UQ NEWS

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JULY 2003 NO. 527
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MESSAGE FROM THE ACTING VICE-CHANCELLOR

The appointments of two eminent researchers by the University epitomises the depth of our institution.

Next month Professor Peter Gray will take up the inaugural directorship of the University’s Australian Institute of Bioengineering and Nanotechnology (see story page 4). And in September we will welcome Professor Kevin Clements as Foundation Director of UQ’s new Australian Centre for Peace and Conflict Studies (see story page 8). These two centres operate in very different spheres, but it is this diversity which makes UQ one of Australia’s finest universities.

Our students are exposed to the very best research and teaching, enabling them to go on to develop worthwhile careers in industry or academia.

UQ is confident that both centres, led by these two outstanding academics, will make an important contribution to advancing human knowledge and understanding.

Professor Paul Greenfield
Acting Vice-Chancellor
Security for biosecurity

The UQ-based Cooperative Research Centre (CRC) for Australian Biosecurity received a funding boost last month with the Queensland Government announcing more than $4 million for the new Centre due to open in August.

The funding will include financial and in-kind support and will take government funding for the Centre to almost $22 million after initial funding of $17.5 million from the Federal Government.

The Centre will help develop advanced early warning systems to safeguard the nation.

It will focus on developing new technology to detect disease as well as new surveillance measures such as hand-held devices and satellite imagery.

Research outcomes will include devices to detect pathogens on-site and new technologies to enhance the speed, sensitivity and specificity of laboratory and on-site tests.

Acting Vice-Chancellor Professor Paul Greenfield said the Centre would use some of the facilities of the Institute for Molecular Bioscience and Faculty of Biological and Chemical Sciences.

The new Centre’s aim is to protect Australia’s health, livestock, wildlife and economic resources by developing new methods of monitoring, assessing, predicting and responding to threats.

It will also address a critical specialist skills shortage by producing research graduates with high-level experience in virology, parasitology and applied epidemiology.

Professor John Mackenzie from the School of Molecular and Microbial Sciences will be the CRC’s interim Chief Executive while Associate Professor Hamish McCallum from the School of Life Sciences will conduct mathematical modelling on the diseases and their spread.

“The CRC will enable Australia to be more proactive in knowing what’s coming our way,” Professor Mackenzie said.

Other partners in the new CRC include: the CSIRO Animal Health Laboratory; the Queensland Department of Primary Industries (QDPI); the Commonwealth Department of Health and Aging; Queensland Health; Northern Territory Health; Northern Territory Fisheries; Sydney University; the Committee of Agriculture, Fisheries and Food Australia; Curtin University of Technology; and the Commonwealth Department of Agriculture, Fisheries and Forestry.

The funding boost is part of a $150 million innovation package from the Queensland Government that also included $1.7 million for the Queensland Animal Breeding Facility at the Herston Medical Research Centre, which is managed by UQ.

The announcement also confirmed the Queensland Government would match university contributions for Australian Research Council Centres of Excellence (COEs), including the UQ-led COE for Integrated Legume Research which will receive $3.4 million, and four other projects partnered by UQ.

Director adds atoms to institute structure

UQ has appointed a head for its newly-established institute for cutting-edge nanotechnology and bioengineering research.

Professor Peter Gray will take up the inaugural directorship position at UQ’s Australian Institute of Bioengineering and Nanotechnology (AIBN) in August.

He will come from the University of New South Wales (UNSW) where he is Director of the Bioengineering Centre and Professor of Biotechnology, as well as a senior principal research fellow with the Garvan Institute of Medical Research.

The aim of the AIBN is to be at the forefront of innovations in areas such as nanotechnology, which is the ability to build structures atom by atom at the molecular level.

The AIBN will also focus on areas of biotechnology such as developing materials that are less likely to be rejected when used in tissue or organ replacement.

“It’s an exciting opportunity given the very rapid development coming out of the fields of nanotechnology and biotechnology,” Professor Gray said.

He said he was also looking forward to building on some already strong links to commercial activities through the AIBN.

Professor Gray has had commercial experience in the United States working for Eli Lilly and Co and for Cetus Corporation as well as holding academic positions at the University College of London and the University of California, Berkeley.

