New course proves its case

Forensic science students court their diplomas

"Your Honour, I call to the stand my next witness, an expert in forensic botany . . ."

It was equivalent to — "You may now turn your papers over and start to write" — the invitation to begin an exam.

But for the graduating students of the Graduate Diploma in Forensic Science, a verbal examination, and cross-examination, by practising barristers in Perth’s Central Law Courts took the place of questions and answers on paper.

The first nine students to complete the new course took part in a mock court this month to prove their ability to present evidence as expert witnesses and to understand the legal nature and context of expert evidence.

Each of the students chose a case that suited their chosen area of speciality (including DNA, entomology, botany, pathology) and prepared a case to present to the court.

Dr Ian Dadour, who initially supervised the case studies with Professor Win Bailey, the Director of the Forensic Science Unit at UWA, chose cases from old WA murder files and blanked out the names before handing them over to the students.

“We have a fantastic relationship with the Director of Public Prosecutions (DPP) and they allow me to get the forensic reports and the cross-examination of the forensic witnesses from real cases,” Dr Dadour said.

“The students wrote two reports: one, a major essay, looking at how the cases proceeded with the given forensic evidence and how the students would go about dealing with the case now; and the second, a two-page report for the court and, of course, an appearance in court.

Dr Dadour said the unit could not exist without the cooperation of the WA Police Force and the DPP. He and Professor Bailey could not heap enough praise on both departments as well as the judges and lawyers who gave

Continued on page 4
This time I determined to take the Great Northern Highway to the northwest. I had always previously taken the coastal highway via Geraldton and the beauties of Shark Bay on the Exmouth Peninsula and Coral Bay, or I had taken the convenience of an airflight to the Pilbara.

But now I had the opportunity of a week’s recreation leave and a chance to explore that inland road and the variety of mining towns in the extraordinary landscape which the ‘Great Northern’ cuts across, especially from Mount Magnet to Port Hedland.

I write these notes from the Kimberley, after that memorable journey through the Hamersley and Opthalmia Ranges, with their amazing rocky outcrops, gorges and tree-edged horizons. Almost like driving within one of the Fred Williams’ paintings, in his brilliantly evocative Pilbara series!

Exceptional environments aside, such a journey also reinforces some very contemporary ideas for WA, and for our University, in this new century.

Most of all what really hits home to the attentive observer is the way in which the modern mining and energy industries — be they in Mt Magnet, or Newman, or the Burrup Peninsular — combine the extraction systems with process engineering, itself heavily dependent on the latest discoveries and innovations in science.

Compared to the world of mining sites when my father was a mine engineer, these new industrial plants today are as much about the chemical sciences and high technology as they are about the ore body itself, its extraction and crushing; some are also manufacturing plants. This value-adding, through science and technology, is what produces the real wealth and prosperity of WA.

How good, I thought, that generic ‘science’ (and ‘high-tech’ engineering) is so prominent within the UWA mission, and also so well connected to the character of the state, in our new draft Academic Profile which identifies the key directional areas of our research. How good too that UWA is planning to invest significantly in a major capital works project devoted to the chemical sciences.

On a national scale I was also very pleased to read the major new ARC Report, “Inventing Our Future: the Link Between Australian Patenting and Basic Science”. Inspired by the now famous Francis Narin study in the USA, and indeed involving Narin himself, the report shows that some 97 per cent of all Australian research cited in Australian invented US patents is authored by public sector institutions. Of this figure, about two thirds of the research originates at Australian universities and affiliated medical research centres. Most importantly, the study demonstrates the strong reliance on university papers in the development of private sector patents. These papers are the most heavily cited resource of private companies.

“Inventing our Future …” (to be found on the ARC web site at http://www.arc.gov.au) indeed substantiates in a rigorous, scholarly way what the interested traveller in the vast reaches of our state can observe. University science and engineering ultimately matters greatly. Beyond the mining industry, it can be found in the vital knowledge agenda, in agricultural production, marine exploration and the new industries, ranging from viticulture and winemaking to IT companies and the new medical applications of major laboratory research.

We have recently hosted the national conference of the Australian Science Teachers’ Association and it was important to share these ideas with them in supporting their important work in attracting more students into generic science at school and generally propagating the excitement, let alone the importance of science, in a world increasingly reliant on new knowledge.

Of course, that world of ‘knowledge’ will also involve social and human sciences. The new technocratic order incorporates organisational knowledge and financial expertise, from the social sciences, while our all too human responses to change and new scientific knowledge call upon the humanities. All that can be seen in the north of our state as well, a new society in an ancient landscape.

More personally, this journey to the Pilbara and Kimberley has challenged my thoughts about ‘land, place, culture and identity’, the powerful theme of an Institute of Advanced Studies program this year.

Yes, I decided, my sense of being an Australian is deeply affected by the landscape. I can learn from Aboriginal ways of ‘seeing’ that environment. I can have it theorised by our humanities’ scholars. And I can take the Great Northern Highway.

Professor Deryck M. Schreuder
Vice-Chancellor and President
For many thousands of people across the world, the end of a war is the beginning of a life of poverty, fear and uncertainty.

Unexploded landmines litter more than 60 countries in eastern Europe, the Middle East, parts of Africa and Asia.

