

campus news

University of Wollongong



Emerging researchers boost grants success



Helping to boost the University of Wollongong's success in the hotly-contested Australian Research Council grants are up-and-coming researchers including (from left) Dr Jenny Beck (Biochemistry), Dr Clive Schofield (Maritime Policy), Dr Adam Clarke (Psychology), Mr Yue Zhao (Superconducting and Electronic Materials) and Dr Willy Susilo (Computer Science).

UOW funding above national average

New researchers, particularly in the areas of science and engineering, have helped boost the University of Wollongong's performance in the hotly-contested 2006 Australian Research Council grants announced by Education, Science and Training Minister Dr Brendan Nelson.

Wollongong's overall success rate for its researchers was 26.9 per cent against a national average of 24.4 per cent.

Under the Discovery Projects Scheme (which represents the largest allocations of grants), UOW researchers were awarded the 11th highest level of national funding overall with 25 grants totalling \$7.4 million.

"Given the decline in the national success rate from 31 per cent in 2005 to just over 24 per cent in 2006, this is an excellent result for the University," Deputy Vice-Chancellor (Research) Professor Margaret Sheil said.

Professor Sheil said the Faculty of Science stood out with 12 Discovery projects and two Linkage Infrastructure and Equipment grants.

Among other faculties, Engineering scored six Discovery grants, one Linkage International grant and one Linkage Infrastructure; Informatics received three Discovery grants and a Linkage grant; and Health and Behavioural Sciences also received three Discovery grants.

One of the highlights from the Minister's announcement was the awarding of two prestigious Queen Elizabeth II Fellowships to Dr Dan Li (Science) who will join the University's Intelligent Polymer Research Institute from the University of California in Los Angeles and Dr Clive Schofield (Centre for Maritime Policy, Faculty of Law). Only 16 QEII Fellowships are awarded nationally.

Dr Schofield is chief investigator together with Professor Stuart Kaye and Professor Martin Tsamenyi into a \$660,970 five-year project looking at "Maritime Legal Practice and Policy in Southeast Asia and the South Pacific: Synergies and Challenges for Australian Trade and Security".

Dr Li is the chief investigator of a research team

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Campus News is produced for community, industry, government and other educational institutions as well as staff, students and graduates of the University of Wollongong. It provides an overview of University news and achievements on a quarterly basis.

Submissions for publication can be made to the Media Unit. Phone (02) 4221 5942 or email media@uow.edu.au

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The Herceptin debate: what price a woman's life?

By Professor Don Iverson

Professor Iverson is Dean of the Faculty of Health and Behavioural Sciences at the University of Wollongong. He has a special interest in breast cancer research, serving on the Board of Directors for the National Breast Cancer Centre and the NSW Cancer Council Research Committee. He has also written a report for the National Breast Cancer Foundation on breast cancer research priorities.

What price do we as a nation put on a woman's life?

Breast cancer is the number one cancer-related killer of Australian women, yet the Therapeutic Goods Administration (TGA) has not yet given approval for the use of a drug that is recognised as the biggest breakthrough in breast cancer treatment in two decades.

The drug – Herceptin – is a therapeutic antibody treatment that has previously been shown to increase survival time among women whose breast cancer has spread. Three recent studies have demonstrated that Herceptin dramatically reduces the mortality rate in women who have HER-2 positive early breast cancer. Herceptin has been approved by the TGA for use in women whose breast cancer has spread, but use of the drug among women with early breast cancer has not been approved by the TGA.

Herceptin is one of the new family of so-called "targeted" drugs that are designed to follow genetic pathways in the body. Unlike chemotherapy, which typically results in damage to healthy organs and tissue, this extraordinary new drug is designed to specifically target the cancer and the HER-2 protein while having very few damaging side-effects.

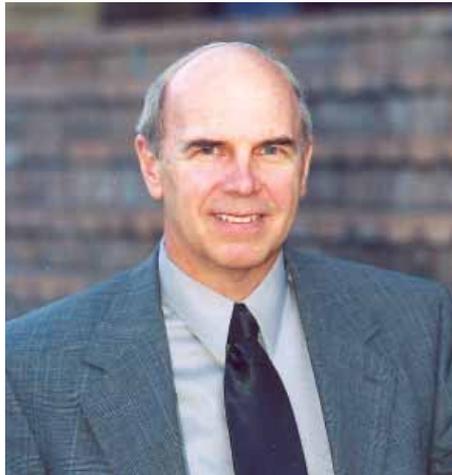
HER-2 occurs in one in four women with breast cancer, but those who have it are at an especially high risk of developing aggressive breast cancer. Their survival rate after treatment is considerably lower than women who have other forms of breast cancer.

The recent trials on Herceptin found that women with early breast cancer who took the new drug after surgery (mastectomy or lumpectomy) and chemotherapy reduced their likelihood of having a recurrence of breast cancer by 52% and reduced their likelihood of dying from breast cancer by 33%.

These are stunning results, and should be great news for Australian women, especially those who are HER-2 positive. But without TGA approval for use in the treatment of early breast cancer, patients must pay for the drug. And this is the problem.

Herceptin currently costs around \$60,000 – enough to put it out of reach of most Australian women. It is clearly an expensive new drug. However, the nation should accept that treating eligible women with Herceptin is an investment that is entirely justified given its demonstrated ability to reduce breast cancer recurrence and improve survival rates.

Obviously the loss of a life has a tragic impact on the victim and her family, so it should be our priority to explore all reasonable avenues to save that life.



Professor Don Iverson

But if legislators and the TGA need more convincing of the worth of this \$60,000 investment, they can simply be pragmatic and count the cost to the nation of the loss of a life. Consider the example of a 45-year-old mother of two. If she dies of breast cancer, then the nation loses many years of her productive life, not to mention the childcare and other costs of caring for her family, and the psychological impact that the loss of their mother will have on her children.

As a nation we seem prepared to meet the hundreds of thousands of dollars that major

transplant surgery costs, the thousands of dollars spent each year on patients requiring associated haemodialysis, and the ever escalating costs associated with high-tech medical procedures.

On that basis, we shouldn't quibble about spending \$60,000 for Herceptin. It really is a small price to pay when its capacity to save many women's lives has been proven beyond doubt.

Having said that, a recent study published in the British Medical Journal examined the increase in the cost of pharmaceuticals over a 14 year period in the province of British Columbia. The study found that 80% of the increases in government expenditure on pharmaceuticals were due to the introduction of 'me-too' drugs – drugs that replaced existing drugs but without any significant clinical benefit. Less than 20% of the increase was related to 'breakthrough' drugs - drugs that had a significant clinical benefit over existing drugs or drugs that are effective in treating conditions for which no viable treatment previously existed.

Herceptin for the treatment of HER-2 positive early breast cancer is one such drug. It is entirely feasible that the cost of Herceptin and other 'breakthrough' drugs could be paid for if the TGA did not allow the ever increasing number of 'me-too' drugs to be approved. This is an important issue as it is reasonable to expect a number of 'breakthrough' drugs will be released in the near future as the basic research conducted over the past decade begins to pay significant benefits. The Commonwealth needs to address this situation immediately.

Prostate cancer is the most common cancer in men.

Like breast cancer, prostate cancer is an insidious and deadly disease. Over 11,000 cases of prostate cancer are diagnosed annually in Australia, and treatment of prostate cancer all too frequently results in severe complications, notably incontinence and impotence. Next to lung cancer more men die from prostate cancer than any other cancer. To date, there is no conclusive clinical trial data to demonstrate that treatment of prostate cancer prolongs life.

Given this scenario and the fact that the political decision-making process is dominated by males, one has to wonder if a drug was released tomorrow that had as dramatic an impact on prostate cancer recurrence and survival rates as Herceptin has on early breast cancer whether that drug would be 'fast tracked' for approval by the TGA.

When any 'breakthrough' drug has been demonstrated through internationally accepted clinical trials to have a significant benefit on cancer recurrence and/or survival rates, the drug should be 'fast tracked' for approval by the TGA. The only benefit from delaying the decision to approve such drugs is cost savings – but this occurs at the cost of lives that could be saved. The Federal government should resolve this and future similar situations by requiring the TGA to immediately 'fast track' approval of Herceptin for the treatment of early breast cancer. **CN**

Key facts about breast cancer in Australia

- One in 11 women will be diagnosed with breast cancer before the age of 75.
- Breast cancer is the second most common cancer among Australian women, after non-melanoma skin cancer.
- A total of 2594 women died from breast cancer in Australia in 2001 (last available national figures).
- The risk of breast cancer increases with age. Almost 24 per cent of new breast cancer cases diagnosed in 2001 were in women aged 20-49; 49 per cent in women aged 50-69; and 27 per cent in women aged 70 and over.
- The incidence of breast cancer in women rose from 100.5 cases per 100,000 population in 1991 to 117.2 cases per 100,000 population in 2001; an average increase of 1.4% per annum.

Reference:
Statistics from Cancer in Australia 2001, Australian Institute of Health and Welfare (AIHW) and Australasian Association of Cancer Registries, 2004).

ARC grants success

continued from page 1.

involved in a \$554,000 grant over five years for the study of "Electronically Conducting Nanofibres and Assemblies".

Professor Sheil said the new research grants would build on the strengths of the University.

"It's obvious from the results that new appointments we have made to the University have greatly boosted our overall research capability, especially in the science and engineering disciplines," Professor Sheil said.

