UQ news

FUTURE FOCUS

UQ Foundation Research Excellence Awards
This prestigious $40,000 prize highlights the University’s commitment to developing a National Collection of Artists’ Self Portraits.

The 2007 Prize will be judged by Mr Andrew Sayers, Director of the National Portrait Gallery, Canberra, and will be announced at 10am on 20 October. The announcement will be followed by a series of artists talks from 11am.

List of exhibiting artists

Tom Alberts
Davida Allen
Vernon Ah Kee
Adam Cullen
John Beard
Richard Bell
Jon Campbell
Celeste Chandler
Julie Dowling
David Griggs
Juan Ford
Joe Furlonger
Kristin Headlam
Gordon Hookey
Dee Jones
Nerissa Lea
Euan Macleod
Mike Parr
David Paulson
Rodney Pople
Ben Quilty
Jude Rae
Wendy Sharpe
Jiawei Shen
Sally Smart
Ian Smith
Vicki Varvaressos
Jenny Watson
Guan Wei
Michael Zavros

The University of Queensland Art Museum
The James and Mary Emelia Mayne Centre
The University of Queensland
University Drive
St Lucia Campus

Exhibition dates
Open: Tuesday – Sunday,
10am – 4pm
Free parking on weekends
www.maynecentre.uq.edu.au

RSVP
by Wednesday 17 October 2007
Ms Jasmin Haddadi
Protocol Officer,
The University Of Queensland
Email: j.haddadi@uq.edu.au
Telephone: 07 3365 7045

Light refreshments will be served

The inaugural 2007 Prize is supported by the Margaret Hannah Olley Foundation.
MESSAGE FROM THE VIC-CHANCELLOR

Leading research funding bodies have recently given renewed testimony to UQ’s excellence. In the brief space of 72 hours in late September, the Australian and Queensland Governments announced that cutting-edge research at UQ would receive sums totalling more than $105 million. This comprised more than $46 million from the Australian Research Council (ARC), more than $44 million from the National Health and Medical Research Council (NHMRC), and $15 million from the State Government for the new Queensland Geothermal Energy Centre of Excellence.

Among many exceptional outcomes, UQ showed unqualified dominance of ARC Linkage grants. Our allocation totalled $13.7 million, which is 22 percent of the national total, and exceeds the combined results of the next two universities by $3.3 million. As these funds are given to projects which have support from business, industry or other organisations, the result reaffirms that our research produces tangible outcomes for the broader community, as well as being academically robust.

No other university received an NHMRC Australian Fellowship in this round, as both of the 2008 fellowships were awarded to UQ. Dr Matthew Cooper will return from the UK to take up a fellowship at UQ’s Institute for Molecular Bioscience, where he will pursue ways of combating drug-resistant pathogens – especially those causing infections in hospital patients. Professor Wendy Hoy, of the UQ School of Medicine, will use her Australian Fellowship to advance her research into chronic diseases in Indigenous populations.

UQ’s sustained success as a research-intense university is due not only to researchers, but also to supervisors and to UQ teachers who encourage their students’ hunger for discovery. UQ’s annual Research Week (in September) and Teaching and Learning Week (in October-November) specifically recognise and reward outstanding researchers, research supervisors and teachers.

Our teachers have received more national university teaching awards than staff from any other Australian university, with these rewards reinvested to further improve teaching and learning. A new scheme, the UQ Teaching and Learning Strategic Grants, offers $2.5 million from the national Learning and Teaching Performance Fund for related initiatives at UQ.

The first round was decided in September and shares $1.39 million among 42 projects which are led by staff from our seven faculties and the Graduate School, with involvement from other UQ units and research institutes. A further $1.11 million will be offered in the first semester of 2008.

Such programs, accompanied by recognition of outstanding research and research supervision, form part of a strategy which makes UQ unique among Australian universities in attaining excellence in both research and teaching practice.

Professor John Hay, AC

UQ News is delivered off-campus to our neighbours at St Lucia and across the Eleanor Schonell Bridge. We hope you enjoy catching up with news and events at the University. If you would like to comment on the magazine, telephone (07) 3365 3367 or email communications@uq.edu.au

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Cover: 2007 Research Excellence winner Dr Derek Arnold from the School of Psychology
Photo: Chris Stacey

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Federal funding recognises research achievements

The University has received more than $46 million in Federal Government funding for research projects during the next five years.

UQ has topped the State and finished amongst the top four universities nationally in the latest round of the Federal Government’s Australian Research Council (ARC) grants which were announced last month.

UQ received almost $29 million to fund 71 research projects from next year under the ARC Discovery Projects scheme.

UQ’s successful research projects span areas as diverse as memory, breast cancer, age-related degenerative disorders, mutations, optimising government structures and how the Papacy became powerful.

Other UQ topics to receive funding will investigate worker wellbeing, marine systems, Brisbane theatre, teacher competence, organic solar cells, hydrogen storage, clean coal technology, neuroscience, clean fuels and pulp fiction, attesting to the University’s breadth and depth in research.

The University of Melbourne received the highest ARC Discovery funding ($38 million) followed by The University of Sydney ($34.5 million) and The Australian National University ($30.8 million).

UQ received more funding than the combined value and number of all grants from all other universities in Queensland.

Minister for Education, Science and Training Julie Bishop announced more than $300 million for 878 new research projects under the Discovery scheme.

UQ’s largest single grant was a $1.4 million award to Professor Stuart Crozier’s team in the School of Information Technology and Electrical Engineering, to improve medical imaging systems.

UQ also received one of the highest numbers of ARC Linkage Infrastructure, Equipment and Facilities (LIEF) grants out of 67 on offer nationally.

UQ’s nine grants were valued at a total of $4.24 million, with partner contributions of about $5.6 million.

The University of Sydney and University of New South Wales had the highest number with 10 grants each.

UQ’s LIEF grants included $500,000 for phase 2 of the AustLit program, involving all works of Australian literature dating back to 1788.

The grant will enable the Bibliography of Australian Literature project to be completed in 2008.

Other ARC research grants included:

• A new project under the Discovery Indigenous Researchers Development scheme — Five universities successful in this $1.12 million scheme. UQ received $180,000 for a project describing the consequences of climate change on marine processes, harvested resources and ecosystems.

• Professor Hubert Chanson from the UQ Civil Engineering division received a three-year Discovery grant totalling $285,000 for a water resource conservation project. His research will assess the engineering design of current spillways and urban drainage systems to provide efficient and economically sustainable solutions for infrastructure expansion and refurbishment which meet the growing needs of industry and urban and rural Australia.

• Professor David Siddle congratulated UQ researchers who had applied for grants under very competitive circumstances.

UQ has dominated the country’s leading industry-oriented research grants scheme by securing $13.7 million in Australian Research Council (ARC) Linkage Projects grants.

It is the fourth time in the last five years that UQ has topped the Linkage research grants. UQ won 22 percent of the $62.3 million awarded under the scheme and received more than twice as much funding than the University of Sydney ($5.5 million for 18 projects), the University of NSW ($4.9 million for 18 projects) and Queensland University of Technology ($3.2 million for 13 projects).

ARC Linkage grants are awarded biannually to link universities with industry, business and community organisations through research.

The round one money for 2008 will fund 25 new UQ research projects, which include about $20 million in partner contributions.

Among the grants, UQ researchers will lead a highly strategic, $4.7 million project with other universities and the water industry partners to create better technologies for odour and corrosion management in sewer systems.

This is the single, largest Linkage grant awarded nationally in the current round. Other grants included:

• $23,455 Linkage International grant to apply a method for accurately mapping shallow coastal environments.

• $131,306 Linkage International Fellowship awarded for research in cell membranes and cellular calcium regulation in the peripheral nervous system.

• UQ applied for 43 grants, with 25 grants awarded, translating to a 58 percent success rate.

UQ Deputy Vice-Chancellor (Research) Professor David Siddle said the funding recognised the strength of UQ researchers and the effectiveness of their links with industry.

View successful projects at: www.arc.gov.au/ncgp/lp/LP08_Rd1_list.htm
HEALTHY OUTCOME
IN MEDICAL FUNDING

UQ has increased its national medical research funding by 10 percent, receiving more than $44.6 million under the latest round of National Health and Medical Research (NHMRC) grants.

UQ secured more than half of Queensland’s 122 NHMRC grants which were worth more than $87.4 million.

The University secured the fourth-highest allocation of the grants, announced on September 25.

NHMRC grants are one of the premier grant schemes for health and medical research which are distributed annually across more than 50 universities and institutes across Australia.

