Funding our research

In 2011, UTS had 13 funded proposals (out of 97 submissions) and was allocated funding of over $3.5 million by the Australian Research Council (ARC) Discovery Projects. Our success rate increased significantly from 10.7 per cent to 13.4 per cent, but total funding decreased by 5 per cent compared to 2010. (This is related to the 25 per cent cut in discovery projects funding to fund the new Discovery Early Career Researcher Award (DECRA) scheme.)

UTS significantly increased its success in receiving ARC Linkage Project funding, with three out of six projects funded — an increase on the 20 per cent success rate of 2010. However, the total awarded amount decreased by approximately $200,000 compared to 2010.

Other research funding included:

> $330,000 under the Linkage Infrastructure, Equipment and Facilities (LIEF) for the latest stage in the longstanding AustLII project
> one funded Discovery Indigenous proposal (out of one submission) from the UTS Business School, with $104,000 allocated by the ARC (fully funded). This is a great achievement, given that only 10 proposals out of 29 were funded nationally
> funding from the ARC for Future Fellows. UTS achieved five future fellows (three in the Faculty of Science and two in the Faculty of Engineering and Information Technology). Three of these are international appointments and will commence in 2012. In comparison with our ATN peers, UTS received the highest number of future fellows
> funding for three DECRAs [two for Business and one for Science]
> over $1 million in National Health and Medical Research Council (NHMRC) funding for two projects led by Professor Caroline Homer.

The outcomes of the 2011 Cooperative Research Centres (CRC) saw a team from the Faculty of Science, led by Professor Guoxiu Wang, join the Cooperative Research Centre for Advanced Automotive Technology, where they will contribute their expertise on lithium ion batteries, supercapacitors and fuel-cells for development of power batteries for electric vehicles.

Two of our researchers had success in this year’s NSW Science and Engineering Awards (NSEA). Previously called the NSW Scientist of the Year Awards, the NSEA recognise and reward NSW’s leading researchers.

Professor Chengqi Zhang from the Centre for Quantum Computation and Intelligent Systems won the engineering and information and communications technology category. Professor Geoff Smith from the University’s Institute for Nanoscale Technology was a joint winner in the invention category.

Professor Smith was also invested as a fellow of the International Society of Optics and Photonics (SPIE) this year. Both the NSEA award and the SPIE fellowship recognise Professor Smith’s achievements as a leader in coatings and polymers for green photonics applications.

Key performance indicator — Higher degree by research completions [weighted]

Note: KPI results are not final until endorsed by the UTS Council in April 2012.
Research highlights

The Conversation
UTS became a founding partner of The Conversation, a new independent source of information, analysis and commentary from the university and research sector. UTS academics were encouraged to register and contribute, with over 120 articles submitted since the site’s launch. More information can be found at theconversation.edu.au

Marie Curie Fellow
At the end of 2011, the Centre for Technology in Water and Wastewater (CTWW) welcomed German researcher Dr Christian Kazner to UTS. Dr Kazner received a Marie Curie Fellowship, a mobility research-training grant provided by the European Community, which provides funding for three years for talented researchers to undertake research, networking and career development opportunities around the world. Dr Kazner is UTS’s first Marie Curie Fellow and he will work with CTWW staff to develop a membrane solution for advanced water treatment. He will complete the final year of his fellowship in Switzerland.

Centre for Technology in Water and Wastewater funding
In addition to the arrival of UTS’s first Marie Curie Fellow, the CTWW had significant funding success in 2011. The Centre’s researchers received almost $1 million in cash and in-kind funding for two projects with the National Centre of Excellence in Desalination. These projects will look at different ways to control and reduce the incidence of bio-fouling in the pre-treatment of seawater. The centre also received over $500,000 worth of funding and two PhD scholarships from CRC Care, a cooperative research centre with a focus on contamination assessment and environmental remediation. The CRC Care funding will allow the CTWW team to conduct further research on groundwater treatment and bio-availability remediation.