UOW also received funding for three Linkage Infrastructure grants, two Linkage grants and one Linkage International Award. These included a Linkage grant awarded to the Business School on supply chain management.

A full list of the successful UOW researchers and the titles of the funded projects can be found at the following web address:

www.uow.edu.au/research/rso/grants/outcomes/external/ CN

Illawarra Coal sponsors Science Centre

BHP Billiton's Illawarra Coal has committed \$75,000 to a three-year sponsorship of the University of Wollongong Science Centre and Planetarium.

NSW Minister for Natural Resources, Minister for Primary Industries and Minister for Mineral Resources Ian Macdonald officially launched the Illawarra Coal Science Theatre at the Science Centre on 28 November. The Minister joined Illawarra Coal President Col Bloomfield, UOW Deputy Vice-Chancellor (Operations) Professor John Patterson and community and business leaders at a special ceremony to announce the sponsorship.

Illawarra Coal's General Manager of Sustainable Development Wendy Tyrrell said the sponsorship was worth \$25,000 annually over three years and was a perfect fit for the company as it focused on community support and science.

"Science is the basis we use when we are working out where the coal is under the ground, then when we are planning how to extract it in the most environmentally and financially sound ways possible and again, years later, when we have finished mining and are ready to rehabilitate the mine sites," she said.

The sponsorship precedes the company's support – set to total \$50,000 – of a major exhibition on dinosaurs, fossils and coal to be mounted at the Science Centre in 2006.

The Science Centre and Planetarium attracts more than 50,000 visitors each year. CN

New publication profiles UOW's research strengths



Deputy Vice-Chancellor (Research) Professor Margaret Sheil with the University's *RESEARCH PROFILE 2005-2006*.

The University of Wollongong has launched a new publication, *RESEARCH PROFILE 2005-2006: Excellence, Leadership and Innovation* to showcase some of the University's outstanding research programs and researchers.

Deputy Vice-Chancellor (Research) Professor Margaret Sheil said the new publication focused on the University's research strengths, new staff who had been attracted to UOW, and externally funded research centres – rather than being a comprehensive report on all the research being conducted at UOW.

"It will be a really important communication tool for staff when they visit other universities in Australia and overseas," Professor Sheil said. "They'll be able to use it to demonstrate the world-class researchers we have at this University."

"It will also be very useful in recruiting research staff and attracting PhD students to the University, and for promoting the University to potential research partners."

The research profiles range from the work being done by the Institute for Superconducting and Electronic Materials and the Intelligent Polymer Research Institute, to the search for healthier foods at the Smart Foods Centre and the National Centre of Excellence in Functional Foods and the world-

leading archaeological dating work performed by scientists at UOW's GeoQuEST Research Centre.

Other Research Centres profiled in the publication include the Centre for Maritime Policy, Institute of Biomolecular Science, Institute for Conservation Biology and the Telecommunications and Information Technology Research Institute.

In her introduction to the Report, Professor Sheil said:

"The University of Wollongong has built its successful research base and reputation through a concerted strategy of focusing on our strengths.

"We have continued to expand and grow areas where we have traditionally had world-leading research groups. These include information and communications technology (ICT), engineering and materials engineering and the sciences. More recently, our research effort has been growing in new areas such as functional foods, health services research, Asia Pacific studies and international law."

"Clearly, quality people are fundamental to excellent research. UOW attracts and retains outstanding staff through a combination of our strong research reputation and the fact that the local region offers a fantastic lifestyle. Our cohort of over 1000 higher degree research students also makes an important contribution to the excitement in our research." CN

Malaysia-Australia conference strengthens ties

Globalisation and the changing local economy are affecting the nature and direction of higher education, including public and private universities.

A three-day forum at the University of Wollongong in November assessed just how big that impact is on Australia and Malaysia and analysed the changing nature of universities and the role of higher education in promoting national growth and regional identity.

The forum will result in the publication of a set of research resources suitable for use in teaching. A second meeting has been planned for 2006 in Malaysia to strengthen and sustain ongoing regional collaboration, linkages and dialogue.

The forum was funded by UOW's Centre for Asia Pacific Social Transformation Studies (CAPSTRANS) and the International Centre for Excellence in Asia Pacific Studies at the Australian National University.

Dean of the Faculty of Arts Professor Andrew Wells and Associate Professor Peter Kell from the Faculty of Education joined a number of experts and academics from Malaysia who spoke about developing an awareness of higher education issues in Malaysia and Australia. Also in attendance were interested members of the university community from Australia, Malaysia, China, Thailand, New Zealand and Taiwan.

"The forum generated enthusiasm and energy for a network of researchers interested in working on issues in higher education," said forum convener Professor Kell.



Malaysia-Australia Higher Education Forum participants (left to right) Dr Roslyn Westbrook (UOW), Associate Professor Koo Yew Lie (UKM), Professor Ambigapathy Pandian (USM), Associate Professor Peter Kell (UOW), Dr Tim Scrase (UOW), Professor Michael Singh (UWS), Associate Professor Yuping Wang (Yuncheng University, China), Associate Professor Li Pang (Nanyang University China) and Dr Rozinah Jamaludin (USM)

"Outcomes included a commitment by members of the forum to maintain a regional network with a view to meet again in 2006 to continue the bi-lateral dialogue. Part of this dialogue will be the production of an edited publication of the papers."

Professor Kell said themes covered in the conference included transnational markets in higher education in Malaysia, international student experiences in Malaysia and Australia, private higher education institutions and the practicalities of international bi-lateral research collaborations.

Malaysian guest speakers included the former Director of the National Institute of Higher Education Research at the Universiti Sains Malaysia Professor Morshidi Sirat; Deputy Dean of the School of Humanities at Universiti Sains Malaysia Professor Ambigapathy Pandian; Deputy Dean of Education and Social Development at Universiti Malaysia Sabah Dr Vincent Pang and Associate Professor Koo Yew Lie from the School of Language and Linguistics at the Universiti Kebangsaan Negara. Academics from the Australian National University and the University of Western Sydney also delivered presentations. **CN**

Terrorism timely topic for Doogue

Acclaimed ABC journalist Geraldine Doogue couldn't have had a more timely topic for her University of Wollongong address in November.

On a day when Prime Minister John Howard told the nation that Australian intelligence authorities had received a specific terrorist threat which prompted an immediate amendment to the Government's anti-terrorist legislation, Ms Doogue spoke on the role of the media as peacemakers.

The host of ABC Television's *Compass* program and Radio National's *Saturday Breakfast* was presenting the annual address at the Graduate School of Business and Professional Development's Town & Gown function to an audience of Wollongong's business and civic leaders and University academics.

After a wide-ranging and thought-provoking presentation on the role of the media, Ms Doogue was asked what impact the anti-terror legislation would have on the media's capacity to report the issues.

While she hadn't seen the specifics of the legislation, Ms Doogue said she was concerned about Australia "drifting into laws that limit the capacity for good journalism".

She said while many Australians hadn't faced up to the nature of the challenges that exist (with the threat of terrorism) the issues needed to be debated through the media.



Graduate School of Business and Professional Development Head Professor John Glynn thanks ABC presenter Geraldine Doogue after her thought-provoking address at the School's annual Town & Gown event.

"It should be debated. The more the community knows, the better the community behaves," she said. Ms Doogue said the terrorism threat raised the question of whether we should sacrifice freedom of speech for national security.

"It is a difficult moment (for the nation) right where we are now. But we've got to be able to ask more questions, not just have the Prime Minister say: 'Trust me'," she said.

"Respectful public debate is the life blood of democracy ... encouraging accountability and decent behaviour. Good quality journalism that doesn't dodge difficult areas, but is careful when it goes into them, encourages problem-solving."

Ms Doogue, who has co-written a soon-to-be-published book on the Islamic faith called *Tomorrow's Islam*, said she believed the West was caught in a battle between fundamentalist and moderate Muslims. She said Australia had the opportunity to encourage "a new Islam that is very special" by supporting Australia's moderate Muslims.

"There is a struggle for power in the world of Islam, and in a sense we (the West) are collateral damage," Ms Doogue said. "The fundamentalists are making life very difficult for moderates ... we need to encourage these people and give them venues and opportunities to talk about moderate Islam."

She said the relationship between the media and modern politics was often "super messy" but was critical of politicians who undermined public faith in the political process.

She expressed disappointment that former Opposition leader Mark Latham had actively discouraged young Australians from engaging in the political process in his recently published memoirs. Ms Doogue said Australia's democracy needed to be refreshed by engaging our best young talent, and that Mr Latham "would take his comment to his grave". **CN**

Julie Steele named Telstra NSW Business Woman of the Year

Professor Julie Steele was pleasantly surprised to win the 2005 NSW Telstra Business Woman of the Year award. The judges, she suspects, were equally surprised by the nature of her role as head of the University of Wollongong's Biomechanics Research Laboratory (BRL).

"I think the judges were a bit perplexed by the number of hats an academic has to wear, and the fact that we operate without the typical administrative support that someone in the corporate world has," Professor Steele said. "One moment I'm teaching 200 students, the next I'm negotiating with a global sports medicine company."

And she wouldn't have it any other way, being as passionate about teaching now as she was when she started at UOW as a 22-year-old PE teacher in 1983.

"I still take first level tutorials. My passion is to communicate with students and excite them about biomechanics," she said.

