A not so noble rot

by Lindy Brophy

The past five years have seen an explosion of vineyards in Western Australia.

But in the same period, the booming wine industry has been threatened by a new fungus, grape downy mildew, which is responsible for wiping out grape crops in Europe, America and the eastern states of Australia.

Since 1998, the area of planted vines in WA has increased by a massive 165 per cent, compared to a national increase of 60 per cent. At the start of this expansion, in 1998, the first case of grape downy mildew was discovered and identified in the Swan Valley.

PhD student Ben Killigrew is looking for answers.
For as long as we have lived and worked in the Dawkins era of the new (from 1989) “national unified system” of Australian universities, we have had what I would call ‘education wars’.

There was, initially, the considerable conflict over the move to create the current 38 universities, but also the transformation of colleges into universities in their own right. Some of the new configurations (eg. the federated system of UNE) did not survive internal conflicts. Other new institutions have found it difficult to realise their missions, given that Commonwealth policy invariably outran fiscal needs.

Then there was Labor’s introduction of HECS. Staff and students were highly critical: it was a clever equity strategy but it did place new burdens on students.

Next, there was the creation of the ARC, ostensibly a laudable attempt to develop a national approach to national research needs. But, of course, that initiative also involved a significant ‘clawback’ from universities rather than a simple reliance on “new money”.

Over the decade, as Governments have changed and Ministries have come and gone, the sector has experienced the full range of policy and financial challenges: Minister Crean (Labor) began the cut in indexation, by offering the universities a loan to cover rising costs, while Minister Vanstone (Coalition) initiated across the board funding reductions. A major national review in 1997 (Rod West) was never implemented, while a radical blue-print of reconstruction (Minister David Kemp) was abandoned when it was leaked as a cabinet document. A full-scale Senate Enquiry across the country produced a large Report with an evocative title –– Universities in Crisis (2002) — to date no result at all. But never have we enjoyed a period of funding and policy stability. Changes and growth — from elite to mass system, almost parochial focus to global outreach — has marked the decade. Access and internationalisation have been proud achievements, but it has come at a cost for staff and students.

The recent Nelson Review has caught some of this and has quite rightly seen our university sector as being at the ‘Crossroads’. And the Minister has accepted the view of the Vice-Chancellors that the status quo cannot continue and that fundamental reform is vital: more investment of funds and more flexibility in operations are now crucial.

How well has the Nelson package then dealt with the need for a fundamental new deal for universities?

There is now a detailed AVCC assessment available — Excellence and Equity: Foundations for the Future of Australia’s Universities (June 2003), available at http://www.avcc.edu.au

I strongly recommend you read the document, both as a guide to what is at issue, but also because it signals where the battles need to be fought for our universities in the coming Parliamentary sessions.

In brief: the AVCC has welcomed the direction and coherence of the Nelson package, and has been pleased to see how Government has taken up the sector’s own proposals for reform, published last year in Forward from the Crossroads. In particular, we should welcome the turn around in the direction of Government investment as a proportion of Australia’s GDP, the new funded places, equity initiatives (including a significant Indigenous program), regional provision, and some flexibility in HECS charges as defined by universities and not by DEST.

But, the AVCC has also identified significant weakness in the Government package. No proper indexation. A disappointingly inadequate equity initiative. Too much compliance attached to new funds (not least as the Minister had spoken of a reduction of red tape). An inappropriate yoking of a significant rise in core grants 2.5 per cent in 2005 – rising to 7.5 per cent in 2007 to changes in governance and work-place relations. Some universities may never achieve these requirements. And changes to our international activities that will constitute a tax burden on a successful export industry, for little apparent benefit is also set out.

The Universities are ready to work with Government, Opposition and minor parties, as well as with other key stakeholders, to secure a major strengthening which reforms the reform package. But, how it will all transpire is an open question. Will Government amend its package and commit more funds? Will the Senate pass an amended package? Will Labor now announce a developed and budgeted alternate approach?

The education wars continue.

Professor Deryck Schreuder
Vice-Chancellor and President
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"IT'S NOT WHAT YOU KNOW, IT'S WHO YOU KNOW" — is a maxim often used in western business environments.

But in China, that idea is extended to encompass the philosophy of guanxi, the importance of personal relationships.

China is opening its markets to the world since joining the World Trade Organisation 18 months ago, and Western business people are finding that, to get a share of the Chinese market, they need to understand the culture. Guanxi can present a daunting challenge.

Xiaoli Lin (pictured) is researching her PhD in Information Management and Marketing and, as a Chinese national who spent her childhood watching her parents conduct their business using guanxi, she is in an ideal position to analyse the philosophy.

She is looking at how Chinese business people trade off guanxi with performance. "It is a difficult choice, choosing a company with whom you have guanxi or one which is performing better," said Xiaoli.

Her topic so intrigued the organisers of a prestigious summer school at the Massachusetts Institute of Technology that they offered her the one and only scholarship to their summer school, which would normally cost close to $US3,000 for a week.

The summer program is on individual choice behaviour: theory and application of discrete choice analysis to consumer demand and market share. It will be run by pre-eminent researchers in the marketing field, including a Nobel Prize winner for economics.

The development of discrete choice models represents a significant advance in the analysis of individual choice behaviour. Discrete choice analysis was originally developed by psychologists and has been extended to apply to choice problems in many fields.