For the past five years, Associate Professor James Trevelyan, from the Department of Mechanical and Materials Engineering, has been working on finding the simplest solutions for ridding these people of the potentially lethal mines that not only pose a constant threat of death and injury but prevent local communities from using their land and their resources.

UWA’s Demining Project has come up with low cost methods and equipment for improving the detection and removal of mines and the safety and comfort of the deminers.

Associate Professor Trevelyan is now a world leader in the area of demining.

He was recently a keynote speaker at an international meeting in Geneva of the Standing Committee of Experts on Technologies for Mine Action. It was part of a series providing a response to the Ottawa Landmines Convention.

He said that donor countries (like Australia and the US) needed to invest in machinery to help manual deminers and mine detection dogs, and to better protective equipment and human resource development to improve clearance efforts.

“Casualties continue at unacceptable levels and many more countries are asking for assistance for clearance. The costs are still far beyond the resources currently available,” Associate Professor Trevelyan said.

He also said that much of the on-going research effort in developed countries could be more effective: the performance of mine detection dogs and quality control were the top priorities for deminers.

“The long sought-after ‘plastic mine’ detector would help, but not as much as a method for remotely locating mine and unexploded ordnance contamination. Many countries have large tracts of land where people suspect there are mines and unexploded shells, but no one knows where. If we knew how to locate contamination, the rest of the land could be used much sooner,” he said.

As well as developing better protective equipment and training mines, to help deminers learn the necessary skills, the UWA research project has been documenting the technical problems that deminers face in many countries.

Associate Professor Trevelyan and his colleagues have documented problems in Afghanistan, Angola, Bosnia Herzegovina, Croatia, Egypt, Iraq, Jordan and Lebanon in the past 12 months.

He hopes to start a research effort into the training of mine detection dogs, with UWA zoologist and dog behaviour expert Dr Ian McLean.

Continued on page 4
New course proves its case

Continued from page 1

up their time to hear the moot cases and cross-examine the students.

Judges Shauna Deane and Paul Healy each gave a day to sit on the cases.

Professor Bailey said the nine graduates were already in work. Two were serving members of the WA Police Force (working in the forensic area but wanting professional training), and another is in training at the Police Academy. Others have work with the PathCentre and the Federal Police.

“We want more lawyers and police to do the course. It’s especially important to lay juries that forensic experts can show their qualifications. Cases like Lindy Chamberlain’s swung on the ‘pieces of paper’ produced by forensic experts who were brought in by the defence from overseas. The prosecution didn’t have those ‘pieces of paper’ to prove their expertise and

“It’s especially important to lay juries that forensic experts can show their qualifications . . . the prosecution (in the Lindy Chamberlain case) didn’t have those ‘pieces of paper’ to prove their expertise and that case failed the Australian public . . .”

Clearing the way for war victims’ future

Continued from page 3

There are currently no available measurements on mine detection dog performance, although dogs have been used, with some degree of success. Recent failures by dogs in Bosnia Herzegovina have caused great concern.

Associate Professor Trevelyan’s work in Lebanon has helped to draw international attention to the mine problems there, where casualty rates exceed levels in Bosnia and Croatia.

“An Afghan deminer uses his dog to sniff out buried mines.

“The recent withdrawal of Israeli forces will enable Lebanon to start clearance operations in the south of the country.

“However, they will need assistance for this work. Israeli authorities have undertaken to provide locations of the minefields their forces laid, but experience in Jordan shows that even precisely located minefields pose huge problems for deminers,” he said.
When Sam Leong and Martin Lamb sit down at the piano together, they improvise beautiful music — effortlessly. "That's because we are in tune with each other's minds," explains Dr Leong.

Teaching music students to be attuned to the minds of other musicians is one of the aims of a unique project in which they are both involved. The idea is to bring together computers and music in an innovative multimedia software package, and to use it to train students by helping them find new and better ways of learning.

International software consultant Dr Martin Lamb, who specialises in creating music, maths and science software, has come to UWA from Toronto to work on the ambitious project with Dr Sam Leong, senior lecturer and Director of Music Education Studies.

“We want to put together a research-based teaching and learning package, complemented by multimedia software, that will teach music students to look at the ways they learn,” says Dr Leong.

“The aim is to identify which learning strategies are being used, and how effective they are. The next step will be to develop alternative strategies and see whether they work better.

“The challenge is to incorporate the strategies into the software. It is a tall order because everybody's brain is different.” And, as Dr Leong points out, the software is just one element of the program, “because software can never ever replace a teacher”.

In training the ear to music, students are taught to analyse what they hear, and describe it intelligently — a vital skill for the complete musician. “For example, if you are playing in an orchestra and lose your place, these skills will help you find it again before the conductor has noticed,” says Dr Lamb.

“They deepen musical appreciation, help musicians to write down what they hear, enable them to look at a piece of music with greater understanding and be able to communicate its meaning better than someone who simply learns which notes to play.”

As Dr Leong has already developed a catalogue of strategies that his students have been trying out, the challenge is now to encapsulate them into a program.

Because the aim of the project is to encourage students to think about how they learn, and to develop new learning strategies, it offers potential spin-offs into other disciplines.

The joint venture is headed by UWA (through the School of Music and the Arts Faculty Multimedia Centre), in partnership with the Universities of Adelaide and Newcastle. The funding, $140,000 over two years, is provided through a CUTSD (Committee for University Teaching and Staff Development) grant.
How do you rate your working life?