Eureka finalist
Dr Peter Macreadie, a Chancellor’s Postdoctoral Research Fellow in the School of the Environment and associate member of the Plant Functional Biology and Climate Change Cluster (C3), was a finalist in the 2011 Australian Museum Eureka Prizes in the people’s choice category for his work in the field of seagrass research.

IBM PhD Fellowship
PhD student Rony Novianto, from the Centre for Quantum Computation and Intelligent Systems, was the sole Australian recipient of an IBM PhD Fellowship in 2011. He received the honour for his work on novel cognitive software architecture that can be applied to self-directing systems. The fellowship will provide Rony with access to a range of internships with world-leading IT mentors, and the opportunity to further his research activities.

New robotics lab
Launched in November 2011, the Assistive Robotic Laboratory Project will be used to identify the needs and practical considerations of people living with disabilities in order to develop intelligent machines that can meet these needs. The laboratory is a joint initiative between UTS and Greystanes Disability Services.

Launch of nuclear magnetic resonance facility
A new nuclear magnetic resonance (NMR) facility was launched at UTS at the end of 2011. The facility was the latest in a long line of collaborative projects between UTS and Agilent Technologies, and will allow UTS researchers to learn more about a range of disease states such as cancer.

Anthill SMART 100 Index
Professor Hung Nguyen and his team in the Centre for Health Technologies had their technology Aviator — technology that enables people with disabilities to control their wheelchairs using their mind — awarded third place in the 2011 Anthill SMART 100 Index. The Anthill Index recognises the best of the best in Australian innovation and entrepreneurship.

Australian International Design Awards
Hypomon, the nocturnal hypoglycaemic monitor for children with type 1 diabetes, received an Australian International Design Award in the category of medical and scientific design. Hypomon was designed by Professor Hung Nguyen and doctoral student Nejhdeh Ghevondian in the early 2000s, and resulted in the development of AIMEDICS, a spin-off company dedicated to the commercialisation of the product.

The Hub 20/20 ‘counter terrorism’ rubbish bin was shortlisted for an Australian International Design Award. The design for the bin originated at UTS in the Designing Out Crime (DOC) winter school in 2009. A redesign was undertaken by design consultant and UTS tutor Nick Karlovastas in collaboration with RailCorp and the DOC team, before HUB Street Equipment was chosen as the unit’s manufacturer. The bin has now been rolled out at railway stations across Sydney.

OMX upgrade
UTS became the first commercial site in the world for the next generation DeltaVision OMX Blaze super resolution imaging system, a system that enables researchers to capture real-time multiple colour images of interactions between microorganisms and living cells, paving the way for a better understanding of how microorganisms such as malaria, bacteria and viruses cause infection. The system involved a joint investment of $400,000 by UTS and NSW Trade & Investment.

Sustainable research
The Institute for Sustainable Futures won the Mercedes-Benz Australian Environmental Research Award for their work and trials on phosphorus recovery through urine diversion as a response to the looming peak in phosphate production.

The Institute for Sustainable Futures (ISF) at UTS won the inaugural Mercedes-Benz Australian Environmental Research Award for their work and trials on phosphorus recovery through urine diversion as a response to the looming peak in phosphate production.
Matthew Shields, first-year student from the Faculty of Nursing, Midwifery and Health.
2011 saw UTS expand on its faculty structure with the launch of the Graduate School of Health. Pharmacy will be the first discipline established within the school, with a Master of Pharmacy to be offered in 2012. This practice-based and innovative course has been designed to support the UTS model of global practice-oriented learning.

All faculties this year focused on developing and refreshing curriculums to support the UTS model. Faculties renewed their curriculums to increase the use of technology in teaching, align research and teaching, and develop relationships with industry partners.

Our Faculty of Design, Architecture and Building used technology as a tool in their construction project management program. Students used building information modelling tools in teamwork projects as an integrated approach to property development, design and construction.

To further align teaching and research, the UTS Business School and the Faculty of Engineering and Information Technology adopted the UTS Framework for Doctoral Education.

All faculties improved their networks with industry and the professions this year, particularly by reviewing courses that required professional accreditation by external agencies. The new Master of Pharmacy was approved and accredited by the Australian Pharmacy Council. Extensive consultation with practitioners in 2011 resulted in reaccreditation of our Bachelor of Education in Primary Education by the New South Wales Institute of Teachers, and our Bachelor of Nursing by the Australian Nursing and Midwifery Accreditation Council.