"I am sure this program will be a great help to me with my PhD, as I have only just started work on it," said Xiaoli, whose summer session at MIT starts this week.

She explained that Chinese culture was a mixture of many different philosophies but three of the great old Chinese thinkers, Confucius, Sun Tzu and Tao Zhu-gong, all had ideas on guanxi. "That explains why it is so popular in China," Xiaoli said.

She said that Confucianism encouraged each individual to become a Yi-ren (righteous person). To be a Yi-ren, a person must return favours and increase the value of a favour given. People receiving the favour always feel indebted to others and find an opportunity to return the favour. The strong obligation of returning favour (or renqing) to others increases the social interactions between two individuals, and therefore guanxi is enhanced.

"So you can see that personal relationships and networks are much more important in Chinese business than in Western society," she said.

Another philosopher, Sun Tzu, took his treatise on the art of war and applied it to business, but turned it around, applying the concept of defence to 'the treatment of 'out-groups' by 'in-groups'.

The Chinese people have since formed the habit of looking at their out-groups (those they don't know or who are in competition with them) defensively. They look at them with suspicion and mistrust, while treating their in-groups with trust and love.

"In business, the out-groups lose huge advantages to the in-groups when they compete for opportunities," said Xiaoli. "As the Chinese say, 'business is like a battlefield'."

Finally, Tao Zhu-gong was also a military strategist, and he is thought to have been the first person to successfully apply military concepts and principles to the business world.

All this strategising took place before the birth of Christ. So guanxi has been firmly entrenched for more than 2,000 years.

"It is actually quite complex behaviour," Xiaoli said. "I will be returning twice to China during my research to study it again at close range."
We just don’t know at the moment.

material from interstate or overseas.

arrived more recently in soil or on vine

some time, just waiting for the right

pathogen got to WA,” says Ben.

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Vine Improvement Association has

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strategies. I am studying certain vineyard

more consumer friendly control

solutions. I am studying certain vineyard

practices that may inhibit the

germination of the spores in the soil, by

using organic mulches and other

amendments, in order to stop the

pathogen at the start of the season.

Last year Ben visited vineyards in

Germany, California and Chile to learn

about their experiences with grape
downy mildew. It is a different fungus

from powdery mildew which grape
growers guard against with sulphur

sprays.

“We think that in WA the biology of

the pathogen may be slightly different to

that found in Europe, in that it may have

adapted to WA’s hot, dry climate, while

the problem is much more severe in

Europe, because the pathogen thrives in

their wetter growing season.”

Ben has been working on the

problem for two years and he hopes

that another year of research will find

some answers for grape growers and

complete his PhD.

“I hope I’ll eventually be able to work

in the wine industry,” Ben said. “It’s

something I’ve always been interested in

since I started surfing down at Margaret

River. When I did my undergraduate

degree in the (then) Faculty of

Agriculture, UWA didn’t offer

viticulture or oenology (as it does now).

So, after I’d finished, I did the equivalent

of an honours year at Adelaide

University, with a postgraduate diploma

in viticulture, before I came back here

to start my PhD.”

Ben’s UWA supervisor, Professor

Sivasithamparam (School of Earth and

Geographical Sciences) has gathered

together what they believe is the biggest

grape downy mildew research group in

the world, with two PhDs (Ben and Mia

Williams), a Masters student (Robert

Underdown) and an Honours student

(Natalie Gilbert).

A not so noble rot

Continued from page 1 

It is caused by Plasmopara

viticola, a pathogen in the

same order of organisms as the jarrah

‘dieback’ fungus. Up to five years ago, it

was unknown in Western Australian

vineyards.

Grape growers have been controlling

the spread of the fungus by spraying

with copper before rain, but they are

keen to find a more consumer-friendly

and permanent method of preventing a

potential disaster in the wine industry.

PhD student Ben Killigrew is looking

for answers. His research is supported

by Australian grape growers through

the Grape and Wine Research and

Development Corporation (GWRDC).

“It is still a bit of a mystery how the

pathogen got to WA,” says Ben.

“Maybe it had been in vineyards for

some time, just waiting for the right

cConditions to proliferate, or maybe it

arrived more recently in soil or on vine

material from interstate or overseas.

We just don’t know at the moment.

“All imported material is strictly

quarantined, and generally importation

of live plant material is discouraged,

especially if the material can be sourced

locally. The State Department of

Agriculture with the Western Australian

Vine Improvement Association has

plantings of about 120 different grape

varieties and clones used as stock for

propagation and sale to growers.

However, in recent years, there has

been a lot of interest in for example,

certain Italian varieties that are not

available in WA, so many growers are

turning to imported material,” he said.

“Australian growers predominantly

spray with copper before rain to

prevent the spread of the pathogen,” he

explains. “And even though this spray is

acceptable to most in the industry,

many growers would like to implement

An honoured professor

Emeritus Professor Alan Morton was one of the UWA staff who was

honoured to receive a Centenary Medal.

But, somehow, his name was left off the list we published in the last issue of

UWAnews.

Professor Morton is a stalwart of the School of Human Movement and Exercise

Science. In 2001, he was made a Member of the Order of Australia in the Queen’s

Birthday Honours List. A person made a Knight of the

Academic Palms is known as a

Chevalier in France and is

recognised by the violet thread in

the jacket lapel.

H is colleagues won’t be
calling him Sir Andrew,

but Associate Professor

Andrew Hunwick (above)

has recently been honoured with

the equivalent of a knighthood

by the French government.