While at UNSW, he built up research and development capabilities in mammalian cell culture with an extensive collaborative network of international research groups and corporations.

He was also one of the founders and a past President of the Australian Biotechnology Association.

UQ’s Deputy Vice-Chancellor (Research) Professor David Siddle said attracting a person of Professor Gray’s calibre was a coup for the University and the newly-established AIBN.

Moot success

UQ law students Catherine Arscott, Jessica Arscott, Kate Deere and Stephen Knight won the International Maritime Arbitration Law Moot Competition at Customs House on July 1.

The team, coached by the School of Law’s Russell Hinchy, also won the prize for best-written claimant memorandum and highest-ranked team in the general rounds.

For the third year in a row UQ law students won the Red Cross International Humanitarian Law Mooting Competition held in Brisbane from July 3-4.

The winning team of Andrew Hodge and Nicolas Lingard was coached by the School of Law’s Peter Alcorn and assisted by PhD student and former mooter Jonathan Crowe.

Alumni awards

Nominations, including self-nominations, close on August 29 for the International and Young Alumni of the Year Awards for outstanding contributions to public and professional life, business, science or the arts.


Research grants

Australian Research Council postdoctoral research fellow Dr Hao Wang from UQ’s School of Engineering has been awarded a three-year grant from the Federal Government’s Department of Education, Science and Training.

Federal Science Minister Peter McGauran last month announced funding for five projects worth a total of $250,000 under the Innovation Access Program.

Meanwhile, the Australian Coal Association Research Program (ACARP) has awarded Dr Basil Beamish from UQ’s School of Engineering $150,000 for research aimed at optimal assessment of spontaneous combustion propensity.
Power sharing surges research

A visionary industry-University partnership has been energised with a spectacular demonstration simulating the power of Nature.

Queensland Minister with responsibility for Energy Paul Lucas officially opened the new Tom Parnell High-Voltage Testing Bay on July 1.

The unique facility, to be operated by Ergon Energy at Virginia in Brisbane, can generate two million volts and simulate the impact of a lightning strike on power equipment.

The facility has one of the largest testing capabilities in the southern hemisphere and will provide specialist extra-high voltage services to the Australian industry.

UQ Vice-Chancellor Professor John Hay said the relocation of the facility from UQ St Lucia to Virginia represented a further strengthening of collaborative links with major industries.

“It’s a very exciting industry partnership and I am really looking forward to the future possibilities,” Professor Hay said.

“The facility will spark greater interest in power engineering and through the association with Ergon Energy, students will get an idea of the types of potential careers on offer.

“Engineering students will have access to the facilities to ensure they are trained in using specialised equipment and techniques needed to maintain the highest industry standards.”

Mining companies, petrochemical producers and businesses involved in power generation, transmission and distribution are expected to take advantage of the local facilities which feature a one-million-volt test set and two-million-volt impulse generator.

Mr Lucas said the facility, previously owned and operated by UQ for research and training postgraduate electrical engineering students, would continue to have a partnership with the University, ensuring it retained a research and teaching role.

“I applaud this far-sighted partnership between an industry innovator and one of Australia’s leading research and teaching institutions,” Mr Lucas said.

“This heralds a new era in research and development opportunities through industry and university collaboration and by providing highly specialised technical services nationally and beyond.”

The testing bay was named in honour of UQ Emeritus Professor Tom Parnell, who specified, bought and installed the original facility.

Professor Parnell attended the opening, as did Faculty of Engineering, Physical Sciences and Architecture Executive Dean Professor Michael Keniger.

Performance program for PhD students

An innovative UQ program designed to develop research students' key graduate attributes and interdisciplinary research skills was launched by the University last month.

A new UQ Research Student Portfolio has been designed to allow students to reflect on and demonstrate how their PhD projects could help them develop a broad range of skills valued by employers.

Dr Catherine Manathunga from UQ’s Teaching and Educational Development Institute (TEDI) and UQ Graduate School helped develop the program.

She said it was a practical development tool that would be tested with 20 Advanced Wastewater Management Centre (AWMC) research students over coming months.