UQ has received 66 grants, made up of:
- 54 Project grants ($27.25 million);
- Two Australia Fellowships ($8 million);
- One Program grant ($5 million);
- One Equipment grant ($724,000);
- Seven Fellowships (Five Research Fellowships, two Practitioner Fellowships - $3.55 million); and
- One Development Grant ($97,000).

UQ received the only two prestigious Australia Fellowships, each worth $4 million, for researchers Professor Wendy Hoy and Dr Matthew Cooper.

UQ’s Institute for Molecular Bioscience (IMB) secured several grants including:
- $593,250, to understand how functional nerve cells in the brain are regulated, Professor Glenn King (IMB); and
- $483,750, to provide essential groundwork for the development of new antimicrobials that inhibit bacterial cell division, Professor Glenn King (IMB).

Other major UQ projects included:
- $763,850, for the Australian Genomewide Association Study in Osteoporosis, Professor Matthew Brown (Diamantina Institute for Cancer, Immunology and Metabolic Medicine);
- $537,500, for a West Nile virus replication and host response study, Associate Professor Alexander Khromyk (School of Molecular and Microbial Sciences), Dr Roy Hall (School of Molecular and Microbial Sciences);
- $483,750, to provide essential groundwork for the development of new antimicrobials that inhibit bacterial cell division, Professor Glenn King (IMB);
- $469,375 to investigate the efficacy of novel, non-robotic devices to train reaching post stroke, Dr Sandra Brauer (School of Health and Rehabilitation Sciences);
- $445,500, to develop antimicrobial agents to combat antibiotic-resistant strains of Staphylococcus aureus (Golden Staph), Professor Glenn King (IMB).

Estrogen linked to breast cancer

The female sex hormone estrogen turns on a gene linked to breast cancer, according to new research by Brisbane scientists.

The cancer biology team from UQ’s Diamantina Institute for Cancer, Immunology and Metabolic Medicine, believe the finding will help explain the link between breast cancer and high levels of estrogen.

“What we’ve shown is that the ability of estrogen to switch this gene on is important for the growth of breast cancer cells,” Diamantina cancer biology research leader Professor Tom Gonda said.

The gene the team studied, known as MYB, is found in about 70 percent of all breast cancers and is one of several dozen genes called oncogenes that promote cancer growth.

“What’s important in breast cancer is the ability of estrogen to turn on MYB rather than there being a mutation in the gene itself,” Professor Gonda said.

He said the next step was to take the results, which come from isolated cancer cells grown in the laboratory, and test them in laboratory mice that are a better model for human patients.

“We’re trying to show directly that MYB can induce cancerous changes in normal breast cells,” Professor Gonda and his colleagues at UQ worked with researchers in Melbourne, Adelaide and the United States and published their findings this month in the prestigious scientific journal Proceedings of the National Academy of Sciences of the USA.

He said a drug that blocks the action of MYB might be used to treat breast cancer in the future, but he warned that would take many years of hard work.
Researchers from UQ’s Australian Institute for Bioengineering and Nanotechnology (AIBN) have discovered a way to precisely deliver drugs to blocked arteries, preventing complications after heart surgery.

The technique, discovered by Dr Anita Thomas and UQ colleagues, uses antibodies linked to the drugs to ensure they are deposited in the arteries where doctors want them, rather than in other places in the body where they can have unacceptable side effects.

Cardiovascular diseases are the biggest single preventable killer in the developed world and result in at least 17 million deaths annually. Most of these diseases are due to the blockage of arteries by cholesterol-rich thickenings.

“Surgical techniques have been developed to remove these blockages, but in up to 60 percent of patients they re-occur within six months,” said Dr Thomas, a post-doctoral fellow at the AIBN.

Dr Thomas and Professor Julie Campbell observed that the protein fibrin, which is found in blood clots, is deposited in arteries within 10 minutes of surgery to remove the original blockage.

They then confirmed that fibrin could be used to attract antibodies which they linked to drugs to prevent the artery from becoming re-blocked.

The targeted delivery of these drugs was effective in preventing re-blocking, and also stopped the drug being dispersed within the bloodstream.

Because the drug is concentrated where it is of most value, it can be used in low doses.
HOT ROCKS BUZZ

Harnessing an untapped energy source which has the capacity to power Australia for 6000 years will be the focus of a new centre at UQ.

Queensland Premier Anna Bligh has announced a $15 million five-year contribution to a new research and development centre for “hot rocks” – the Queensland Geothermal Energy Centre of Excellence.

UQ Senior Deputy Vice-Chancellor, Professor Paul Greenfield, said it could lead to abundant zero-emission baseload electricity.

“Geothermal energy has unique potential in that it creates no greenhouse gas and could be a reliable source of baseload power, so it will satisfy industry, householders and the growing demand for “green” energy,” Professor Greenfield said.

“It will become cost-competitive when the expense of mitigating greenhouse gas emissions from fossil fuels is factored in. “This energy source is often called “hot rocks” because it is based on fractured granites, heated to up to 250°C, which are at least three kilometres below the Earth’s surface.”

“The Cooper and Eromanga Basins beneath Queensland and South Australia are believed to be among the best and hottest in the world, and hold enough water to supply the needs of a hot rocks power plant, without depleting the natural aquifer,” UQ Deputy Vice-Chancellor (Research), Professor David Siddle, said.

Queensland’s geothermal energy resource is equivalent to that needed to supply Australia’s current demands for 6000 years.

“In the shorter term, we estimate that 4000 Megawatts of geothermal power could be generated by 2030 without any carbon dioxide emissions,” Professor Siddle said.

There would be three main steps to the process:
• Water would be forced downwards through natural rock fractures, where it would be heated and then rise through other fractures to above-ground heat exchangers;
• The heat exchangers would heat a working fluid to drive a turbine-generator set, to produce electricity with no greenhouse emissions;
• Meanwhile, the water which had been thrust to the surface by the hot rocks would be recycled back into the earth to be reheated, forming a closed water circuit.

Professor Greenfield said that the centre was an investment in research and development, as well as in the expansion of technical expertise.

“We need these investments to make large-scale geothermal power generation a sustainable reality,” he said.

“Ideally geothermal should become part of a mix of energy sources which would include clean coal and gas, and established renewables.”

In addition to the $15 million from the Queensland Government, UQ will provide in-kind contributions valued at $3.128 million over five years and a further $2.05 million will be raised from external sponsors.

The centre will be the biggest of its type in the nation and will make Queensland and Australia a leading technology provider in the growing geothermal energy sector, through research and development.

UQ will work with institutions in the USA – where Massachusetts Institute of Technology (MIT) will be a partner – and Iceland, as well as relevant Australian collaborators.

Brisbane-based company, Geodynamics Ltd, is one of about 16 companies active in geothermal power generation in Australia. Geodynamics Ltd initiated Australia’s first underground heat exchanger in the Cooper Basin in late 2002.

Professor Greenfield said the new centre would not have been possible without expertise provided by UQ researchers including Professor Hal Gurgenci (School of Engineering); Professor Victor Rudolph (School of Engineering); Professor Max Lu (Australian Institute for Bioengineering and Nanotechnology); and Professor Tapan Saha (School of Information Technology and Electrical Engineering).

A steam production test in South Australia. Photo courtesy of Geodynamics

“Geothermal energy has unique potential in that it creates no greenhouse gas”

BACK PAIN STUDY

The Pain Sciences Research Unit of the UQ Physiotherapy Division needs volunteers with lower back pain for a study.

People experiencing such pain often have points of tenderness in their lower back muscles. The main purpose of the study is to see if these points are changed by gentle treatment.

Volunteers should be between 18 and 65 and willing to attend a single one-hour session. Volunteers will not be suitable if they have a diagnosis of fibromyalgia syndrome or rheumatoid arthritis or have had a spinal fracture in the last two years.

Information: Lieszel Plumb (07) 3365 4692 or l.plumbe@uq.edu.au.

BIOMEDICAL DEGREE

UQ’s Faculty of Biological and Chemical Science will introduce a new Bachelor of Biomedical Science in 2008.

The four-year program provides a broad foundation in the biological sciences in the first year, followed by the opportunity to specialise in Physiology; Developmental Biology; Pharmacology and Toxicology; Neuroscience; Molecular and Cellular Biology; Human Genetics; or Immunology and Infectious Diseases.

