stay at home for their first year of tertiary studies.

About half the students at Geraldton are school leavers, the other half mature-age students. They can choose between first year units in Psychology, Anthropology, Philosophy, History

(including Ancient History) and Computer Science.

The centre has a Commonwealth Government operating grant for 20 HECS places, seven each for ECU and Curtin and six for UWA.

"But we actually have 15 students, 14 of them part-time and one full-time. Not all of them are HECS students. Some are access students, which means they apply through UWA Extension to do their chosen units. There are no pre-requisites and, when they've completed their studies, they can apply, on the strength of their assessments, to upgrade their results to a degree," Dr McNamara explained.

"We also have audit students, who pay fees up front but don't want to take part in assessment. They are simply studying out of interest, without wanting a degree at the end."

Rob McCormack, manager of the University's planning services, said a government capital grant of \$1 million had been promised for the combined universities for 2004.

A big birthday celebrated by little people



One of the State's oldest childcare centres, Unicare, has celebrated its 30th birthday.

Also one of the first centres in WA to provide purpose-built premises, Unicare is run by the parents who use it, on land generously provided by the University in Parkway.

The opening of the original centre, on Easter Tuesday, 1972, came after a long struggle for students and staff who desperately needed childcare.

At the time, it was seen by Senate as an "illegitimate application of University resources". Even after 1971 when Senate approved support for the newly-established Child Care Club, there was stiff opposition. The Professor of Child Health wrote a three-page submission to Senate on the danger for young children of maternal deprivation.

The centre's current president, senior lecturer in Chemistry, Dr Allan McKinley, said it was impossible to count the number of children who had attended the centre over its 30 years. It began with 20 children, increased to 60 the following year and currently has 133 children from 120 families, although no more than 100 are in the centre at one time.

Dr McKinley said the popular non-profit centre had children from 25 different cultures and always had more children on the waiting lists.

Unicare has been directed by Henrietta Frost, a children's nurse by profession, for nearly all of its 30 years. She started at the centre in 1975. Her deputy, Val Marsh, had her son Scott at Unicare and now Scott's son Austin is there.

Help make this an inclusive campus

With around 500 students with disabilities on campus each year, UWA's disability officer, Mark Edwards, used to be kept busy with requests for help with note taking and transcription of lectures.

"Now I get none. The biggest and best thing to happen for people with disabilities over my 10 years here has been the development of flexible delivery. Last year it took off in a big way. There is so much information for students online and there are now 16 centres on and off campus where the multi-media section can just push a button and lectures and classes are put onto the Web," Mr Edwards said.

"In the drive for quality, equity and accessibility are included. Better quality delivery means it's more inclusive for everybody, whether you're a full-time or part-time student, whether you have a disability or not, whether you have family commitments or work commitments outside your studies.

"And by ensuring the most inclusive delivery, it means students with disabilities don't necessarily need to disclose their disabilities to anybody. That is exactly how it should be."

Mr Edwards is currently working on draft objectives for a new disability service and action plan for the University, to reflect the requirements of new legislation.

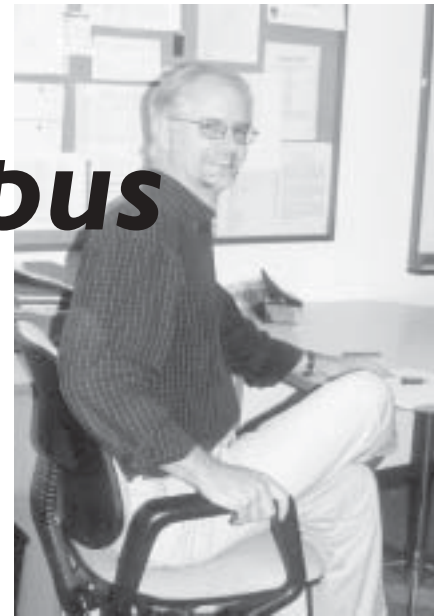
The objectives cover ten key areas: policy, planning and resource allocation; buildings and facilities; prospective students; admission, enrolment and orientation; teaching and learning; information technology; disability services; awareness and staff development; employment; and promotion of the University's services and events.

"The University is doing really well in the employment area, thanks to Malcolm Fialho (diversity officer) and Janette Barrett (committee for disabilities) and their fantastic proactive work.

"And we are starting to develop a website called *Universal Design for Learning at UWA* so teachers can access it and find help with making their teaching inclusive.

The draft objectives of the disability action plan are on a website and feedback from staff and students is encouraged. Access them at: www.studentservices.uwa.edu.au/disability/action_plan/

The action plan will eventually be a guide for the University to ensure that it minimises barriers to all sorts of access and thereby encourages full participation



Disability officer Mark Edwards has seen a lot of change over his 10 years at UWA

in its education, cultural, recreational and other facilities and services.



Proactive research services

Colin Cooper and Campbell Thomson discuss benchmarking research administration

A leading British research administrator has been helping to guide UWA research services towards the future.