“Every six months students in the AWMC will review their progress in developing and enhancing a range of graduate attributes against a set of key performance indicators and collect a portfolio of evidence of this skill development,” she said.

“Students and advisors identify the student’s achievements and areas where further skill development is needed and negotiate an action plan that will provide resources and steps to take in order to achieve or enhance particular attributes.

“Students therefore have access to systematic career development tools that go beyond a focus on the PhD project itself.”

The Portfolio was launched on June 19 by Dr Manathunga and AWMC Director Associate Professor Jürg Keller.

“It is hoped the Research Student Portfolio will improve research supervision and the overall development of research higher degree students’ essential research and other generic skills,” Dr Manathunga said.

“It contains a number of interdisciplinary goals that seek to produce future researchers able to wrestle creatively with complex interdisciplinary research problems of the 21st century.”

Dr Manathunga said she worked closely with AWMC students and academic and research staff to develop the Portfolio, which was supported by Deputy Vice-Chancellor (Research) Professor David Siddle and Dean of Postgraduate Students Professor Alan Lawson.
A UQ Bachelor of Music student has travelled to Tuscany this month to study conducting.

First-year music/education student Dane Lam has accepted an invitation from the chief conductor of the Sydney Symphony Orchestra to study conducting under his tuition.

Mr Lam will spend six weeks at Maestro Gianluigi Gelmetti’s masterclass at the Accademia Musicale Chigiana in Siena, Italy.

Mr Lam said he had been offered the opportunity after working with the Melbourne Symphony Orchestra through the Symphony Australia Conductor Development Program.

“After spending the week with Maestro Gelmetti in Melbourne I got a call from the Sydney Symphony Orchestra saying that Maestro would like to meet with me,” Mr Lam said.

“The next week I was in Sydney for rehearsals with the Orchestra before conducting their performance of Mozart’s Marriage of Figaro Overture at the Sydney Opera House.”

“Walking out on stage was amazing. It has taken a while for it to hit me how great this whole opportunity is and will be, because it’s like all my dreams are becoming reality.”

Symphony Australia’s Podium Program that facilitates the development of young Australian conductors will fund the trip to Italy.

“The invitation may also entail an apprenticeship with the Maestro, following him to concerts and rehearsals in Sydney and Italy,” Mr Lam said.

He said it would be an intense learning experience that would not allow much free time.

“I’ve got 27 symphonies, overtures and operatic movements to study and will be working with the Sofia Festival Orchestra in Siena which could lead to a performance in the final concert at the end of the course,” he said.

“I’m not too sure whether I’ll be able to do much sight-seeing.

“In the six weeks of the masterclass we only get three days rest.”

Mr Lam said he had set his sights on a career conducting orchestras around the world.

“Ideally I would like to conduct all the world’s greatest orchestras, especially the Berlin Philharmonic,” he said.

“I hope that within the next five years I will have my first professional engagement with a professional orchestra.”

Dancer steps up

PhD student Dale Johnston has been awarded one of three inaugural Queensland Creative Fellowships worth $40,000.

Queensland Minister for the Arts Matt Foley presented the award to Mr Johnston at a ceremony in June.

The fellowship will fund a program to allow him to act as choreographic facilitator within the four regional dance centres of Brisbane, Toowoomba, the Sunshine Coast and the Gold Coast.

Mr Johnston, who was a principal dancer with the Queensland Ballet for 10 years and has performed with the Australian Ballet and Royal New Zealand Ballet, said the fellowship would fund five community dance projects over a 12-month period.

“In the short-term the program will afford up to 150 talented Queensland dancers the rare opportunity to create their own dance work,” he said.

“It gives them a hands-on opportunity to develop work that is for, by and about young people as creators, participants and consumers.”

Arts Queensland funds the prestigious fellowships in conjunction with UQ, Queensland University of Technology and Griffith University.

They are awarded to artists with exceptional records of achievement in their fields and whose one-year projects represent outstanding potential for developing arts and cultural practice in Queensland.

Mr Johnston is currently completing his PhD, reconceptualising the art of dance composition and education using a socio-cultural approach.