The Convenor of French Studies

in the School of European Languages

and Studies has been made a Knight

of the Academic Palms.

It is a decoration, awarded by
decree of France’s Minister for

National Education, to honour

people who have given outstanding

service to French education. The

award was created by Napoleon in

1808.

“It has been awarded to only a

couple of non-French people,”

Professor Hunwick said.

After completing an

undergraduate honours degree in

Latin and French at Adelaide

University, Professor Hunwick

studied for his doctorate at the

Sorbonne, passing with distinction in

1969. In recent years, he has been

invited to present some prestigious

lectures at his alma mater in Paris.

Once again, few foreigners are given

this opportunity.

A person made a Knight of the

Academic Palms is known as a

Chevalier in France and is

recognised by the violet thread in

the jacket lapel.

THE UNIVERSITY OF WESTERN AUSTRALIA • 16 JUNE 2003
It was the lure of gold that brought Noreen Vielreicher to Western Australia from Ireland. But she wasn’t a nineteenth century prospector, hoping to find a fortune. She was a twentieth century geologist, looking for a career.

At UWA, in the 1990s, Dr Vielreicher completed her PhD and met the man who would become her husband, Dr Richard Vielreicher. So she fared a lot better than some of her compatriots of 150 years earlier.

Noreen Vielreicher now has a prize even more precious to her than the gold that is at the centre of her research. She has won the 2003 Young Scientist Award from the international Society for Geology Applied to Mineral Deposits (SGA).

The award is offered every two years, worldwide, to a scientist under the age of 35 who has contributed significantly to the understanding of mineral deposits. The winner is nominated by a senior member of the SGA. Dr Vielreicher will travel to Athens to accept the award in August.

The €1,500 (A$2,500) prize money will pay for her husband, who works in the same field, to accompany her to Athens.

Noreen has a postdoctoral research fellowship with the Centre for Global Metallogeny (CGM), in the School of Earth and Geographical Sciences, where Richard also works on a casual basis.

“I was lucky enough to have the opportunity to study some geology at high school level, in Ireland, and I loved it. But when it came to choosing a university course, I wasn’t sure that I wanted to be a geologist, especially in Europe, where the job prospects are not so good. So I almost decided to study architecture. But I stayed with geology and I have never looked back.”

Dr Vielreicher’s current research project is looking at the relative and absolute timing of gold deposit formation in WA’s eastern goldfields.

“The research is funded through the Australian Mineral Industries Research Association Ltd (AMIRA) and is sponsored by eight major mineral exploration companies as well as an ARC linkage grant,” she said.

“We are trying to unravel the timing of gold mineralisation, in the context of the geological history of the area.

“It’s important because it will provide valuable pieces of evidence in resolving the problem of why gold is where it is, and what it is related to. For example, there is debate as to whether some of the gold in the WA goldfields is related to granites or other bigger scale tectonic events. If we can better define what is happening to the rocks at precisely the same time as the gold is being deposited then we can provide some constraints on these models.

“From an exploration perspective, if we can constrain the specific timing for gold deposition, then exploration companies can feed that data into their exploration models. Big international companies are really only interested in finding world-class deposits or, even better still, another ‘giant’ like Kalgoorlie. Hence, by providing them with some constraints on the formation of known deposits, they can better select targets in their search for the next big one.”

Dr Vielreicher said that previous studies, including those by Head of School Associate Professor Mark Barley and his group, had put in place an excellent framework from which she was working. Together with Professor David Groves, they were aiming to resolve some of the major issues relating to the timing of gold mineralisation.

“Western Australia is a wonderful place for studying mineral deposits and the CGM and the school in general provide an excellent base,” she said.
Scholarships smooth the tertiary study trail

Three first year students might be following quite different career paths, if it wasn’t for scholarships they have won at UWA.

Sarah Arnold had been offered a place in medicine, but declined the offer, choosing to pursue a degree in Natural Resource Management in the Faculty of Natural and Agricultural Sciences. Sarah is the winner of the annual Primary Industries bursary.

At the age of 17, Leonard Goulds is already a professional actor. Everybody thought he would go to the WA Academy of Performing Arts to further his career. But Leonard is studying the classics at UWA, as a recipient of one of the First-Year Arts, Humanities and Social Sciences Scholarships.

Another Arts scholarship winner, Jasmine Brickwood, is keen to develop a career in an area of writing, perhaps journalism. But she turned her back on specifically-tailored media courses at other universities and chose UWA, taking advantage of the new Arts course in communications.

There are more than 70 scholarships, bursaries and awards available to undergraduate students. Most of them are designed to meet the needs of students who might otherwise not be able to undertake tertiary studies.

They include scholarships for Indigenous students, rural students, students from non-traditional backgrounds, children of Vietnam veterans and students who choose to enter the Defence Forces. There are special scholarships offered by the residential colleges and others from government and business that pay or subsidise the cost of living at a residential college. Education and Medicine have bonded scholarships that require students to work in rural areas after they have graduated, in return for free education and substantial financial support during their studies.

The Albany Centre offers some scholarships for students to study in the Great Southern. There are also bursaries specifically for students from particular areas (for example, Moora and Mundaring) set up by individuals or groups who have an interest in educating the young people of that area. There are scholarships specifically for women, for members of church organisations and service clubs.