Professor Steele described her participation in the Telstra awards judging process as a "fantastic exercise" that had forced her to qualify her role as an academic. Having been nominated for the award by her proud mother, Professor Steele was so surprised at winning her category (Community and Government) and then being named NSW Business

Woman of the Year that she hadn't prepared an acceptance speech.

"I was so overwhelmed and humbled, and thought it was fantastic that the business community would recognise the skills and worth of academic women," she said. "I look across UOW and see so many amazing women doing such great work".

"I plan to use it (the award) in the most positive way to promote the role of research which is so often hidden in universities. It is already opening corporate doors for the Laboratory that weren't even ajar before."

Not that Professor Steele is unfamiliar with large corporations. The BRL has already worked closely with some of the world's biggest companies in their fields, including sportswear manufacturers Nike and Asics and British department store chain Marks & Spencer.

Professor Steele is a global authority on biomechanics, well-known for her work in what she calls "the science of women's underwear". The BRL is known internationally for its work in breast motion and bra design, working with UOW's Intelligent Polymer Research Institute, to develop the "smart bra" to allow women to exercise in comfort.

The BRL has a staff ratio of 12 women to one male, which Professor Steele said happened quite by accident.

However, it has meant that the Laboratory is unique in a traditionally male-dominated field.

"We take unusual research concepts out into the real world," she said. "For example because biomechanics is a male-dominated field no-one had previously thought to look at breast motion and how it affects women, especially larger women, and the way they exercise. If a large woman is uncomfortable when she exercises the chances are she won't do it, and so you get a vicious cycle where she finds it difficult to lose weight.

"We are also looking at safe footwear for elderly women to wear indoors that will actually help prevent falls. That's not necessarily a 'sexy' area of research, but it is very important for elderly women."

Professor Steele was a keynote speaker at the International Society for Biomechanics Conference in Cleveland in the US in August, where she challenged the largely male audience for ignoring issues such as breast motion in biomechanical research.

"When accepting the Telstra Award I highlighted our new take on feminism: don't go burning your bras, we're going to make them work for you," she said. "The response from women in the audience was amazing."

Professor Steele started with UOW's Faculty of Education in 1983. She



Professor Julie Steele, Telstra NSW Business Woman of the Year.

formed the BRL with colleagues in 1984, taking over as head in 1994.

"We've deliberately kept the Lab small and focused," she said. "That is part of our strength, just as the University's size is part of its strength. We have a level of flexibility and collaboration between some amazing research units here that you just don't find in larger universities.

"UOW also has a very supportive environment at the senior academic level. They are willing to take a risk to back innovation."

Professor Steele juggles her busy academic life with her family - husband Bruce, 14-year-old daughter Jessica and nine-year-old son Harry.

"Our life is pretty chaotic, but I am lucky to have an incredibly supportive husband and the children understand what my life is like. I am often sitting poolside with a laptop or working on manuscripts at the back of a children's music class." **CN**

Yeatman's animal welfare appointment

Associate Professor Heather Yeatman from UOW's Graduate School of Public Health has been appointed to the National Implementation Advisory Committee for the Australian Animal Welfare Strategy.

Australian Government funding of \$6 million is aimed at improving standards of animal welfare, under the new national strategy.

Professor Yeatman said that many people in the community were concerned about animal welfare. These concerns influenced their day-to-day decisions such as their food purchases

– for example whether eggs had been produced by chickens in small cages or in open pens, and the use of hormones and antibiotics in the raising of farm animals.

"People's health concerns were often linked with broader issues, including the health of animals," she said.

She identified that it would be important to keep public concerns and need for information a major focus during the implementation of the strategy.

Federal Minister for Agriculture, Fisheries and Forestry Peter McGauran said the national strategy was the first



Associate Professor Heather Yeatman.

co-ordinated approach to improving the welfare of all animals in Australia.

"The Australian Animal Welfare Strategy will deliver clear and consistent national standards for the care of animals in Australia," he said.

Action plans will be developed for animals covered by the welfare strategy, in six categories:

- animals used to produce food and fibre
- those used for research and teaching purposes
- aquatic animals
- companion animals
- animals used for work, recreation, entertainment and display; and
- those in the wild

The strategy was developed collaboratively by the Australian Government, with the assistance of the National Consultative Committee on Animal Welfare (NCCAW), and in consultation with industry, producers, animal welfare groups, including the RSPCA and the public.

Information on the strategy is available at www.daff.gov.au/animalwelfare **CN**



The University of Wollongong in Dubai (UOWD) has been operating since 1993 and is now one of the most prestigious educational institutions in the United Arab Emirates. UOWD currently has more than 2,000 students undertaking undergraduate and postgraduate degrees at its campus in Dubai's Knowledge Village.

Colleges agreement reached

UOWD has signed an articulation agreement with the Higher Colleges of Technology (HCT).

The agreement paves the way for graduates from the HCT Higher Diploma in eBusiness Management to articulate into UOWD's Bachelor of Business Administration, Bachelor of Commerce, Bachelor of Internet Science or Bachelor of Computer Science degrees. Speaking at the signing ceremony in October, UOWD Chief Executive Officer Professor Nick van der Walt said: "The Higher Colleges of Technology has earned a reputation for providing innovative learning opportunities for United Arab Emirates nationals, and the UOWD is delighted to be able to provide HCT students access to undergraduate degrees at UOWD."

HCT's Dean of Business Dr James Pounder thanked UOWD for its support by providing further education opportunities for HCT diploma holders who wished to upgrade their qualifications. "UOWD has achieved distinction as a teaching university with a reputation for the high quality of its academic programs and we are both honoured and privileged to be associated with such a pre-eminent institution in the UAE," he said.



The signing ceremony for the articulation agreement between UOWD and Dubai's Higher Colleges of Technology.

UOWD joins Indian trade exhibition

UOWD will participate in the United Arab Emirates 2005 Trade Exhibition in India for the first time this year.

The UAE Trade Exhibition will be held from 7-10 December at the Nehru Centre in Mumbai. It is an initiative of the Dubai Chamber of Commerce and Industry, the Jafza-Dubai Business Hub and

the Department of Tourism and Commerce Marketing, and is designed to help the UAE's leading institutions, corporations and entrepreneurs raise their profiles in India.

India's rapidly expanding economy and growing demand for products including training is seen as a key opportunity for the UAE.

UOWD Student recruitment Officer Gary Fernandes said: "India represents an excellent source of quality students interested in studying overseas. Participation in exhibitions of this nature helps raise the profile of the UOWD in India."

AIIESEC recruits from UOWD students

International student organisation AIIESEC chose 14 UOWD students to join it after a rigorous selection conducted during its recent membership drive in Dubai.

This represents more than 50% of the new members from Dubai hand-picked by AIIESEC to carry out its core activities of facilitating the exchange of students (and their cultural knowledge) across the world.

AIIESEC is a non-profit, non-political, independent student-run organisation which links approximately 18,000 students at 800 higher education institutions in over 90 different countries. "AIIESEC's objective is to provide talented students with an opportunity to join the largest youth organisation in the world," said Basma Iqbal (President) and Sameer Khan (Vice President) of the AIIESEC Dubai chapter. "There was a 100% increase in the number of applicants interested in joining AIIESEC compared to last year. We were very successful in getting the best people to work in the organisation and explore the opportunities that AIIESEC provides... and we are delighted to have so many UOWD students join us this year to help carry out our mission."

Students' research recognised

UOWD students Thomas Alex (IT) and Saad Salahie (Commerce) have been honoured by the Dubai Ethics Resource Centre (DERC) for their study on corporate responsibility.

The pair were among seven students chosen from UAE universities for summer internships with corporations in Dubai as part of DERC's Future Leaders Program. The students researched and documented examples of best practice in the corporate social responsibility programs of companies operating in Dubai.

Saad and Thomas' research centred on the Kanoo Group, a diversified business conglomerate in the UAE with business activities across shipping, machinery, gas and oil, power and industrial projects, logistics and specialty chemicals. The students focused on how the Kanoo Group recycles water used to clean heavy machinery.

Scholarships reward quality candidates

UOWD has increased its prestigious scholarships for the (northern hemisphere) Autumn session by 25% in recognition of the outstanding quality of this year's applicants.

Speaking at the awards ceremony for students and their parents in November, UOWD's Dean of Academic Affairs Dr Raed Awamleh said: "UOWD has been very successful in attracting quality students to the University. Initially, we had planned to award only 15 scholarships, but given the number of quality candidates we received, the University felt obliged to reward at least 20 deserving students by offering these very generous scholarships."

Sonia Ajit Manek (Bachelor of Commerce), from Ibn Seena English High School, was the inaugural winner of a 100% scholarship awarded to a student nominated for academic excellence by a high school in Dubai. This is a special arrangement between UOWD and selected high schools.

Also at the undergraduate level, 100% scholarships were awarded to Bachelor of Commerce students Janoo Chugani and Radhika Mahajan, Bachelor of Computer Science students Roohi Shama, Muhammad Yakoob and Umaima Shahana Suleman, Bachelor of Internet Science & Technology students Anoop Kumar Rachamadugu, B Vishanth and R Baburaj, and Bachelor of Business Administration student Haneen Niaz Khan.

Students awarded 50% scholarships were Bachelor of Commerce students Alfiya Fakhruddin, Faraz Khan, Hussain Saifuddin, Muhammad Mazher Anver, Ali Karim and Sonam Suresh Mehta, Bachelor of Computer Science students Ali Khayat and Shahrzad Morteza Fazlali and Bachelor of Internet Science & Technology student Hoda Ansari Kharaji.