He is working under the supervision of UQ’s Dr Merrilyn Goos and Griffith University’s Professor Peter Renshaw and will submit his thesis in October before starting the fellowship in December.
Members of the University’s underwater dive association are playing a part in protecting one of Australia’s most misunderstood sharks.

Grey shark nursed

Volunteers from Unidive, UQ’s underwater dive club, are mapping and surveying critical habitats of the grey nurse shark in southern Queensland.

“The grey nurse shark population along Australia’s east coast has been listed as critically endangered under the Commonwealth’s Environment Protection and Biodiversity Conservation Act 1999,” said Chris Roelfsema from UQ’s Centre for Marine Studies, who is coordinating the project with Carley Bansemer from the Queensland Parks and Wildlife Service.

“This means there is a high chance this population could become extinct in the wild if urgent remedial actions are not taken.”

Ms Bansemer said grey nurse sharks were docile despite their fierce appearance and were not known to attack humans.

She said in the past the species had an undeserved reputation as a human-eater and thousands were killed by spear and line fishers up to the 1970s, causing a dramatic decline in numbers.

“They are now fully protected in Australian waters and there are five areas in Queensland that have been identified as critical habitats for the grey nurse shark,” she said.

Four of these are within the Moreton Bay Marine Park (Henderson’s Rock, Cherubs Cave and China Wall off Moreton Island and Flat Rock off North Stradbroke Island) and one is off Double Island Point at Rainbow Beach (Wolf Rock).

Unidive received $25,000 funding from the World Wildlife Fund and the Threatened Species Network to undertake the project.

Computers, underwater video cameras and marine survey equipment have been made available by UQ’s Centre for Marine Studies and Biophysical Remote Sensing Group as well as the Queensland Parks and Wildlife Services.

Volunteer researchers from the three groups also trained Unidive members in fish, invertebrate and substrate identification and advanced techniques in underwater mapping.

“By the time we complete the project in December this year, we will have a significantly enhanced understanding of habitat selection by grey nurse sharks,” Mr Roelfsema said.

“We will understand more about the biological and physical characteristics of the sites and will also produce and distribute geo-referenced bathymetry maps of the critical habitat sites.

“We also plan to develop a repeatable, cost-effective and scientifically sound monitoring framework for the five sites.”

Mr Roelfsema said local dive charter operators had assisted the Unidive survey by providing their time, knowledge, experience and charging reduced rates. They included Ken Holzheimer of Point Lookout Scuba Dive Charters and Trevor Jackson, the captain of MV Esperance Star.

People sighting grey nurse sharks should phone 07 3821 9019 or email carley.bansemer@epa.qld.gov.au
Promoting path to peace

An internationally respected conflict transformation and peace-building expert has been appointed Foundation Director of UQ’s new Australian Centre for Peace and Conflict Studies.

Professor Kevin Clements will take up his position in September when he arrives from London.

He is currently Secretary General of International Alert, one of the world’s largest non-governmental organisations working for the transformation of violent conflict and the building of sustainable peace.

The new centre based at the St Lucia campus was established by UQ’s Faculty of Social and Behavioural Sciences, which aims to seek further funds to promote the centre’s expansion over coming years.

Professor Clements, who has advised numerous governments on conflict prevention, peace, defence and security issues, said he wanted the centre to be the leading institution of its kind in Australasia.

“It will include students in the most exciting intellectual endeavour of all, namely how to build stable, peaceful relationships through time,” he said.

He said he hoped the centre would play a vital role in stimulating high-quality research; providing a neutral environment for collaborative and analytic problem-solving; organising training programs for peace-building practitioners and humanitarian workers; and developing learning opportunities for students from conflict zones.

“If we provide some of these services we will have made an important contribution to a more peaceful Asia-Pacific region and the world,” he said.

“There is no more challenging nor more satisfying endeavour that I can think of for the 21st century.

“My motivation for peace and conflict studies stems from a desire to understand the origins and causes of violence; to discover ways violence can be prevented; and what institutional mechanisms need to be developed to ensure sustainable peace.”

He was previously the Vernon and Minnie Lynch Chair of Conflict Resolution and Institute for Conflict Analysis and Resolution Director at George Mason University, Virginia, US; Quaker United Nations Office Director, Geneva; and Peace Research Centre Head at Australian National University, Canberra.

