A class of law students has spent its final semester doing what enthusiastic and passionate young lawyers do best — helping the less fortunate members of our society.

Through an elective unit called Law and Contemporary Social Problems, more than 70 mostly final year students got stuck into practical work, using their legal knowledge to benefit asylum seekers, refugees, migrants, intersex people and people with mental health problems.

At their final class, lecturer Daniel Stepniak acknowledged that they had all done much more work than they would have if they had chosen to satisfy their assessment requirements by simply researching and writing a paper.

“I have always wanted to run a class devoted to current issues, and one where anyone who was interested was able to gain practical experience,” Mr Stepniak said. “This class exceeded my expectations in both respects. It has been a huge success, with an overwhelming enrolment of 95 students, more than 70 of whom chose to do practical work. The feedback from those who opted for practical work reinforces my belief that these kind of projects are a particularly valuable way to learn the law.

“There are some things you just don’t get out of textbooks or from listening to lecturers. I hope that job offers, career options and options for pro-bono work will also come out of the experience,” he said.

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Suddenly it is jacaranda season again — and all that means on campus.

“I knew it was exam time when I saw the campus jacarandas in bloom”, one of our senior students said to me a few weeks ago …

“The jacaranda always mean marks meetings”, commented a weary-looking professor at a faculty prize-giving ceremony. “I’m reminded of my African home city of Harare with all its jacarandas”, as one of our overseas students said to me in conversation at a college dinner last week.

For me, the jacarandas of 2002 came as a seasonal jolt: where had the year gone? Was it really the ending of this academic year?

Yes, it was! The intense activities in the University this year, coupled with the Nelson Review (and my additional role as AVCC President), has made for a speedy but momentous 2002.

Reflecting on that year past at the recent annual Academic Board Dinner I commented that it was useful to put our UWA process of change in the larger perspective of a global revolution in higher education.

I particularly had in mind the major challenges raised in a World Bank Report just published — Constructing Knowledge Societies: new challenges for tertiary education (Washington, 2002) — which begins with the challenging comment (from Professor Mamphela Ramphele, remarkable black South African educationalist), that higher education is now — "a critical pillar of human development worldwide".

On several key measures UWA is now positioned to be a highly successful 21st century university.

• As the State’s flagship research-led university we are a critical part of the emerging innovation economy of the region and contribute vital elements to shaping the social capital which underpins a cohesive and tolerant community.
• Our graduates are achieving well above average success in employment and salary rewards.
• Remarkable success in NHMRC grants this year plus excellent ARC results is also now matched by a growing R & D capacity as IP grows into significant spin-off companies and liaison with industry.
• Income diversification and income growth marks the notable growth in our budget over the past few years (and the fall in our reliance on government block grant to 27 per cent).
• Higher capital works initiatives (the Motorola software village, the projected molecular science complex, and the interactive learning centre) all point to future success in new knowledge areas.
• The “brain drain” is largely a brain gain for us: we have had superb fields of candidates for all our senior positions.
• International outreach has meant a rise in overseas students and transnational programs to some 16 per cent of enrolments with income potential still great, while the IAS has ensured a remarkable program of international visitors.
• Quality processes are being enhanced with significant key benchmarking with world-class overseas institutions.
• Governance is becoming a major issue in universities and it is good to note the successful reform of Senate and the bedding down of our own internal structure of Schools. Developing appropriate governance systems will be a key issue for 21st century universities.

Above all, I believe we have a well-understood mission and an alignment of budget and plans: UWA’s potential is huge.

I most warmly thank all of you for the contribution you are making to the development of the University, and encourage you to take pride in the progress of UWA.

With my wife Paddy, I send the best of festive wishes to you and your family. And for a more peaceful world in 2003.

Enjoy the jacarandas of 2002.
Research puts local marron on the global menu

When the best quality marron start appearing regularly on dinner tables all over the world, it will be thanks to the combined efforts of research scientists Phil Vercoe and Craig Lawrence.

Dr Craig Lawrence, senior research scientist from the WA Department of Fisheries, and Dr Vercoe, a senior lecturer in the School of Animal Biology, are working on improving marron production through genetic and husbandry strategies.

They are based at UWA’s Shenton Park station where they have Australia’s biggest aquaculture genetics research facility, with 80,000 marron (representing 13 strains of the freshwater crayfish) under the microscope.

Their work is also the nation’s biggest genetic improvement project for the breeding of freshwater crayfish and is funded by the Fisheries Research and Development Corporation (FRDC), industry, UWA and WA Department of Fisheries.

Globally, farming of freshwater crayfish is limited by the spread of a crayfish plague that kills all freshwater crayfish and now occurs everywhere in the world except Australia and Antarctica. This local research project is helping to prepare the Australian marron industry for the likely increase in demand for locally produced marron world-wide.

They have a winning combination of Dr Vercoe’s genetic expertise and Dr Lawrence’s aquaculture experience. The two worked together on a similar project with yabbies (another freshwater crustacean) with great success so they decided to join forces again and tackle marron.

With a grant from the Australian Academy of Technological Sciences and Engineering (ATSE), Dr Vercoe and Dr Lawrence have embarked on a collaboration with the Danish Institute of Agricultural Science (DIAS). Two scientists from Denmark will visit UWA early next year.

“The Danes have a very good reputation for their work in genetic breeding and aquaculture. They are among the top five groups working in this area in the world,” Dr Vercoe said. “And they have developed an excellent software program, which has meant great improvements in selection methods and processes for breeding programs.”

The Danish scientists will share their expertise and software with the UWA group, which will offer data sharing in return.

With the help of a FRDC grant, Dr Vercoe and Dr Lawrence started to evaluate wild strains of marron and compare them with industry stocks for breeding and growth. They have nearly finished this phase of their research.

An ongoing objective of the breeding side of the research program is determining the best strains for the commercial marron industry.