All faculties focused on developing and refreshing curriculums to support the UTS model.
Teaching

Strengthening the UTS model of practice-oriented learning by ensuring the faculty’s graduates gain the necessary knowledge, skills and experience to use a range of digital technologies in their professional and creative practice was a priority for the faculty in 2011.

Two new media labs were commissioned in 2010 and in spring this year the faculty saw the opening of the student production space in the University’s Bon Marche Building.

The increasing popularity of the sound and music program saw the addition of an extra cohort in 2011. The sound and music design course is the first of its kind to combine the domains of sound and music, and prepare students for new emerging domains that require the confluence of sound in design and interaction.

A review of honours offerings was conducted in 2011 under the leadership of Professor David Boud. Structural improvements to the honours program in the Bachelor of Arts in Communication were initiated to better prepare students and to permit pathways for students in other program areas such as global studies and international studies.

The faculty conducted major work on the restructure of the Master of Arts in Communication Management and Graduate Diploma in Communication Management, with proposals for new graduate diploma courses in integrated communication, public relations, and organisational change and communication. Significant progress was made in regard to the new Master of Teaching in Secondary Education.

This year saw our first graduates in the new Bachelor of Arts in Communication. Collaborative student work on real communication issues that relate to a broader theme, such as community or sustainability, and interdisciplinary solutions that capitalise on the learning and skills developed during the course of the core subjects, were included in a new capstone core subject run for the first time in 2011.

The faculty’s Bachelor of Global Studies also entered its third year with the first cohort of students finishing at the end of 2011. The final capstone core subject also entered its third year with the first cohort of students finishing at the end of 2011. The final capstone core subject provided students with the opportunity to collaborate across disciplinary lines in solving a global problem.

Strong international partnerships and internationalisation in the faculty were demonstrated this year. In response to student demand and ongoing reviews of the faculty’s international studies program new partnerships are being sought with universities in Switzerland, France, Spain, Argentina, Japan and Colombia.

Further, the Master of Arts in Training and Human Resource Development and the Doctorate of Education were approved for introduction in Hong Kong in 2012, subject to approval by the Hong Kong Education Bureau.

Research

The faculty produced collaborative, focused and high-profile research this year while also being strategic in its approach to funding, the production of research outputs and distribution of research to the general public.

Diana Slade, Professor of Applied Linguistics, led a project on improving effective clinical communication during handovers in hospitals, collaborating with six other universities and four health departments from around Australia. The faculty had a number of Australian Research Council (ARC) successes in 2011 [see box on right]. In addition to these successes, a rich variety of publications were produced this year.

> Catherine Robinson’s book Beside One’s Self: Homelessness Felt and Lived draws on field research and interviews detailing the lives of homeless individuals in Sydney and Brisbane. This book bridges the divide between research that has policy implications and research that makes theoretical contributions.

> Professor Theo van Leeuwen’s book The Language of Colour develops a new theory of the way colour communicates in a wide variety of situations, and cultural and historical contexts.

> A new textbook for public relations students by Professor Jim Macnamara, Public Relations: Theories, Practices, Critiques, offers a critical study of the profession.


> Lai-Ha Chan’s book China Engages Global Health Governance uniquely and systematically examines China’s participation in the global health domain.

> Malcolm Angelucci’s book, Words Against Words: On the Rhetoric of Carlo Michelstaedter, is the first book to consider the philosopher’s work at the turn of the 20th century.

> When Horse Became Saw is Anthony Macris’s personal account of his young son Alex’s regression into a severe autistic state.
Engagement

Connecting with the community and enhancing our inclusive university environment have been demonstrated in a number of achievements in the faculty this year.

Sydney’s first City Poet, Kate Middleton, was selected for the inaugural 12-month appointment, supported by Arts NSW in partnership with UTS Centre for New Writing.