Gender on the agenda

A recent UQ graduate has become the first Australian appointed to an international organisation for parliaments of sovereign states.

Dr Sonia Palmieri, a Bachelor of Arts (first class honours) graduate, began duties with the Inter-Parliamentary Union (IPU) earlier this month after graduating in June with a PhD in political science.

Established in 1889, the IPU is based in Geneva, Switzerland and is the focal point for world-wide parliamentary dialogue with 145 member countries and five associate members.

“My role with the IPU is to continue its research into gender and parliament, documenting the presence and absence of women in the world’s parliaments and encouraging further developments in this field,” Dr Palmieri said.

“I’m very excited about continuing to work in the area I have spent so many years researching, particularly because the IPU is a leader in this field, having published numerous monographs on the status of women in politics and other gender and human rights issues.”

Dr Palmieri’s PhD focused on gender in the Federal Parliament and argued it was difficult to discuss women as one homogenous group.

“The literature often asked what difference women made to parliament but I found this question to be problematic in the sense that it automatically assumed women could, should and want to make a difference,” she said.

As part of her research, supervised by Di Zetlin of the School of Political Science and International Studies, Dr Palmieri analysed two Federal parliamentary committee inquiries.

“Instead of comparing the way women do something to the way men do it, I looked at how men and women parliamentarians interacted,” she said.

“I found interactions to be dominated by institutional factors and, more interestingly, that interactions could be legitimised or dismissed by other committee members.

“This meant that all members needed to discover what the dynamics and norms of the group were and work within them in a legitimate fashion in order to make a difference.

“I found the parliamentary process gendered because it was generally easier for men to work within this framework, but it wasn’t exclusively the case.”

Seasonal labour study

UQ arts honours student Jayde Hanson is conducting fieldwork across the State this month as part of a research project on seasonal labour in the Australian agricultural industry.

The research is being conducted in cooperation with the Queensland Fruit and Vegetable Growers Association and is part of a wider Australian Research Council-funded study led by Dr Martin Bell, Director of UQ’s Queensland Centre for Population Research.

Information: 07 3365 7089

Stroke research

People who have had a stroke affecting an arm are needed for a UQ study assessing a new form of therapy that, when applied to an arm muscle, retrains the arm of therapy that, when applied to UQ study assessing a new form of therapy that, when applied to

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Shooting for the stars

UQ has hosted an annual fun-packed camp designed to introduce students to the space industry.

The 2003 Queensland Youth Space Forum (QYSF) from June 30–July 1 was jointly hosted by UQ and the Queensland University of Technology and showed 44 Grade 11 and 12 students local and international developments in the space industry.

The event included workshops, lectures, tours and practical events such as rocket-launching and zero-gravity simulation.

President of the Australian Students Space Association Michael Brett said delegates received a unique, once-in-a-lifetime insight into a rapidly expanding industry.

“The aims were to educate and motivate young people and to promote the aerospace industry,” he said.

QYSF also highlighted university courses offered in south-east Queensland and delegates experienced university life by living on campus at UQ’s Grace College.

Guest speakers included the control engineer for the Mir Space Station, Ivan Voropaev; HyShot™ team leader Professor Allan Paull of UQ’s Centre for Hypersonics; and UQ PhD student Jason Hoogland from the Mars Gravity Biosatellite Project.

Delegates participated in a miniature rocket launch and experienced the feeling of zero gravity through underwater simulation using scuba-diving equipment.

Mr Brett said the 2003 event focused on astro-physics, the science of galaxies, and as in previous years had been a great success.

“The students loved it and learned a lot from it,” he said.

He said some QYSF graduates had gone on to space-focused university courses and remained heavily involved in the space industry working for Boeing and Auspace after completing their degrees.

Mr Brett said he hoped the 2003 event also encouraged students to consider a career in the aerospace industry.

From left: QYSF participants John, Kate and Arman. 

Rollers for research

UQ staff and student teams of three to four people are invited to enter rolling devices with three or more wheels in the Roll for research from 8.30am–11am on August 31, UQ St Lucia.

The riverside event kicks off with breakfast and concludes with prize presentations in various categories.