“The commercial industry in WA is worth about $1m a year,” Dr Lawrence said. “Close to 90 per cent of the marron go overseas. They travel extremely well and are highly sought after on international markets.”

They also breed very well. “One of the problems with aquaculture is that we are farming wild animals,” Dr Lawrence said. “But with marron, we have about a 90 per cent survival rate on the farm, compared with a very low survival rate with other crustaceans that are much more difficult to farm, such as rock lobster.”

Dr Vercoe said some of their hybrid strains were breeding after only one year. “We think it’s better if they don’t breed until they are two years old, but this is one of the areas in which the Danes’ software will help us to test our hypotheses,” he said.

Globally, farming of freshwater crayfish is limited by the spread of a crayfish plague everywhere in the world … except Australia and Antarctica.

Continued on page 4

LEFT: The ponds are drained and refilled every few months
ABOVE: Dr Lawrence (left) and Dr Vercoe check the breeding stock
Taking law where it’s needed most

Throughout the semester, the class had considered issues of judicial activism, mental health reform, the legal processing of refugees, racism and racial vilification, and sex law reform. With the exception of judicial activism, these topics coincided with their community or paralegal work.

More than 20 students worked on the review of Western Australian Mental Health laws. Three of them spent many hours organising the Mental Health Law Centre’s library and putting in place a much needed 60-page catalogue. They did so while researching and compiling a manual on civil debt for mental health patients.

About ten students undertook placements with the Mental Health Law Centre, where they were engaged in paralegal work and legal research. Others worked with counsel assisting the executive conducting the review of WA’s mental health laws and with the Mental Health Review Board.

Several students assisted pro-bono counsel prepare for at least four refugee appeals to the Federal Court, while 11 others also assisted in a high profile coronial inquest into the drowning deaths of two refugees. Fifteen students assisted refugees on temporary protection visas gain permanent protection by taking statements, preparing claims and researching background papers.

For some students, practical work included working with interpreters for the first time. The class all related well to one student’s experience as she conducted an interview with an asylum seeker. “I was asking him questions through the interpreter when, all of a sudden, he interrupted the interpreter and said directly to me: ‘When you have finished asking all these questions, can I tell you why I cannot go back to Afghanistan?’”

Four students worked with an intersex person and researched the legal status of such persons in Australia. They presented their findings in a paper at the fifth international conference on sex and gender, held at UWA in October. One of the students said it was remarkable how little information was available considering that the incidence of intersex people was as common as the incidence of some common intellectual disabilities.

Several other students worked with the Office of Citizenship and Multi-cultural Interests. One of their research projects involved preparing a paper for a steering committee on anti-Asian sentiment. They went through 500 newspaper articles looking at how they affected the Asian and Lebanese communities. Under the Racial Discrimination Act, it is an offence to offend, insult or humiliate people of any race. The students were looking at the existing legal framework to see what could be done about making newspapers more responsible to minimise offence and humiliation.

Though the unit is over, and many of the students have completed their university studies, some are continuing to work with the various community and legal organisations with which they were placed for Law and Contemporary Social Problems. At least one student has been employed by the legal centre for which she undertook research.

Research puts local marron on the global menu

Their 80,000 marron are mostly in 35 big tanks and 145 aquaria at Shenton Park, with others at commercial marron farms south of Perth.

They hope they will have breeding stocks ready for commercialisation in three years time and plan to continue an on-going breeding program to regularly provide farmers with fresh stocks each genetically better than the last.

Coupled with the Danish collaboration will be a visit from a representative from the International Network of Genetics and Agriculture (INGA). There are only nine Associate Members of INGA recognised as Advanced Scientific Institutes in Aquaculture Genetics in the world and the UWA group hopes they will be approved as the tenth member with help from the ATSE grant.

This will enable the facility to more easily exchange research and personnel with similar institutes around the world and create opportunities for industry and student projects at UWA.

Dr Lawrence weighs and measures baby marron with the help of Fisheries Department assistant Sandy Seidel
Dr Giles-Corti hopes to establish a research centre to concentrate on the environment and physical activity, “to look at what goes on in the environment, what goes on in your head and how they work together.” She will also apply this line of inquiry to the University campus. Dr Giles-Corti has a smaller grant to work with UWA’s Office of Facilities Management to survey staff and students about active commuting, with a view to helping the University to develop ‘green’ transport plans.

Lin Fritschi will be handing over her position as Population Health’s co-ordinator of post-graduate studies for the period of her NHMRC career development award.

“I’m very happy to be able to spend more time on my funded research. Teaching and administration roles had always taken priority over research.” she said.

Dr Fritschi’s area of research is cancer epidemiology. She is interested in the occupational causes of cancer and is involved in studies that ‘look both ways’: from the perspective of different cancers and possible occupational causes of them; and from the perspective of different occupations, to see which people from these areas end up contracting cancer.

She was involved in the Alcoa study into workers in the aluminium industry, has just finished studies of meat workers and textile workers and is looking at veterinarians.

The object of her research is to improve methodologies for assessing occupation exposures in epidemiological studies and to use these methodologies for research that will eventually improve the safety of the working environment.

“Workers continue to be exposed to substances that are potentially dangerous. Thousands of chemicals are used in industry today and only a small proportion of them have been adequately assessed for carcinogenesis. The only way to determine if workers are at risk is by epidemiological studies,” Dr Fritschi said.

“In such studies, the accurate measurement of occupational exposure is vital. Studies based on inadequate exposure assessments result in inaccurate and misleading results and my work aims to improve occupational exposure assessment.”

Western Australians can look forward to safer working environments and healthier living conditions following studies by two research scientists at UWA.

Associate Professor Billie Giles-Corti and Dr Lin Fritschi are devoting the next five years to their public health research, after winning National Health and Medical Research Council career development awards.