Business sectors, such as the mining industry, offer financial help to students who are interested in working with them when they graduate. And some areas of business (for example, the Shop Distributive and Allied Employees’ Association of WA) offer help to their members and their children.

Sport scholarships are offered to elite sports men and women and the Vice-Chancellery offers a range of awards. Awards of Excellence go to one graduate from every high school in the state, guaranteeing that student a place in the course of his or her choice at UWA. A total of 16 Diversity and Merit awards go to school leavers who come from non-English-speaking backgrounds, who experience economic hardship, who live in the far north, or who have a disability, any of which could preclude a student from taking on higher education.

The Vice-Chancellery also awards Vice-Chancellor’s Awards of Distinction to five outstanding school leavers who have excelled in the cultural, sporting, community or leadership arena, as well as academically.

But, apart from all the category-specific bursaries and one-off awards, the University has only a handful of scholarships for bright young students to carry them through the life of their first degree.

As the University of choice for so many prospective students, scholarships are not needed to lure a big proportion of the best students to UWA.

The most lucrative unbonded scholarship available for a first year student is the Primary Industries Bursary, offered to students enrolled in the Faculty of Natural and Agricultural Sciences. It is $7,000 a year for four years.

This year’s winner, Sarah Arnold, from Darlington, was one of an extremely high-achieving group of students at Perth College last year. Two of her classmates won Vice-Chancellor’s Awards of Distinction and have chosen to study medicine.

Sarah was on the brink of choosing medicine as a career when she heard more about the career opportunities awaiting an agricultural science graduate and the possibility of winning the bursary.

She changed her enrolment options and applied for the bursary, which involved writing an essay on the future of Western Australian agriculture, from her perspective.

“When I chose to study Natural Resource Management, none of my friends and family was surprised. They knew before I did that this was the path for me!”

She is paying her HECS with her scholarship and plans to buy a car to alleviate the three or four hours of travelling between the hills and the University by public transport.

Leonard Goulds and Jasmine Brickwood both completed high school at John Wollaston Anglican Community School in Kelmscott. Jasmine was Head Girl and was involved in many extra-curricular activities during her final year, so was surprised she did so well in her TEE.

Her leadership qualities and
experiences went a long way to her winning one of five Arts scholarships. She is now studying French, history, political science and anthropology.

Leonard had taken a lot of time out of school over the past few years because of his acting career.

“In Year 10, I was in Brisbane for a few months, rehearsing and performing Boy Hamlet (a role written especially for him by Robyn Archer). But I still managed to be dux of Year 10.

“I’ve always managed to combine my acting with studying and I’m doing it again now, studying subjects I just love — archaeology, classical languages, ancient history — and still acting.”

Leonard is rehearsing the lead role of Rob Coram in The Merry Go Round In The Sea, at the Playhouse next month.

Another Arts scholarship winner, Simon Hall, successfully combined music and politics with his school work, and it became a winning combination for him.

He was in five musical ensembles at Perth Modern School, playing trumpet in two and singing in three. He was chosen for the Sir Charles Court leadership camp in Year 10, which was the start of an ongoing involvement in politics, also encompassing the United Nations Youth Association.

He is now studying a combined degree in Arts and Law. Simon, Leonard and Jasmine, all from schools targeted by UWA, have scholarships worth $2,000 a year for three years.

The other two winners of the Arts scholarships, Alex Mossop and John van Bockxmeer, both went to Christ Church Grammar School. They are both undertaking combined degrees: Alex is studying Arts and Law and John is combining Arts with Medicine. Their scholarship is for $1,000 a year for three years.

Alex took a gap year after finishing school in 2001 and worked as a sports coach and a teacher’s assistant at Harrow, in London.

“It was a fantastic experience and one that I would recommend to anybody,” he said. At school, Alex was vice-captain of mock trials, and involved in drama and debating. He is using his scholarship to buy a laptop computer.

The trumpet has been John van Bockxmeer’s companion for the whole of his school days. His musical talent and his leadership ability landed him the position of captain of music at school last year. He was also vice-captain of debating, chair of the drama council and a senior school prefect.

While taking on a heavy academic load this year, John is still playing trumpet in his Jazz combo, Jazz Club 7, and is adjudicating school debating.

“I hope that studying arts might make me a better doctor, a more well-rounded person with wider views and experiences,” he said. “And who knows, it might even open up different career options for me … a medical journ-alist perhaps!”
**Buses and bikes are better**

A public transport pass that is cheaper than a UWA parking permit? Now that would be something.

And it’s one of the options that UWA’s new environment/transport officer, Naomi White, is hoping to achieve. Her role is to encourage UWA staff and students out of their single-occupancy cars and into alternative modes of transport, whether it’s buses, bikes, trains, car pooling or a good long walk.

Naomi has been employed jointly by the University and the City of Subiaco, which both needed somebody to help with reducing the number of cars in their environments. The University and the City of Subiaco are working together to develop transport strategies that complement each other.

Naomi has an environmental background, having done a lot of work with Landcare. On most days, she catches a bus to work. For the past few weeks, she has been getting to know the University and its transport and parking patterns. She will do the same in Subiaco, then divide her time between the two.

She and Gordon Walsh, manager of the UWA’s environmental services, are hoping to develop a version of the U-pass for University staff and students and the local community, modelled on the system created at the University of Washington, which could be used for travel on public transport, would be cheaper than a multi-rider and a realistic alternative to a UWA parking permit.