Colin Cooper, Head of Research Grants and Contracts Administration in UMIST Ventures Limited, (University of Manchester Institute of Science and Technology's research management section), recently visited UWA at the invitation of the Pro Vice-Chancellor for Research and Innovation, Professor Michael Barber, and the Director of Research Services, Dr Campbell Thomson.

"We invited him to guide us towards being more pro-active in research development and in pre-award research management and administration," Dr Thomson said.

Mr Cooper has successfully developed the 'one stop shop' for the research to commercialisation process, whereby there is one central point on campus for all R&D and technology transfer management.

He ran several information sessions for research administration staff and research groups on campus.

Mr Cooper was also guest speaker at the recent launch of the WA Chapter of The Australasian Research Management Society (ARMS) at the Lawrence Wilson Art Gallery. This was particularly appropriate given that Mr Cooper is the co-chair of the international committee of the Society of Research Administrators International. He said the broader range of disciplines here than at UMIST could only enhance research and commercialisation opportunities. "People don't realise how well a breadth of disciplines can work together," he said.

His visit was timely, given the University's academic restructure, which promotes interdisciplinary activities.

UWA honours favourite sons . . . and a daughter

The University has honoured six leading West Australians, including one of the country's best dramatists, the first woman to be elected as Guild President at UWA and the man many know simply as 'the Coach'. Honorary doctorates were bestowed on Alan Seymour, Sue Boyd, Dr Ric Charlesworth, Clinical Professor Alex Cohen, Michael Chaney and Dr Richard Lefroy, at six separate graduation ceremonies in Winthrop Hall.



A former UWA, Chancellor Clinical Professor **ALEX COHEN AO** devoted his medical career to diabetes, spending most of his professional life at Royal Perth Hospital, but also teaching at Harvard and Oxford universities.

As President of the Diabetes Research Foundation of WA, Professor Cohen was a prime mover in the successful campaign to raise more than \$2 million for the creation of a Chair of Diabetes Research at UWA. He accepted the award of the honorary degree of Doctor of Letters.



SUE BOYD (honorary degree of Doctor of Letters) has served Australia with distinction through the Foreign Service, most notably in advancing Australia's interests in Vietnam at a crucial time in the bilateral relationship and steering Australia's interests in Fiji during the

2000 coup and its aftermath.

She completed a Bachelor of Arts and a Diploma of Education at UWA before becoming the first woman to be elected as Guild President. Ms Boyd worked as a journalist in Perth for three years before joining the Foreign Service. Since then she has served in Europe, Asia and the Pacific including terms as Australian Consul-General in Hong Kong and Australian Ambassador to Vietnam.

Most theatregoers would know **ALAN SEYMOUR** as author of *The One Day of the Year*, the play about Anzac Day that was initially banned by the Adelaide Festival, and went on to become a classic in Australian theatre.

Mr Seymour grew up in Fremantle but worked in London for much of his career, a long, productive and significant one that has made a major contribution to theatre, radio, and television in both the UK and Australia, where he now lives permanently in Sydney. He has accepted the award of the honorary degree of Doctor of Letters.



MICHAEL CHANEY, CEO of Wesfarmers, is one of Australia's leading businessmen, a graduate of UWA and Harvard University, and a patron of the arts, medical research, education, Indigenous advancement and youth development.

During his time as CEO, Wesfarmers has increased its market capitalisation from \$1 billion to more than \$10 billion. But it is his active and significant support of causes and organisations outside his business interests that saw him elected by his fellow CEOs as Australia's Most Admired Business Leader last year, and now he can add an honorary degree of Doctor of Laws

Dr **RICHARD LEFROY** (honorary degree of Doctor of Medicine) studied history at UWA under Professor Fred Alexander. It was not until an extended period in hospital after an accident while serving in the British Army that he decided to make medicine his career.

Returning to Australia he studied medicine in Melbourne as there was no medical school in WA. But six years after graduating, Dr Lefroy became Reader and later Associate Professor in UWA's new school of medicine.

He had a profound effect on the teaching of medicine and still has a reputation amongst his former pupils as one of the best teachers in the school for his exemplary medical practice, dedication and compassion.

In 1963 he was invited to set up a State Geriatric Service and his interest in geriatrics continued, through his career into his retirement. He is currently Senior Honorary Research Fellow in the University's Department of Public Health, with a principal interest in the care of people with dementia.



Dr **RIC CHARLESWORTH AM**, a consultant, commentator and writer on sport, employed by the Australian Institute of Sport as a mentor coach, accepted the award of the honorary degree of Doctor of Science.

After studying medicine at UWA and working in General Practice for several years, Dr Charlesworth was elected to the House of Representatives in the seat of Perth. His distinguished sporting record includes 16 years as an international hockey player, representing Australia in both cricket and hockey, winning WA Sportsman of the Year three times, winning 16 state and national awards for coaching over eight years, and, of course, coaching the Australian women's hockey team to gold medals at the Atlanta and Sydney Olympics and the Kuala Lumpur Commonwealth Games.

His second book, *The Coach – Managing for Success*, published last year sealed his reputation as 'the Coach'. Dr Charlesworth is studying part-time for an arts degree at UWA.