Only six of these prestigious grants were awarded by the NHMRC nationally in the field of public health and two of those went to UWA’s School of Population Health.

As Dr Fritschi explained, the awards fill a niche, for successful academics, between post-doctoral positions (for people who have recently completed their PhDs) and senior research fellowships.

Both Associate Professor Giles-Corti and Dr Fritschi are involved with ongoing research, funded by several different grants. This award, over the top, and not tied to any specific area of study, allows them to concentrate on their research for five years.

Dr Giles-Corti is part of a team of cross-disciplinary researchers (from population health, human movement and geography) and industry partners who have a grant from Healthway for $574,000 to evaluate the State Government’s Department for Planning and Infrastructure’s Liveable Neighbourhood guidelines.

They will track families who move into 32 new suburban residential areas, which have been designed to encourage a healthy lifestyle, for five years. These areas have been designed, for example, to make it more convenient for residents to walk to the shops than to drive, more attractive to take public transport to work than to take a private car, easier to combine daily exercise with everyday life rather working out at a gym.

“We know this approach works in inner-city areas, but will it work in the suburbs? The project crosses lots of agendas, including environmental issues, sustainable development and physical health and well-being,” Dr Giles-Corti said. “Our collaborators include the Environmental Protection Authority and the Heart Foundation.”
Prime medical research

Preventing teenage pregnancy, heart disease and diabetes, feeding premature babies, and regenerating optic nerves are among medical research projects given a boost by the Raine Foundation. Raine has announced eight priming grants for WA medical researchers, chosen from 47 applicants. The Foundation has allocated $834,000 to the research projects for 2003-2004.

SUCCESSFUL RESTORATION OF VISION is the long-term direction of research Dr Carolyn King from the School of Animal Biology. She will investigate the guidance molecules required for regeneration of the optic nerve in goldfish.

“The results from these studies will be compared with other species, which do not successfully regenerate, including mammals,” Dr King said. “By inducing similar changes in guidance molecules in a mammalian system, the successful restoration of vision may be achieved.”

DR BRYAN WARD (WA Institute of Medical Research) is concentrating on the calcium-sensing receptor CaR. It can trigger different cell signalling pathways that regulate diverse cellular processes.

“The significance of the abundant detection of CaR in the brain is unclear. This project could well detect target proteins important in cell signalling which dictate novel functions for CaR in the brain,” Dr Ward said.

DR DEBORAH SLOBODA, from the School of Women’s and Infants’ Health, is hoping to eventually prevent the global epidemic of diabetes.

“Type 2 Diabetes is the single largest disease affecting humans worldwide,” Dr Sloboda said. “There is compelling evidence from human and animal studies that events occurring before birth predispose individuals to this disease.

“We think exposure of the fetus to stress hormones is an important factor and we propose to investigate developmental patterns of the fetal and neonatal sheep pancreas to determine the effects of varying exposures to stress hormones,” she said.

“From this, we expect to elucidate some of the pathways that predispose an individual to diabetes and other chronic diseases of adult life.”

FEED INTOLERANCE is a major problem with preterm babies. Breastmilk is the milk of choice but growth and bone mineralisation are less than optimal in preterm infants fed solely on breastmilk. A fortifier made from cow’s milk improves growth but reduces many of the benefits of breastmilk.

Professor Karen Simmer (School of Women’s and Infants’ Health) is working on producing a fortifier for breastmilk, made from the mother’s own milk. She will evaluate its use in very preterm infants.

Australia has one of the highest teenage pregnancy rates in the Western world. The reliable use of contraception is problematic for some teenagers.
Australia has one of the highest teenage pregnancy rates in the Western world. **DR RACHEL SKINNER** (School of Paediatrics and Child Health) is trialing, over a three-year period, an implantable contraception, and comparing it with other contraceptives. The results of the study will inform teenage pregnancy programs both locally and internationally.

**DR DAVID BURGNER** (Paediatrics and Child Health) is looking at Kawasaki disease, an inflammatory illness in children under five. It is a frequent cause of heart disease but the cause of Kawasaki disease is not known and there is no diagnostic test or specific treatment.

“This project studies naturally occurring human genetic variation and investigates the role of common viral infections in predisposing vulnerable children to Kawasaki disease,” Dr Burner said.

The nerves that make nitric oxide are found in circuits that control the heart and blood vessels but their function is unknown.

**PROFESSOR LEONARD ARNOLDA** (School of Medicine and Pharmacology) will study the role of nitric oxide in these nerves, leading to a better understanding of the mechanisms that lead to activation of nerves to the heart and blood vessels.

“This, in turn, should lead to new treatments for hypertension and heart failure, conditions that cause so much suffering and premature death in our society,” Professor Arnolda said.

**DR BRENDAN MCQUILLAN** (School of Medicine and Pharmacology) will use an exciting new technique, DNA microarrays, to assess the expression of a wide variety of genes in his quest to identify the genes contributing to atherosclerosis, the underlying cause of most heart attacks and strokes.

He hopes his project will provide insight to the molecular basis of vascular disease.

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The Raine Foundation has also funded eight Visiting Professors who will share their expertise at UWA next year. Coming from the UK, the USA and Germany, their visits will range from one week to three months and they will work with medical researchers on areas including forensic science, population health, paediatrics, geriatrics and human movement.