Announced this year, the CAL Non-Fiction Writer-in-Residence will commence in 2012 with the selection of a prominent Australian writer. This new appointment will promote the study of non-fiction and provide an author with a creative environment in which to complete a major work and also connect with students and staff from the UTS writing program.

Students were launched into the limelight this year as their creative works were screened and exhibited in the Chauvel Cinema in Paddington as part of the UTS Golden Eye Awards, held for the 12th consecutive year with an audience of over 300.

Renowned Australian filmmaker Paul Cox was recognised for his contribution to the creative arts when he received an honorary doctorate from UTS.

The faculty’s Indian Ocean and South Asia Research Network was a prime mover in establishing the UTS and the Indian Council for Cultural Relations (ICCR) Rajiv Gandhi Visiting Chair of Contemporary Indian Studies — ICCR’s first chair in Australia.

Eleanor Bell became the first UTS undergraduate to win the 2011 Walkley Award for best online journalism. Eleanor won the award for her piece Beating the Odds about the disappearance of six-year-old schoolgirl Kiesha Abrahams. Eleanor combined her study in the Bachelor of Arts in Communication (Journalism) with a job at the ABC as a multimedia producer and video journalist.

The piece gives an insight into the issues facing the community of Mt Druitt, in Sydney’s western suburbs, particularly public housing, unemployment and children at risk of social exclusion.

Eleanor stated on winning the award: "Beating the Odds takes the best aspects of investigative journalism, photo and video journalism and feature storytelling and puts them together in a medium that is accessible for people and allows audiences to engage and participate.”

Future plans

> several courses due for re-accreditation
> proposals for new courses in areas including creative digital studies and interpreting and translating to intensify.

Major research projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Funding</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indigenous persistence in formal learning</td>
<td>$693,000 (Indigenous Discovery via the University of New South Wales, over three years)</td>
<td>Dr Greg Martin</td>
</tr>
<tr>
<td>Globalising the magic system: a history of advertising industry practices in Australia 1959–1989</td>
<td>$444,000 (ARC Discovery Projects funding scheme, via Melbourne University, over three years)</td>
<td>Associate Professor Robert Crawford</td>
</tr>
<tr>
<td>Enhancing the quality of science learning through a representation-intensive pedagogy</td>
<td>$225,000 (ARC Discovery Projects funding scheme, via Deakin University, over three years)</td>
<td>Associate Professor Peter Aubusson</td>
</tr>
<tr>
<td>The geography of power in China: urban expansion and administrative empire</td>
<td>$183,000 (ARC Discovery Projects funding scheme, over three years)</td>
<td>Professor Carolyn Cartier</td>
</tr>
<tr>
<td>A project to examine and strengthen health care incident disclosure communication</td>
<td>$170,000 (ARC Discovery Projects funding scheme, over three years)</td>
<td>Professor Rick Iedema</td>
</tr>
</tbody>
</table>
Teaching

Curriculum development and renewal, together with increasing structured opportunities for students to strengthen their knowledge, capabilities and networks, was a focus point for the UTS Business School in 2011.

The UTS Business School revised a number of postgraduate programs this year. In consultation with industry and stakeholders, the school revised its Master of Management in Community Management to become a stream in the Master of Management degree. In 2012 the school will develop a new Master of Business Administration (Executive) program. This degree will support the UTS model of practice-based learning, research-informed teaching and globalisation, and will reflect the school’s mission and vision of integrative and design thinking.

Through its teaching, the UTS Business School built on its relationships with alumni and industry with two new developments this year. The Master of Business in Operations and Supply Chain Management was revised to introduce a procurement stream accredited by the Chartered Institute of Purchasing and Supply (Australia), and was accredited to full membership status. The Master of Business in Finance secured postgraduate program partnership status with the Chartered Financial Analysts Institute (CFA), enabling students to undertake further study to become a member of the CFA.

In 2011 the redesigned Bachelor of Business was introduced, including revised first-year core subjects, the inclusion of extended majors and the embedding of various themes including ethics and sustainability. The school also introduced a new core cross-disciplinary subject — Integrating Business Perspectives — in the Bachelor of Business. This subject has proven popular with students and is supported by industry through significant prize sponsorship.