At the postgraduate level, Alistair Simpson, (MQM), Chris Ferguson, (MIB), Raihan Aamir (MBA) and Sayed Javed, (MBA) were awarded 100% scholarships. **CN**

Jacqui's twin careers as teacher, author

Jacqueline Harvey

Diploma of Teaching (Distinction) 1989

Bachelor of Education (Primary) 1991

Since graduating from the University of Wollongong, Jacqueline Harvey (nee Earnell) has combined successful careers as an educator and author.

Jacqueline, who graduated from UOW's Faculty of Education in 1991, is Deputy Head at the exclusive Abbotsleigh Junior School in the Sydney suburb of Wahroonga.

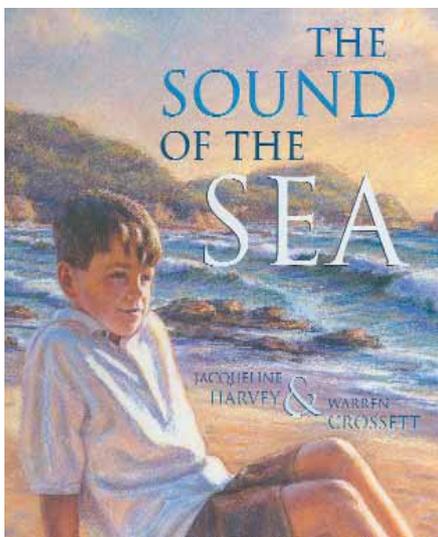
She is also a successful author, having had four children's books published by Lothian since 2003: *Code Name Mr Right*, *Code Name Unwanted*, *Code Name Rescue* and *The Sound of the Sea*. She has a young adult title scheduled for release in 2007.

Jacqueline says she harboured a desire to write from a young age, and encouragement from her Children's Literature lecturer at UOW Pat Farrar provided early inspiration.

"I remember writing a story for an assignment and Pat said that I should think about writing some books," she remembers. "It was great when my first book was launched in 2003 that Pat and his wife were able to come along to the celebrations."



Above: Jacqueline Harvey.
Below: The cover of one of her books, *The Sound of The Sea*.



Jacqueline said a "work scholarship" at UOW where she worked as a research assistant for Faculty of Education academics Brian Cambourne and Jan Turbill had also influenced her career in education.

After graduating from UOW she taught at Gib Gate, an independent junior school at Mittagong, before moving to Byron Bay where she combined casual teaching with giving writing a "proper go".

In 2001 she won the Frustrated Writers' Competition run by the NSW Branch of the Children's Book Council, which gave her the opportunity to work with a mentor, illustrator and author Donna Rawlins, who gave her invaluable advice on writing and publishing.

Her first book, *Code Name Mr Right*, about a young girl growing up in a coastal town, was published in August 2003. It has been followed by two more in the series and a picture book, *The Sound of the Sea*, about a young boy who loses his mother and how his family deals with their grief.

In 2001 Jacqueline took up a six-month position at Abbotsleigh, and has been there ever since, being appointed

Deputy Head in 2003. But this demanding role has not quenched her enthusiasm for writing,

"I have several projects underway including a novel for teenagers set in the Outback which is due for publication in early 2007 as well as a more sinister novel for older teenagers and a really fun story for Primary kids. I always have lots of ideas - it's just difficult finding the time to write," she said, crediting her husband with being "incredibly supportive". "I'm always asking Ian (my husband) to sit and listen to something - either an idea, or some writing. Fortunately, he doesn't seem to mind and is always encouraging."

Jacqueline also finds time for conference presentations and literary festivals, and this year has been working with Gilgandra Public School on their Read Aloud Birth to Kindergarten Program.

"Reading aloud is one of my passions and I'm looking to work further in this area, particularly with students who come from less fortunate backgrounds where reading and writing are not highly valued," she said. **CN**

Stay connected

Graduating from the University of Wollongong is an important milestone in a life-long relationship with the University.

UOW's Alumni Office is dedicated to ensuring that our graduates can stay connected - with the University and with each other - through domestic and international Alumni chapters and networks, and through receiving the Alumni editions of Campus News twice-yearly.

Contacts for our domestic chapters and networks include:

Commerce Business Network - David Jones
david@iom.com.au

Education Chapter - Lenore Armour **larmour@uow.edu.au**

Engineering Chapter - Vic Watts **vic@wattsdev.com.au**

Campus Chapter - Keith Phipps
jandkhipps@bigpond.com

Honorary Chapter - Rev Raymond Heslehurst
raymond@uow.edu.au

Arts Alumni Network - Jocelin Kelly **jocelin@uow.edu.au**

UOW Graduate Network - Jocelin Kelly
jocelin@uow.edu.au

International Chapters:

The Alumni Network has Chapters established in 13 countries. They offer social and professional networking opportunities for graduates who have returned to their home country or who are working overseas, and also provide advice and support to prospective and current students.

Chapters are established in Bangladesh, Canada, Dubai, Hong Kong, India, Indonesia, Malaysia, Nepal, Papua New Guinea, Singapore, Thailand and Vietnam. Contacts include:

Bangladesh - Muktar Chowdhury
Muktar@uniglobebd.com

Canada - Patrick De Vuono
beachboy_ca_au@hotmail.com

Dubai - Linda Newman **LindaNewman@uowdubai.ac.ae**

Hong Kong - Joseph Leung **mail@josephleung.hk**

India - Chand Goel **cgoel@hotmail.com**

Indonesia - Efendi Tanudjaja **admin@erajasa.com**

Malaysia - Amin Baki **amin_baki@wowmail.com**

Nepal - Viplava Joshy **viplava@solutions.com.np**

Papua New Guinea - Dr Betty Koka
bet_beth2000@yahoo.com.au

Singapore - Maurice Tan **Maurice.tan@cnh.com**

Thailand - Tukta Jiwahasuchin **tukta01@hotmail.com**

Vietnam - Thang Nguyen **nnthang@hn.vnn.vn**

If you would like to become involved in a Chapter or Network, or simply update your postal and email addresses, please contact the Alumni Network on **alumni@uow.edu.au** **CN**

Young Engineer of the Year

Glenn Matthews

Bachelor of Engineering
(1st Class Honours) 1998



UOW Engineering graduate and 2005 Young Professional Engineer of the Year Glenn Matthews.

UOW Engineering graduate Glenn Matthews is using his 2005 NSW Young Professional Engineer of the Year title to help promote engineering as a career choice for school leavers.

The 28-year-old structural engineer, who is co-manager of Northrop Engineers' Wollongong office, is proud of his profession and feels it deserves better recognition.

His recognition in the 2005 Engineering Excellence Awards run by the Sydney Division of Engineers Australia gives him the ideal forum to help achieve that, and he has contributed a number of Opinion articles to newspapers, extolling the benefits of a career in engineering.

"Engineers make things happen. They lead, invent and, ultimately, change the world. They bring you bridges, robots, Formula One cars, rockets, iPods ... you name it," Glenn said.

"And a degree in engineering is truly a passport to the world. There's a shortage of engineers around the world, and Australian engineers are well regarded internationally."

Glenn said engineers were traditionally poor at self-promotion, but he was committed to helping change perceptions of the profession.

Glenn has certainly had a positive experience since graduating from UOW's Faculty of Engineering in 1998. Seven years later he is a senior structural engineer with Northrop, co-managing the firm's Wollongong office and responsible for up to 20 projects at

a time valued from \$100,000 to \$20 million.

Glenn said one of the satisfactions of his job is seeing completed buildings that he had worked on. He'll soon have that opportunity every day as he travels from his Cronulla home to his Wollongong office. One of his current projects is the Wollongong Gateway, a stylish glass and steel tourism information centre, restaurant and Aboriginal arts complex under construction beside the F6 Freeway at the top of Bulli Pass.

Glenn, who grew up in Menai and attended Menai High School, said he chose to study at UOW because it had a reputation as offering the best Engineering course in NSW.

"It still has that reputation," Glenn said. "They take a different approach at Wollongong, and the students get a very well-balanced education. You can always tell a UOW-trained engineer."

Glenn said he was surprised when he was named Young Professional Engineer of the Year at the 2005 Engineering Excellence Awards at Sydney's Westin Hotel's Grand Ballroom on 30 September.

"I'd been nominated by my manager in Sydney but people told me that if I was going to win, I'd be contacted beforehand to make sure I was in the audience and ready to give an acceptance speech," he said. "I didn't get the call, so I was very surprised when I won."

"But it's nice to be recognised by your peers in the industry." **CN**

Appointments

Dr Chris Doyle

Bachelor of Environmental
Science (Honours) 1995

PhD (Fluvial Geomorphology)
2003

UOW Alumnus, environmental scientist Dr Chris Doyle, has been appointed to a senior role in the Persian Gulf. Dr Doyle is the new Environment Manager for Bovis Lendlease for the Gulf Region, working on major dredging, reclamation and tourism development projects in Bahrain, Dubai and Oman.

Dr Doyle, who was previously Sustainability Coordinator for the Port Kembla Port Corporation, has maintained a close association with the University and was an Honorary Fellow at UOW's Oceans and Coastal Research Centre, where he supervised post-graduate students.

Dr Doyle took up his appointment in November. His wife Ulla, and children Annalise, Elina and Eamon, will join him in Bahrain after Christmas.