Gordon hinted that part of the plan to get people out of their cars could be to raise on-campus parking fees, but there has been no discussion about that yet.

Naomi said she had already started talking to Transperth about getting bike racks on buses, similar to the old pram hooks, so commuters could combine bikes and buses as they can bikes and trains.

“I would also like to see more showers and change facilities on campus for people who want to ride or walk to University,” she said.

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**College link set in ink**

**UWA’s Business School has established another landmark in its strategic planning, with an articulation agreement to guarantee entry to the School for international graduates of Canning College’s Uni-Direct UWA program.**

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The Vice Chancellor, Professor Deryck Schreuder, congratulated the Business School and Canning College on taking this step that “forges closer links between two institutions in which quality is the hallmark of their operations.”

The Associate Dean of the Business School, Ken Robertson, described the agreement as “a landmark for both the University and the College, building on a long and successful relationship.”

Students have to complete the Diploma Plus program with an average mark of 65 per cent for entry to the Bachelor of Commerce, or 60 per cent for the Bachelor of Economics. In addition, they must satisfy English language proficiency requirements.

The first students to enter under this agreement will begin in July 2004.
Picture a science fiction movie in which the hero, fed up with an increasingly polluted Earth and in search of a new home, jumps into a space capsule and sails out beyond our solar system powered only by the pressure of sunlight.

This may sound crazy, but Florin Garoi, a visiting academic from Bucharest University Romania, believes it’s possible. Indeed NASA is also working on this technology, to put the pressure of light to good use.

In the basement of the Physics building, Florin is working on a physics problem which has intrigued talented minds for centuries: can light really exert enough force to move an object? ‘Yes’, says Florin. ‘It is now possible to achieve a movement of about 1.5 mm on a specifically designed test mass of 40 grams.’

Even though his research is yet to be tested in the laboratory, his theoretical findings are important in the applications of lasers in experimental work. Florin works with the Gravity Wave Group and Professor David Blair. ‘His findings are very exciting’, said Professor Blair. ‘This is the first time radiation pressure will be used for a mechanical purpose.’

Florin explained that his team’s approach was different from other groups around the world. ‘We are doing the same basic research, but we are looking for the possibility of using photon radiation to move the test mass.’ Florin said that, if successful, his method would be an effective way to adjust the equipment with minimal disturbance in the gravity wave detection process.

Florin is planning to extend his research project and stay at UWA to complete his PhD. He is working in collaboration with Professor Blair and Dr Xiuting Chen from UWA, Dr Chunnong Zhao from Edith Cowan University and Dr Peter Veitch from the University of Adelaide.

Thanks to research academics like Florin, we are now a step closer to developing new technologies that may enable us to achieve objectives we have only dreamed of or seen in a Hollywood movie. It may be only a matter of time before we detect gravity waves, and one day develop light powered space capsules that could be blasted out of our solar system.
Venture capital ensures Alison’s adventure

Alison Fowler, the physics student who was chosen to attend an exclusive summer school in Durham, is on her way – with her bills paid.

Dr Andy Sierakowski, Director of UWA’s Office of Industry and Innovation, read about Alison in the May 19 issue of UWANews and immediately went to work on his contacts to raise money for Alison’s trip of a lifetime.

She is the only Australian among 24 students who will spend six weeks with some of the world’s top astrophysicists and particle physicists. Winning a place meant the summer school was paid for, but Alison had to find $800 to top up her airfare and other expenses.

Two Perth-based venture capital companies, Foundation Capital, and QPSX, who have been involved with commercialising UWA inventions and discoveries, through the Office of Industry and Innovation, came to her rescue.

Each company has given Alison a cheque for $400, which they consider a good investment in a leading scientist of the future.

Alison said she was overwhelmed by their support and the help from the Office of Industry and Innovation.

Thelma Koppi says her choice of sport is bridge.

“Yes, bridge was a demonstration sport at the last Winter Olympics,” said Dr Koppi, a senior lecturer in microbiology, in the School of Biomedical and Chemical Sciences.

“Bridge is a rediscovered passion from my youth. Family and career in the last umpteen years had left little time for indulgences such as hobbies, until now. Bridge is a great game: it stimulates the mind, it is social, you can discuss hands afterwards (over a glass of wine!), and there are rewards (playing the cards perfectly, tournament titles or monetary). The great thing about bridge is that anybody can play it at any level. You can take it up at any age, play it at home or in clubs.”

Thelma started playing bridge about 20 years ago. She was chosen for the Queensland state youth team after only one year of playing. After moving to Perth she played for Western Australia in the Open Team (she was the only woman in the team) at the Australian National Championships. She and her partner also held various WA state titles such as Open Pairs Champion and Mixed Pairs Champion. “One year we even got to the dizzy heights of Australian Mixed Pairs Champions. This was short lived as there followed a succession of four children and a full time academic job and the only game I could play at that time was patience!” she said.

Before Thelma took up the academic position at UWA, she had been a research scientist. During this time she started to teach bridge at evening classes. In fact it was teaching bridge that led to a passion for teaching in general, and to a new career as an academic at UWA.”

This year, Thelma has been playing bridge one night a week at her bridge club, entering a few events and trying to polish up her card play. She and her husband Jonathan have been chosen as Team Captains for the West Australian teams (Womens’ and Open Team respectively) to play at the Australian National Championships in Darwin next month.