- **Professor Thomas S Buchanan**, Centre for Biomedical Engineering Research, University of Delaware. He will be working with Dr David Lloyd (School of Human Movement and Exercise Science) on helping patients with neuromuscular disorders to regain their ability to walk.
- **Professor Reinhard Faessler**, Molecular Medicine, Max Planck Institute for Biochemistry, will visit Professor Miranda Grounds (School of Anatomy and Human Biology). He has an outstanding research record on studies of developmental processes with transgene and knockout technologies.
- **Professor Felicia Huppert**, Cambridge University’s Department of Psychiatry, will spend two months with Professor Leon Flicker (School of Medicine and Pharmacology) working in the area of geriatrics.
- **Professor Chris Hutchinson**, Biological Science, The University of Durham, will spend three weeks in April with Professor Dharma in the School of Anatomy and Human Biology.
- **Professor Murray Marks**, The University of Tennessee Medical Centre will visit the Centre for Forensic Science. He is widely acknowledged for his work in the area of estimating time of death and, more recently, in computer-graphic facial reconstruction and craniofacial fractures and growth.
- **Professor Mark Hanson**, Centre for Fetal Origins of Adult Disease at Princess Anne Hospital, Southampton, will visit Professor John Newnham in the School of Women’s and Infants’ Health for three weeks in September.
- **Professor Jon Wakefield**, Statistics and Biostatistics, University of Washington will visit the School of Population Health. He has been recognised for his work on the development of statistical methods in application to spatial epidemiology.
- **Professor John Warner**, School of Medicine, University of Southampton will work for three months in the School of Paediatrics and Child Health. His work focuses on the early life origins of asthma and related allergic disorders.
A basic understanding of mathematics can help us to control our credit cards, appreciate nature and work things out logically.

Professor Howell Tong, visiting UWA from London and Hong Kong, believes that everybody in an educated, informed society should have this basic understanding, and similarly, a basic knowledge of science, psychology and economics.

He said the mathematical community had begun to popularise maths, in much the same way that science had been made accessible.

"In the UK, there have been a couple of programs on the TV show Horizon, about mathematics and statistics. And Penguin has published a couple of maths books recently from the University of Warwick that are entertaining, as well as accessible," Professor Tong said.

He is Professor of Statistics at The London School of Economics and Political Science, and also at the University of Hong Kong. Professor Tong was a guest of the School of Mathematics and Statistics for a fortnight with the help of the Distinguished Visitors’ Fund. He delivered a public lecture on chaos and statistics last week.

"Without a basic understanding of mathematics, people can be fooled. They might read in the paper that some company’s shares have gone down by 30 per cent, then risen by 30 per cent, so they are ‘back to square one’ That is not so. There are some real ‘howlers’ in the financial pages and if the general public gets the wrong idea, that leads to an uninformed society which could eventuate in uninformed politicians," he said.

"With a little maths, we can fill out our tax forms, we can do some personal financial planning and maybe, if people did have some interest in and knowledge of maths, they wouldn’t get themselves into trouble with their credit cards!

"Some mathematical knowledge would enable you to see nature in a slightly different way. You would look differently at a leaf with a spiral pattern and marvel at the design of a beehive. Insects and plants are very clever mathematicians."

"It’s all about patterns. Mathematicians and statisticians don’t spend all their time working with columns of figures. We are looking for patterns, just like musicians. Maths is actually closer to art than any branches of science. At some universities, including Oxford and Cambridge, you earn a Bachelor of Arts if you study mathematics. We also talk about taste in mathematics and statistics. You must have taste, just like an artist."

Professor Howell said that there was also a close affinity between maths and law. “A close mathematical colleague of my predecessor in Hong Kong went on to become one of the highest lawyers in the land.

“With maths, we start with an axiom, a self-evident truth, and use logic from there to develop something. With law, we start with an accepted man-made law and use logic to deduce an outcome from that premise. It’s very similar.”

As a statistician, Professor Tong specialises in chaos. “I actually prefer the word randomness — chaos can have bad connotations.”

He said the chaos theory — that there is more than one solution to even the simplest equation given different circumstances — was first published by Pioncre, a French mathematician, around 1900.

“It was not until 1976 that it was developed fully by the Australian mathematician, Bob May, who wrote in Nature magazine that a very simple equation could give rise to very complicated behaviour. It got everybody, including me, very excited, and Bob and I started to correspond.

“But as a statistician, I see the world full of randomness. It is not exact, it does not work like clockwork. It is impossible for a human to accurately measure anything. But Bob May, coming from his background of theoretical physics and biology to mathematics, does see the clockwork-like patterns.

“We have different perspectives, but we remain good friends.”
A love of mathematics plants its seed early in bright young minds and Professor Cheryl Praeger celebrated this when she was guest of honour recently at the Australian Mathematics Trust's award night.

Professor Praeger presented medals to high school students from around the country who had excelled in the Australian Mathematics Competition (Westpac Awards Medals).

She also presented the B.H. Neumann Awards for Excellence, in honour of Professor Bernhard Neumann, her 'number one mentor.'

In her speech to the students, their families and their teachers (reproduced in part here), she recalled both her own devotion to mathematics at a young age and Professor Neumann's.

“The vision of the Australian Mathematics Trust is ‘to challenge and encourage Australians in the understanding of mathematics to realise their intellectual potential’. It’s a wonderful thing to discover your own interest, talent, and enjoyment of mathematics. And it’s also a wonderful thing to see this happen for someone you love.

“The B.H. Neumann Awards for Excellence were named for Professor Bernhard Hermann Neumann, an extremely eminent Australian mathematician. He came to Canberra in the early 1960s and he took great pleasure in all kinds of mathematics and was enormously proud of the achievements of young people in the Australian Mathematics Competition. He planned to be at the ceremony today. In fact he told me he was looking forward to it when I telephoned to congratulate him on his 93rd birthday on October 17. Unfortunately for all of us Bernhard Neumann died on October 21.

“Bernhard had been interested in Mathematics since he was very young, and in 1931 he became the youngest Herr Doktor in Mathematics in Berlin just a couple of weeks after he turned 22. He was in his second year as an undergraduate when one of his professors asked him to submit some of his research work for a doctorate.