Glenn gone from the gardens



Glenn Sproule, one of only four curators in the 90-year history of the campus

leaving a lovely legacy

Glenn Sproule knows the University grounds like the back of his hand. He should. He's used those hands to mould and nurture the grounds for 26 years.

Mr Sproule, the Curator of Grounds, left the University last week and left his mark on its beautiful surroundings.

The Foreman Gardener who became Curator of Grounds in 1988 will be remembered for successfully incorporating the planting of indigenous Australian vegetation into landscaping based on classical European principles.

His particular contributions have been to the development of Prescott Court in Agriculture, major refurbishments of the Tropical Grove, the Sunken Garden and the Somerville Auditorium, and the establishment of the Jurassic and Eocene gardens in Geology.

Russell Candy, Director of the Office of Facilities Management, said Mr Sproule's commitment to the training and development of his staff had resulted in horticulture graduates from Unigrunds sometimes being employed in prestigious gardens overseas and always becoming skilled practitioners of their art.

"The University thanks Glenn for his warmth, kindness and genuine concern for the well-being of each member of his grounds team," Mr Candy said.

"We are sorry he is leaving UWA but we know he will take his place in the landscape history of the campus, which will be fully recorded in the years leading up to the University's centenary in 2011."

Mr Sproule's expertise will not be lost to the campus. He will continue his connection as a Friend of the UWA Grounds, of which he was a foundation member.

CAMPUS *secrets*



If you have a secret spot on campus, a favourite feature or a little-known fact to share, please send it to us: lindy.brophy@uwa.edu.au or phone extension 2436, fax 1192.

The ferns and creepers almost hide it from view. But if you can spot the small yellow door in the stone wall on the western side of the Sunken Garden, don't be disappointed if it doesn't lead you somewhere magical!

Although it looks as though it should take you to a dark tunnel that emerges onto a sparkling beach, it actually leads to the carpark under the Lawrence Wilson Art Gallery.

Visitors to the campus who attend weddings and parties in the Sunken Garden probably know the tunnel and the door better than University staff. It's been there since the gallery was built in 1990.

Canada learns from our water expert

Where do pollutants go when they are dumped into a lake? How does the rotation of the Earth affect the water temperature of our beaches? How can we improve the environmental quality of a reservoir, and the river below it?

Professor Jorg Imberger, Chair of the Centre for Water Research, is trying to answer these questions at Canada's University of Waterloo, where he is currently the Walter Bean Visiting Professor.

He is presenting his research in the dynamics of aquatic ecosystems and how, by modelling their dynamics, we are able to better understand how they work, and predict the impact of our actions on these systems.

Professor Imberger is the world's pre-eminent physical limnologist. He is one of several distinguished environmental experts invited to the University of Waterloo since 1992, through the Canada Trust Walter Bean Visiting Professorship.

The Trust Professorship in the Environment attracts top international



research professors to give public lectures, teach classes and/or meet with professors and students.

Professor Jorg Imberger — taking his knowledge of fresh water dynamics to Canada



Tradition on the brink of transformation

Jon Stubbs
Director, Student Services

By the time this column is read an operational review of another six UWA graduation ceremonies will have been completed.

Fingers crossed, the findings of the review will be largely positive. Amidst the magnificent setting of Winthrop Hall, almost 2,200 graduands will have been admitted to degrees and awarded diplomas that confer a credential of international standing.

UWA has been graduating students in Winthrop Hall since 1932. In that regard not much has changed in 70 years. The academic procession enters the hall in garb with origins tracing back to medieval times; the Chancellor is protected by his Mace Bearer; an anthem is sung before speeches and presentation of the successful candidates.

Yet in many other ways the organisation of these events has changed markedly, with all its reliance on computer technology to mass-produce invitations, collate lists of graduands for Senate's consideration and publish degree certificates etc. But it hasn't yet transformed the core process – determining that a student has satisfied the academic requirements of a UWA degree.

If, by some magic the University Registrar of 1932, could be transported through a time portal into the 21st century, I feel certain he would recognise many of the elements of our graduation ceremony organization:

- A process which begins with students filling in forms to signal their intention to complete a UWA award
- Manual checking of academic records for compliance with degree regulations, together with
- Repeated checking and cross-checking of lists, with all the attendant risks of human error: lists for Senate, lists for the graduation program, lists for seating and guest tickets, and lists for the production of degree certificates.

Transformation of this manual process, however, is one of the key goals of the Student Information Management System (SIMS) project that is currently evaluating the capabilities and potential of three 'off the shelf' computer systems, one of which may be selected to replace the current Student Records System.

In a statement of functional requirements extending beyond 1600 items, eleven key areas have been identified where the University expects to achieve significant functional and thereby service enhancement. Three of these areas are:

- Enhanced enrolment functionality to provide comprehensive on-line real-time checking of enrolment eligibility against course rules and / or course plans, and complex unit rules
- Academic progression functionality that will:
 - Periodically apply academic progression rules
 - Identify students who have failed academic progression rules
 - Manage sanctions arising from inadequate course progression
 - Identify students who have completed majors and courses, including the level of completion
- Enhanced graduation capabilities to:
 - Manage the status of potential graduands through to graduation at a ceremony or in absentia, and
 - Manage the production of testamurs and other graduation publications.