“Bridge has helped me tip the scales a bit towards a work-life balance rather than just work-work. You get to meet all different types of people (it’s how I met my husband – playing bridge), it’s inexpensive to play (only $4 at a club), and it’s usually played in local clubs, in air-conditioned comfort.”

Thelma used to be a member of the now defunct UWA bridge club and it is something she would like to see re-kindled. “We have great players at UWA, for example, Paul Brayshaw from Physics has represented Australia and I’ve seen a few of those guys from Chemistry at the West Australian Bridge Club. Wouldn’t it be good for social interaction if UWA had a club again?”

If you would like to find out more about bridge, Thelma is happy to help you. Her husband Jonathan is a bridge teacher and national bridge event director. Call her on 9346 2215 or email her at tkoppi@cyllene.uwa.edu.au
Magnetic group attracts Silva

Magne ts form the basis of computer technology, so the speed at which magnets can act and react has become extremely important.

The Nanomagnetics and Spin Dynamics (NSD) group in the School of Physics recently hosted Dr Tom Silva, from the National Institute of Standards and Technology (NIST) in Colorado, to work with them on a development of a high speed magnetometer which measures magnetisation at very short time scales.

At NIST, Dr Silva had created a new type of magnetic experiment called the Pulsed Inductive Microwave Magnetometer (PIMM). The technique provides the most accurate measure of magnetic dynamics possible to date and has already uncovered new microscopic phenomena related to physical processes controlling microwave absorption by ferromagnets.

Data obtained with this equipment is of particular interest to the computer industry because it can measure very accurately and very simply the speed of magnetisation reversal, which directly relates to how quickly information can be recorded in computer hard disks. About 85 to 90 per cent of all digital information in the world today is stored magnetically and the industry associated with this is worth $150 to $200 billion annually in gross sales.

Dr Silva’s three-month visit is part of a collaboration that began with Associate Professor Bob Stamps and the NSD group and is supported by funding from the Gledden Foundation. The group including ARC Postdoctoral fellows Dr Rob Woodward and Dr David Crew, and honours student Kim Kennewell, have been working with Dr Silva, to build the world’s second PIMM at UWA.

Dr Silva explained that much of the work at the National Institute of Standards and Technology is in support of metrology, which is all about creating and maintaining standards for measurement. This work is only successful if the metrology developed at NIST is adopted by other researchers.

“This piece of equipment builds upon a fundamental property of magnets that Einstein proved in his one and only effort in experimental physics: magnetism has momentum,” Dr Silva said. He explained that that momentum created a precessional force against which a magnet must fight as it reverses its magnetism. “This equipment allows us to see the precession – which is the ringing or resonance of the magnet,” he said.

“The equipment will also be used to investigate several other phenomena in magnetic systems, including how small you can make pieces of information that are stored on your hard drive before they become unstable,” said Dr Woodward. Kim Kennewell’s honours project involves looking at high speed effects on very small magnetic particles. Dr Crew is working on understanding resonance effects in coupled magnetic materials, and received a UWA Research Grant to buy one of the world’s fastest, low-noise pulse generators — a vital component of the PIMM.
A Graduate Entry Program for the Medical School at UWA

The question of whether to develop a Graduate Entry Program (GEP) for the Medical School at UWA is not new. The issue has been debated on several occasions and each time, for a range of reasons, the concept has not been pursued. However, the question is once more a hot topic as we enter the final phases of implementation of a reformed six year undergraduate curriculum.

In a rapidly changing world, the issue takes on a new significance and must be examined in the context of challenging forces for change to medical curricula.

Independent consultants to the Faculty have produced a series of documents that have guided our thinking. What is absolutely clear is that we cannot rest on our laurels and attempt to remain satisfied with recent reforms to our medical curriculum. The rapidity and the significance of changes in medical education elsewhere make it necessary that we view change as part of a continuing process of evolution.

There is an overwhelming case in favour of increasing the number of medical graduates in Western Australia. This has been recognised by the State Government whose spokespersons regularly express this view in media statements.

We have made all possible efforts to secure more medical student places for our State and have provided both the WA State Government and the Federal Government with critical contemporary analyses of the status of the supply and demand.

The WA Minister for Health, Mr Bob Kucera, the Deputy Vice-Chancellor of UWA and the Vice-Chancellor of Notre Dame University (NDU) have supported the case for additional medical places for WA. The Federal Minister for Health has confirmed that our base enrolment will increase to 185 as of January 2004, with 30 of these additional places reserved for a new medical school subject to Australian Medical Council Accreditation and State Government support for clinical places. UWA will work with NDU and Curtin University to develop the best arrangement for the State.

The issue of whether we have an institutional partner or partners (e.g. Notre Dame University), in the development of a GEP has been the subject of substantial and on-going deliberation at UWA. Partnerships should be based on the high probability of gaining benefits for the community, the health service, prospective and current students and for all partners, particularly in terms of sharing costly resources, attracting cutting edge expertise in medical education and research and attracting and exchanging students.

Critical issues include: badging of the degree; governance structure to ensure high quality education; and the respective benefits to the State of possible structures such as a collaborative GEP or two separate GEPs.

These and other hurdles must be resolved to the mutual satisfaction of the community and all collaborating institutions before government approval and AMC accreditation and course implementation is achievable.