“Bernhard felt that he was too young, and that the work was not sufficiently substantial. But finally, after doing some extra work, he agreed to submit it for a doctorate - but he did not tell his parents about it. His older sister lent him some money to buy a suit to wear for the formal examination, and because of the examination he was late home for dinner. His mother was cross as there was a guest for dinner. She was very surprised when he explained that he had just earned his doctorate!

“I owe a lot to Bernhard Neumann. He supervised a vacation project I undertook at the Australian National University between my third and fourth years of undergraduate study. It was during this period that I decided definitely that I wanted to do a doctorate in mathematics, and if possible become a mathematician. Bernhard became my ‘number one mentor’ - always interested in my career, and my family, and always supportive.

“Throughout his life Bernhard continued to be fascinated by all kinds of problems involving mathematics, from pure mathematics research through to industrial applications. He saw unprecedented changes in science and technology, and their implications for the way we live. Perhaps now, more than during most of Bernhard’s lifetime, new mathematical skills, and young talented mathematicians are needed to solve the challenging problems facing the world.

“Many of you will be our future leaders in science, technology, engineering, or medicine. Perhaps you will construct mathematical greenhouse climate models that enable us to predict and manage the effects of climate change. Maybe you will lead in the exploration of the humane genome where, I hope, teams of mathematicians, biologists and medical scientists will solve some of the mysteries of human disease.

“Mathematics is the invisible ‘oil’ that keeps our technological society running efficiently. Like vitamins for our physical health, Mathematics is an invisible ‘vitamin’ that is essential to the health of our society.”
Simple hand held diagnostic devices are taking medicine in a new direction.

Pioneering work by the Lions Eye Institute (LEI) in conjunction with UWA is developing and perfecting an electronic system which will be trialed soon by practitioners outside the ophthalmic area, including dentistry, dermatology, ear, nose and throat specialists and pathologists.

The digital imaging device allows a health professional to scan the surface of an eye (or, potentially, skin, teeth, throat, etc) and send the image electronically to a specialist who can make a diagnosis.

Associate Professor Kanagasingam Yogesan is the Director of Electronic Health (or E-Health) at LEI. He has been developing the E-Health and Telemedicine program and the digital imaging device for the past six years. Recently, he has been awarded two National Health and Medical Research Grants totalling more than $800,000 for further development.

He is working towards making the hand held digital device even simpler to use and cheaper to acquire. He hopes it will eventually cost no more than $5,000 and be simple enough to be operated by any health professional.

Linked to an on-line health care system, it means better health services for remote and rural areas. “Communities can be screened for glaucoma and other eye diseases and disorders with the device,” Professor Yogesan said.

“The same system can eventually be used by many different specialists so the desperate need for these specialist services in remote areas can be catered for without the specialists having to travel the long distances.”

While rural Australians might not have the luxury of a specialist visiting them, the advantages of the system are that it is cheaper, they are treated more quickly and they don’t need to travel to the city.

“Even when they do need to come to Perth or other centres for surgery, they have already been screened and the ophthalmic surgeon doesn’t need to spend more time evaluating the patient. The surgeon can operate more quickly, which reduces waiting time for the patient,” he said.

Currently, trials using LEI technology are being conducted at the Moora Telecentre by an optometrist who is travelling in the Kimberley and Carnarvon regions.

“The system is not restricted to picking up diseases and disorders. It can be used for emergencies too. The details of an eye trauma can be screened, then evaluated in Perth. The specialist can tell a rural GP how to deal with the trauma and often the patient can be treated without leaving the region.

“Rural eye trauma patients are usually flown to Perth, at a cost of between $15,000 and $20,000. So there’s a good saving for the community, as well as much less stress for the patient and the patient’s family.”

After working in the area of cancer research in Norway, using telemedicine, Professor Yogesan brought his background of medical informatics to UWA and the LEI.

“There is a huge future in telemedicine and E-health. It has taken off in the US and I can confidently see it happening here.”
UWA gets the show on the road

The grand opening celebrations at the Concert Hall for the Perth International Arts Festival on Australia Day will be sponsored by the University.

The Australian Youth Orchestra (AYO) will perform Gurrelieder, a rich and splendid composition, with the biggest orchestral forces ever assembled in WA. And they will have been rehearsing at UWA.

Gurrelieder calls for gargantuan forces: an orchestra of 132 instrumentalists, a large mixed chorus and vocal soloists. This momentous work is considered to be the ultimate in romantic richness and the final statement of nineteenth century decadence and excess – a reflection on love and nature, a mesmeric combination of poetry and music.

The score calls for a remarkable range of specialist instruments including four harps, two E flat clarinets and two bass clarinets, two contrabassoons, Wagner tubas, an alto trombone and a bass trumpet.

This will be the premiere performance of Gurrelieder in WA and the first time this work has been performed by the AYO.

The orchestra and vocalists were chosen by audition to become the Australian Youth Orchestra for 2003. They come from all over the country, including six from WA (two violins, two violas, a cello and a horn) and this will be one of their first performances together.

The University has offered the AYO space for its all-important rehearsals and it is also hosting the AYO's National Music Camp in January.

This camp is for a different group of 125 young musicians from around Australia, who will make UWA their home for two weeks while they live and breathe music.

National Music Camp is a training program for which auditioning is highly competitive. It has been run for more than 50 years.

Secrets often have a mysterious element. In this, our last Campus Secret for 2002, a mystery has been solved.

Back in June, we featured the chair, fashioned from a tree stump, on the edge of the Nedlands campus. Nobody knew who had created it or when it was carved.

But, by chance, the tree surgeon who made the chair was talking to a staff member and asked her if it was still there. She said that it was and it had just been mentioned in UWA news.

The chair carver is Murray Turner, a local tree surgeon. He said he used to do all the tree surgery for the Nedlands Teachers’ College, as the Nedlands campus was, back in 1969.

“The jarrah tree was in a bad way,” Murray recalled. “It had a dead crown and top and a big branch had fallen across the road. I sliced it off at head height, then decided that I should make sure it had a useful life. So I carved it into a seat. The tree was leaning back from the street, so it provided a naturally good-shaped back for the seat.”