Further details will be available at an information session held from 5pm on October 18 on Level 4 of the Sir James Foots building at St Lucia. To register, visit www.bacs.uq.edu.au/biomedical

VOLUNTEER WITH RSL

You can make a difference to the life of an elderly person by donating a few hours each week to help with shopping, transport to Doctor’s appointments or by just dropping in to have a chat. Make a difference and volunteer with RSL Care, one of Australia’s most respected not-for-profit providers of HomeCare, retirement living and residential care to the ex-service and wider communities. For more information visit www.rslcare.com.au or phone 1300 796 111.
DROUGHT-PROOF NATIVES COLOUR GARDENS

UQ is providing salvation for drought-affected gardens – in the form of three new native flowers from the Queensland bush.

The drought and cold hardy plant cultivars were developed from the Australian species Ptilotus nobilis by the Centre for Native Floriculture (CNF) at the University’s Gatton campus.

Named Poise, Passion and Purity respectively for their pink, purple and cream flowers, the plants are the first releases from the Outback Princess range being marketed by Aussie Colours, a creation of the University’s main commercialisation company, UniQuest.

UniQuest Managing Director David Henderson said the formation of the company would help ensure the range would have the best chance of success in the marketplace.

“We believe Aussie Colours has the potential to become a global company that promotes and markets Australian native plants all around the world,” he said.

The Outback Princess range flowers year-round, producing lots of large, soft and attractive conical flowers.

Once established, the plants require little water, are suitable for a wide range of soil and climatic conditions, and can thrive as either pot or bedding plants.

Director of the CNF Professor Daryl Joyce said he had high hopes the range would be the first of many Australian species to excite consumers.

“Ornamental plants are fashion items and the marketplace is constantly seeking new, different and exciting products,” Professor Joyce said.

“With 26,000 species of higher plants, the Australian native flora has a lot to offer – both at home and abroad.”

The Outback Princess range are available in Big W Garden Centres in Queensland and Northern NSW, with negotiations also underway to market the flowers in the USA, Europe and Asia.

UQ experts have called for more scientific analysis in the rezoning of the Moreton Bay Marine Park and less politics and scaremongering.

Public input is currently being sought on the rezoning of the park, which could change how people access and use the Bay.

At present, less than one percent of the bay is within a protected green zone but there has been strong opposition to further protection.

UQ ecologist and mathematician Professor Hugh Possingham, a Fellow of the Australian Academy of science and member of the Park’s Independent Expert Scientific Panel, said the Queensland Government needed to stick to the principles determined by science experts.

“It is important that the areas chosen for protection are based on sound scientific principles and relevant socioeconomic data,” Professor Possingham said.

“The panel has advised the Environment Minister that most of the international scientific literature points to protecting between 20-40 percent of all marine systems in no-take areas.

“The expert panel developed guiding principles for the review and the State Government must ensure they use these principles to rezone our Bay.”

Professor Possingham’s research group created the “Marxan” computer program which designed the protection areas of the Great Barrier Reef Marine Park.

The package is the most widely used reserve design software in the world, and has been implemented in more than 70 countries.

UQ Moreton Bay Research Station research and education manager Dr Kathy Townsend, a rezoning Stakeholder Advisory Group member and expert on many aspects of the Park, said only 0.5 percent of the area was fully protected at present.

Dr Townsend oversees many scientific investigations about the health and diversity of Moreton Bay each year at her research laboratories on North Stradbroke Island.

“Stakeholders have been fully engaged by the Environmental Protection Agency [EPA] throughout the review process,” Dr Townsend said.

“However, I fear that objective science may be disregarded as pressure on the EPA and Environment Minister from interest groups increases.

“All the stakeholders despite their backgrounds, have one common goal: to maintain the health of Moreton Bay.

“Science cannot, and should not, take a backseat in a process as critical as this.”

Recommendations from the Independent Expert Panel can be viewed on the EPA’s website at www.epa.qld.gov.au
UQ researchers have proven ancient Pacific islanders made the journey between Hawaii and Tahiti, solving a long-standing sea faring mystery.

UQ Earth Science Professor Ken Collerson and archaeologist Dr Marshall Weisler have studied a woodworking tool, called an adze, that was fashioned from volcanic rock. The adze was collected in the 1930s on a low coral island in the Tuamotu Archipelago in French Polynesia, 4000 km from Hawaii.

Professor Collerson said the lead isotope composition and trace element chemistry of this adze clearly shows it was manufactured from a volcanic rock that came from Hawai‘i, rather than from an island in central Polynesia, close to where it was collected.

"Using knowledge of the chemistry and the unique isotopic compositions of mantle sources of volcanic rocks in East Polynesia, we identified the sources of every one of the 19 adzes in the study," Professor Collerson said.

"The varied chemistry of the adzes showed that they were obtained from throughout East Polynesia, including the Marquesas, Australis, Societies, and the Pitcairn Group."

He said this multi-disciplinary isotope and trace element research is the first physical confirmation that the remarkable extended voyages from Hawai‘i, documented in Polynesian oral histories, were possible.

Dr Weisler said although Hawaiian oral histories mentioned voyages from Hawaii to Tahiti and back via the Tuamotus, a total open ocean journey of more than 8000 km, no objects originating from Hawaii had ever been identified in East Polynesia until now.

"Kaho‘olawe Island is culturally extremely important to Hawaiians and before beginning their voyage south from Hawaii, the ancient voyagers in their sea-going canoes most likely stopped at the westernmost tip of the island, traditionally named Læ o Kealakahiki, which literally means ‘the cape or headland on the way to Tahiti.‘" Dr Weisler said.

"Here they apparently collected rocks, like that from which the adze was subsequently made, to take on their voyage, either as ballast or as a gift."

Dr Weisler said by confirming the extent of ancient inter-island trade within East Polynesia, he and Professor Collerson had resolved a long-standing archaeological problem concerning migration and cultural exchange within East Polynesia, the last region on Earth settled by humans during prehistory.

"This 4000 km journey now stands as the longest uninterrupted maritime voyage in human prehistory," he said.

The research was published last month in the prestigious journal Science.

A panel of leading scientists gave the journal, Australian Archaeology, the maximum rating out of three categories for the listing of the European Reference Index for the Humanities, putting it on par with World Archaeology, the Journal of Archaeological Science and Antiquity.

The bi-annual journal, the official record of the Australian Archaeological Association, is produced by a team of nine UQ and UQ-linked academics and alumni.

Dr Sean Ulm from UQ’s Aboriginal and Torres Strait Islander Studies Unit and Dr Annie Ross from the University’s School of Social Science and School of Natural and Rural Systems Management are the joint journal editors.

Dr Ulm said the team had revamped the journal’s content and design since it shifted to UQ 18 months ago.

“When the editorial team moved to UQ we took the opportunity not only to overhauls its appearance but also the quality and international appeal of the journal,” Dr Ulm said.

“What we were trying to do was make the content of the journal more accessible to both domestic and international audiences.”

The next issue, published in December, features articles on how Australian archaeological evidence improves our understanding of the development of modern human behaviour and explores the public benefits of archaeology.
ARC HEAD PRAISES FORWARD THINKING

The new Chief Executive Officer of the Australian Research Council (ARC), Professor Margaret Sheil, praised UQ’s researchers and strategies during her first public address as head of the national body.

Professor Sheil, whose appointment began in mid-August, was guest speaker for the UQ Foundation Excellence Awards and Awards for Excellence in Research Higher Degree Supervision, which rewarded seven early-career researchers and three supervisors with prizes worth a total of $535,000.

The announcement of the awards was among the major events held as part of the annual UQ Research Week, this year held from September 17-21.

Research Week raises awareness of current UQ research amongst the university community, the general public, industry and government.

Professor Sheil said UQ had 17 ARC Federation Fellows, three directors of ARC Centres of Excellence, and other outstanding researchers funded by bodies such as the National Health and Medical Research Council.

“To be judged excellent in this environment is really a great achievement, so well done to those who’ve received awards for research excellence both this year and in previous years,” she said.

Giving the address at the invitation of Deputy Vice-Chancellor (Research) Professor David Siddle, Professor Sheil said an excellent research environment was not created by accident.

UQ’s success was “evidence that the research management strategy that’s been in place here for many years is really proving to pay dividends”.

Another highlight of Research Week was the inaugural UQ Federation Fellows Public Lecture at Brisbane’s Customs House.

Environmental and media issues were discussed at the free community event, with lectures from distinguished researchers, Professor Hugh Possingham and Professor Graeme Turner. ABC Radio National sports reporter and writer, Warwick Hadfield, convened the forum.

Supervisors stand out

The University has rewarded three of its academic staff for their outstanding supervision of research higher degree students.

The Awards for Excellence in Research Higher Degree Supervision, worth $10,000 each, were announced during the 2007 UQ Research Week last month.

The winners were Associate Professor Richard Baldauf (School of Education), Professor David Craik (Institute for Molecular Bioscience (IMB) and Dr Sarah Roberts-Thomson (School of Pharmacy).