Ethics and your well-being are two new areas to be included in the Working Life Survey 2000. All UWA staff should have received their survey forms a few weeks ago and everybody is urged to take the time to fill them in and return them by the beginning of August.

Information gathered in the survey is valuable for planning over the next few years. The results will indicate what areas need improvement and identify a range of issues to feature in future enterprise bargaining agreements.

Human Resources’ senior policy analyst, Jan Stuart, said the most important indication from the 1997 Working Life Survey was a powerful need for job security among UWA staff.

“We have focused on that in the latest enterprise agreement,” Ms Stuart said.

She said that efforts have been made to reduce repetition and improve the coherence, especially the section on the working environment.

Other areas have been expanded, including new sections on ethics and your well-being, and the questions on equity have been altered.

In reworking the survey, Ms Stuart and her team in Human Resources have included questions that will facilitate comparison with other surveys.

Questions about choosing an academic career or choosing to work in higher education have come from the American Faculty Poll, a regular survey of Americans working in higher education. UWA can benefit from comparing its staff’s attitudes to those in similar positions overseas.

A few questions from a national ARC-funded stress survey in higher education (due out in August) are included in this Working Life Survey, also for comparisons, as are some questions from a survey of academics in Australian universities on work roles, and questions from polls conducted by the National Health Service in the UK and the WA Public Service.

“We have included these so we can identify our position in relation to other institutions in our own state, in other parts of the country and internationally,” Ms Stuart said.

The over-riding feeling expressed by staff in the 1997 survey was a positive one about UWA, that it was a good place to work and they were reasonably happy at work.

“This was confirmed by the exit statements provided by staff who have left the University since the last survey,” Ms Stuart said. But the rapidly changing environment for higher education may have resulted in changes. We need to be aware of these movements.

“It is important that as many staff as possible find the half an hour needed to respond to this survey, so we are best equipped to make the decisions or changes that YOU want.”

Book in for a bargain

Looking for genuine bargains? Forget the department stores and boutiques and stay on campus.

The UWA Save the Children Fund book sale is in its final days in the undercroft of Winthrop Hall.

While the rare gems are likely to have been already snapped up, the tables are still being replenished and the prices are plummeting. As organiser Rosalind Lindsay says, “Everybody goes out smiling on the last day” when you can fill a box for just a few dollars.

The sale is open until 7.30pm tonight and tomorrow (Monday and Tuesday) and the doors close on the last happy customer at 2pm on Wednesday. Enquiries: 9381 3423.
Civil engineer Barry Lehane has led design teams working on the Hong Kong–Kowloon tunnel, a new underground rail link across London and gravity platforms in the North Sea.

He thought there could be no more engineering surprises in store for him — until he came to UWA.

The Gledden Senior Fellow from Trinity College, Dublin, spent first semester working with Professor Mark Randolph, Director of the Centre for Offshore Foundation Systems (COFS), and Associate Professor Martin Fahey, Head of the Department of Civil and Resource Engineering, on design methods for foundation systems.

Dr Lehane said he was surprised to find that every structure in WA has to be built with the possibility of earthquakes in mind.

“There is quite a severe earthquake loading, something which I’m not used to. We have no seismicity at all in Dublin!” he said.

“The world is such a small place now that I would have said there were no surprises to be found in technology, methods and design of foundation structures, no matter where in the world you were. Then I learned about Western Australia’s earthquakes.”

The brilliant young engineer who topped his class at University College, Cork, is now a lecturer in civil engineering at Trinity College and a Fellow of the College, as well as chairman of the Geotechnical Society of Ireland and a core member of the European Technical Committee on Piles.

“About 50 per cent of my research is involved with piled foundations and the design approach for them,” he said.

“Design differs from theory in that it’s more practical. My particular skill is in bridging the gap between the crazy ideas that academics have and the reality of practical engineering.

“Of course, I’m not referring to the academics here! COFS has an international reputation for always being in touch with industry. That’s why I decided to come here.”

He said that exploration companies were having to drill deeper to find oil and gas and this presented a challenge to people like himself and COFS.

“Our understanding of soil behaviour is improving all the time, so we need to keep changing our designs.”

Dr Lehane said designing foundations for offshore structures was not much different from those for onshore use.

“A thousand metres of water doesn’t make much more difference to the soils and movements within them than one meter of water. And allowing for wave motion in the structure is similar to allowing for wind in structures on land,” he said.

Paralympics light the way

For Kerry Smith, the Olympic Torch Relay was just a practice run for the real thing.

For Mrs Smith, the co-ordinator of Unigym, in the Department of Human Movement and Exercise Science, the real Olympics are the Paralympics, which will follow the competitions for able-bodied athletes.

She has been chosen to carry the torch in the Paralympic Torch Relay on October 8.

Her son David, swam in the 1992 Paralympics and she was a staff member at the Barcelona Games. Mrs Smith is the sports director of the WA Paralympic Committee and past president of the WA Disabled Sports Association.

She has been involved in paralympics and sports for people with disabilities since they began in WA. She is on several state, national and international committees and it is for her untiring work for people with disabilities that she is being rewarded with a leg of the torch relay.

Earlier this month, Human Movement graduate Scott Walker returned from his work with a motor racing company in France to carry the Olympic torch for a leg of the relay in Joondalup.