Murray said that most of the good timber from the tree went to the craft department of the teachers’ college and some went to Gordon Wilkinson’s wood turning class, who created beautiful pieces of art.

“A few months later, I saw an elderly man using the seat. He had just had a heart attack and was waiting for a lift to hospital. I was so pleased it was proving useful.

“After a while the shrubbery around the seat grew up and smothered it and as I haven’t done any work at UWA for the past 10 years, I almost forgot about it. I happened to be on campus recently and that reminded me, so I asked about it, and found that nobody knew its history.”

A celebratory note on which to end the year.
Overview of a year that’s over

By Professor Alan Robson
Deputy Vice-Chancellor

2002 has been a very busy year within the University and I am most grateful for your commitment in our many endeavours. We have received excellent assessments in both teaching and research, as assessed by indicators of student choice, student satisfaction, research income and staff recognition.

In addition, there have been significant organisational changes, and our far-reaching restructure has been smoothly implemented. A ‘cycle of accountability’ and a new operational priorities plan have also been developed.

All our staff within the University have contributed strongly to these activities, but I would particularly like to commend the staff of Human Resources for their outstanding work in implementing the restructure, and staff in the Registrar’s Office, particularly in Planning Services, for their excellent contribution to our planning activities. The Equity and Diversity office has also made a substantial contribution with our recognition as Prime Minister’s Employer of the Year and as an Employer of Choice for Women.

During the year I was extremely grateful for the delegated help of a range of staff including Mike Partis who provided an excellent analysis of the structure of the academic year; Tom Dickson who contributed an incisive and thoughtful analysis of degree structures; Jon Stubbs who led a team to carefully and thoroughly select a new student records system; and Christine Gledhill and Diane Christensen who participated with others in developing an approach to long-service-leave.

All of these activities have involved considerable work within the faculties and our continued success will depend upon our capacity to be innovative and responsive to a rapidly changing environment.

What are the challenges for 2003? First we will be quality audited with our performance portfolio being submitted in early May followed by an audit visit in August. Faculties are currently undertaking self-evaluation. If we are to gain maximum benefit from the quality audit, it is essential that there is widespread input to our performance portfolio and that the document is owned and accepted by all.

In staffing there will be a new round of enterprise bargaining. Additionally, I have delegated authority to Margaret Seares to lead a process to improve the performance management system within the University.

The key priority of the University is to recruit, develop and retain the highest quality staff. I believe we are achieving this objective and as 2002 comes towards an end, I thank our excellent staff for their excellent work in the further development of our University.

This is the final issue for the year.

We hope you’ve enjoyed reading it and keeping in touch with what’s happening at your University. Your news tips, story ideas, feedback and comments are always welcome. Please keep in touch … but not until February next year.

The office of UWA news will be closed from today (December 2) until Monday February 10, 2003. The deadline for both editorial and advertising copy for the first issue next year is Wednesday February 26. That issue will be published on Monday March 10.

We will be continuing the back page column, The Last Word, next year, its sixth year. Please don’t wait to be asked to contribute. Anybody who is on the staff or closely connected to the University can take the opportunity of airing a view, canvassing opinion or simply getting something off your chest. Contributions should be about 650 to 700 words long.
Mental illness – despite it affecting up to 50 per cent of the population – is still feared by the community.

Professor Osvaldo Almeida (above), the Head of the new School of Psychiatry and Clinical Neuroscience, said that, these days, few people tolerated discrimination on the grounds of gender, race or religion.

“But people with mental disorders are still discriminated against,” he said.

“People feel they have failed if they have to admit they have a mental problem, but they are quite happy to admit they have a problem with their bones or their heart or their liver. They feel embarrassed to go to a doctor and, while they will not hesitate to go to a doctor for a sore back, they tend to hide their mental illnesses and put off seeking help.”

Studies in genetics, molecular biology and environmental factors over the past ten years have shown that mental disorders are a combination of all of these.

“Nobody should blame themselves if they develop a mental problem,” Professor Almeida said.

His aim, in the two years he has been here, is “to make a difference.”

“We have a pivotal role in mental health, being the only school of psychiatry in the state. It is a privileged position but also one of great responsibility. I want to ensure that our research makes a difference, that it is not just a curiosity, but something that will have worthwhile implications for the community.”

Current research in the School includes looking into methods of early identification of schizophrenia, new treatment models for Alzheimer’s diseases, based on genetics, and studies of depression and anxiety disorders.

“Over the next two years, I want to expand into other areas: into population mental health and the needs of the community; and neuropsychiatry, looking at brain damage and behavioural problems caused by trauma such as car accidents, strokes and epilepsy.

“People are more aware of mental health and mental disorders than they were ten years ago.

“But there is still the feeling that mental problems are incurable, when, in fact, our treatments are as effective as treatments for physical conditions, such as osteoporosis.”

Professor Almeida said that all medical undergraduates had psychiatry training but few graduates chose to become psychiatrists.

“There is a misconception that psychiatry is not real medicine. I hope to change that among our students,” he said.

The new School has about 70 staff spread over five sites: QEII, Fremantle, Graylands, Royal Perth and Princess Margaret hospitals.

“As Head of the School, I will still do a lot of teaching. I’m a firm believer in ‘getting my hands dirty’. Clinical academics need to maintain a clinical presence if they are going to set the right example for their students,” he said.

“We shall strive to have an impact on the causes and treatment of mental disorders, from the molecular biology in the laboratory to the public programs in the community.”
December 1 to 4

6TH MEETING OF THE INTERNATIONAL MESOTHELIOMA INTEREST GROUP

‘Recent advances in mesothelioma’ and associated satellite meeting, ‘Advanced technologies in cancer research — from gene chips to gene therapy’. Sir Charles Gairdner Hospital. (The meeting is supported and organised by the Department of Medicine, WA Institute for Medical Research, The Lotteries Commission and UWA. For further information and to register, please contact Mrs Maree Branigan, University of Medicine, 9346 2005 or email branigam@cyllene.uwa.edu.au).