Dr Baldauf is an applied linguist whose research interests centre around language, culture and education, particularly in the Pacific basin and how they relate to teaching English to speakers of other languages.

His students attest to his outstanding qualities as a scholar, an intellectual and a mentor and greatly value his constructively critical approach and his active engagement with their research projects.

Dr Baldauf has an outstanding record of supervision of international students and has helped several candidates whose supervision he took over late in their candidature.

He has successfully established the Thesis Family concept where students are taught skills as referees and editors, giving them a broader insight into the research process.

A senior lecturer in the School of Pharmacy, Dr Roberts-Thomson’s research interests include transcription factors in cancer, as well as nutrition and toxicology.

Her students describe her as uniquely able to inspire, leading by example and providing a highly enjoyable research environment that is structured yet creative, flexible yet focused.

Her expectation that every candidate publish while under her supervision has been met since 2000, with students publishing 21 papers, many in top-tier journals.

As postgraduate coordinator for her school, Dr Roberts-Thomson has shown outstanding leadership and is credited by her Head of School, Professor Nick Shaw, with being instrumental in the recent growth in the school’s research student numbers.

Professor Craik is Australian Research Council Professorial Research Fellow and Group Leader for NMR Spectroscopy Research at the IMB, and his research focuses on drug design and development.

Professor Craik’s students are drawn to him by his reputation as an outstanding researcher. He leads by example and has created a highly productive team. He has successfully supervised to completion more than 20 PhD students and currently has 10 under supervision.

Students particularly value his strong commitment and dedication to maintaining weekly, face-to-face meetings and the range of discussion opportunities he provides including one-on-one sessions, small group meetings and social gatherings such as a writing retreat at UQ’s Moreton Bay Research Station.

Director of the UQ Graduate School and Dean of Postgraduate Studies, Professor Alan Lawson, said high-quality research supervision was the most crucial factor in students completing research higher degree studies.

“UQ prides itself on finding a perfect match between research higher degree students and supervisors from the start of their candidature,” he said.

“This is a two-to-four-year relationship requiring compatibility and enthusiasm by both parties.”
Dr Straton is currently involved in projects including the assessment of the social and economic values of Australia’s tropical rivers, property rights and greenhouse gas abatement on Aboriginal land and evaluating the resilience of tropical savanna land use systems.

International Alumnus of the Year Award

Datuk Dr Rosti Saruwono, completed a Bachelor of Engineering in 1974, the 2007 Alumnus of the Year is Dr Jackie Huggins, AM, co-chair of Reconciliation Australia and deputy-director of UQ’s Aboriginal and Torres Strait Islander Studies Unit. In 2001 Dr Huggins was made a member of the Order of Australia.

Upon graduation, Anna was determined to roll up her sleeves and get involved in research and advising in the context of solving actual environmental problems, rather than becoming an academic,” Professor Foster said.

“Her PhD thesis, which she completed in 2005, offered a new perspective on how to deal with environmental problems, and attracted significant attention.

Dr Straton’s PhD research supervisor, could not speak more highly of the Young Alumnus. “She is a fine example of an outstanding Honours and PhD student who has gone out of academia to make a difference in a vitally important area.”

Dr Straton completed her Bachelor of Economics in 1998 and graduated with first-class honours in 1999.

“Dr Straton is a fine example of an outstanding Honours and PhD student who has gone out of academia to make a difference in a vitally important area.”

The 2007 Alumnus of the Year is Dr Jackie Huggins, AM, co-chair of Reconciliation Australia and deputy-director of UQ’s Aboriginal and Torres Strait Islander Studies Unit. In 2001 Dr Huggins was made a member of the Order of Australia.

After completing her undergraduate degree at UQ in the 1980s she went on to obtain a diploma of education and an honorary associate degree, conferred by the University last year. As a distinguished public administrator, academic and policy maker, Datuk Dr Rosti is highly respected in Malaysia, Australia and internationally.

The 2007 Alumnus of the Year is Dr Jackie Huggins, AM, co-chair of Reconciliation Australia and deputy-director of UQ’s Aboriginal and Torres Strait Islander Studies Unit. In 2001 Dr Huggins was made a member of the Order of Australia.

After completing her undergraduate degree at UQ in the 1980s she went on to obtain a diploma of education and an honorary doctorate, conferred by the University last year.

A renowned activist, academic and author, Dr Huggins said she would continue to strive for reconciliation, a cause she has supported for many years.

The Alumnus of the Year is selected by the Alumni Association of the University of Queensland Inc. as a distinguished public administrator, academic and policy maker, Datuk Dr Rosti is highly respected in Malaysia, Australia and internationally.

The 2007 Alumnus of the Year is Dr Jackie Huggins, AM, co-chair of Reconciliation Australia and deputy-director of UQ’s Aboriginal and Torres Strait Islander Studies Unit. In 2001 Dr Huggins was made a member of the Order of Australia.

After completing her undergraduate degree at UQ in the 1980s she went on to obtain a diploma of education and an honorary doctorate, conferred by the University last year.

A renowned activist, academic and author, Dr Huggins said she would continue to strive for reconciliation, a cause she has supported for many years.

The Alumnus of the Year is selected by the Alumni Association of the University of Queensland Inc.

Students and teachers will benefit from a new $2.5 million fund which reinvests UQ’s income from national teaching awards into a range of projects, including efforts to bring teaching into the realm of Second Life and YouTube.

The first round of the UQ Teaching and Learning Strategic Grants scheme was decided in late September, with 42 teaching-related projects receiving a total of $1.39 million.

The leaders of funded projects included Dr Roger Moni (Biological and Chemical Sciences, BACS), Dr Jim Hanan (BACS), Associate Professor Lawrence Gahan (BACS), Dr Tom Baldock (Environment Physical Science and Architecture, EPSA), Mr Doug Neale (EPSA), Dr David Pullar (EPSA), Associate Professor David Ip (Social and Behavioural Sciences) and Ms Monica Moran (Health Sciences).

Vice-Chancellor Professor John Hay, AC, said each project would promote excellence in teaching and learning.

“UQ has won more national awards for teaching than any other university in the history of the awards, and these new grants are sourced from the $18.5 million acquired in 2006 and 2007 from the national Learning and Teaching Performance Fund,” he said.

Deputy Vice-Chancellor (Academic) Professor Michael Keniger said funded projects included some where teachers applied “Gen Y” technologies.

“Examples include the creation of interactive, multi-dimensional electronic media to teach Latin, and the accommodation of a Second Life virtual island – with spaces for various religions – to enhance Studies of Religion,” he said.

“DVD recordings will aid development of medical students’ skills in communicating with patients, and YouTube technology will help biology tutors to communicate effectively with first year students.”

A further $1.11 million of UQ grants will be allocated in the first semester of 2008.
ALMOST ONE-THIRD OF ALL AUSTRALIAN RESEARCH COUNCIL (ARC) FEDERATION FELLOWS AT UQ HAVE PREVIOUSLY BEEN RECOGNISED WITH UQ FOUNDATION RESEARCH EXCELLENCE AWARDS. THE AWARDS, INTRODUCED IN 1999 AND DESIGNED TO NURTURE EARLY-CAREER RESEARCHERS, ARE THIS YEAR WORTH A TOTAL OF $505,000.

BRIGHT SPARKS

ENZYME ENQUIRIES
A UQ biophysical chemist is working on new research which one day may slow down or switch off certain diseases.

Dr Gary Schenk, from the School of Molecular and Microbial Sciences, has been awarded $85,000 to study a group of enzymes including one linked to the bone disease osteoporosis.

“An enzyme works like a machine, you feed in a substrate (a particular molecule), the enzyme does something to it and out comes a product,” Dr Schenk said. “If you’re able to inhibit this enzyme’s action, you can effectively combat the disease associated with it.”

Understanding how an enzyme works during a reaction is a key to its use as a drug target, with the mid-point (known as the transition state) of particular interest.

“Transition states are unstable and difficult to study,” Dr Schenk said. “One way we can explore the ‘shape’ of this state is by using isotopes – atomic markers placed at particular positions in the substrate.

“This modified molecule may have chemical properties different from those of the original, an observation which can be used to ‘visualise’ the transition state.”

From this, synthetic molecules can be designed which mimic the real thing and might stop the reaction.

Dr Schenk will use the award to visit Utah State University, where he will collaborate with Professor Alvan Hengge, a world leader in the field.

COMPLEMENTARY COMMUNICATION
Complementary treatment use is high in regional Australia, but patients often don’t tell their doctor, according to a UQ researcher, who will conduct the world’s first study in this area.