Mr Walker has represented Australia at two Olympic games in bobsleigh but after a master’s thesis, which examined problems for motorsport athletes, he is now working in the field he loves most, the motor racing industry.
PMRG – Perth Medieval and Renaissance Group Ninth Conference
“Writing People, Writing Places in Medieval and Early Modern Europe”

9am to 5pm, University House, Saturday August 5

9.30 to 10.45am: Dr Emma Hawkes (History) — “Isabelle Plumpton: a life in law”
Peter Little (History) — “Absent with leave: identifying the occasional armies of late medieval England”

11.05 to 11.35am: Bruce McClintock — “Scripting the holy: saints’ lives”
11.35am to 12.50pm: Dr Amanda Capern (University of Hull) — “Women, property and family relations in early modern England”
1.50 to 2.50pm: Gina Goddard (English) — “Margaret Cavendish”

Dr Brad Menpes — “Aspiring to Divine Zenocrate: Marlowe’s Myth of Timur the Lame in Tamburlaine”

3.10 to 4.10pm: Helen Bemingham (Italian and English) — “A spirit of Venice: the unique voice of Gaspara Stampa in early modern poetry”
Jennifer Smith (History) — “Writing bodies, writing spaces: the Occitan Lyric”


Conference fee (incl. coffee on arrival, morning tea, lunch and afternoon tea) is $30 or $20 for full-time students/concession.
Enrolment forms are available from the Department offices of English and History and should be forwarded with payment to Emma Hawkes, c/o Dept. of History by Friday July 28.

CENTRE FOR STAFF DEVELOPMENT

What’s on Next
Places are available in the following workshops due to close within the next month. Further details are available on the CSD Web page:
http://www.csd.uwa.edu.au/programme/
or by contacting CSD on ext. 1504 or
csdoffice@csd.uwa.edu.au

• Flexible Teaching and Learning: What Is It? How Can It Help Me?
• The Experienced Committee Secretary
• Handling the Media Confidently
• Equity and Diversity Issues within the Higher Education Environment
• Introduction to Management
• Designing (or re-designing) Your Unit
• Using the University’s Accounting System: Budget Process
• Using the University’s Accounting System: Mastercard — Corporate and Purchasing

GUILD NEWS

your on-campus news agency

• The West Australian - 60¢
• The Australian - 50¢
• Financial Review - $2
• Postage
• Dry Cleaning - 10% discount for UWA Staff
• Huge range of magazines—we’ll order your favourites just for you!
• Official UWA Gear & Gifts
• Mobile Phones and charge cards
• Cards
• Degree Framing
• Cassettes, Disks and heaps of other stuff

located to the right of the North entrance to the Guild Village Courtyard

Call Laura on extension 2283 or email your requests to laura@gu.uwa.edu.au
**Monday 24 July**

ASTHMA AND ALLERGY RESEARCH INSTITUTE SEMINAR  
“What statistical reviewers are looking for in journal articles”, Kieran McCaul, 12:30 to 1:30pm, Joske Seminar Room, Medicine, Fourth Floor, G Block, SCGH.

**Tuesday 25 July**

LAWRENCE WILSON ART GALLERY FLOORTALK  
“A fortunate life: John Rose speaks about Albert Facey.” 1pm, LWAG.

THE FRED ALEXANDER LECTURE 2000  
“Historical carnival of reconciliation: commemorating the South African War 1899-1902”, Dr Jane Carruthers, Department of History, University of South Africa. 1pm, Fox Lecture Theatre.

**Wednesday 26 July**

ENVIRONMENTAL ENGINEERING DYNAMICS SEMINAR  
“Ineffective natural attenuation of degradable organic compounds in a phenol-contaminated aquifer”, David Lerner, 4pm, Blakers Lecture Room, Ground Floor, Mathematics Building.

PHYSIOLOGY SEMINAR  
“Iron absorption in the light of recently discovered genes”, Dr Phil Oates, Physiology, 5pm, Physiology Seminar Room.

**Thursday 27 July**

ENVIRONMENTAL ENGINEERING DYNAMICS SEMINAR  
“Long-term environmental load distributions: influence of platform configuration”, Professor Beverley Ronalds, Centre for Oil and Gas Engineering, 4pm, Blakers Lecture Room, Mathematics Building.

**Friday 28 July**

ANTHROPOLOGY SEMINAR  
“Invented tradition: from pinkie fingers to graveside customs in modern Israeli behaviour”, Dr Sam Cooper, Anthropology, Bar Ilan University, Israel. 12 to 1pm, Anthropology Conference Room, First Floor, Social Sciences Building.

BIOCHEMISTRY SEMINAR  
“Molecular regulation of Apoptosis”, Associate Professor Dharma, Anatomy and Human Biology. 1pm, Simmonds Lecture Theatre.

CIVIL AND RESOURCE ENGINEERING SEMINAR  
“Rigorous plasticity solutions for the bearing capacity of offshore foundations”, Dr Chris Martin. 3.45pm, Room E151, First Floor, Civil Engineering Building.

**Saturday 29 July**

BRACK SYMPOSIUM (INCORPORATING SALEK MINC LECTURE)  
The Lawrence Wilson Art Gallery is pleased to hold the Brack Symposium, a day of talks about the art of John Brack, which celebrates the new exhibition being held at LWAG between July and September — John Brack: Inside and Outside, a National Gallery of Australia travelling exhibition. The symposium will also include the annual Salek Minc Lecture given by Helen Brack. For bookings or further information call 9380 3707.