Three systems, Callista, PeopleSoft Student Administration and Student One are under consideration. Representatives from the companies have responded to the University's tender and, during March, demonstrated their systems against a series of scripted scenarios developed by the UWA Evaluation Team. Each of the systems presented a number of strengths as well as areas where additional development would be required. For example, the WWW portal interface of the PeopleSoft Student Administration system was a revelation to those staff used only to the grey panels and mysterious menu structure of the PeopleSoft Finance system; the Student One system appeared to deliver excellent adhoc reporting capabilities; the rules engine of the Callista system demonstrated that UWA course regulations could be entered into the system and be available to both staff and students to monitor progress through a course.

Student systems are complicated and they are required to do a lot: manage student recruitment; process applications for admission, academic standing, reviews of grade and request for special consideration; assess student liability for fees; manage results processes and academic progression; and determine that successful students are eligible to graduate. They must also integrate with, and make information available to, many other systems and processes around the University: the finance system; the library; a variety of managed learning environments.

Our plan is to 'go live' with the new system for the 2004 academic year, but before then the UWA Evaluation Team must be confident that the preferred system has the capacity to provide the University with significant functional and thereby service enhancement.

For those interested in the SIMS project, more information is available at: <http://documents.cwis.uwa.edu.au/sims/>

the
LAST
WORD

Research Grants & Contracts

UWA SMALL RESEARCH GRANTS SCHEME

Dr Nithiananthan Asokanathan, Microbiology: "The role of bacterial infection in the initiation of inflammation in the prostate epithelium-mesenchymal unit" – \$15,000 (2002).

Dr M. Saunders, Microscopy & Microanalysis: "Analytical electron microscopy investigation of the nano-scale distribution of invisible gold in Fe-sulphide minerals: A pilot study" – \$11,000 (2002).

Dr A. Suvorova and A/Prof Brendan John Griffin, Microscopy & Microanalysis: "High resolution cathodoluminescence spectroscopy in an environmental scanning microscope" – \$12,600 (2002).

Dr Peter Hammond, Physics: "Long lived states of doubly excited atoms" – \$12,000 (2002).

Mr John Gideon Hartnett, Physics: "Whispering-Gallery-mode sapphire-dielectric resonators with exceptionally enhanced quality-factor" – \$19,734 (2002).

Dr Ian Norman McArthur, Physics: "The supersymmetric nonabelian Born-Infeld action" – \$20,000 (2002).

Dr Timothy Guy St Pierre, Physics: "Magnetic behaviour of semi-disordered antiferromagnetic nanoparticles" – \$9,000 (2002).

Dr Jingbo Wang, Physics: "Electronic structure of quantum dots" – \$14,033 (2002).

Dr David Kingsley Waterhouse, Physics: "Molecular shrapnel: what do the fragments reveal?" – \$10,313 (2002).



Dr Livia Charlotte Hool (left), Physiology: "Identifying the cellular mechanisms responsible for altered sensitivity of the cardiac L-type Ca²⁺ channel to beta adrenergic stimulation during hypoxia" – \$18,484 (2002).

Dr Shane Kevin Maloney, Physiology: "Insights into the evolution of thermoregulation: brain temperature regulation in mammals" – \$7,000 (2002).

Dr Janet Florence Fletcher, Psychology, **Dr B. Hands** (external) and **Dr Janet Dawne Larkin**, Human Movt & Exercise Science: "Kids need friends: An examination of the relationship between language and motor deficits, and peer rejection in primary school children" – \$18,671 (2002).

Dr Jonathan Keith Foster, Psychology: "How does our blood glucose level affect our memory?" – \$9,000 (2002).

Dr Allison Margaret Fox, Psychology: "Event-related potential (ERP) indices of response inhibition" – \$9,215

Enjoy a cuppa – your heart does!

When you crave a cup of tea, is your body helping you on the way to a longer healthier life?



Dr Jonathan Hodgson stays healthy with a cup of tea

Medical research fellow Jonathan Hodgson has recently shown that regular cups of tea improve our blood vessel's capacity to dilate.

"Increased ability of blood vessels to dilate has been associated with lower risk of heart disease. Therefore, the effects of tea in improving blood vessel function may be good news for those at risk of heart disease," Dr Hodgson said.

About 10 years ago, population studies showed that people who drank more tea had a lower incidence of cardio-vascular disease. Any benefits of tea were suggested to be due to antioxidant compounds found in tea.

"I had an interest in dietary anti-oxidants and their potential to influence heart disease, so I decided to perform a dietary intervention trials to see if the effects (of drinking tea) were

consistent with proposed benefits," he said.

Just over 20 people participated in the research over four weeks, with some drinking five cups of black tea a day and a control group drinking hot water. Their blood vessels were monitored by ultrasound at the beginning and end of the study.