Dr Saeid Soltanian

PhD (Institute for
Superconducting and
Electronic Materials) 2004

Dr Saeid Soltanian, who completed his PhD at UOW's Institute of Superconducting and Electronics (ISEM) in 2004, has been promoted to Pro Vice-Chancellor at the University of Kurdistan in Iran.

ISEM Director Professor Shi Dou said Dr Soltanian had been a star student during his post-graduate studies at UOW, winning post-graduate awards in 2002 and 2003. "He authored or co-authored more than 34 papers during his PhD and eight-month post-doctoral work at UOW," said Professor Dou, adding that the papers had earned 417 citations.

"He worked tirelessly, spending many evenings in the lab," Professor Dou said. "The samples and superconductor wires he made have been studied by a number of prestigious groups around the world. These materials set world records in both critical current density and upper critical field – records that still stand."

Karen Bohm

Bachelor of Commerce/
Bachelor of Laws 2000

Diploma in Legal Practice 2001

Karen Bohm, who completed her Commerce/Laws double degree at the University of Wollongong in 2000, has joined Sydney specialist legal firm Truman Hoyle.

Ms Bohm, who had been working with a leading firm in London prior to her appointment, will be working in Truman Hoyle's industrial and employment team.

Prior to her move to London, Ms Bohm worked for PriceWaterhouseCoopers Legal in their Employment and Industrial Relations Law Group. She was made an Associate in 2004, before moving to London.

She has extensive experience in health and safety law and an in-depth knowledge of the mining industry, having acted as part of the defence team in NSW's largest occupational health and safety prosecution.

Michael Byrn

Bachelor of Information
Technology 2001

Michael Byrn, who graduated from UOW with a Bachelor of Information Technology degree in 2001 has been appointed SCADA Application Administrator at Hobart Water.

Hobart Water supplies water for domestic and industrial use to the eight local government areas of southern Tasmania.

SCADA systems are used to monitor and control a plant or equipment in industries such as water storage and delivery, telecommunications, waste control, energy, oil and gas refining and transportation. SCADA systems gather information, such as where a leak on a pipeline has occurred, transfer the information back to a central site, alert the home station that the leak has occurred, carry out necessary analysis and control, such as determining if the leak is critical, and display the information in a logical and organised fashion. **CN**

UOW Nursing pioneer researching ageing population



Professor Tracey McDonald

Master of Science (Honours) in Public Health 1994

PhD with the Faculty of Education 2002

Australian Catholic University's Professor of Ageing Tracey McDonald looks back with great fondness on her 20 years with the University of Wollongong as an academic and student.

Professor McDonald, who took up her research-focused role at ACU's McKillop Campus in North Sydney in May this year, was one of the pioneering academics who helped establish Australia's first

School of Nursing at UOW in the 1980s.

She joined UOW in 1983, attracted by the opportunity to work with the Head of the School of Nursing Professor Bruce Partridge and an impressive team of nurse teachers who had established reputations in the previous hospital-based education system.

"I knew of Bruce by reputation and really wanted to work with him," she said.

Professor McDonald stayed on the UOW academic staff until 1999, punctuated by a two-year secondment to the Monash University Faculty of Medicine as Head of Nursing at its Frankston campus in Victoria from 1995-97.

While at UOW, Professor McDonald completed a Masters degree in Public Health in 1994 for which she produced a Health Atlas of the Illawarra, under supervisors Professor Dennis Calvert and Professor Murray Wilson. After leaving in 1999 to join the Australian Nursing Federation in a policy development and management role she completed a PhD under Dr Jan Wright in the Faculty of Education.

Before joining ACU, Professor McDonald spent several years as Manager of Research, Policy and Professional Services at the Australian Nursing Homes and Extended Care Association and was recognised as a leader in aged care because of her involvement at all levels of the industry.

"I look back with great fondness at my time at UOW," Professor McDonald said. "I loved working and studying there and contributing to the growth of this beautiful new university.

"The Wollongong University School of Nursing was an exciting place to be in the 1980s. It was the only

university in Australia with a Nursing course, and with Bruce Partridge's vision and leadership, I was privileged to be part of a most amazing team.

"Many people have worked very hard over that period to build up both the Nursing course and the university's reputation as a quality institution," she said. "It now has that reputation for quality, and I am proud to have played a part in that development."

Professor McDonald's current position is sponsored by the RSL Veterans' Retirement Village, and is designed to stimulate and promote research into health and social issues affecting Australia's ageing population as well as the many care, treatment and support issues related to ageing.

"There is quite a lot of medical research underway concerning our ageing population, but the sad truth is, not every problem can be solved by medicine," she said. "We as a community need to acknowledge and understand older people in terms of productive ageing and to appreciate the broader issues that affect seniors and prompt choices they make about their futures.

"For a start, we need to understand why increasing numbers of older Australians are retiring earlier from paid employment, joining walled communities and disconnecting from mainstream society."

Professor McDonald is establishing research partnerships with other institutions and said she would welcome the opportunity to collaborate in the future with UOW researchers. She already works at a policy level with UOW Head of the Department of Nursing Professor Patrick Crookes on a number of State committees, and more focused partnerships on scholarly projects are possible. **CN**

Blake's training paid off

Blake Beattie

Bachelor of Education (PDHPE) 1998

Blake Beattie graduated from the University of Wollongong as a PE teacher in 1998 and says a teaching degree is a "great thing to have under your belt".

Not that he's spent much time in the classroom. Blake is Managing Director of Inspire Consulting and a professional speaker, trainer and consultant. In this role he's addressed audiences up to 15,000 people.

"I enjoy teaching, even though I only did a limited amount of casual teaching after I graduated," Blake

said. "But my work is just a different form of teaching, and the training I received at UOW comes into everything I do."

Blake has delivered more than 100 seminars, keynote addresses and training programs to corporate clients including Telstra, the Australian swimming team and Australian Post, focusing on unlocking people's potential and thereby improving their performance professionally and personally.

Blake has a Certificate IV in Workplace Assessment and Training, a Graduate Diploma in Business Administration and is a trained actor and presenter (through NIDA). He is also a certified Neuro Linguistic Programming (NLP) Practitioner, describing NLP as an advanced form of psychology "that is very powerful if you know how to use it".

He is also a Director of the Life Changing Experiences Foundation, a not-for-profit organisation that helps disadvantaged teenagers. **CN**

Award for Camtu

The Sydney Business Review has named UOW graduate Camtu Pham its Sydney Business Woman of the Year for 2005.

Ms Pham, who has Bachelor of Computer Science (1993) and a Master of Commerce (1997) degrees from UOW, is Managing Director of her own successful web design and e-commerce company called Cleverlink.

Ms Pham, who emigrated to Australia from Vietnam in 1984, also lectures in the Faculty of Commerce and is in wide demand as a public speaker. **CN**

Thais recognise conductor's world-wide reputation

Bundit Ungrangsee

Bachelor of Creative Arts 1993

The Thai Government's Ministry of Culture has presented celebrated conductor and UOW Alumnus Bundit Ungrangsee with the Silapathorn Award in recognition for his global achievements as a Thai artist.

Mr Ungrangsee completed a Bachelor of Creative Arts degree at UOW in 1993 before studying for his Masters degree in orchestral conducting at the University of Michigan in the United States.

He came to international recognition in 2002 when he was named Laureate and co-winner of the Maazal-Vilar International Conductors' Competition, held in Carnegie Hall in New York City. The competition ranked him first among 362 competitors and led to his appointment as Cover Conductor for

the New York Philharmonic Orchestra for the 2002-2004 seasons.

Mr Ungrangsee, from Bangkok, has a rapidly expanding guest conducting career that has included invitations from orchestras in the United States, Europe, China, Korea, Australia and Thailand.

In the early stages of his career he held a number of prestigious appointments that recognised his potential, including Music Director of the Young Musicians Foundation (YMF) Debut Orchestra in Los Angeles, Associate Conductor of the Utah Symphony and Associate Conductor of the Charlestown Symphony.

He currently is Principal Guest Conductor for the Seoul Philharmonic. **CN**

UOW Creative Arts Alumnus Bundit Ungrangsee, who has forged an international reputation as a conductor.



US biologist found career direction during Study Aboard



Dr Alison Styring (nee Robinson)

Study Abroad student from the University of Indiana (1993)

US Wildlife Biologist Dr Alison Styring is a classic example of the value of Study Aboard programs. In fact, Dr Styring credits the Study Aboard year she

spent in Australia at the University of Wollongong in 1993 as having a profound influence on her studies and future career direction.

A Biology student at the University of Indiana, Bloomington at the time, she said her trip to Australia convinced her to focus on ecology and the study of birds – a decision that took her to the rainforest of Malaysia for her PhD and later to a job as a wildlife biologist at Disney World in Florida.

Dr Styring is now in her "dream job" – a senior Faculty position at Evergreen State College in Olympia, Washington – and has fond memories of her time at UOW.

"Indiana University had a great Study Abroad program with UOW," she said. "I had always wanted to see Australia, and I loved my time at Wollongong. The campus was great, the classes were very engaging, and the social aspects of student life were really fun.

"My time at UOW and in Australia had a profound influence on my career. During that time I really caught the travel bug and wanted to learn more about other parts of the world in depth. I became particularly interested in learning about wildlife while I hiked and backpacked around Australia.