The study, by School of Population Health social scientist, Dr Jon Adams, aims to help improve rural health outcomes by investigating the practices and perspectives of regional GPs regarding complementary and alternative medicine (CAM) treatments such as acupuncture, naturopathy and herbal medicine.

Dr Adams, who has been awarded $85,000 for his research, said the results would be important for rural health delivery because the high use of CAM could have safety issues when combined with conventional healthcare.

“GPs are key healthcare providers, particularly in rural areas and it’s vitally important that they have as much information as possible about CAM and their patients’ use of CAM,” he said.

The study will examine a number of issues, including how many GPs practise CAM and refer patients to CAM practitioners, what type of patients this is most likely to involve and GPs’ perceptions and experiences of these treatments.

Other key areas to be examined are the relationship of complementary and alternative medicine to rural GP training and education.

TAKING IT PERSONALLY
Dispensing and swallowing the “bitter pill” of personal criticism is one of life’s less enjoyable but most important experiences.

UQ social psychologist, Dr Matthew Hornsey, is out to fill an information vacuum surrounding the best ways and circumstances in which to give and receive personal criticism using his $75,000 award.

“The aim is to unlock the psychological processes underlying defensiveness in the face of criticism, and to translate these insights into specific and usable strategies for change,” he said.

“Conclusions drawn from the research have implications for any context where criticism is delivered or received, including educational institutions, workplaces, and in psychotherapy.”

He said former British Prime Minister Sir Winston Churchill had captured the complex nature of criticism when he said it “may not be agreeable, but it is necessary”.

“On one hand, if we were never criticised, we might be condemned to repeat our mistakes and would be unlikely to reach our potential. On the other, criticism is inherently threatening and, if taken in the wrong spirit, can lead to an atmosphere of mistrust, hurt, and denial,” Dr Hornsey said.

He said because people tended to shy away from potential for hurt, there was evidence that negative feedback was not passed on, particularly to people higher in the status hierarchy.
BLURRED EDGES

Dr Melissa Gregg has won $55,000 to investigate how much the internet and mobile technologies are blurring our public and private lives and creating real benefits.

Dr Gregg, from UQ’s Centre for Critical and Cultural Studies, will follow the technology habits at work and home of 30 white-collar workers in Brisbane during the next three years.

She said people were increasingly being more intimate online by sharing their identities and personal information through sites such as MySpace, Flickr, and blogs. “In online communities, relationships become part of the CV for which you are judged and the testimonials of contacts are central to maintaining status,” she said. “If I look attractive and interesting enough to enough people, then I will get a wider group of friends or contacts that I can then draw upon for further developments in my life.”

She said her goal was to inform online policy and provide material for a book about online communities.

She also wants to show employers how their employees are using technologies and how often online networking translates into job offers or other business.

“People are constantly updating their online profiles, which is a new form of labour, because they’re investing in themselves for future, unknown benefits,” she said.

SENSE OF TIMING

Scientific experiments by a UQ researcher have shown that our own brain activity can influence our sense of timing.

Work by Dr Derek Arnold, of the UQ School of Psychology, goes against a widely held belief that activity in the cortex of the human brain does not influence how we perceive time.

Dr Arnold has been awarded a $60,000 award for a project building on his recent work and which has substantial implications for understanding the mechanisms involved in time perception.

“Clariﬁying the mechanisms involved in normal time perception will obviously help in understanding situations where those mechanisms fail,” he said. “So, in addition to the considerable theoretical signiﬁcance, this project may have implications for our understanding of disorders associated with impaired time perception, such as autism, dyslexia and schizophrenia.”

His recent work has examined sensory changes that can only be detected because of activity in the cortex of the human brain.

He has found that large changes can be detected more rapidly than smaller changes. He also found that large changes seemed to occur earlier than smaller changes.

Dr Arnold was awarded his PhD in visual perception by Macquarie University in 2003 and worked at University College London before joining UQ 18 months ago.

CLEAN AND GREEN

A novel technology to trap large-scale greenhouse gas emissions caused by coal mining and power generation is being developed by a UQ researcher.

Dr John Zhu, Senior Lecturer at the School of Engineering, aims to develop a carbon nanotube (CNT) membrane for gas separation that will work like a sieve to separate high volumes of methane or carbon dioxide from other gases.

Dr Zhu has received $85,000 to advance this important research into clean energy and greenhouse gas reduction.

Dr Zhu said that the CNT technology was exciting because it would trap gases moving up to 100 times faster than other gas separation techniques and could therefore be used by large-scale plants such as power stations.

“Conventional membranes such as polymeric and metal membranes, porous silica and carbon molecular sieves all show a trade-off between how well they separate gases and how much gas they can process,” he said.

“The CNT membranes can both separate effectively and process large volumes of gas, making them superior to conventional membranes at the large scale required for coal-fired power plants or natural gas processing.”

Dr Zhu was delighted to receive the award because of his conviction to advancing research in an area critical to the planet’s future health.

QUANTUM WHIRLPOOL

A UQ quantum physicist is applying a new theory to an old problem.

Dr Matthew Davis, from the ARC Centre of Excellence for Quantum-Atom Optics within the School of Physical Sciences, is working on a new state of matter – a Bose-Einstein condensate – to further understand the very nature of the universe.

“The beauty of a Bose-Einstein condensate is that it is similar to a laser but made of matter,” Dr Davis said.

“It is a collection of atoms that are perfectly coherent and have the potential to be used in ultra-sensitive measurement devices.”

Dr Davis’s work has been recognised with a $60,000 award. “I’m very pleased that my research record and proposed project have been judged worthy of the award,” Dr Davis said.

“Dr Davis said BECs were first predicted in the 1920s by Albert Einstein, but not realised in the laboratory until many years later, in 1995.

His own particular interest is looking at how the BECs form and especially how quantum whirlpools, called vortices, are formed. “This will hopefully answer broader questions about the nature of certain types of phase transitions, and will feed into experiments being performed by my collaborators at the University of Arizona,” he said.
WATER EXPERTISE PUT ON TAP

UQ is a partner in a project granted $532,000 by the Federal Government to develop and deliver a program to upgrade water management skills.

International WaterCentre, a joint venture partnership between UQ, the University of Western Australia, Monash University and Griffith University, obtained the funding for the jointly-badged Master of Integrated Water Management program under the government’s Collaboration and Structural Reform Fund.

Design and development of the course will be shared across the universities, with significant input from industry, government and non-government organisations.

The chair of the International WaterCentre, UQ Senior Deputy Vice-Chancellor Professor Paul Greenfield, said the funding recognised that water professionals needed broad knowledge and skills in order to properly address the complex challenges facing them.

“Effective water professionals must understand that water is an essential component of sustainability, which impacts on areas including health, socio-economic welfare, national and international economies, and relations between peoples and nations,” he said.

Federal Minister for Education, Science and Training, Julie Bishop, announced the funding in September as part of a national $7.6 million allocation.

INNOVATION REWARDED

JKTech’s ongoing dedication to innovation and commercialisation was rewarded recently when it won the Business category of the 2007 Lord Mayor’s Investment Awards.

JKTech’s application for the award outlined the range of innovative technology, software and consulting solutions for the international minerals processing market, with a focus on advances in the company’s flagship product, the Mineral Liberation Analyst (MLA), which is used by market leaders including Rio Tinto and BHP-Billiton.

The award reinforces the commercialisation role JKTech plays with the Julius Kruttschnitt Mineral Research Centre (JKMRC), housed within UQ’s Sustainable Minerals Institute.

INAUGURAL APPOINTMENT

Professor Caroline Crosthwaite, Director of Studies for UQ’s Faculty of Engineering, Physical Sciences and Architecture (EPSA) has been appointed as the University’s first professorial level teaching-focused academic.

Professor Crosthwaite has been EPSA Director of Studies since 2005 and served as a co-director of the Catalyst Centre, which has undertaken interdisciplinary research into engineering education.

Professor Crosthwaite has received numerous awards for her work, including an Australian Award for University Teaching for Enhancing the Quality of Teaching and Learning and an Australasian Association for Engineering Education Award for Excellence in Curriculum Innovation.

MBA’S FIVE STARS

The Graduate Management Association of Australia (GMAA) has once again awarded UQ Business School’s MBA program the highest possible star rating.

Head of School Professor Tim Brailsford said the GMAA used data submitted to the Good Universities Guide – an annual snapshot of University performance.

“The GMAA also makes its methodology explicit so everyone knows how the ranking is derived. It is arguably Australia’s most credible ranking process and we’re delighted to have done so well for the third consecutive year,” Professor Brailsford said.