Donations of $20 per team will benefit research at the Royal Brisbane and Women’s Hospital.

Information: 07 3636 7748

Call for volunteers

Researchers within UQ’s School of Health and Rehabilitation Sciences need children aged from six to 12 years to participate in a research project.

Participants must have difficulty saying sounds and have received speech therapy for at least the past two years.

They will be required to attend three to four appointments primarily at UQ St Lucia.

Information: 07 3365 8560

Noel Pearson lecture

Noel Pearson, the team leader of Cape York Partnerships, will be guest speaker at this year’s Keeble Lecture on July 28.

The free event, co-sponsored by UQ, will be at the Charles Barton Auditorium, Department of Main Roads, 477 Boundary St, Spring Hill.

The lecture is held in recognition of Lewis Keeble, who established UQ’s Department of Regional and Town Planning in 1972.

Information: 07 3289 1792

From left: QYSF participants John, Kate and Arman.
Integrated marketing perspective. The scope of their organisation's marketing—designed for educational administration—will focus on the future direction of professional development and training in Australasia.

The conference will include a symposium, plenary sessions and a workshop on an online course in professional development organisations. Dr Stephen Holmes, will present the seminars. Details: 07 3365 7343

**Portrait paper trail**

A comprehensive selection of works by one of Australia’s most widely regarded artists is on display at the University Art Museum.

*Latemouth: Works on paper 1987–2003* consists of Mike Parr’s works on paper from the past 16 years and a specially re-conceived video projection composition.

The works, on display until August 30, are the result of a dynamic 16-year collaboration between Mike Parr and printmaker John Loane of Melbourne’s Viridian Press.

Mr Parr has created more than 1000 prints with Mr Loane since 1987 when the printmaker sent him copper plates and suggested drawing on them. Over the past 10 years, he has produced a number of prints within the context of the *Self Portrait* series, comprising works in a range of media, including performance, installation, sculpture, drawing and drypoint etching.

“Mike Parr’s prints have remained very grounded in the concerns of his 30-year artistic practice, in particular the fundamental importance of the performative to his work,” said University Art Museum Director Ross Searle. “Where his body is central to his dramatic performances, his self portrait has been central to much of his printmaking.”

The exhibition includes a selection of small to medium-sized works, a range of large-scale “red” prints of recent years and the video projection of *100 Breathe*, a work re-conceived for the exhibition, which extends printmaking into the performative.

Located in the Forgan Smith Tower, UQ St Lucia, the museum is open every Tuesday to Friday from 10am–4pm and Saturday from 12–4pm.

**To publicise your conference or seminar, email Joanne van Zeeland at j.vanzeeland@uq.edu.au**
The work of graduates from a Papua New Guinea art school forms the basis of a UQ art exhibition now on display.

*Kibung: Textiles from graduates of the National Arts School, Papua New Guinea* focuses on textile graduates from the school during the 1980s and their subsequent careers.

“The 1980s were a particularly vital era of creative endeavour in PNG and the National Art School made an enormous contribution to areas of creative practice, particularly in textile design,” said co-curator and Art Museum Director Ross Searle.

More than 75 textiles and wearable items are on display until August 17 from 10am – 4pm daily at the Customs House Art Gallery, 399 Queen St, Brisbane city.

“The exhibition documents almost 20 years of struggle, invention and wonderful achievement,” said co-curator Jill Kinnear, a Queensland-based artist and textile designer who taught at the National Arts School of Papua New Guinea from 1986 until 1989. “Textile design has been used as a political tool, propaganda, even a conveyor of secret messages, but its most powerful role is its declaration of national cultural identity and narrative.

“Since graduating, many of the artists moved on to further study and developed successful individual careers in teaching and the arts, some could not be traced, and sadly some had passed away.”

Ms Kinnear said the exhibition was a meeting or reunion of the artists and their work with the Melanesian Pidgin word “kibung” meaning an official meeting.

Some of the work on display includes Wendi Choulai’s *105 skirt* of raffia and plastic bags, part of a 1996 commission for a swimwear company; Ben Mele’s 1989 *Air Niugini* uniforms; and Henry Iyarot’s *Tapa cloth* design for the 1994 Commonwealth Games uniforms.