UWA remains committed to introducing a GEP. Benefits include:

- the recruitment of graduates from other fields who have given deep consideration to Medicine as a career and who have advanced learning and problem solving skills;
- the likelihood of lower attrition rates amongst students who are more certain about their career pathway;
- the attraction of students from more diverse academic backgrounds, resulting in broader social skills in general practice and deeper scientific backgrounds for specialization;
- provision of opportunity to those with educational disadvantage in secondary school (e.g. in some rural areas – particularly important in the Western Australian context), to study medicine based on subsequent academic achievement;
- provision of increased flexibility with respect to introducing curriculum change, which will be necessary to meet the demands of the proliferation of medical knowledge;
- the provision of a more commercially competitive model in terms of attracting overseas students.

We have now moved beyond speculation and have begun to consider: what GEP model we should adopt; how large it should be; what relationship it should have to our current undergraduate program; the financial implications for the Faculty of creating a GEP; and the process of implementation.

This new graduate entry course aims to be available to enroll its first students in 2005.
Australia’s Own
Prestigious Postgraduate Scholarships

Up to $150,000 over three years
Eight inaugural Awards

The Anzac spirit is being rekindled with the General Sir John Monash Foundation currently calling for nominations for the Monash Awards which are being made available annually for postgraduate study overseas at the world’s best universities, starting in 2004. Eight awards will be announced in December 2003.

The ‘spirit’ will be demonstrated by Australian citizens having been ‘put to the test’ through demonstrated academic excellence and leadership and ‘mateship’ through community service.

The Awards will provide a benefit of up to $150,000 over three years to assist Australian postgraduates undertake a study programme in any field leading to the degree of PhD/DPhil or equivalent, or to a relevant professional master’s degree.

The Awards are being conducted by the General Sir John Monash Foundation, a non-profit organisation incorporated to recognise academic excellence and leadership. The Awards are part-funded under the Higher Education Innovation Programme of the Department of Education, Science and Training. They are not linked with Monash University.

Visit the Foundation’s website on www.monashawards.org for further details.

Dr Gary Kendrick and Prof Diana Walker, Plant Biology: ‘Integrating seagrass recruitment and growth at the shoot scale with temporal and spatial dynamics of seagrass meadows in marine landscapes’—$60,000 (2003-05).

Prof Johannes Lambers, Plant Biology: ‘Carboxylate exudation and phosphate nutrition in Hakea Prostrata (Proteaceae)’—$300,000 (2003-05).

Prof Mark Bush, A/Prof Xiaohua Zhu and Prof B. R. Lawn, Mechanical Engineering: ‘Evolution of contact damage in layer structures’—$165,000 (2003-05).

Dr Karol Miller, Mechanical Engineering: ‘Real-time computer simulation of human soft organ deformation for computer-assisted surgery’—$243,000 (2003-05).

Dr Murray Baker, Prof Allan White and Prof K. J. Cavell, Biomedical and Chemical Sciences and Crystallography Centre: ‘Cyclophane carbene complexes as catalysts: an integrated synthetic, structural and mechanistic approach’—$255,000 (2003-05).

A/Prof Andre Luiten, Dr Eugene Ivanov and A/Prof Michael Tobar, Physics: ‘Creation of new precision optical and microwave technologies and their application to testing the fundamental of physics’—$1,855,621 (2003-07).


Dr Sandra Saunders and Mr B. Radford, Earth and Geographical Sciences: ‘Quantifying the effects of sediment (from drilling and dredging) on reef coral’—$25,032 (2003).

Mr B. Radford, Dr A. Moeller and Dr S. M. Stick, ICHR: ‘Validation of breath condensates to identify using yeast two hybrid technology’—$66,000 (2003-04).


Tuesday 17 June
SOIL SCIENCE AND PLANT NUTRITION SEMINAR
Phosphorus' by Susan George, Mineralogy, 4pm, Agriculture Lecture Theatre.

ANATOMY AND HUMAN BIOLOGY SEMINAR
'The sex life of the foot and the shoe', Mr Cameron Kippen. If ever an article of clothing represented a symbol of social status, then the shoe remains unmatched. Footwear throughout history has supplied a social ritual, the knowledge of which indicated breeding. However fashion is not an arbitrary phenomenon but instead a sign of the times (Zeitgeist). Throughout history, shoe styles have taken some bizarre turns with the glititerey of many European courts in different styles to 'outshoe' their rivals. Fashion mores often lasted centuries yet, to date, no satisfactory explanation has ever been proposed to explain these bazaar events. The origins of slippers have been grounded in the common belief the disease did not exist in Europe before 1492, however there is now mounting evidence to contradict this. In an entertaining way, the author attempts to explain the historical significance, which includes resurgence of paganism, acceptance of chivalry, safe sex, and the origins of foot orthoses. Room I.81, Anatomy and Human Biology.

Wednesday 18 June
ENVIRONMENTAL DYNAMIC SEMINAR
'Migration of non-aqueous phase liquids through fractured geologic systems', Dr David Reynolds, CWR. 4pm, Blakers Lecture Room, Ground Floor, Mathematics Building.

AFUW(WA) ANNUAL BIRTHDAY DINNER
Guest speaker: Her Honour Judge Kate O'Brien. Cost: $50 incl. three-course dinner, wine and soft drinks. Book a table (4, 6, 8) together. Karrakatta Club, Sherwood Court, Perth. 6.30 for 7pm. RSVP to Karen on 9386 3570 or email afuwwa@home.it.et.au by 13 June.