**Monday 31 July**

HISTORY SEMINAR  
“Thesis disaster stories” , Anna Hicks and Joanna Sassoon. 4.30pm, Postgraduate Lounge, Hackett Hall.

PUBLIC LECTURE/INSTITUTE OF ADVANCED STUDIES  
“Einstein: his scientific and humanitarian legacy”. Professor Hanoch Gutfreund, Professor of Physics, Immediate Past President, The Hebrew University of Jerusalem. Professor Gutfreund is on a speaking tour of Australia in preparation for future exhibitions in Melbourne, Sydney and Perth of materials from the Einstein Archives at the Hebrew University of Jerusalem. Clinical Professor and Chancellor Alex Cohen will introduce the lecture. 5.30pm, Lawrence Wilson Art Gallery. All Welcome. RSVP on ext. 2114 or tawhite@cyllene.uwa.edu.au.

**Tuesday 1 August**

SOIL SCIENCE AND PLANT NUTRITION SEMINAR  
“The use of cover crops to decrease nitrate leaching from arable soils”, Andrew McDonald, Department of Soil Science, IACR Rothamsted. 4pm, Agriculture Lecture Theatre.

**Friday 4 August**

ANTHROPOLOGY SEMINAR  
“The pragmatics and politics of tradition and identity”, Professor Robert Tonkinson. 12 to 1pm, Anthropology Conference Room, First Floor, Social Sciences Building.

CIVIL AND RESOURCE ENGINEERING SEMINAR  
“The simplified numerical analysis of thin-walled tubular piles”, Shunqing Cai. 3.45pm, Room E151, First Floor, Civil Engineering Building.

**Saturday 5 August**

AUSTRALIAN STRING QUARTET PERFORMANCE  
Australia’s premier chamber music ensemble presents a program that includes Schubert’s Death and the Maiden and Roger Smalley’s newly commissioned Second Quartet. 8pm, Winthrop Hall.

**Monday 7 August**

ASTHMA AND ALLERGY RESEARCH INSTITUTE SEMINAR  
“FACS: advanced cell sorting techniques”, Dr Matthew Wikstrom. 12.30 to 1.30pm, Joske Seminar Room, Medicine, Fourth Floor, G Block, SCGH.

**ADVANCE NOTICE**

**Tuesday 8 August**

SOIL SCIENCE AND PLANT NUTRITION/CENTRE FOR LAND REHABILITATION SEMINAR  
“Why dryland and water salinisation are still major environmental problems”, Elizabeth Kington. 4pm, Agriculture Lecture Theatre.

UWA DISTINGUISHED LECTURE SERIES IN SCIENCE, PHILOSOPHY AND RELIGION  
“Creationism and sociobiology: towards a new morality?” Professor David Hull, Dressler Professor in the Humanities at Northwestern University, Illinois. Professor Hull will be introduced by Professor Deryck Schreuder. 8pm, Social Sciences Lecture Theatre.
Ugly ingredients in creating a President

“If you can come through this horrible process alive, you are probably in fairly good shape to take on the office of President...”

A
n ugly horrendous process in an almost manic, inhuman campaign.

The words of visiting American political scientist Alan J. Ward, describing not civil war or ethnic cleansing, but the US Presidential election.

Professor of Government at the College of William and Mary in Virgina, and Visiting Professor of American Studies at Flinders University, Professor Ward says he is glad to be out of America (at Flinders) during the election campaign.

He relayed his special interest in how and why Americans elect Presidents as they do and whether the process, in the end, puts the best man in the White House, at a recent lecture at UWA.

He said the long and expensive campaigns were not what the founding fathers intended.

“They didn’t like popular passions and the position of President was not designed to be a popularly elected office,” Professor Ward said.

But money — hundreds of millions of US dollars — has changed all that.

“Entrepreneurial campaigns have opened up the race for the Presidency to anybody. There are 11 people standing for President this year and nine of them believe they have a chance of winning.

"Jimmy Carter proved in 1976 that just about anybody could win!”

Professor Ward explained the system of primary campaigns in each state which chooses the eventual contenders. The winner of each primary takes all the votes from that area to the national vote.

Over the past 20 years, only 50 per cent of registered voters have actually voted in a Presidential election. Professor Ward says it is impossible to tell what proportion of eligible voters that represents.

“So it is possible to eventually become President with something like 30 per cent of the eligible votes, as Ronald Reagan did, or even the high 20s, like Bill Clinton.”

He said political parties in the US were weak, compared to the system in Australia and, during the Presidential election, become little more than fund-raising auxiliaries.

The 50 states all have separate powers and the President doesn’t depend on the support of Congress, as the Australian Prime Minister needs the support of the House of Representatives, to survive.

“Every candidate faces the task of running a primary in at least 40 states, each of them with different rules and regulations. The congestion and complexity makes campaigning almost manic, inhuman,” Professor Ward said.

The campaigns are dominated by TV and the much-cited Fifth Amend-
Making your smile more appealing...

You might not wish to know that the materials used in tooth fillings today — while matched to the colour of your teeth — are not as long-lasting as the silver amalgams of old.