The exhibition also includes *Faces*, a hand-printed folding screen designed by Solomon Kavo and Oksy Okae inspired by a hairy snail found in the PNG Highlands.

Barleyde Katit’s fabrics based on shields and masks from the Papuan Gulf, the Sepik and the Maring tribe of Madang are displayed, as are fabric designs by Philip Brimpier featuring war shields, canoes and wildlife.
New centre launched

A new health research alliance between UQ and the University of Southern Queensland (USQ) was launched on July 1.

The joint Centre for Rural and Remote Area Health was officially opened at USQ by the Parliamentary Secretary to the Federal Minister for Health and Ageing, Trish Worth.

It aims to improve access to and the standard of health care for rural and remote Australians and improve the education and training of the health workforce.

Acting Executive Dean of the Faculty of Health Sciences Professor Bruce Abernethy said the new centre demonstrated UQ’s continuing commitment to the development of regional health infrastructure and workforce recruitment and the training of health professionals to work in regional and rural communities.

Vale Dr David Bellamy

The UQ community was saddened by the passing of Dr David Bellamy on June 21, aged 48.

Dr Bellamy, who worked as a research fellow in the Business School’s Centre for Valuation and Venture Capital, joined UQ in 1987 as a tutorial fellow and was appointed as a specialist tutor in 1988 and a lecturer in corporate finance in 1989.

“David had unmatched computer and data-analysis skills and, as a result, spent hours and hours of his own time helping staff and students with their projects, never expecting anything in return,” said Centre Co-director Professor Stephen Gray.

“He will be sadly missed by everyone in the School at both a professional and personal level.”

Dr Bellamy was awarded his PhD at a UQ graduation ceremony in December 2002.
Making sense of the senses

A book edited by two UQ academics into the way aquatic animals see, hear, smell, taste, feel and sense their environment has been published by one of the world’s most prestigious international scientific publishers.

Sensory processing in aquatic environments (Springer) is a 446-page hardcover book edited by the School of Biomedical Sciences’ Associate Professor Shaun P Collin and Associate Professor Justin Marshall.

“Research into aquatic sensory processing has advanced a great deal in the past 15 years and several years ago a number of researchers came up with the idea of updating the landmark 1988 text Sensory biology of aquatic animals by Jelle Atema and colleagues,” said Dr Marshall.

The text raised the idea of considering the sensory systems of an animal as an integrated whole, rather than studying one sense and its capabilities separately.

“We used the same concept when planning the new book and aimed to address specific problem-based tasks faced by animals in a range of environments taking into account the world’s physics. We then arranged chapters that examined their biological solutions.”

The idea for the book, which took four years to complete, was conceived after the success of an international conference of the same name that Drs Collin and Marshall organised on Heron Island in March 1999.

Forty-seven authors, including numerous world experts in sensory neurobiology, contributed to the 22-chapter book, which is divided into five thematic sections.

In addition to editing contributions, Dr Collin contributed two chapters on visual plasticity and eye design in both shallow water and deep-sea fish and Dr Marshall wrote two chapters on the design of chromatic signals and colour vision in fishes and crustaceans.

In the first two sections (Navigation and communication and Finding food and other localised sources), long and close-range sensory tasks are examined in both bony and cartilaginous fishes and marine mammals.

The third section, The coevolution of signal and sense, examines how animals decide what is prey, predator or mate and describes the strong links between physical parameters of the aquatic realm and sensory receptors.

Visual adaptations to limited light environments focuses on visual challenges for many animals living in a deep-sea environment. It also examines several sea creatures whose vision adapts to both deep water, where bioluminescent light prevails over sunlight, and shallow water environments with plenty of sunlight.

The final section of the book, Central coordination and evolution of sensory input, details how aquatic animal signals are processed and filtered in the central nervous system.

The book was launched in the US earlier this year and is available at bookshops around the world.

Sensory processing in aquatic environments (Springer) is a 446-page hardcover book edited by the School of Biomedical Sciences’ Associate Professor Shaun P Collin and Associate Professor Justin Marshall.

Dr Collin (left) and Dr Marshall.