Thursday 26 June
FREE PUBLIC LECTURE
'Covering continents: the work of newsmedia foreign correspondents', Professor Ulf Hannerz. The foreign correspondents of newsmedia have an important part in shaping our understandings of the world and its regions. This lecture draws on an anthropological study of the backgrounds and everyday working lives of foreign correspondents working for newspapers, news agencies, radio and television. Extensive interviews were carried out with correspondents particularly in Jerusalem, Johannesburg and Tokyo. The themes of reporting from the Middle East, Africa and Japan are exemplified against the background of the working conditions correspondents experience on these beats. 6pm, Geography Lecture Theatre 1. For further enquiries contact Filomena D'Cruz at fdrcruz@admin.uwa.edu.au or phone 9380 1340.

Thursday 26 June to Saturday 5 July
THE EUROPEANS: SYMPOSIA SERIES
The Europeans Symposia Series, organised by the Institute of Advanced Studies, has a special emphasis on migration, racisms and the construction of the 'Other' in Europe and Australia. The Europeans Program consist of the following three symposia: 'Migrancy and its futures', 26-28 June; 'Intimacy and Sexualities in a Mobile World', 1 July; 'Italian Diasporas Share the Neighbourhood', 2 July. This is is followed by the The Australasian Centre for Italian Studies (ACIS) Second Biennial Conference—Italians and their Others: representations, identities and exchanges at home and abroad—held from 3 to 5 July. View the preliminary program for ACIS and register at http://www.arts.uwa.edu.au/ acis/news.html. Full registration: Migrancy and its Futures Symposium, June 27 to 28, $30; Intimacy and Sexualities Symposium, July 1, $20; Italian Diasporas Share the Neighbourhood, July 2, $20; OR $60 for the 3 sessions (4 days). Students $10 per session or $20 for all 3 sessions (4 days). Registration fees includes lunch, morning and afternoon tea. To register please email the IAS at iaseuropeans@ admin.uwa.edu.au or telephone (08) 9380 1340 or register on-line through this email address.

Friday 20 June
BIOCHEMISTRY AND MOLECULAR BIOLOGY SEMINAR
'Molecular portraits of cancer: when will they change clinical practice?' Dr Barry Iacopetta, General Surgery, QEII. 1pm, Simmonds Lecture Theatre.

Friday 27 June
CLIMA SEMINAR
'Doubled haploid research in chickpea and field pea', Dr Janine Cros; 'Wild Cicer germplasm characterisation: a molecular approach', Dr Fucheng Shan. 4pm, CLIMA Seminar Room.

FREE PUBLIC LECTURE
'The global hierarchy of values: tracking global power through the intimacies of the working body', Professor Michael Herzfeld. Many people assume that globalisation is a process of homogenisation. The speaker will challenge that view, arguing instead that the spread of an apparently worldwide interest in tradition, while producing similar patterns of domination everywhere, also provokes highly localised forms of insubordination. These, however, are not so much the marks of a heroic workers’ resistance as they are the tools whereby the powerful at every level block others access to wealth and status. What is much globalised and perpetuated is not so much the glory of local culture as the implacable force of political might. Using the example of artisanship in modern Greece (but with a comparative eye on other parts of the world), the speaker will show how this pattern is reproduced at every level of inequality, so that its absorption into the daily habits of movement and posture of workers is also reproduced in the subjection of their home regions or nations to the larger interests of international forces. 6pm, Geography Lecture Theatre 1. For further enquiries contact The Institute of Advanced Studies at iaseuropeans@ admin.uwa.edu.au or phone 9380 1340.

ADVANCE NOTICE
PERTH MEDIEVAL AND RENAISSANCE GROUP TALK
'Penis trees and popular culture in the late Middle Ages and early Renaissance', Dr George Ferzoco, Leicester University, UK. 7.30pm, English Common Room, G14 Arts Building.

Please supply Campus Diary entries to Joanna Thompson by June 18 for the June 30 issue.

Telephone: 9380 3029
Facsimile: 9380 1162
Email: joanna.thompson@uwa.edu.au
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Women’s Childbearing Choices

What are your plans?
Do you intend to have children or not?

If you are older than 18 years of age and don’t yet have children, you are invited to participate in a study of the social and psychological factors that play a part in women’s childbearing choices.

Willing participants can complete an internet survey, which will add to our understanding of women’s childbearing choices. The survey will take approx 20-30 minutes of your time.

The survey can be found at

www.ocs.mq.edu.au/~dshep003

available to 30th June, 2003

A paper and pencil version of the survey can be obtained by mailing your name and address to

D Shepherd, Reply Paid 82, Concord West, NSW 2138.

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research).

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FULLY FURNISHED APARTMENT OR TOWNHOUSE close to UWA for out-of-town 'nest-freak' couple (childless and animal-less) newly arrived to take up positions at Uni. Prefer house-sitting arrangement but not adverse to reasonable rental. Duration is not an issue. Contact Paul at 9809 4965, paul@maths.uwa.edu.au.

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RENAULT 19 RT 1993, 5-door hatch, auto, air-conditioning, tinting, log book, long registration, only 74,000 km, nicely-presented and well-looked-after car. $7500. Phone Peter on ext 3025 or 9387 7819.

MELAMINE DESK, UWA manufactured, cream with Jarrah trim. 150cm. Plus sturdy matching office chair. $200. Phone Peter on ext 3025 or 9387 7819.

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