While they undoubtedly make your smile more appealing, they do have problems, and considerable research is currently going into improving the quality of dental composites, as they are known.

Visiting US researcher Professor Jack Ferracane (pictured right), from the School of Dentistry at the Oregon Health Sciences University, explained that although the materials have been around for almost 30 years, and many improvements have been made during that time, dental composites used for aesthetic reasons still have limitations.

They were originally designed for use in the most visible front teeth, but as the big push in dentistry today is in aesthetics, they are becoming more commonplace.

Professor Ferracane said one of the main problems was durability. As the fillings harden from paste to solid they are inclined to shrink, which can prevent them from adhering properly to the tooth wall. “A lot of research is being done into understanding how shrinkage occurs and how to reduce it.”

Tooth-coloured fillings are more expensive and difficult to insert than the old amalgams. Another problem is that when these materials are inserted in teeth that are subjected to regular stress they are not as strong as silver amalgams.

“We are looking at the wear and abrasion of these materials and how to make them more resistant.”

Professor Ferracane said that although concerns have been expressed about the dangers of mercury in silver fillings, such fears are unfounded as the levels are too low to be toxic.

As the 2000 A. J. Herman Fellow, Professor Ferracane is in Perth to deliver the A. J. Herman lecture, present a paper at the International Association for Dental Research 2000 Conference held at UWA, and lecture to staff and students at the School of Dentistry.

Now in soft cover: On The Homefront

Recently released in soft cover version by UWA Press is a book commemorating the contributions and sacrifices made by Western Australians in World War II.

On The Homefront: Western Australia and World War II, which was shortlisted for the WA Premier’s Special Book Award 1997 and the NSW Premier’s Community and Regional History Award in 1998, examines how ordinary people responded to the war and its aftermath.

Edited by Dr Jenny Gregory, academic, historian and Director of UWA Press, the book incorporates the work of 23 historians, bringing together the largest group ever to work on a single historical project in WA. They included retired senior lecturer Pen Hetherington, retired psychology lecturer and writer Ron Davidson, Associate Professor Tony Barker and ex-doctoral students from the Department of History.

On The Homefront is currently in use in secondary schools and as a text for a UWA history unit. It is available at the UWA Visitor’s Centre.
While women in business and the professions have made real advances over recent decades, they still lag behind men in achieving decision-making positions, resulting in many leaving the corporate arena to run their own businesses.

To provide a focus for research aimed at giving small business and the corporate world a better understanding of the issues involved, the Centre for Women and Business has been established as part of the Graduate School of Management.

For Centre Director Professor Leonie Still, the priority is to promote public debate about issues relating to women in work, and the barriers preventing them from achieving their full potential.

The trend towards running their own businesses is not necessarily an adverse one but it does have limitations, says Professor Still. “Thirty-five per cent of small operators are now women and the rate is accelerating. Many are escapees from the corporate world, tired of not achieving their ambitions, and of conforming to a masculine culture. They want to do things differently — to combine social and economic goals, value honesty and integrity, look after customers, and make a contribution to the community. (Many men have the same goals, but perhaps not to the same degree.)

Most women keep their businesses small, working on their own or with a few employees, in order to keep control and avoid being bought out by a partner. One limitation is that they tend not to grow their businesses; instead they start another small enterprise, and thus become serial business owners. “They do it quite successfully,” says Professor Still “The limitations, if you use the male model, are that we are not producing women who will build multi-nationals, they don’t want to reach for the sky as men do.”

Women are also limited in the types of business they run, tending to focus on the service area, as opposed to manufacturing, which needs venture capital.

“What is very pleasing,” says Professor Still, “is that young women don’t have these limitations. Their approach is, ‘I can do anything’. They invest in themselves and their own entrepreneurial abilities, and they are proving they can attract venture capital.”

Ev Jackson is a woman of unlimited enthusiasm. As a member of the Zonta International Peel Club, she is the driving force behind a unique campaign in which funds for breast cancer research are raised through golf tournaments. By cajoling, harassing, and browbeating businesses, corporations, professional golfers and individuals, Ev almost single-handedly persuades them to support Zonta’s annual fund-raiser — a nine-hole mixed tournament at the Pinjarra Golf Club.

This year, after the ninth-hole had been completed in the tournament in February, money was raised through an auction of donated goods and services, ably conducted by Arthur Marshall, MLA for Dawesville.

To date, the group has raised more than $32,000 from this annual event, and the money has enabled the Department of Pathology to buy vital items of equipment including their newest acquisition — a research microscope.

To acknowledge Zonta’s generous contributions to research into breast cancer, the department recently held a special ceremony at which Club President Joyce O’Loughlin was presented with a mounted cover of the Journal of Cell Biology, which features an article by research staff using image analysis equipment bought by the department with money raised by Zonta.

Bev Jackson using the new research microscope.
**Diversity Initiatives Fund 2000**

Do you have an idea for a project you would like to implement which would advance the University’s equity and diversity goals? If so, now is the time to do something about it.

The University has allocated funding for equity projects. Grants are available to individuals or groups for projects that contribute to and advance the University’s equity and equal opportunity objectives.

The grants can be used to develop new projects or to assist in the continuation or expansion of existing projects. The projects can be related to research, teaching, curriculum, provision of services for students, staff issues or other areas.