Monday 2 December

PLANT BIOLOGY SEMINAR

‘Seminon plant biology’, Euan Harvey. Plant Biology. 4 to 5pm, Agriculture Lecture Theatre.

Tuesday 3 December

DEPARTMENT OF MEDICINE AND THE LOTTERIES STATE MICROARRAY FACILITY IN CONJUNCTION WITH MILLENNIUM SCIENCES WORKSHOP

‘Affymetrix GeneChip® use’ by Lillian Markind Bloch, Technical Specialist, Affymetrix USA. This workshop is on The Affymetrix Vision Series: Emerging Technologies and New Product Lines and The Affymetrix Technology Series: Understanding Variability and Data Quality. RA Joske. 10.30am to 12.30pm, Seminar Room, Medicine, 4th Floor G Block, Sir Charles Gairdner Hospital. (Please direct all enquiries to LSMAF via Nigel Swanson 9346 3598, Violet Peeva, Grace Chen 9346 3827 and Bill Kenworthy 9360 7238).

Wednesday 4 December

2002 GENOMICS, SOCIETY AND HUMAN HEALTH PROGRAM

‘Winning the war on cancer: unravelling the role of genes and the environment’ Public lecture by Professor David Bowtell, Director of Research and Peter MacCallum Cancer Institute, Melbourne. 6.30pm, Social Science Lecture Theatre. (Supported by the Institute of Advanced Studies. For more information, please contact Anne Same on 9380 7373 or email: sanne@dph.uwa.edu.au).

Early booking for NEWSPAPER DISPLAY ADVERTISING OVER Christmas & New Year

Due to the Christmas/New Year break, the DEADLINE for all display advertising for publication in newspapers over the period from:

Saturday 21 December 2002 to Saturday 4 January 2003 inclusive

has been moved to

Monday 16 December 2002

Kindly send all copy for typesetting and design to Joanna Thompson, Publications Unit (extension 3209, email: joanna.thompson@uwa.edu.au) by the above deadline. Display advertising booking in 2003 will resume on Monday 6 January for publication in newspapers from Saturday 11 January onwards.

Note: Display advertising does not include job advertisements which are handled by Human Resources.

Due to the Christmas/New Year break, the DEADLINE for all display advertising for publication in newspapers over the period from:

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Note: Display advertising does not include job advertisements which are handled by Human Resources.
Staff at UWA can claim a tax benefit from taking part in the Perth International Arts Festival. The Australian Tax Office has agreed to allow UWA employees to include tickets for the Festival in their salary packaging. Staff can buy up to $500 of tickets under the agreement.

Human Resources is putting the procedures in place to manage the salary packaging and will send out an all-staff email with details as soon as they are ready.

Check out the Festival website and choose what you would like to see, while waiting for arrangements to be put in place.

It pays to go to the Festival

UniPrint is UWA’s in-house printshop. We provide a friendly and efficient print, copy and design service to all areas within the University.

- Graphic design and typesetting
- Digital copying
- General printing
- Sale of course readers
- Assistance with UWA and faculty branding guidelines
- On-campus copying
- Daily delivery and pickup

Contact Ray Horn on 9380 8790 or David Prior on 9380 8791 to discuss all your printing needs.

Email uniprintjobs@admin.uwa.edu.au  Website www.uniprint.uwa.edu.au

workskillsprofessionals temporary & permanent personnel

Need temporary, contract or permanent staff?

Workskills Professionals are proud to be a wholly owned and operated WA Company and are a preferred supplier to State Government agencies through the DoIT 63200 panel contract.

Supplying staff in the areas of:

- Administration/Clerical
- IT/Computing
- Professional/Technical
- Skilled/Unskilled Labour

We have been supplying candidates with previous tertiary (University) experience to UWA since 1993. We have developed a Star Education Performers list to capture these experienced people, enabling us to deliver a fast quality service.

Try us — we are sure you will notice the difference

Give our friendly staff a call on

Ph: (08) 9201 7777  Fax: (08) 9201 7778
requestwa@workskillsprofessionals.com.au
www.WorkskillsProfessionals.com.au

Fantastic Pricing on Acer Pentium 4 Notebook

The Acer Travelmate 270 is a brand new model with Pentium 4 processor to give an incredibly fast notebook computer at a great price for Education.

- Internal 56K Modem
- Intel Pentium 4 Processor
- 256MB DDR DRAM
- 20GB Hard Disk Drive, 52x CD Rom
- 10/100 Ethernet, Internal Speakers
- 14" Active TFT Screen, Windows XP Professional
- 3 USB Ports, Hi Speed Firewire Port
- 3 Year return to base warranty*
- 12 month warranty on battery

Acer Travelmate 270 Pentium 4 1.4GHz ....

$2750.00 Ex GST
$3025.00 Inc GST

*All pricing excluding GST. All offers and promotions subject to change without notice.

University of Western Australia
Hackett Drive Entrance 2, Level 1
Guild Commercial Centre, Crawley WA 6009
Phone: (08) 9380 2777
Fax: (08) 9380 1049
Email us at sales@winaust.com.au
WANTED TO RENT
VISITING PROFESSOR FROM USA, 2 adults and 3 children arriving 9 February 2003 and leaving 23 June 2003 require a furnished home with at least three bedrooms within walking distance of the University. Around $400 per week would be preferable. Enquiries to Brenda at School of Human Movement and Exercise Science on extension 2360, or email: brenda@cyllene.uwa.edu.au.