The Good Universities Guide itself awarded the UQ Business School five stars for graduate salaries, industry links, and staff academic qualifications.

Ecologist nets riverprize

A new way of prioritising freshwater rivers for restoration and conservation has won Dr Simon Linke, a researcher with UQ and eWater CRC, the Riversymposium Young Water Scientist Award for 2007.

Dr Linke was one of three finalists for the prestigious prize announced last month and sponsored by GHD and the Water Forum CRCs (Cooperative Research Centres).

The $3000 award demonstrates the high quality of industry-focused postgraduate researchers concentrating on water management issues in Australian universities and CRCs.

The Young Water Scientist Award for 2007 is the culmination of an annual contest between early-career scientists who are capable researchers, clear communicators, and innovative thinkers with real world applications for their work.

Dr Linke is the first ecologist to win the award, which was for his research on identifying endangered freshwater systems of high conservation value.

The research has been turned into an interactive software package to analyse and help identify freshwater rivers in danger, while providing suggestions of ways landowners and managers can manage their land to achieve the best environmental outcomes.

Similar systems have been used in the NSW forest agreements and the re-zoning of the Great Barrier Reef Marine Park, but are new in rivers.

Dr Linke believes his research, which will be incorporated into the software package, will improve the outlook for Australia’s rivers.

“My research is about creating compromises between the conservation of native biodiversity while minimising the impact on other stakeholders such as irrigators or graziers,” he said.

“It’s about getting the best bang for your buck in terms of environmental investment.”

A prototype for the software is currently being developed and discussions are being held with several state and regional bodies such as Brisbane City Council and the NSW Environmental Protection Authority. There is also interest from institutions from the USA and South Africa.

Dr Linke completed his postgraduate research at both the University of Canberra and the University of Western Ontario.

He is currently a member of the Spatial Ecology lab at UQ, and part of the eWater CRC research team on landscape analysis.

Professor Gary Jones, eWater CRC Chief Executive, said the award had highlighted the exceptional quality of young researchers entering the water management industry.

Dr Linke
STRESS-FREE SHOPPING WITH KIDS POSSIBLE

UQ researchers are seeking families with a child aged three to five to participate in a free parenting program aimed at improving their behaviour during shopping trips.

Developed by Professor Matt Sanders at UQ's Parenting and Family Support Centre, the project is an adaptation of the award winning Triple P Positive Parenting Program, a proven success with parents all over the world.

“We believe that if parents have a clearer sense of what it is they could be doing differently, it makes the world of difference,” Professor Sanders said.

The current study is part of a series looking at high risk parenting situations. Triple P studies have found that shopping with young children is one of the most difficult parenting situations.

Professor Sanders said it was very hard for parents to be consistent when they were in the “spotlight of attention” of other shoppers because their child was throwing a temper tantrum in the toy aisle.

“This is where the new research program picks up,” he said.

“The two-hour group seminar held at UQ aims to enhance parenting skills to prevent shopping hassles and to deal with problem behaviour, especially in public situations.”

Feedback from parents who participated in groups so far has been very positive.

“They enjoyed the opportunity to discuss ideas and solutions with other parents and found the strategies very helpful.”

For more information, contact Sabine Joachim on (07) 3365 8870 or sjoadim@psy.uq.edu.au

Saltwater crocodiles are making marathon ocean swims to reach home even if they are airlifted hundreds of kilometres away, new research shows.

Three relocated crocodiles in Far North Queensland have been tracked swimming between 10 and 30 kilometres per day with one crocodile swimming around the northern tip of Australia to reach home — covering more than 400 kilometres in 20 days.

The results are from the first satellite tracking study of wild crocodiles undertaken by UQ, Australia Zoo and the late Crocodile Hunter Steve Irwin and Queensland Parks and Wildlife Service (QPWS).

Using tracking data from 2004, the team found crocodiles had remarkable homing and navigational skills and stamina to swim large open water voyages.

All three monitored crocodiles were moved by helicopter between 52 and 130 kilometres away but still found their way back to their capture sites.

One crocodile was flown across Cape York Peninsula from the west to east coast and then circumnavigated the peninsula to return home.

Project researcher Professor Craig Franklin, from UQ’s School of Integrative Biology, said the data showed that crocodiles were oceanic animals which could move phenomenal distance over a prolonged period of time.

“We often thought crocodiles tired very quickly but here we show very clearly that they are capable of moving marathon distances for days on end,” Professor Franklin said.

Crocodiles were tracked using a specially-designed transmitter attached to the back of their heads that collected data and relayed it via satellite back to the scientists.

Professor Franklin said the study showed that moving problem crocodiles away to remote river systems was not effective.

He said the results also proved the success of satellite tracking for crocodiles allowing continuous monitoring without human interference.

“Satellite technology is a great way of tracking these really cryptic animals which are difficult to follow.”

Steve Irwin was a major driving force behind the study, and his intellectual and logistical support complemented the knowledge, experience and contributions made by the other team members.

“He also gave us the assistance of the croc team from Australia Zoo who are highly skilled in the capture and care of crocodiles,” Professor Franklin said.

Professor Franklin said crocodiles probably used many factors such as its position to the sun, magnetic fields, sight and smell to navigate.

“Crocodiles are more closely related to birds than they are any other reptile. Maybe they are using navigation systems that are similar to what occurs in birds?”

The collaboration was led by Dr Mark Read from the QPWS and funded by an Australian Research Council grant and bequest from the late Cooktown herpetologist Charles Tanner.

The team’s results are published in the open access online journal, Public Library of Sciences One (PLoS ONE) at www.plosone.org/doi/ pone.0000949

Professor Franklin said further satellite and acoustic tracking studies would reveal even more impressive results about crocodile behaviour, particularly about their navigation systems.
CONTINUED SUCCESS FOR SMART WOMEN

UQ has again been successful at the Smart Women Smart State Awards, scooping prizes in four of the 13 categories.

An initiative of the Queensland Government’s Office for Women, the annual awards recognise those who have made outstanding contributions in the areas of science, engineering, and information and communications technology.

Professor Jenny Stow from the Institute for Molecular Bioscience (IMB) received the award for Women in Industry/Business (Science), the third consecutive time an IMB researcher has done so.

Professor Stow’s research potentially means cheaper alternatives to current treatments for chronic inflammatory diseases such as rheumatoid arthritis and inflammatory bowel disease.

The award for Women in Community/Public Sector (Science) went to Professor Linda Blackall from the Advanced Water Management Centre, whose research will maximise Australia’s ability to control environmental pollution, recycle water and use and generate energy.

Current UQ students were also named among the winners, with honours scholar Alecia Carter successful in the Undergraduate Students (Science) category.

The Postgraduate Students (Science) prize was awarded to Jennifer Firn, Nikki Sims, Megan Ward and Alice Yeates, a group of UQ PhD students supported by the CSIRO who are investigating the mechanisms behind costly and environmentally destructive weeds.

Providing real job opportunities is a key to overcoming Indigenous disadvantage according to UQ’s new Aboriginal and Torres Strait Islander Employment Coordinator.

Paula Coghill recently took up the position within the University’s Human Resources team, and will work closely with the Aboriginal and Torres Strait Islander Studies Unit to develop an employment strategy to boost Indigenous staff numbers and retention rates.

A Goori woman from Bundgulung country in northern New South Wales, Ms Coghill said she would draw on her experience in community development, social services and the university sector to build on existing UQ policy.

“We’ll start to look at recruitment and the selection process, and to look at advertising positions specifically targeting Indigenous Australians, in terms not only of their skills and experience, but the cultural knowledge they can bring to the University,” Ms Coghill said.

“It also means the University can acknowledge and recognise that bringing Indigenous people into the workplace not only enhances it but allows mutual exchange between cultures.”

Building partnerships with external and internal stakeholders – including Indigenous students – was an important first step, Ms Coghill said.

“It’s not only about going out there and looking for potential employees in the community but certainly looking at students we have here.

“It makes good business sense, otherwise you’re missing out on a whole market of clients and customers if you don’t have the resources to target that group.”

The employment program would take a holistic approach, including the creation of new apprenticeship, traineeship and cadetship opportunities and the development of a thorough cross-cultural training program for all staff.

Ms Coghill said she was enthusiastic about the project, and that continued support from the UQ community was needed to ensure future goals would be met.

“If you’ve got a workplace that’s really wanting to improve then you’re likely to have a better success rate,” she said.

“Once Indigenous people realise this is an employer of choice – which is what I hope UQ becomes – then that will open the floodgates and increase opportunities for Aboriginal and Torres Strait Islander people.”

in brief

ENTERPRIZING FINALISTS

Finalists in the 2007 UQ Business School’s Enterprize competition include two web applications, a therapy for auto-immune diseases, a materials science breakthrough and a more efficient photocatalyst.