A small committee will assess the applications and determine which projects will receive funding against a list of criteria that have been developed taking into account level of need, impact of the project and the degree to which they contribute to the University’s equity and equal opportunity goals.

Application forms and further details have been sent to executive deans, heads of departments and the Guild.

Please contact Malcolm at the Equity Office on 9380 2252 if you have any queries, or see our web page at the following address: http://www.acs.uwa.edu.au/hrs/equity/

Applications will close on **Friday 31 July 2000**.

Initiatives funded in 1999 included:
- Enhancing the access, participation and outcomes of women into Academic Surgery, Faculty of Medicine and Dentistry;
- Mentoring scheme for new staff from culturally diverse backgrounds, Centre for Staff Development;
- Improve support structures for non-English speaking background women postgraduate students in the Faculty of Agriculture;
- Increasing employment opportunities and equity for people with disabilities, Human Resources;
- Rural and Isolated Students Recruitment and Support project — Arts and Science.
**Classifieds**

**FOR SALE**

Redundant Equipment for Sale

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PRICE</th>
<th>AGE</th>
<th>CONDITION</th>
<th>DEPT.</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer desks, adjustable height mechanism (8 only), successful bidders to arrange own pick up and delivery</td>
<td>Offers</td>
<td>5</td>
<td>2-3</td>
<td>Library</td>
<td><a href="mailto:recoleman@library.uwa.edu.au">recoleman@library.uwa.edu.au</a></td>
</tr>
<tr>
<td>4 PC's (Not Y2K complaint)</td>
<td>Offers</td>
<td>6</td>
<td>3</td>
<td>Agric. &amp; Res. Econ.</td>
<td>2530</td>
</tr>
<tr>
<td>Micro Arts 100 MHz</td>
<td>Offers</td>
<td>4</td>
<td>3</td>
<td>Micro Arts</td>
<td></td>
</tr>
<tr>
<td>48 Mb Ram, 840 Mb H/Disk</td>
<td>Offers</td>
<td>4</td>
<td>3</td>
<td>Netpro 155 MHz, 32 Mb Ram</td>
<td></td>
</tr>
<tr>
<td>Netpro 155 MHz, 32 Mb Ram, 1 Gb H/Disk</td>
<td>Offers</td>
<td>4</td>
<td>3</td>
<td>IBM Laser Printer 4039 10R, by Lexmark (Prints double-sided)</td>
<td>Offers over $100</td>
</tr>
<tr>
<td>IBM Laser Printer 4039 10R, by Lexmark (Prints double-sided)</td>
<td>Offers over $100</td>
<td>—</td>
<td>3</td>
<td>International Centre</td>
<td>3941</td>
</tr>
<tr>
<td>3 x Power Mac 7200/75</td>
<td>$600 each</td>
<td>—</td>
<td>—</td>
<td>Child Care Centre</td>
<td>9389 9433</td>
</tr>
<tr>
<td>Power Mac 7 7100/66AV</td>
<td>$450</td>
<td>—</td>
<td>2</td>
<td>Medical Centre</td>
<td>2118</td>
</tr>
<tr>
<td>Power Mac 6100/60</td>
<td>$300</td>
<td>—</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Mac 6100/60</td>
<td>$450</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple LaserWriter II</td>
<td>$200</td>
<td>—</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mac LC630 (no screen)</td>
<td>$100</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avtek Megamodern 336</td>
<td>$50</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canon Elec. Typewriter</td>
<td>Offers</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Label Printer for Mac</td>
<td>$100</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QuickTake 150 Digital Camera</td>
<td>Offers</td>
<td>—</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple Laptop</td>
<td>$500</td>
<td>—</td>
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</tbody>
</table>

Bids should be accepted by Monday August 7 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 (1 = as new; 2 = good; 3 = serviceable; 4 = unserviceable). **AGE** refers to the nearest year.

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**FOR RENT**

HOLIDED IN CARLISLE available for rent in September to mid-October. Close to bus and train, fully furnished, suit visiting academic with family. Phone Jen de Vries on 9361 4990 or email jdevries@csd.uwa.edu.au.

**HOLIDAYING IN THE SOUTHWEST?**

Go ‘first class’ at Broadwater Beach Resort, three B/R lux. unit with heated pool, spa, tennis court, privately owned, special rate; or cedarwood chalets in bush setting on Blackwood River, two adults only, perfect peace and tranquillity. Pay two nights, stay three.

**Advertising Rates**

- Full page: $550
- Half page: $275
- Quarter page: $137.50
- Eighth page: $88
- Sixteenth page: $71.50

Rates are GST inclusive.

All bookings to Joanna Thompson, Publications Unit

Phone: 9380 3029; Fax: 9380 1162
ARC STRATEGIC PARTNERSHIPS WITH IN-D RESEARCH/TRAINING (SPIRT)


- Mr Thomas Meier and A/Prof King Ng Ngn, Electrical and Electronic Engineering, Dr W. Li and Dr X. Zhang (external): “Real-time content based video coding for multimedia communi-
cations” — $63,577 (2000); $56,192 (2001); $58,003 (2002).

- Dr Brenton Knot, Zoology, Dr Julie Lorraine Delaney, Geography, Prof Jorg Imberger, Centre for Water Research, and Prof M. McGregor (external): “Research programme into Western Australian Salt Lake Biota” — $42,160 (2000/01/02).