ACADEMIC VISITOR FROM CANADA on sabbatical at LEI requires fully furnished three or more bedroom home in Claremont or surrounding area. January 2003 to August 2003. Please contact Megan Dallas, megan.dallas@lei.org.au, ph. 9381 0723.

FOR SALE
SUBARU 4WD, 1991 L-SERIES ENDURO SPORTSWAGON $5000. 2 owners, full service record, 162,000km, burgundy colour, roof-racks, roof bars and tow ball. Call Alistair Paterson 0421 994 625.

MACINTOSH POWERBOOK G4, 667 Mhz, 256MB RAM, 30 GB HD, Combo drive, Mac OS 9 and 10, seven months old, 3 year warranty from date of purchase. $4800. Contact details: Toby ext. 7974 or 041 991 2685.

WASHING MACHINE Simpson Rivera and RECLINER CHAIRS all excellent condition. Please call Jenny to make an offer. Any reasonable one considered! Ext. 3324 or 0417 966 643.

URGENT SELL—PULSAR LX99 5-door hatch. Excellent condition, like new. Metallic silver, air con, power steering, CD player, immobilizer, service history, driver air bag, 71,500 kms, new rego, good tyres, owner’s manual. Only $13,500—reasonable one considered! Ext. 3324 or 0417 966 643.

FOR RENT
6/7 NAPIER ST, COTTESLOE. 2 bedroom, 1 bathroom (new with hook up for laundry), new kitchen (with dishwasher), and large balcony. Just up from Beaches Café, 150m from Cott. Beach with great NW ocean views. Available 20 November. $270 per week. Call Jennifer Heigel 0407 027 045.

LEURA ST, NEDLANDS available for lease. Beautifully presented, polished boards throughout. Coloured leadlight, 3 beds plus sleepout-rear lane access-garage. Great location, near uni, hospitals. Stroll to shops and trendy café strip. $290 p/w, available for tenancy from date of purchase. $13,700. Tel: 9380 7385 (Mon-Tues office hrs), 9276 2290.

LOCK-UP GARAGE ON CAPORN ST near Fairway available for rent on short- or long-term basis. $25 per week (negotiable for longer term). Contact David on 0438 469 273.

HOUSESITTING
VISITING RESEARCH FELLOW AVAILABLE to house sit 6 February to end July 2003, extremely neat and willing to look after pets and plants. Contact Teresa de Castro at teresa.decastro@adelaide.edu.au or Muriel on 9380 2128 or email mmahony@arts.uwa.edu.au.

MATURE, SEMI-RETIRED, non-smoking are seeking short-, medium- or long-term housesitting for themselves and small, non-digging house-trained dog. Any suburb ok and willing to pet-sit. Arriving in Perth from south-west WA approx 17 December but date is very flexible. If you’re interested, please call Steve on 0422 129 764 or Tricia Gardiner on ext. 7311 or tgardiner@admin.uwa.edu.au.

The University of Western Australia
Convocation, the UWA Graduates Association
Annual Elections

• ELECTION OF ONE MEMBER OF SENATE
• ELECTION OF WARDEN AND DEPUTY WARDEN
• ELECTION OF ELEVEN MEMBERS OF THE COUNCIL OF CONVOCATION, THE UWA GRADUATES ASSOCIATION

Application forms are now available for the above positions.

Mr Paul Nichols will complete his term as a member of the Senate of The University of Western Australia, elected by the University’s Convocation of Graduates, in March 2003.

Dr Suzanne Baker will complete her one-year term as Warden of Convocation, the UWA Graduates Association in March 2003.

Mr Peter Clifton will complete his one-year term as Deputy Warden of Convocation, the UWA Graduates Association in March 2003.

Seven members of the Council of Convocation, the UWA Graduates Association will complete terms in March 2003, and there are four ditional vacancies.

Nomination forms for all of these positions are now available from Convocation, the UWA Graduates Association. Please telephone Juanita Perez, the Convocation Officer on 9380 3006, or email on uwaga@admin.uwa.edu.au including your postal address.

Please consider nominating for one of these positions.

Closing date for nominations for all sitions is 5 p.m., Monday 20 January 2003.

Bids should be accepted by Monday 16 December with schools to have first option

Schools are reminded that all University equipment available for sale must be advertised in the UWABIDS. 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.

Redundant Equipment for Sale

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PRICE</th>
<th>AGE</th>
<th>COND.</th>
<th>DEPT.</th>
<th>CONTACT</th>
</tr>
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<tbody>
<tr>
<td>Computer, digital PC 3000, pi 200 1.9 GB</td>
<td>$250 ono</td>
<td>5</td>
<td>2</td>
<td>Statistics</td>
<td>K. Quek, ext. 2813</td>
</tr>
<tr>
<td>HD/160 MB RAM, 17&quot; monitor</td>
<td>Offers</td>
<td>5</td>
<td>2</td>
<td>Oil and Gas</td>
<td>Debra, ext. 1971</td>
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<tr>
<td>Mitac DC-3060 P apier</td>
<td>Offers</td>
<td>6</td>
<td>2</td>
<td>Computer Sci.</td>
<td>Cara, ext. 3453</td>
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<tr>
<td>Sun Sparc Ultra, 20&quot; monitor, 2.1GB, CDROM, Ethernet, solaris, docs, etc</td>
<td>$320 ono</td>
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<td>2</td>
<td>ECEL</td>
<td>Mark, ext. 1405</td>
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<tr>
<td>42 x PC Pentium II 350Mhz, 128MB RAM, 3.2GB hard drive, 15&quot; monitor, CDROM, network card, sound card, redhat linux 8.0</td>
<td>$150</td>
<td>7</td>
<td>3/4</td>
<td>Stuart Mather</td>
<td>3899/stuart@ee.uwa.edu.au</td>
</tr>
</tbody>
</table>

ITEMS should be accepted by Monday 16 December with schools to have first option.