"The courses I took at UOW weren't in the sciences - they included a great Australian history course, Literature, and Sociology - but they really helped me

understand more about Australia, and that is very important in any career in which you work in another country or with people from diverse backgrounds.

"As I neared completion of my Biology degree, I decided that I wanted to be an ecologist and study birds and my time travelling and wildlife-watching in Australia was an important part of this decision.

"I applied to the PhD program at Louisiana State University because of its emphasis on tropical bird biology, and I conducted my dissertation research in Malaysia studying the effects of logging on cavity-nesting birds in the rainforest."

After finishing her PhD, Dr Styring worked as a Wildlife Biologist at Disney's Animal Kingdom in Florida where she was in charge of establishing long-term wildlife monitoring of native Florida animals on a large conservation area at Walt Disney World. The conservation area comprised a variety of habitats including swamp forest, marsh and upland scrub with diverse fauna. She established monitoring projects for alligator, birds, butterflies, deer and gopher tortoises.

In August 2005 she joined Evergreen State College in Olympia, where she plans to continue her Malaysian research and also conduct comparative research in the temperate rainforests of western Washington, with the goal of providing practical insight into forest management practices. **CN**

OPPORTUNITIES FOR GRADUATES

Deferring studies paid off all round

Seven University of Wollongong graduates have reason to be grateful that Geoff McQueen deferred his Bachelor of Engineering (Telecommunications) studies at UOW.

Geoff was half-way through his degree in 1999 when his fascination with the emerging Internet got the better of him, so he deferred his studies in 2000 to concentrate on a burgeoning business developing Internet software.

Five years later Geoff is the Managing Director of the successful Wollongong-based IT company he founded, Internetrix, which develops customised Internet-based software solutions for a range of clients (including UOW).

He hasn't returned to his studies – yet. Instead, he has sourced most of his staff from UOW's Faculty of Informatics and has even returned to the University occasionally to deliver guest lectures on Internet applications.

"I have great respect for IT graduates from the University of Wollongong," Geoff said. "I know from personal experience that the courses are tough and arduous, and anyone who makes it through can hold their head high.

"The graduates we have employed certainly satisfy our technical requirements, but I am also impressed with the people skills and initiative they develop at UOW.

"I really enjoyed my two years at uni, but I realised the Internet was where I wanted to be. It was new technology at the time, and the uni wasn't equipped to deliver the training I wanted – unlike now where one of its strengths is its Internet Science course."

Geoff struck out on his own, starting his business by building websites for friends. The rest, as they say, is history – and a happy result for the seven UOW graduates he now employs in a range of fields from software development to graphic design, marketing and communications, and accounting.

The UOW graduates working at Internetrix are:

Daniel Rowan (Operations Manager)
Bachelor of Computer Science (Information and Communication Technology) - completed 2002.

Mark Turnbull (Solutions Architect)
Bachelor of Information and Communication Technology (Business Information Systems) - With



The Internetrix UOW Connection (clockwise from front centre): Natalie Creces, Geoff McQueen, Nik Cubrilovic, Eamonn Bell, Daniel Rowan, Mark Turnbull and Tim Lawson.

Distinction - completed 2001.
Bachelor of Internet Science (E-Commerce) with Honours - completed 2003.

Glenn Fowler (Systems Developer)
Bachelor of Mathematics, Bachelor of Computer Science - completed 2001.

Natalie Creces (Marketing and Communications Officer)
Master of Journalism with Distinction - completed 2004

Tim Lawson (Solutions Architect)
Bachelor of Computer Science - completed 2004.

Eamonn Bell (Interactive Designer)
Bachelor of Computer Science - completed 2004.

David McQueen (Part-time Accounts)

Bachelor of Science (Physics) – completing in 2005

One of Geoff's contemporaries in the Bachelor of Engineering (Telecommunications) degree, Nik Cubrilovic, also works for Internetrix as a Solutions Architect. Like Geoff, Nik deferred his studies after two years to establish his own business. He joined Internetrix earlier this year.

Geoff and Nik agree that they would both like to return to UOW in the future, but developing their growing business is the priority at the moment – with the help of UOW graduates of course. **CN**



IPRI Research Liaison Officer Kaylene Atkinson (right) and PhD student Jenny Causley, at work on the IPRI booth at the Science EXPOsed 2005 exhibition at Parliament House in Sydney. IPRI Director Professor Gordon Wallace is on the television monitor behind them.

Intelligent polymers exposed

The University of Wollongong's Intelligent Polymer Research Institute (IPRI) was one of the key exhibitors at the recent Science EXPOsed 2005 exhibition in Sydney.

Minister for Science and Medical Research Frank Sartor launched the second annual Science EXPOsed - a free two-day event organised by the NSW Government to showcase the latest in science and technology and the range of careers available to young people who study science.

"Science is the basis for almost every new discovery and advancement in our every day lives," Mr Sartor said.

"Science and scientists however, are

still plagued by an image of stodgy slightly eccentric old men in white coats beaver away by themselves in a laboratory.

"This couldn't be further from the truth. Science is discovery and is only limited by our imaginations.

"I would encourage all young people to think about incorporating science within their studies and see this as a valuable way to make an important contribution to our society," he said.

IPRI represented the Australian Research Council Centre for Nanostructured Electromaterials, with the exhibit including hands-on demonstrations of actuators and

electronic textiles to spark the curiosity of almost 1,200 school children who attended the Expo.

Staff and students from IPRI broke down bionics and discussed the exciting new developments that are revolutionising the field, with school teachers particularly showing interest in taking back leading edge research to their higher level students.

Videos and posters were used to demonstrate to students how nanotechnology is improving the capabilities of scientists to re-engineer new and improved devices for wearable electronics and in the biomonitoring and biofeedback of human movement.

IPRI is regarded as a world leader in intelligent polymer and nanotechnology research. **CN**

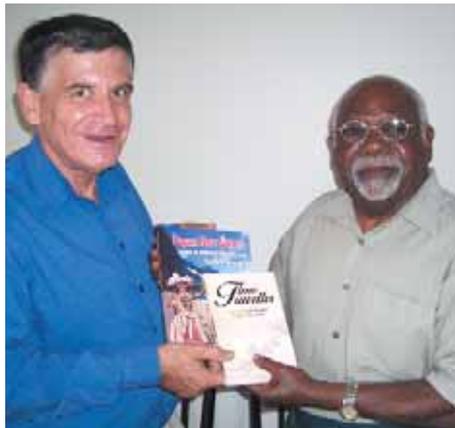
News in Brief

PNG expert's book role

University of Wollongong Politics Professor Ted Wolfers, who is currently on secondment to the Papua New Guinea Government, has played a key role in the production of two books by the country's Governor-General Grand Chief Sir Paulias Matane.

Professor Wolfers helped produce and contributed to Sir Paulias' two books, launched recently in the lead-up to PNG's 30th anniversary celebrations.

The books are a survey of contemporary PNG society titled *Papua New Guinea: Land of Natural Beauty and Cultural Diversity* (CBS Publishers, New Delhi), which the Governor-General co-authored with Indian writer M. L Ahuja, and *Time Traveller: A journey through the heart of Papua New Guinea* (Cassowary Books, Port Moresby), which is a collection of Sir Paulias' recent journalistic writings.



Papua New Guinea's Governor-General Grand Chief Sir Paulias Matane with Professor Ted Wolfers at the recent book launch. Photo: Keith Stebbins.

Professor Wolfers helped check and edit the first book and contributed material about the recently formed Autonomous Bougainville Government, and wrote the introduction to *Time Traveller*.

Sir Paulias is a prolific writer, with these two publications taking his total to 36 books.

Professor Wolfers has a long association with PNG. He served as a consultant on many committees and commissions including the pre-independence Constitutional Planning Committee (1972-74) and the Constitutional Development Commission (1997-2002). Since 1997 he has been on secondment to the PNG Government as an adviser on the Bougainville peace process.

Professor Wolfers has also written widely on politics, race relations and constitutional issues in PNG and the Pacific. **CN**

Don Lewis retires

Professor Don Lewis has retired after 30 years of exemplary service to the University of Wollongong and Faculty of Commerce.

Professor Lewis started his UOW career in 1976 and most recently has been Associate Dean Teaching and Learning, an appointment he took up in 2002.

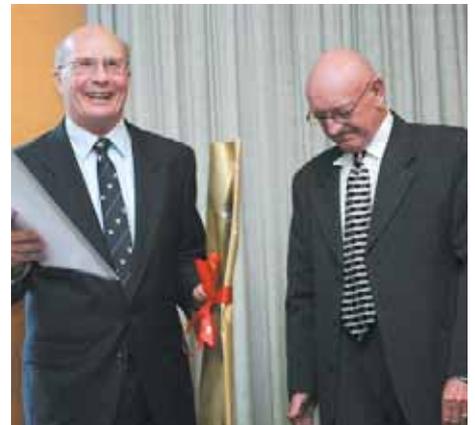
In that role, Professor Lewis made major contributions to the Faculty of Commerce. In particular he directed the improvements in academic governance and quality control and was the major architect of the 2004 revision of the Bachelor of Commerce, streamlining the major and minor programs of study.

A gifted and innovative teacher, he was the first recipient of the Vice-Chancellor's Award for Excellence in Teaching in its inaugural year, 1991.

His research interests covered the fields of economics of health care, education and labour markets.