"Tea contains a high concentration of flavonoids, which have antioxidant activity. It also provides these without providing any calories, so we didn't have to alter the normal diet of the participants during the study," Dr Hodgson said.

He explained that flavonoids are phenolic compounds and that coffee has a high concentration of phenolic acids. So his next study will be into the effects on cardio-vascular health of drinking coffee.

The level of flavonoids in tea is so high that it doesn't matter which tea you drink, whether it's a blend like Tetley's, Lipton's or Bushell's or a more pure tea like Darjeeling.

And perhaps the best news is that adding milk to tea is unlikely to affect its positive benefits.

Dr Hodgson's research results were recently published in the international journal, *Clinical Science*. The research was supported by the Heart Foundation of Australia and the Tea Trade Health Research Association.

Mr Kibeom Lee, Psychology: "A development of international distortion scale in personality testing" – \$16,652 (2002).

Dr Murray Thomas Maybery, Psychology and **Prof D. M. Jones** (external): "The representation of events and their order in working memory" – \$19,231 (2002).

Prof Timothy Mark Davis, Medicine and

A/Prof Kenneth Frank Ilett, Pharmacology: "Pharmacokinetics and efficacy of combination therapies for malaria based on the novel drug piperazine: Field studies in Cambodia" – \$18,220 (2002).

Dr Jonathan Marcus Hodgson (see main story) and **A/Prof Kevin David Croft**, Medicine: "Acute Effects of Coffee, and the Metabolism of Phenolic Acids Derived from Coffee on Postprandial Homocysteine Concentrations in Humans" – \$15,000 (2002).

A/Prof Philip John Thompson and **Dr N. L. Misso**, Medicine and **Dr S Aggarwal**, Biochemistry: "Signal transduction pathways in leukotriene D₄ induced activation of NADPH oxidase in human eosinophilic HL-60 cells" – \$16,617 (2002).



CAMPUSDiary

22 April to 6 May

Monday 22 April

INSTITUTE OF ADVANCED STUDIES PUBLIC LECTURE

Literary reading, by Barry Hill, poet, fiction writer and biographer. 5pm, Lawrence Wilson Art Gallery.

Tuesday 23 April

PUBLIC HEALTH SEMINAR

"Prognostic determinants of out-of-hospital cardiac arrest – the use of linked data to inform emergency care policy and practice", Judith Finn, Royal Perth Hospital. 11am, Seminar Room 3, Department of Public Health, Clifton St Campus.

INSTITUTE OF ADVANCED STUDIES LECTURE

"Bioinformatics to bioinformation science", Professor Simon Easteal, John Curtin School of Medical Research. 1pm, Simmonds Lecture Theatre.

SOIL SCIENCE AND PLANT NUTRITION SEMINAR

"The global pattern of forest productivity: Implications for biodiversity, carbon sequestration, and Australia," Dr Michael Huston, Oakridge National Laboratory. 4pm, Agriculture Lecture Theatre.

INSTITUTE OF ADVANCED STUDIES LECTURE

"Understanding disease by exploring the evolution of genes and society," Professor Simon Easteal, John Curtin School of Medical Research, as part of the Genomics, Society and Human Health program. 7pm, Social Science Lecture Theatre.

Friday 26 April

MICROBIOLOGY SEMINAR

"Are all MRSA equal?", Professor Warren Grubb, Curtin. 9am, Seminar Room 1.1, First Floor, L Block, QEII MC.

CLASSICS AND ANCIENT HISTORY SEMINAR

"AD 43—New insights on the Roman invasion of Britain," John Manley, Sussex Archaeological Society. 11am, Arts Room 2.43.

CHEMISTRY SEMINAR

"Quantitative approaches to molecular recognition," Chris Hunter, University of Sheffield. 1pm, Simmonds Lecture Theatre.

Monday 29 April

ASTHMA AND ALLERGY RESEARCH INSTITUTE SEMINAR

"The role of liver progenitor cells in health and disease," Professor George Yeoh, Biochemistry and Molecular Biology. 12.30pm, Joske Seminar Room, Fourth Floor, G Block, SCGH.

Tuesday, 30 April

PUBLIC HEALTH SEMINAR

"Parental Guidance Recommended (PGR): A national child nutrition project," Emma Stringfellow, Cancer Foundation of Western Australia. 11am, Seminar Room 3, Department of Public Health, Clifton St Campus.

SOIL SCIENCE AND PLANT NUTRITION SEMINAR

"Safety and health: fact of life or pain in the butt?" Greg Cawthray, Plant Sciences. 4pm, Agriculture Lecture Theatre.

POSTGRADUATE BURSARY LAUNCH

Presentations by four recent winners. Subjects include ovarian cancer, urban bushland, religious conflict in Java and Latin Americans in Perth. Education Trust of the Australian Federation of University Women (Western Australia). 5.30pm for 6pm, M E Wood Room, St Catherine's College.

2002 GRACE VAUGHAN LECTURE

Professor Lowitja O'Donoghue, AC, CBE, former Chair of ASTIC and campaigner for reconciliation, presents the 2002 Grace Vaughan Lecture in association with the Women's Policy Office and the Australian Association of Social Workers (WA Branch) – "Advance Australia Where? Social justice challenges for the 21st century," 7pm, Octagon Theatre.