Now in its seventh year, the $100,000 competition is sponsored by the UQ Business School and the Queensland Government.

The seven finalists will pitch their business plans to an audience of industry experts, investors and members of the public on October 11 at the State Library of Queensland.

For more information, phone (07) 3365 8561.

HEALTHY HEART STUDY

Researchers in the UQ Physiotherapy Division are looking for people with Chronic Obstructive Pulmonary Disease (COPD) to participate in clinical trials of a new program involving individually-tailored, supervised exercise classes.

Participants must be able to travel to UQ (St Lucia or Ipswich campuses) and must not have unstable heart disease or have had a recent neurological injury such as stroke.

For more information, contact Megan Fisher on (07) 3365 4587 or m.fisher@shrs.uq.edu.au
Three days a week Jill McFarlane works in the research scholarships section of UQ’s Research and Research Training Division ... the rest of her time is spent artistically exploring the female figure.

The Scottish-born artist, who graduated from the Edinburgh College of Art in 2000, has consistently featured at exhibitions for the past eight years.

“I’ve always worked hard at keeping at my art and making something of my profession,” Ms McFarlane.

“When I came to Australia there was a really good response to my work,”

Ms McFarlane relocated ‘down-under’ four years ago after marrying an Australian she met in Scotland.

Ms McFarlane said her paintings tended to focus on the female icon, and always contained an underlying narrative.

“I’m inspired by the female figure, but also by storytelling, fables and nature,” she said.

“My work is quite playfully erotic and kitsch.

“It moves beyond merely framing the aesthetics and ideals of femininity and into storytelling and symbolist subtext.”

Ms McFarlane said Brisbane was a fantastic city for young artists trying to establish themselves.

“Culturally, Brisbane is booming. The Queensland Artworkers Alliance, which I am a member of, is really dedicated to promoting local artists as well as helping them out with the business side of the profession.”

Employment at UQ has allowed Ms McFarlane to explore a new environment, while remaining focused on her art.

“I think to work as an artist 24 hours a day, seven days a week, would be quite draining.

“Working here gives me the opportunity to meet a lot of interesting people and revive the creative energies.”

Ms McFarlane said she had always strived to make a profit from her profession.

“I’ve always sold my work,” she said.

“When I was still at school my teachers would buy my paintings, and now they’re on sale in commercial galleries.”

Ms McFarlane aims to have a solo show in Brisbane by the end of the year, or early 2008.

More information is available on her website, www.jillmcfarlane.com

SBS COMMENDED

The University’s Faculty of Social and Behavioural Sciences (SBS) was highly commended in two categories at the recent State Government Celebrating International Education and Training Industry Showcase.

The event is a unique activity highlighting Queensland’s institutions and individuals who demonstrate a commitment to enhancing the international student experience.

SBS received mentions in two categories, with The Rotary Centre for International Studies in Peace and Conflict Resolution recognised in the Internationalisation division and a linked project between UQ and Indonesian universities awarded in the category of International Support Services and Pastoral Care.

CULTURAL CONNECTION

The Japanese Discipline in UQ’s School of Languages and Comparative Cultural Studies has been awarded a Japanese Foreign Minister’s Commendation for 2007.

Japanese studies were established at UQ in 1966 and graduates have since made valuable contributions in strengthening ties with Japan and other countries in global politics, economics and cultural affairs.

Students within the discipline are taught not only to strengthen their language skills, but to develop a capacity for critical thinking together with the perspectives and skills which promote intercultural communication.

SUPPORTING GAMBLERS

UQ psychologists have developed a self-help program designed to help gamblers monitor their thinking.

Cognitive Behaviour Therapy educates users about the nature of gambling, and the triggers and factors that cause it.

Previous trials using face-to-face treatment were successful, and now the research team is looking for 250 volunteers to participate in a free seven-session trial of the program.

The new trial is designed to evaluate the program delivered in a self-help format using a manual sent by mail. For more Information contact (07) 3346 9417, selfhelp@psy.uq.edu.au or visit http://exp.psy.uq.edu.au/selfhelp
NO VEGETATING
AT UQ IPSWICH

The healthy living message was the focus of a day of fun on September 19 at the University’s Ipswich campus.

The celebrations began with the launch of the UQ Ipswich Walking Trail, which featured a “mass walk” with students, staff and a number of large fruit and vegetable costumed characters.

Pro-Vice-Chancellor Professor Alan Rix said the initiative was established in conjunction with the Health Services Program, Property and Facilities Division and the University Health Service.

“The campus Walking Trail provides an opportunity for staff and students to get active and take in the fantastic views to the west, and to the south towards Mount Flinders,” Professor Rix said.

The launch also gave a team of final year Communication students a chance to draw attention to the healthy living message through a number of entertaining and educational activities.

“With the students’ assistance and the support of the University Health Service, the event was a fun way to remind our busy staff and students of the importance of healthy eating, regular exercise and maintaining work/life balance,” Professor Rix said.

The event was supported by Queensland Health, the Ipswich Hospital Foundation and the Australian Banana Growers Council.

New equipment works out what’s good for us

World-first equipment, made exclusively for UQ scientists, will determine how to produce food which is better for us, but still tastes good.

UQ researcher Professor Bob Gilbert said that while an unhealthy lifestyle and poor eating habits were significant factors in Australia’s obesity and diabetes epidemics, they were not entirely to blame.

“An important component of the problem is from changes in the starches in our food,” Professor Gilbert said.

“Starch supplies 50 percent of food energy in the modern Australian diet, and up to 90 percent in countries on Asian diets.

“A way forward would be to see what factors in the starches in our diets correspond to healthy digestibility.”

He said uncovering which starches were good for us was no easy task.

“Starch and non-starch polysaccharides, which are important for fibre, have amazingly complex structures which are very hard to characterise.”

New instrumentation, manufactured in Germany and housed in the Hartley Teakle Building at St Lucia, will overcome this problem.

Another related UQ finding will ensure that data produced by the new machine can be placed in a meaningful context.

“These new techniques, developed by the Centre for Nutrition and Food Sciences at UQ, will provide the tools needed to produce foods which are both better for us nutritionally, and palatable to the consumer,” Professor Gilbert said.
Many of the crowd watching a dynamic martial arts display at UQ in September would have been surprised to learn that kung fu and calligraphy have much in common.

As explained by Dr Nat Yuen, a UQ graduate who is both a great grandmaster of kung fu and a proficient calligrapher, the common thread is not conspicuous: it’s all in the mind.

“Kung fu is the training of the physical body in the technique of fighting, and acceleration of body movement requires relaxation, concentration and reflexes,” said Dr Yuen, a Hong Kong resident who graduated in medicine in 1965.

“Calligraphy practice requires not only the art form of the words but also relaxation and concentration. It is a training of the mind, the body and hand movements.”

Drawing together the martial arts and the art of calligraphy, Dr Yuen and his friend and former pupil, Grandmaster Henry Sue, orchestrated a free hour-long display of kung fu, tai chi, tile breaking and lion dancing on Sunday, September 30. The action took place beside the UQ Art Museum, where the Consul General of China, Mr Ren Gongping, formally opened the Calligraphy Exhibition on October 1 (China’s National Day).

More than 500 people enjoyed the skilled, disciplined action by masters and students of Grandmaster Sue’s Chinese Kung Fu Academy, before experiencing the tranquility of calligraphy in the UQ Art Museum.

Grandmaster Sue said his students were the newest generation in a kung fu lineage which began more than 50 years ago, when Dr Yuen became his teacher.

The Calligraphy Exhibition, running until October 14, is the latest in Dr Yuen’s series of gifts to the gallery. It features more than 90 pieces by his own hand as well as by Mr Wong Kwok Hing and the late Mr Lo Yat Ngam, who taught calligraphy to Dr Yuen and Mr Wong. Before his recent death Mr Lo was intending to visit Brisbane for the show, which is now in a sense a tribute to him.

Dr Yuen is the benefactor behind the Nat Yuen Collection of Chinese Antiquities at the museum, and has worked extensively to build Australia-China relations.
Write a Brisbane story and you could win $6000

Do you have a story or tale to tell about Brisbane? Perhaps its mystery, crime, romance or even speculative fiction. Write your story about Brisbane and you could win $6000 and be published in the 2008 One Book Many Brisbanes anthology.

For details and entry forms visit your local Council library, log onto www.brisbane.qld.gov.au/libraries or phone Council on (07) 3403 8888.