Throughout his years of service to the University, Professor Lewis served on a number of academic management and governance positions both within the Faculty and more broadly across the University. He also served on the Academic Senate, Academic Promotions Committee, University Education Committee, Graduate Studies Committee, Recurrent Resources Committee, Undergraduate Studies Committee, University Medal Committee, Working Party on Summer Session and the University Open Day (Chair).

Within the Faculty, Professor Lewis was the head of Economics on three occasions, Chair of the (former) Faculty of Social Sciences, Chair of the Faculty of Commerce and a former Head of the Graduate School of Business. **CN**



Professor Don Lewis (left) pictured at his retirement function with Deputy Vice-Chancellor (Operations) Professor John Patterson.

Academy records Worner

Emeritus Professor Howard Worner has long been described as a true icon of materials science.

From the late 1930s and early 1940s when he was considered the leading world authority in scientific study of dental and surgical materials through to extensive investigation into iron smelting and casting, his work has been at the forefront of Australian and international development.

His role as one of Australia's great scientists was further recognised by the Australian Academy of Sciences recently when representative David Salt visited UOW to interview Professor Worner, aged 92, about his fascinating life and scientific achievements.

His interview was part of a series called *Interviews with Australian scientists* which records interviews with outstanding Australian scientists for this and future generations. The scientists talk about their early life, development of interest in science, mentors, research work, and other aspects of their careers.

Professor Worner donated his extensive collection of more than 10,000 rare mineral and rock samples to UOW in 2003. The Howard Worner Collection, on display in the main foyer of the Sciences Building, is recognised as the best mineral display of any Australian university or teaching institution. **CN**



Emeritus Professor Howard Worner discusses the mineral and rock sample collection he donated to UOW with Australian Academy of Sciences representative David Salt.

UOW's close Thai links reinforced



Pictured at the afternoon tea for Thai scholarship holders with the students and senior University representatives are (front row, centre): Mr Wiboon Chulertiyawong, Minister Counsellor (Education) Royal Thai Embassy, flanked by Ms Patthira (Anne) Weir, Education and Research Officer, Royal Thai Embassy, and UOW Vice-Chancellor Professor Gerard Sutton.

The University of Wollongong's close links with Thailand have been highlighted recently with a succession of visits and functions at the University. Wollongong attracts more Thai students than other Australian universities, and currently has 542 students enrolled.

A senior delegation of Thai government officials and academics including the Vice Minister for the Ministry of Education Dr Phiraphan Phalusuk and the Vice Minister for the Ministry of Education Dr Kittti Limskul visited the University as part of a fact-finding mission investigating various options for the management of student fees and loans systems.

The mission included visits to the Australian Taxation Office, the Department of Education, Science and Training (DEST) and the Australian Vice-Chancellors' Committee (AVCC).

A delegation from the National Research Council of Thailand (NRCT) also visited the University to inspect some of UOW's internationally-acclaimed research centres, and to investigate the possibilities of both research collaboration and of forming a network of researchers in the Physical Sciences and Mathematics.

UOW Vice-Chancellor Professor Gerard Sutton welcomed the delegates, who included Professor Youngwinn Lenbury, Assistant Professor Tanakorn Osotchan and Assistant Professor Weerachai Siripunvaraport (all from Mahidol University), NRCT Research, Policy and Planning Division Director Mrs Duangworaporn Sittivate and NRCT Policy and Planning Analyst Mrs Chalophon Boonboothara.

Deputy Vice-Chancellor (Research) Professor Margaret Sheil gave the Thai visitors an overview of

the University's research programs before they inspected some of UOW's research institutes including the Intelligent Polymer Research Institute, the Institute for Superconducting and Electronic Materials and the Earth and Environmental Science Laboratories with Head of School Professor Colin Murray-Wallace. They also met Professor Jim Hill and Associate Professor Graham Williams from the Faculty of Informatics for an overview of the University's mathematics research.

The delegation also met Thai researchers currently studying at UOW.

Professor Sutton also hosted a special afternoon tea to celebrate the long-standing relationship between UOW and Thai scholarship holders at the University. They were joined by Royal Thai Embassy staff and senior university staff.

Scholarship holders come from a range of areas in Thailand including the defence co-operation program between Thailand and Australia and the Royal Thai Government Scholarship Program.

Professor Sutton told those attending the function that the University was honoured that they had chosen UOW at which to pursue their degree studies and thanked the Royal Thai Embassy in Canberra for their ongoing support.

Wollongong greatly values its close links with Thailand, particularly with the Thai Royal Family, Professor Sutton said. In 2002 the University conferred an Honorary Doctorate on the King of Thailand, His Majesty Bhumibol Adulyadej. In 1999 Professor Dr HRH Princess Chulabhorn Mahidol travelled to Wollongong to receive an Honorary Doctorate and to sign an Education and Scientific Agreement with the University. **CN**

Keeping track of vegetation

The days may be numbered when railways face excessive and continuous ballast maintenance and costly track drainage following heavy rains. The basic message for railway authorities is not to underestimate the importance of vegetation growing near railway tracks.

Behzad Fatahi, a PhD student and a teaching academic in UOW's Faculty of Engineering with more than four years of professional experience in the civil engineering industry, has helped develop a comprehensive water uptake model which links civil engineering and botanical science. His research project is under the Co-operative Research Centre (CRC) for Railway Engineering and is supervised by Professor Buddhima Indraratna.

The model simultaneously simulates the suction of ground water through vegetation roots and the evaporation of water from leaves. Soil conditions, type of vegetation and atmospheric conditions are incorporated in the model.



Behzad Fatahi (left) was one of the recent prize winners at UOW's Higher Degree Research Student Conference. He is pictured with the Dean of Engineering Professor Chris Cook.

Considering the integrated infiltration-evapotranspiration-suction relationships, the model can predict the influence of vegetation on the ground behaviour and performance of engineering structures.

The findings of Behzad's study, backed up by field trials, indicate that due to significant changes in soil moisture content induced by tree roots, soil shear strength will be enhanced.

"Consequently, the model which I have helped develop can improve the design and construction procedures for railway lines, foundations and embankments near native vegetation," Behzad said.

Behzad was one of the recent prize winners at UOW's Higher Degree Research Student Conference in the category of "Frontier Technologies for Building and Transforming Australian Industries". **CN**

Awards, achievements and accolades



UOW's Colin Roderick Award winner Alan Wearne, who shared this year's award with novelist Tim Winton.

UOW writer shares prize with Winton

UOW academic and writer Alan Wearne has shared this year's prestigious Colin Roderick Award for the best book published in Australia with best-selling novelist Tim Winton.

Mr Wearne from the Faculty of Creative Arts won the award with the second volume of his verse novel *The Lovemakers* ('*Money and Nothing*'), which is centered on the interconnected lives of a number of Australian people between 1960 and 1990.

The Colin Roderick Award, established in 1967, is the main award of the Foundation for Australian Literary Studies within James Cook University, Townsville.

The \$10,000 prize is awarded annually for the best book published in Australia, which deals with any aspect of Australian life including fiction, history, autobiography or poetry. The award honours the late Colin Roderick who was an eminent literary scholar, the first Professor of English at James Cook University and the person who established the Foundation of Literary Studies.

This year the award is being shared for the first time between Mr Wearne and Winton, for his novel *The Turning*.

Mr Wearne has been part of the Australian poetry scene since the late sixties and is the author of *Public Relations*, *New Devil*, *New Parish*, *Out Here*, (a verse novella), the award-winning verse novel *The Nightmarkets* (which has also been adapted for the stage) and *Kicking in Danger* (a fantasy satire on Melbourne's football). Volume 1 of *The Lovemakers* was launched in 2001, together with a CD of selections read by the author.

The first volume won the NSW Premier's Prize for Poetry and Book of the Year in 2002. It also won The Arts Queensland Judith Wright Calanthe Award for Poetry, an award presented annually for the best collection of poetry by an Australian author.

The Lovemakers, in its entirety, explores the inner and outer tensions of families and society. The rituals of home extensions, weddings and public-service career paths are covered in Book 1 and the world of big business, the sex industry and the drug trade in Book 2.

Design award lauds Conroy

Associate Professor Diana Wood Conroy from the Faculty of Creative Arts has received the Distinguished Research Award from the Australian Council of University Art and Design Schools (ACUADS) at its recent conference in Perth.



Associate Professor Diana Wood Conroy

Professor Wood Conroy was one of three senior Australian researchers to receive this national award. Her citation said:

"Professor Wood Conroy has been a consistently outstanding achiever in the tertiary art and design education research environment for more than 10 years. Her recent achievements encompass gaining nationally competitive research and exhibition grants which have provided models of cross-disciplinary collaborative research; an extraordinary track record of success in mentoring postgraduate students and bringing to completion research higher degrees; an international career as an archaeologist, artist and writer; and commitments 'beyond the call of duty' to the development of research both within the Faculty of Creative Arts and the broader University of Wollongong.

"Professor Wood Conroy has worked strategically on the Faculty's positioning in the arts and in arts education and is irreplaceable in the leadership, breadth and quality her contributions demonstrate."

Badham's latest play a winner

Confronting the difficult subject of terrorism in her latest play was an arduous but rewarding experience for UOW PhD student and Summer School tutor Van Badham.

Black Hands/Dead Section is about the Baader-Meinhof gang - a faction of the student movement in West Germany in the 1960s which waged an armed campaign against the state following the brutal harassment, beatings and shootings of anti-Vietnam War student protestors by police.