Wednesday 1 May

CLASSICAL ASSOCIATION PUBLIC LECTURE

"The Fishbourne Roman Palace," John Manley, Sussex Archaeological Society. 6.30pm, Austin Lecture Theatre.

NOTE: Subscriptions now due, \$10 (\$5 concession).

LEARNING STYLES: FREE INTRODUCTORY SESSION

Be an empowered learner – learn effectively and improve your grades. 7pm. Call 9380 2433 to register.

Thursday 2 May

FREE LUNCHTIME CONCERT

Jane Kovar and Graeme Gilling recite works for two pianos, featuring *Variations on a Theme of Beethoven* by Saint-Saëns and works by Richard Rodney Bennett. 1.10pm, Octagon Theatre.

Friday 3 May

MICROBIOLOGY SEMINAR

"Inflammatory myopathies – genetics & mechanisms," Professor Michael Garlepp, Curtin. 9am, Seminar Room 1.1, First Floor, L Block, QEII MC.

ASIAN STUDIES SEMINAR

"Lifestyles of the rich and single? 'Parasite Single' women in Japan," Laura Dales. 1pm, G.25 Seminar Room, Social Sciences Building.

BIOCHEMISTRY SEMINAR

"Signal transduction during the fungal infection of plants," Dr Richard Oliver, Murdoch University. 1pm, Simmonds Lecture Theatre.

CLIMA

"Science communication: A model of the research, development and diffusion cycle," Jerry Hooper, Excellence 2 Enterprise. 4pm, CLIMA Seminar Room.

UNIVERSITY MUSIC SOCIETY CONCERT

Virtuoso Italian pianist Roberto Cominati joins the University Orchestra for a performance of Rachmaninov's Piano Concerto No 3. The concert also features Haydn's *Farewell* Symphony and the Australian premiere of Mark-Anthony Turnage's *Momentum*. Conducted by Peter Moore. 7.30pm, Winthrop Hall.

LEARNING STYLES: WORKSHOP

Special price for students and UWA staff: \$145 (normally \$195). Contact Dr Nigel Dolan on 9380 3473 or ndolan@uwa.edu.au. 9am-5pm.

FREE HEARING SCREENING TESTS

Children aged 0 - 3 years

**29 & 30 April
and 2 May 2002**

UWA Audiology Clinic
Suite 7, 162 Wanneroo Road

TUART HILL

(Cnr Royal Street)

Contact - Ms Peta Monley

To make a booking or for further details, please phone 9349 0595.

PERTH MEDIEVAL AND RENAISSANCE GROUP

QUIZ NIGHT

Wednesday 15 May

University House

Questions start 7.30pm

Tables of 6



Bookings to
Charles Acland
9423 9428

ADVANCED NOTICE

Tuesday 7 May

PUBLIC HEALTH SEMINAR

"Measuring the physical environment for physical activity," Terri Pikora, UWA, and "How many women had their uterus removed in Western Australia in the last twenty years, why and how?" Annabel Bolck, UWA. 11am, Seminar Room 3, Department of Public Health, Clifton St Campus.

SOIL SCIENCE AND PLANT NUTRITION SEMINAR

"Images of New Zealand, and an investigation of water and solute flux from soil monolith lysimeters," Dr Andrew Rate, Soil Science. 4pm, Agriculture Lecture Theatre.

Thursday 9 May

FREE LUNCHTIME CONCERT

Defying Gravity Percussion Ensemble (Director – Tim White) presents an exhilarating concert of contemporary percussion works from Australia, New Zealand and England, including *Prelude and Dragonfly Dance* by Ross Edwards and Cameron Sinclair's *Funk Loops*. 1.10pm, Octagon Theatre.

Friday 10 May

MICROBIOLOGY SEMINAR

"HPV and cancer in WA," Brian Brestovac, PathCentre. 9am, Seminar Room 1.1, First Floor, L Block, QEIIIMC.

Tuesday 14 May

PUBLIC HEALTH SEMINAR

"Long-term survival in elderly patients following Carotid Endarterectomy," Paul Norman, Fremantle Hospital. 11am, Seminar Room 3, Department of Public Health, Clifton St Campus.

SOIL SCIENCE AND PLANT NUTRITION SEMINAR

"Harnessing the benefits of soil micro-organisms in farming systems," Dr Margaret Roper, CSRIO. 4pm, Agriculture Lecture Theatre.

Thursday 16 May

FREE LUNCHTIME CONCERT

Matthew Styles (saxophone) and Adam Pinto (piano) present two Australian premieres: Mark-Anthony Turnage's *Two Memorials* and Richard Rodney Bennett's *Concerto for Stan Getz*. 1.10pm, Octagon Theatre.

Friday 17 May

MICROBIOLOGY SEMINAR

"Sepsis in fruit flies and other model organisms," Dr Steve Webb, UWA. 9am, Seminar Room 1.1, First Floor, L Block, QEIIIMC.