2011 saw the re-launch of the student club Footprints, a networking group for postgraduate students. A highlight was a seminar with Paul McClintock, Chair of the Council of Australian Governments Reform Council.

Dean Professor Roy Green and Andrew Lowe, 2011 Bradman Scholar. This scholarship recognises students who possess a blend of academic, sporting, personal and social skills together with a strong talent on the cricket field.

Andrew is a second-year Bachelor of Business student, majoring in sports management.
Research

Research is fundamental to the progress and success of the UTS Business School. To ensure this success, the school instigated an action plan to improve the outcomes of Australian Research Council (ARC) linkage submissions. This included the development and implementation of a school incentive scheme to support external research grant applications.

To strengthen its research capabilities, the UTS Business School became an early adopter of the UTS Framework for Doctoral Education. This year, 22 students graduated from UTS Business School higher degree by research programs.

Recognition of research excellence across the many disciplines within the school has seen recruitment of additional senior academic staff. This was in response to the ranking of 5 ['well above world standard'] for applied economics in the 2011 Excellence in Research for Australia (ERA) initiative and a ranking of 4 ['above world standard'] for accounting and management.

New academic staff in the UTS Business School in 2011 included Professor Joffre Swait as Deputy Director of the Centre for the Study of Choice (CenSoC) and Professor John Wooders as Distinguished Research Professor of Economics.

The UTS Business School also demonstrated its strong research leadership by announcing the appointment of Professor Susan Thorp as Australia’s first Chair of Finance and Superannuation, and Professor Suzanne Benn as Chair in Sustainable Enterprise.

Current staff and centres were also recognised this year. Professor Jordan Louviere, Executive Director of CenSoC, was awarded the Chancellor’s Medal for Exceptional Research. And the Australian Centre for Event Management was announced winner in the Best Education or Training Program category in the Australian Event Awards, judged by an independent panel representing the breadth of the Australian events industry.

To foster strong cross-university links, the UTS Business School, in partnership with five other leading Australian universities, successfully tendered to operate the new national Centre for International Finance and Regulation.

Engagement

The UTS Business School continued to engage with the community and professions in 2011 aided by Dean Professor Roy Green’s external roles with industry, including Chair of the Australian Government’s Innovative Regions Centre, board member of the CSIRO Manufacturing Sector Advisory Council and the ARC Centre of Excellence for Creative Industries and Innovation, and member of the Prime Minister’s Taskforce on Manufacturing.

In further industry engagement, the school’s Professor Suzanne Benn co-led a partnership project between UTS Business School and Ernst & Young to develop an energy efficiency training program for accountants and business managers in New South Wales. The project attracted over $300,000 in funding from the NSW Government’s Office of Environment and Heritage.

The creation of UTS-wide key performance indicators for the University’s research strengths, including one for external engagement, led to a number of conferences this year being hosted by the school’s Paul Woolley Centre for the Study of Capital Market Dysfunctionality, the Centre for Corporate Governance and the Quantitative Finance Research Centre.

As signatory to the United Nations Principles of Responsible Management Education (UNPRME), the UTS Business School launched an initial report detailing how it is advancing the six UNPRME principles, focusing on purpose, values, method, research, partnership and dialogue. UTS Business School participated in a global working party for the development of a global compact among universities in keeping with the United Nations global compact.

A foundation partner of TEDx Sydney in 2010, the school returned with significant sponsorship support for the 2011 event, working again with the University’s School of Design and design consultancy Second Road to visualise the event. The event featured a selection of Australia’s leading thinkers, storytellers and performers sharing their ideas with an invited audience of 800 and simulcast globally via web stream.

This year saw the establishment of the Creative Minds Sessions — a series of workshops that aimed to tackle pressing issues in Sydney and globally, and foster innovation across the university. Led by academics Dr Jochen Schweitzer and Dr Melissa Edwards, together with a small group of students and academics, a creative journey was facilitated using integrative and design thinking.