COMPETITION CLOSES MONDAY 10 DECEMBER 2007

One Book Many Brisbanes is another way Council is achieving our vision for the city’s future.

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3  Sacred Games – Chandra, V. Allen & Unwin (PB) $23.95 FICTION

4  Dirty Beat – Armanno, V. UOP (PB) $32.95 FICTION

5  Change The World 9 to 5 – Hardie Grant (PB) $12.95 GIFT

6  Dangerous Book for Boys (Australian Edition) – Iggulden, C. Harper Collins (HB) $ 45.00 GIFT

7  Notes From An Exhibition – Gale, P. Harper Collins (PB) $ 27.99 FICTION

8  Spook Country – Gibson, W. Penguin (PB) $ 32.95 FICTION

9  Down To This – Bishop-Stall, S. UQP (PB) $34.95 BIOGRAPHY

10 Parsley Rabbits Book About Books – Watts, F. Allen & Unwin (HB) $19.95 CHILDRENS

Textbook success: Associate Professor Donna Pendergast
UQ Senior Lecturer and award-winning author
Dr Veny Armanno

TOP RANKING TITLE FOR MIDDLE YEARS AUTHORS

The prestigious US-based Choice magazine has singled out a textbook by two Middle Years of Teaching academics from UQ Ipswich as a critical read for aspiring teachers around the world.

From a collection of more than 7000 reviews Teaching Middle Years: Rethinking Curriculum, Pedagogy and Assessment by Associate Professor Donna Pendergast and Dr Nan Bahr, was one of only 14 academic titles in the Education category, and the only Australian title, to be selected as an Outstanding Academic Title for 2006.

Dr Pendergast said she was thrilled that the publication has been recognised as a leading work by such a well-respected source.

"Since they published their annual list of Outstanding Academic Titles our book has been picked up as required reading for student teachers by a growing number of universities in the US and New Zealand," she said.

UQ SUPPORTS LOCAL LITERARY SCENE

UQ has again supported the Brisbane Writers Festival, held this year from September 12 to 16.

The festival provides a unique opportunity to showcase the literary talents of the University’s academic staff, many of whom took part this year.

UQ-sponsored events included:

A panel on September 13 exploring why writers write, involving international authors Damon Galgut, Patrick Gale and Jenny Pattrick and Australian literary greats David Malouf and Elizabeth Stead.

On September 14, Damon Galgut and Ariella Kornmehl explored the shifting cultural and moral landscape of post-apartheid South Africa.

And, after a visa delay, author and editor-in-chief of London-based Arabic newspaper al-Quds al-Arabi Abdel Bari Atwan presented a sold out session on the secret history of al-Qa’ida. He was the last journalist to interview Osama bin Laden.
Forget sun-drenched beaches and palm trees when planning your next holiday – take a leaf out of a UQ academic’s book and visit Antarctica.

Professor Craig Franklin, from the School of Integrative Biology, has recently released the Antarctica Cruising Guide, an environmentally focused tourist handbook.

The guide aims to combine scientific research with tourist-friendly information to help the 30,000 or so people who visit Antarctica each year to better appreciate its geography, wildlife and history.

“I wrote this book to inform passengers about what you might get to see on your trip southwards, with the hope that it will help the visitor to better understand and appreciate the beauty and charm of Antarctica and, in doing so, lead them to care for its future,” Professor Franklin said.

The book is the product of 11 research expeditions to Antarctica since 1985 and a keen interest in the continent’s unique ecosystem.

“I am fascinated by how animals evolved to survive and function in extreme environments,” Professor Franklin said.

“The animals that live in Antarctica have evolved some unique adaptations to cope with the sub-zero temperatures.”

Professor Franklin said Antarctica’s ecosystem was at serious risk and Australians, being on Antarctica’s “doorstep”, had an important role to play in its conservation.

“Antarctica faces many threats – all the result from human activity,” he said.

“Some are direct, like long-line fishing, whaling and the presence and activities of humans on the continent, while other threats are indirect and are the result of human activities elsewhere on the planet which reach southwards.

“This includes the impact of climate change and the formation of the ozone hole during spring and over summer.”

Professor Franklin said tourism in Antarctica was important for its conservation because visitors could learn about environmental issues and become more motivated to protect it.

Antarctica Cruising Guide combines breathtaking pictures of the Antarctic landscape and wildlife with scientific information on the continent’s ecosystem, a snapshot of its history, and guidelines for visitors from the Antarctic Treaty consultative meeting of 1994.

Professor Franklin co-authored the book with Dr Peter Carey, director of conservation organization SAFER (Subantarctic Foundation for Ecosystems Research). For further information about the guide, visit www.awapress.com/
HEAVY LOAD FOR WEIGHTLIFTER

People from near and far enjoyed the facilities of UQ SPORT for free when the third annual Energise Brisbane event was held on September 16.

High energy experience

Sport and Fitness Complex, and Brisbane’s largest tennis facility.

Free entertainment for children included appearances by ABC television’s Active Kidz stars, Scott and Amy, as well as jumping castles, face painting, competitions, and inflatables in the pool.

Junior sporting clinics were held throughout the day, introducing children to a range of activities in a fun and interactive environment.

The event got off to an energetic start through the inaugural Bridge Bash Fun Run, which took competitors on a 4km or 8km run or walk along the Brisbane River and over the Eleanor Schonell Bridge.

Sporting personalities including swim star Jessica Schipper, Olympic sprinter Paul Di Bella and UQ’s own World swimming champion Melanie Schlanger were on hand throughout the day to meet fans and sign autographs.

Olympic hopeful Amanda Phillips

Children take part in a soccer clinic above, and below: UQ SPORT staff get into the spirit of the day
ROWERS EXCEL IN GERMANY

The Australian team performed strongly at the recent World Rowing Championships in Germany, thanks in no small part to the efforts of a strong contingent from the UQ Boat Club (UQBC).

University alumnus Marguerite Houston and team mate Amber Halliday led the charge on the final day of competition, claiming gold in the lightweight double sculls.

In an extremely close race, the Australian pair managed to overtake the Finnish team in the final few strokes to finish on top of the medal dais, going one better than their silver medal from last year’s event.

“We basically looked at the draw for the race and said to ourselves: ‘well we have to be worried about this crew, this crew, this crew and this crew ... I’ve never seen a standard jump like this in just one year. I’m glad we were able to jump with it,” Ms Halliday said.

Early on in the race the pair were placed fourth, but through each of the 500m splits they gained position to ultimately finish first.

Following a bronze in the double sculls at the 2006 World Championships, UQBC rower Sally Kehoe has joined the women’s eight crew in 2007.

In the lightweight men’s coxless pair, UQBC’s Michael McBryde teamed with rowing partner Ross Brown to claim bronze in the final behind Italy and Germany.

Although narrowly missing out on a medal after finishing fourth in the final, the team gained an all-important spot for next year’s Olympic Games.

“Unfortunately we weren’t able to find the solid rhythm of the heat. But we’ve qualified the boat for Beijing which is great and it’s a terrific base for next year,” Ms Kehoe said.

The eight will have one final opportunity to qualify for the Games at a regatta in Lucerne, Switzerland in July next year.

Team mate Sam Conrad did not fair so well, finishing second in the men’s eight B Final, which the crew had to win in order to gain automatic Olympic qualification.

The eight will have one final opportunity to qualify for the Games at a regatta in Lucerne, Switzerland in July next year.

The Australian team managed to secure starts in Beijing for 10 of their 14 boats, finishing the regatta ranked second on the medal tally with three gold, two silver and two bronze medals.

Debbie Bartlett said he was delighted that the agreement will be on display at the event. “It’s 8:00-9:00pm, Building 1, (swich campus). Information: lorna@itee.uq.edu.au

In brief

DUAL BRAIN GAIN DEAL
UQ’s Queensland Brain Institute (QBI) continues to expand its scientific influence within the Asia–Pacific region with the signing of a new research agreement with the RIKEN Brain Science Institute (RIKEN BSI) in Japan.

Established in 1997 and located at Saitama, RIKEN BSI is part of the parent Institute of Physical and Chemical Research and employs more than 400 researchers and staff working from more than 40 laboratories.

QBI Director Professor Perry Bartlett said he was delighted to formalise a new scientific collaboration with the world-renowned institute, which would benefit staff and students from both organisations.

“RIKEN BSI is one of the largest neuroscience research centres in the Asia–Pacific region, so this agreement is a wonderful opportunity to share and increase our understanding of brain function,” he said.
Horizons widened here

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*Closing dates can vary across Faculties and Schools. Applicants should check with Admissions on (07) 3365 2203.

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