ASIAN STUDIES SEMINAR

"*Sangha*, state and schooling in Burma," Nick Cheesman. 1pm, G.25 Seminar Room, Social Sciences Building.

CLIMA

"Introgression of pea weevil resistance into cultivar field pea: Methods of detection," Oonagh Byrne, UWA. 4pm, CLIMA Seminar Room.

CENTRE FOR MICROSCOPY AND MICROANALYSIS COURSES

June/July 2002

Information and bookings:

Tel: 9380 2770

Fax: 9380 1087

Web: <http://cmm.uwa.edu.au>

Email: admin@cmm.uwa.edu.au

PLACES LIMITED

16TH AUSTRALIAN INTERNATIONAL EDUCATION CONFERENCE

30 SEPT – 4 OCT 2002

HOBART, TASMANIA, AUSTRALIA

The Australian International Education Conference is the largest of its kind in the southern hemisphere and attracts over 800 participants and more than 150 speakers from around the world. This important annual conference provides a forum for education industry participants, business managers, and academics to present and discuss the latest research as well as providing an opportunity to network with influential international education professionals.

Proposals are sought for presentations and workshops for the 16th AIEC. Proposals are preferred for, but not restricted to, topics that relate to the major Conference streams being addressed at the Conference. All proposals should consider the conference theme *New Times, New Approaches*. Details of the theme and streams are available on the website at <http://www.idp.com/conference>.

Streams to be addressed are: Issues, Innovation and Opportunities in International Education ☆ The Changing International Market Place ☆ Life-long Learning and International Education ☆ The Changing Business of Development ☆ Virtual Education – the Way of the Future? ☆ Perspectives on International Education ☆ Professional Development for International Education Professionals

This is your opportunity to present your research or opinion, lead discussion, identify problems and develop strategies and solutions that can enhance your sector, area of interest, or the industry as a whole.

A variety of session formats are being considered, including presentations from 20 to 45 minutes, panel discussions, short workshops, forums, and poster sessions.

TO SUBMIT A PROPOSAL

Proposals must be submitted via the Conference website – go to <http://www.idp.com/16aiec/about/papers.htm>

Deadline for submissions 6 May 2002.

Phone: +61 (0) 2 8251 2777

Email: conference@idp.com Web: <http://www.idp.com/conference>

Research Grants & Contracts

continued from page 1

Dr John Warwick Upham and Dr Darryl Andrew Knight, Medicine and Dr M. Weichselbaum (external): "A confocal microscopic study characterising the association of pulmonary neuroendocrine cells, dendritic cells and neuropeptide-containing nerves in the human airway epithelium" – \$5,000 (2002).

Dr Bu Beng Yeap, Medicine: "Modulation of peroxisome proliferator-activated receptor gamma (PPAR γ) activation and function in prostate and breast cancer cells" – \$15,000 (2002).

Dr Susan Lynne Prescott, Paediatrics: "Environmental origins of allergy: The effects of persistent organic pollutants on early immune development" – \$29,500 (2002).

A/Prof Boris Martinac, Pharmacology: "The role of mechanosensitive channels in magnetoreception studied in bacteria" – \$14,000 (2002).

Ms Vera Anne Morgan, Psychiatry & Behavioural Sci: "Psychiatric morbidity and intellectual disability: a Western Australian record linkage study" – \$14,000 (2002).

Dr Helen Street, Psychiatry & Behavioural Sci: "Investigation and identification of motivational factors contributing to childhood mental health and wellbeing" – \$19,966 (2002).

A/Prof Garry T. Allison, Surgery: "Spinal joint position sense impairments in individuals with recurrent episodic low back pain" – \$13,618 (2002).

Dr Ralph Martins, Surgery and **Prof A. Bittles** (external): "Neutralization of Alzheimer's beta amyloid induced toxicity" – \$8,500 (2002).

A/Prof Kevin Singer, Surgery and **Dr R. I. Price** (external): "Thoracic spinal deformity characterisation from optical rasterstereographic assessment and calcaeneal bone densitometry" – \$15,095 (2002).

Dr Roberta Bencini, Animal Science and **Dr N. R. Adams** (external): "Changes in the Composition of Milk from Sheep Transgenic for Growth Hormone" – \$8,5000 (2002).

Dr Dominique Blache and **A/Prof Graeme Bruce Martin**, Animal Science: "Anorexia and bulimia in the male emu - a new model for

understanding the mechanisms that control appetite?" – \$8,000 (2002).

Prof John Richard Dodson, Geography: "Evolution of Pliocene climate and vegetation patterns in the Tibetan Plateau region" – \$16,250 (2002).

Dr M. Tonts, Geography: "The characteristics and implications of recreational second homes in rural Western Australia" – \$13,657 (2002).

Dr M. A. M. Gee, Geology & Geophysics: "The origin(s) of kromatiites from the Yilgarn, Western Australia: geochemical constraints for whole earth models and the local tectono-magmatic environment" – \$8,390 (2002).

Dr Annette Dale George, Geology & Geophysics: "Provenance and burial history of upper cretaceous-lower tertiary reservoir sands, Browse Basin, North West Shelf" – \$8,000 (2002).