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CURRENT BESTSELLERS

1 Harry Potter and the Order of the Phoenix, J K Rowling (Bloomsbury, $45) FICTION
2 A Short History of Everything, Bill Bryson (Doubleday, $54.95) HISTORY
3 The Curious Incident of The Dog, Mark Haddon (David Fickling Books, $29.95) FICTION
4 My Invented Country, Isabel Allende (Flamingo, $29.95) BIOGRAPHY
5 Dark Star Safari, Paul Theroux (Penguin, $24.95) TRAVEL
6 From Nothing to Zero: Letters from Refugees in Australia’s Detention Centres, anthology (Lonely Planet, $22) AUSTRALIAN POLITICS
7 Quarterly Essay Issue 10: Bad Company The Cult of the CEO, Gideon Haigh (Quarterly Essay, $12.95) POLITICAL JOURNAL
8 The Girl Most Likely, Rebecca Sparrow (UQP, $22) FICTION
9 The Mayne Inheritance, Rosamond Siemon (UQP, $19.95) BRISBANE HISTORY/TRUE CRIME
10 Stupid White Men, Michael Moore (Penguin, $22.95) POLITICS/HUMOUR

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Laws of nature

Academics from UQ, Queensland University of Technology and Griffith University have been awarded a $50,000 grant to develop a network to strengthen the link between law and biology.

The Australian Research Council International Linkage grant was awarded to help fund the network that includes two key UQ academic members – Associate Professor Hamish McCallum from the School of Life Sciences and Dr Piero Giorgi from the School of Biomedical Sciences.

Dr McCallum said lawyers and the law often had difficulty understanding biological issues.

“Scientists work from theories and lawyers from case studies,” he said.

“Lawyers have an idea of proof beyond reasonable doubt but are reluctant to quantify uncertainty and doubt as scientists do routinely.

“This makes it difficult to deal with scientific evidence.”

The network will foster interdisciplinary knowledge and communication with the help of other national and international research institutions.

It will cover five main areas including bio-logic and legal-logic; feminism in law and biology; biological governance; artificial intelligence; and biosecurity.

QUT Faculty of Law Assistant Dean (Research) Dr Barbara Hocking said there could be some benefit to broadening legal education to include issues of statistical probability and even philosophy of science.

“It’s important for both sides to understand the ways in each communicates,” she said.

“The network will aim to elaborate on the legal implications of bio-statistical information in its many applications, from biodiversity as an input in industrial processes to crime-related DNA, to genetic testing in medicine.

“In forensic genetics and conservation biology, bio-statistical analysis can also quantify variables often presented only qualitatively in the law.”

Dr Hocking said researchers from all over the world had already pledged support for the network.
Running a test for researcher

UQ research assistant Ela Martin is not known for taking things easy in her spare time.

Despite working for the Centre for Immunology and Cancer Research and being part of the team that earlier this year announced they had found a way of turning off some types of auto-immune diseases, she is also known for getting up at 5am to go for a leisurely 160km bike ride or a 10km run.

During the day she may have the lab coat on running another series of tests, but in her own time she is also a long distance triathlete who pushes her body to the extreme.

“The racing’s much easier than the training believe it or not,” Dr Martin said.

“Training takes over your life doing two sessions a day, before and after work, for two to three hours.

“So when you are racing you are just taking every moment as it comes and it’s not about dragging yourself out of bed at 5am every morning.”

That dedication paid off for Dr Martin in May when she competed against the best in the world as part of the world championships in Spain.

“I was coming off the Foster Ironman race only five weeks before, when you are supposed to recover for eight weeks between races,” she said.

“Even the flight over was a tiring exercise with jet lag and having to organise getting my bike everywhere.

“Then, during the race, I dislocated my shoulder coming out of the swim so my priority changed from trying to do well to just finishing.

“I didn’t want to have gone all that way and have DNF (Did Not Finish) against my name.”

Putting her head down, Dr Martin completed the 120km ride followed by the 30km run to finish an amazing ninth.

“I had no idea where I was placed, so it was fantastic to find out,” she said.

After two weeks enforced rest from her coach, Dr Martin is now getting back into training setting her sights for next year and again trying to find a balance between work and play.