- Dr David Philip Hamilton, Dr Charitha Bandula Pattiarchati, Environmental Engineering, and Mr M. S. Robb (external): “Salt wedge propagation and biochemical composition in two West Australian estuaries and implications for water quality management using oxygenation” — $70,000 (2000); $50,000 (2001); $45,000 (2002).

- Prof Krishnapilla Sivasithamparam, Soil Science and Plant Nutrition, A/Prof John Jin-Su Kuo, Microscopy and Microanalysis, and Dr K. W. Dixon (external): “The role of mycorrhizal interactions in the urban ecology, management and restoration of terrestrial orchids” — $57,000 (2000/01/02).

- Dr Mark Emmerson Barley, Dr Bryan Krapez and Dr Mark Geoffrey Doyle, Geology and Geophysics: “Volcanic and hydrothermal influences on the genesis of banded iron formations, Hamersley Group, Western Australia” — $54,377 (2000); $36,192 (2001).

AUSTRALIAN RESEARCH COUNCIL — SMALL GRANTS

- Dr Zed Rengel, Soil Science and Plant Nutrition: “Regulation of manganese transport into developing lupin seed” — $33,000 (2000); $30,100 (2001); $32,000 (2002).


- Dr P. Clement, Environmental Engineering: “Experimental and numerical investigation of unconfined flow systems with seepage-face boundaries” — $13,170.

- Dr Marie Ann Bogoyevitch, Biochemistry: “Identification of high affinity binding partners for phosphorylated tyrosine 763 of the granulocyte colony stimulating factor receptor” — $7000.

- Dr Michael John McAleer, Economics: “Modelling financial returns and risk in the presence of extreme observations” — $8872.


- Dr Philip Stephen Oates and Prof Evan Morgan, Physiology: “The role of divalent metal transporter and HFE in iron absorption” — $9000.

- Dr Rosalie Dianne McCauley, Surgery: “Metabolism of the amido nitrogen group of glutamine within enterocytes” — $7000.

CANCER FOUNDATION OF WA

- A/Prof Konrad David Jamrozik, Public Health, and Dr D. J. Joseph and Dr M. J. Byrne (external): “National colon cancer care survey” — $50,000.

COMMONWEALTH DEPARTMENT OF THE ENVIRONMENT


DEPARTMENT OF TRANSPORT

- Dr Gerald Anthony Ryan and Ms Lucia Rina Cercarelli, Public Health, and Dr N. Haworth (external): Tender: “Feasibility study into the determination of fatigue related crashes” — $22,900.

IAN POTTER FOUNDATION


JUVENILE DIABETES FOUNDATION INTERNATIONAL


Watch out for more Research Grants and Contracts in the next issue of UWA News.
When it comes to sponsorship the main thing to realise is that it is not about money. It is about relationship and partnership. It is about the parties having an agreement which brings them mutual benefit. Without mutual benefit the relationship will not continue.

The sponsorship relationship is about people and human interaction and it is always a great pleasure working with the Qantas Marketing Manager Justine Bell-Morris and her team.

When people often talk about wanting sponsorship they see it only as a means of improving the cash flow for a planned event or conference. In todays changing world you have to look at what you tangibly have to offer the other party. How do you make it a valuable relationship for them to be engaged in.

Qantas has been a long-term partner with UWA Extension in a relationship which started with Australian Airlines nine years ago. Over that time the nature of the relationship has changed by mutual agreement. The benefits for UWA Extension has been access to travel which facilitates our being able to bring in major public speakers. The benefits for Qantas are brochure promotion but more importantly access for their staff to attend the wide range of developmental opportunities our courses offer.

UWA Extension is planning to increase our range of sponsorship partners and the model we will be following is that which has developed with Qantas.

The key to sponsorship is to think not of what they can do for you, but what you can do for them.

Kim D. Roberts, Director, UWA Extension

No longer is advertising and marketing a one-dimensional medium — it’s not enough in the current competitive environment to rely on the traditional means of promoting your services and winning new business through an advertising campaign.

With ever-increasing competition within a competitive marketplace, marketers have become strategic and targeted in their promotional and advertising strategies.

Companies are sponsoring organisations and events that will offer both a unique way to promote their company’s services and fit their overall marketing strategy.

When approaching potential sponsors do some background research on the company. The questions that need to be asked are:

• How does our organisation/event suit the marketing strategies of the company we are approaching for sponsorship?
• Does our image fit in with the image the company is trying or has created?
• What can we offer the company other than branding and hospitality; can we offer any direct benefit, (in the case of an airline, can we offer any travel revenue)?
• Do we have other sponsors who do business with the company we are approaching? Do we have opportunities for this company to network with potential clients?

Qantas and UWA Extension have had a relationship for over five years. We have worked together to create a sponsorship that benefits both parties.

This year we value-added the sponsorship, extending it to our employees, giving them the opportunity to be involved with UWA Extensions courses. By doing this we have internally created good will amongst our staff. By involving our staff in our sponsorship we are fostering a unity between UWA Extension and the various departments within Qantas Perth.

In summary, if you wish to approach corporations for sponsorship, do your homework — don’t assume you know what’s best for them. Take some time and tailor make the proposal to suit the individual company, understand their objectives and, above all, be innovative.

Justine Bell-Morris
Marketing Manager
Qantas