Dr Zheng Xiang Li, Geology & Geophysics: "1000 million-years-old mountain-building in South China: a possible record of collision between Australia and North America" – \$12,083 (2002).

Dr K. N. Sircombe, Geology & Geophysics: "An investigation into biasing of detrital zircon geochronology due to magnetic susceptibility" – \$16,585 (2002).

Dr Noreen Mary Vielreicher, Geology & Geophysics: "Geochronology and geochemistry of lamprophyre dykes; implications for gold mineralisation processes in the Yilgarn Block" – \$11,230 (2002).

Dr Weinberg Roberto Ferrez, Geology & Geophysics: "The Boulder-Lefroy Shear Zone and Gold Mineralisation" – \$10,000 (2002).

Dr Andrew Harvey Millar, Plant Science: "A proteomics and DNA microarray analysis of a key detoxifying gene family in the model plant *Arabidopsis thaliana*" – \$17,000 (2002).

Dr Erik Jan Veneklaas, Plant Science: "Identifying the cause of sudden autumn death of Banksias" – \$5,000 (2002).

Dr Caixian Tang, Soil Science & Plant Nutrition: "Mechanisms of organic acid exudation by plant roots under phosphorus deficiency" – \$8,000 (2002).

Miss Kathryn Jane Steadman, WA Herbicide Resistance Initiative: "Proteomic analysis of changes in imbibed *Lolium rigidum* seeds during dark-induced dormancy release" – \$14,000 (2002).

Dr J. Britto and **Dr S. J. Busfield**, Zoology: "Characterization of neuregulin-2 function in the developing and adult nervous system" – \$14,000 (2002).

Dr Julia Shand, Zoology: "The visual systems

of seahorses, pipefish and seadragons: applications for conservation and aquaculture" – \$16,500 (2002).

AUSTRALIAN RETINITIS PIGMENTOSA ASSOCIATION

A/Prof Piroska Rakoczy and **Dr Chooi-May Lai**, Centre for Ophthalmology & Visual Science, and **Prof Adrian John Baddeley**, Mathematics & Statistics: "Generation and characterisation of an animal model for age-related macular degeneration" – \$30,000 (2001-03).

Classifieds

FOR SALE

COMPUTER TROLLEY. Solid steel frame on castors. Ergonomic design. Three levels (printer/computer/slide-out keyboard) plus clip on side panel to hold work. \$120 ono. Contact John Tonkin on ext. 8090 or jtonkin@arts.uwa.edu.au

NISSAN PINTARA, 1991, silver-grey sedan, air-con, new tyres, 162,000kms - \$4,200 ono. Phone 0403 0208 681 or ext. 1776.

PIANO, Yamaha P2HR, condition as new, professionally and regularly tuned. \$4,100 ono. Phone Cherry on 9380 1829.

FOR RENT

BUSSELTON, holiday cottage close to beach and Broadwater Resort, short walk along beach to cafes and restaurants. Sleeps 4 plus. Contact 9346 2140 or lyndam@cyllene.uwa.edu.au.

CRAWLEY, furnished accommodation ideal for visiting academics, short & long term (two months to unlimited). Two bedroom fully self-contained apartment in Fairway, next to UWA. Fully furnished & fitted out (including linen). Air-conditioning, heating, TV, telephone, undercover parking. Short walk to shopping centre, transport, restaurants, tavern, cinema, Swan River and Kings Park (bushland and recreational facilities). Phone: 9386 2367, mob: 0418 914 204, email: crawley-apartment@iinet.net.au, web: www.goodstay.com/perthapartment

NORTHBRIDGE, fully furnished recently renovated two bedroom home. Available from July 11 until the end of the year while academic is on study leave. Rent \$280/week. Contact Ian McLean, imcl@cyllene.uwa.edu.au; wk ph 9380 2064, hm ph 9228 9707.

WEMBLEY, comfortable furnished home, 2 bedrooms with sleep-out, close to shopping and transport, lawn mowing provided, \$220 per week. Available second week of June to end of September 2002. Contact Christine on 9380 2666 or criordan@geol.uwa.edu.au.

Classified advertising in UWA News is free to all university staff. To place your advertisement contact Joanna Thompson on extension 3029.

Redundant Equipment for Sale

ITEM	PRICE	AGE	COND	NAME	DEPT.	EXT
Apple Mac LaserWriter Printer 8500	Negotiable/best offer	3	3	Pip Christmass	Linguistics	2862
Rinnai Grand Gourmet Outdoor Kitchen ..	\$1000 ono	1.5	1	Murial Mahony	Aboriginal Prog.	3428
Samsung Pentium 133mhz computer	\$550	2			Humanities	7350

Bids should be accepted by Monday 3 May with departments to have first option

Departments are reminded that all University equipment available for sale must be advertised in the **UWAnews**. 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 3618/2546 for details.

CONDITION refers to the general condition of item (1 = as new; 2 = good; 3 = serviceable; 4 = unserviceable). AGE refers to the nearest year.