The play recently received the prestigious Queensland Premier's Literary Award for Drama worth \$15,000. The award offers established and aspiring authors the opportunity to gain recognition in the literary industry as well as providing financial assistance to support the development of high quality writing.

The award is one of many for the Wollongong playwright, who spends nine months of each year living and working in England. She was also recently named Best Playwright on the London Fringe - marking her as one of the most exciting emerging talents in British theatre.

"It's wonderful to have the opportunity to win this latest award, and an enormous boost to my career," she said. "The Queensland Premier's Award is one of the few awards that allows Australian writers to enter work that has been developed overseas - usually, the play must premiere in Australia."

"The play was a commission from the London Academy of Music and Dramatic Art (LAMDA), with the challenging and unusual brief to write a play for 30 graduating student actors. LAMDA scouted me for the commission as a result of seeing my play *Camarilla* at the Edinburgh Festival in 2003."

The judging panel described Van's play as "outstanding writing with an epic range, a complexity of vision and a balance of mood and emotion" and said she was a "voice pushing theatre out of the drawing room smallness of recent plays and tackling the great themes". **CN**



Van Badham

Students win Science and Innovation Awards

A study into an unusual kind of fish and preventing algal blooms in waterways has led to two University of Wollongong PhD students winning 2005 Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry.



Nathan Miles, who won his award for his research into fish that must move between saltwater and freshwater to complete their lifecycle.

Federal Minister for Agriculture, Fisheries and Forestry Peter McGauran presented Nathan Miles and Ann Mills with their awards at a ceremony at Parliament House in Canberra in November. Winners receive up to \$10,000 to complete a project of long-term benefit to Australia's agriculture, fisheries, forestry, food or natural resource management industries.

Nathan, from UOW's School of Earth and Environmental Sciences, has undertaken a study into the remarkable diadromous fish, which must move between saltwater and freshwater to complete their lifecycle. His study is under the supervision of Associate Professor Ron West.

"Ninety-nine per cent of fish are unable to do this and are basically confined to either one or the other," Mr McGauran said.

Diadromous fish are potentially under threat, mainly due to high coastal population densities, poor land practices, land reclamation and river regulation. The research hopes to identify important migratory times and spawning requirements for the species so that environmental managers have the information to better manage them and their environments.

Mr McGauran said Ann's study aimed to increase our understanding of the science of nitrogen-based nutrients within Australian waterways. Ann is completing her PhD in chemistry.

"Understanding how this cycle works would make it



Ann Mills, who is researching ways to prevent algal blooms in waterways.

possible to predict and prevent the formation of algal blooms," he said.

Mr McGauran said that a system that is able to measure the air, water and sediment simultaneously while in the environment was developed by a team that Ann was involved in at UOW.

"Ann will now further develop this system in the field study which will be conducted in Lake Illawarra," Mr McGauran said.

She is undertaking her PhD under the supervision of Associate Professor Stephen Wilson and Dr Di Jolley.

Biotechnology Entrepreneur of the Year

A PhD student in the University of Wollongong's Faculty of Health and Behavioural Sciences has been named NSW Biotechnology Entrepreneur of the Year.

Karen Walton is working at UOW's Smart Foods Centre and completing research into hospital food service systems and the quality of nutrition support for rehabilitating patients.

She received her prize at the Young Achievement Australia (YAA) awards in Sydney in November. YAA provides unique opportunities for young Australians to actively participate in enterprise programs.

Karen is the Human Relations Director for the company 'Industrya' which is part of the YAA biotechnology entrepreneur program. It was created this year by a group of UOW postgraduate students to produce books to teach children about biotechnology.

Industrya recently launched its first children's book which allows eight to 12-year-olds to learn about the science behind biotechnology through a series of experiments, fun facts and puzzles. All proceeds from the book are donated to the Children's Ward at Wollongong Hospital.

The competition for the NSW Biotechnology

Entrepreneur of the Year involved a self-nomination and the completion of a two-hour business theory exam in which Karen gained first place. The award, which was sponsored by the Department of State and Regional Development, involved attendance at the AusBiotech 2005 conference in Perth in November.

"To receive this award is very exciting, particularly participating in the AusBiotech conference which is very relevant to my background in dietetics," said Karen.

"Working with Industrya has been a wonderful chance to get hands-on experience and learn how to effectively establish, run and liquidate a company." **CN**



UOW's NSW Biotechnology Entrepreneur of the Year Karen Walton.

Energy savings effort awarded

The NSW Government has recognised significant energy savings at the University of Wollongong with the Minister for Utilities Carl Scully awarding UOW the highest honour at the Energy and Water Green Globe Awards 2005.

The University has reduced its energy usage by 2,617 tonnes of CO2 (9,321GJ) annually.

UOW received the Gold Green Globe Award at a Department of Energy, Utilities and Sustainability (DEUS) ceremony held at NSW Parliament House - the only university and only Illawarra-based organisation to receive a Green Globe this year.

UOW became an Energy Smart Business Partner in June 1998 with the then Sustainable Energy Development Authority (SEDA), which awarded it a Bronze Green Globe award for energy reduction in October 2001 and a Silver Green Globe award in November 2003.

Maintenance and Energy Manager for UOW's Buildings and Grounds Division Chris Hewitt said the energy reductions were achieved primarily through implementing energy conscious design of all new and refurbished building space, a lighting upgrade project and replacement of antiquated air-conditioning plant. **CN**

Scholarship takes Kirsty to Dubai

University of Wollongong Engineering student and self-confessed motorsport fanatic Kirsty Last has won the inaugural Women in Motorsport Scholarship presented by NSW Premier Morris Iemma.

The scholarship means she was part of the pit crew for Team Australia in the A1 Grand Prix of Nations round at Sydney's Eastern Creek on 4-6 November and was due to travel to Dubai for the race there on 7-12 December.

Kirsty, 20, a Mechanical Engineering student who was a member of UOW's successful Formula SAE racing team in 2003 and 2004, races competitively in Formula Vee events at Eastern Creek, Oran Park and Wakefield Park.

Being involved in international motorsport events in Sydney and Dubai is a dream come true.

"Motorsport is my life," she said. "Every decision I have made on my future has been focused on motorsport.

"I chose to come to UOW to study Mechanical Engineering based on the

fact this University had the best Formula SAE program. It has a great profile, and graduates from the Formula SAE team have gone on to jobs with some of the best race teams in Australia."

Kirsty wants to follow in their footsteps when she graduates – if she's not behind the wheel of a V8 Supercar by then – and the opportunity provided by the Women in Motorsport scholarship is an important step towards achieving that goal.

The Formula A1 Grand Prix series is a new series where teams representing 25 countries travel around the world competing in identical V8-powered open-wheeler Lola racing cars.

"This is a fantastic opportunity," said Kirsty before heading to Eastern Creek, where the Australian team finished sixth in the second race.

Above: UOW Mechanical Engineering student Kirsty Last with NSW Premier Morris Iemma, test driver Peter Hackett and the Team Australia race car at the announcement of the inaugural Women in Motorsport Scholarship.



UOW races away with award

The University of Wollongong's highly successful racing car team has carried off another trophy - but this one is off the track for a change.

UOW Racing returned victorious from the 2005 Engineering Excellence Awards, held at Sydney's Westin Hotel on 30 September. The team won the Welfare, Health, Safety, Education and Training category in the NSW awards and was heading for the national awards in Canberra as Campus News went to press.

UOW's Faculty of Engineering first entered a team in Formula SAE - a competition for teams of Engineering students from different universities who must design, build and prove on the track a single-seater race car - in 2001.

Since then UOW Racing has

competed in four Australasian campaigns, winning three. The team has also competed in the United States three times, taking out the 2003 world championship in Detroit, the first non-American team to do so.

The Faculty of Engineering entered UOW Racing in the Engineering Excellence Awards based on the team's four-year program, and the Awards judges noted the team's "phenomenal success" over that time. The judges also awarded the team a Highly Commended in the Small Business Ventures/Projects and Reports category.

Faculty of Engineering Honorary Principal Fellow Dr Bob Wheway, who has been involved with UOW Racing from the beginning, described the award as a fitting tribute to the students and staff who had contributed to the race team over the last four years.

"Winning this award is great recognition for the team. It proves that what they're doing is accepted nationally as engineering excellence," Dr Wheway said. **CN**



UOW's victorious women's soccer team – gold medallists at the 2005 Australian University Games.

Women's soccer team's clean sweep of titles

UOW's women's soccer team has had a phenomenal year, sweeping all before them in local, state and national competitions.

Having won the Illawarra Women's Soccer Association minor premiership, they beat Woonona 3-0 in the grand final to add to their victory in the IWSA's Number 10 Cup.

The team proved themselves the best in the State, winning the NSW State Cup and the NSW Champion of Champions title.

Turning their attention to inter-varsity competitions, they went through the Eastern University Games undefeated to retain the title UOW has held since 2000. They then won the Australian University Games title to add to previous championships in 2001, 2003 and 2004.

In other sporting success, UOW's women's hockey team claimed their second consecutive Illawarra championships beating Wests 3-1 in the grand final.

The men's hockey club also made it to the grand final but lost 1-3 to Albion Park. It was the first time in 20 years that both teams have featured in the grand final.

The UOW Rugby Club also has had an outstanding season in 2005 culminating in the club's first ever club championship and their first first grade grand final appearance since 1981. Unfortunately, they went down to Tech Waratahs 24-16 in the season finale. **CN**

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