Future plans

> development of the new MBA (Executive) program to continue in 2012
> review Bachelor of Management courses
> re-launch of the UTS Business School’s Industry Advisory Board

Major research projects

The dynamics of contractual and relational governance in inter-organisational relationships
Funding: $375,000 (ARC Discovery Early Career Researcher Award, over three years)
Recipient: Marketing discipline group

Monetary policy and models of money, credit and banking
Funding: $375,000 (ARC Discovery Early Career Researcher Award, over three years)
Recipient: Economics discipline group and Centre for the Study of Choice

The value of characteristics of Australian wheat
Funding: $160,539 (ARC Linkage Project, over two years)
Recipient: Centre for the Study of Choice

Indigenous women and entrepreneurship in NSW
Funding: $104,000 (ARC Discovery Indigenous Researchers Development, over three years)
Recipient: Management discipline group and economics discipline group
Teaching

Internationalising the curriculum to equip students for work in a global workplace was a major priority for the Faculty of Design, Architecture and Building in 2011. The faculty also worked on building its international profile and developing strategies to improve research-led teaching and learning.

UTS: Design, Architecture and Building increased the impact of their programs internationally by participating in a number of collaborative programs with prestigious overseas universities.

In 2011, the faculty hosted the United Kingdom’s Architectural Association School of Architecture Visiting School, with a number of visiting international staff and students taking part.

Tongji University in Shanghai sent a group of 30 Urban Planning and Design Institute professionals to undertake a two-week workshop on urban planning in Australia hosted and delivered by the Faculty.

Developing a group of international study subjects to be undertaken as electives across the faculty saw opportunities for students to study overseas. Twenty-four students and four interns travelled to the United States to participate in the Frank Gehry and Los Angeles study tour, working with students from California Polytechnic State University on a design charrette.

Ten students travelled to Prague for the Prague Quadrennial of Performance Design and Space in June. Further, students travelled to France, China, Japan, New Zealand and Italy this year as part of the global field studies program, helping local universities develop design outcomes that were presented to local communities and political heads.

The School of Design launched a number of new courses in 2011. Students embraced the new direction of the revised Bachelor of Design in Interior and Spatial Design, with an increase in first preferences and offers through the Universities Admissions Centre. The new Bachelor of Animation will commence in 2012, following successful development and accreditation this year. And a strong initial enrolment of 30 students will participate in the new Master of Design in 2012.

This year the faculty clarified the pathways to PhD research, with the continuing shift of all undergraduate courses in the School of Design to move towards a 3 + 1 honours model (three years undergraduate study plus one year of honours study), and integration of a two-year master’s by coursework program. Both of these models will now allow practice-focused research training as entry to the PhD program.

The faculty’s School of Architecture strengthened links with RMIT University and the Queensland University of Technology this year. The three universities received European Union funding for three postgraduate students to participate in the Doctor of Architecture exchange program. This also included a staff exchange with universities in Aarhus, Denmark, and Barcelona, Spain, as well as 120 students visiting UTS from Aarhus for a two-week program with the Faculty’s architecture students.

Faculty staff participated in workshops to develop strategies to implement research-led teaching and learning, including strategies such as incorporating emerging industry and professional issues directly into teaching, such as robotic fabrication in the Master of Architecture program, sonification and visualisation in other faculty work.

Research

The Faculty’s research aims in 2011 were to build significant international collaborations to improve the reputation of its research capability and to provide leadership in industry to make the Faculty the leading site in Australia for intellectual engagement. To achieve these aims, a number of important research events and activities took place this year.

Dave Pigram from UTS, Wes McGee from the University of Michigan and Jeremy Ficca from Carnegie Mellon worked in the United Arab Emirates undertaking collaborative research into robotic fabrication.

Leena Thomas collaborated on a five-year grant awarded by the Australia–India Strategic Research Fund to the Centre for Environmental Planning and Technology, one of India’s most prestigious architecture schools, to evaluate the environmental impact and occupant experience in Indian buildings.

Professor Peter McNeil continued his collaboration with Professor Evelyn Welch from the School of English and Drama, Queen Mary, University of London in a consortium awarded 985,000 euros on the project ‘Fashioning the Early Modern: Innovation and Creativity in Europe, 1500–1800’, which will contribute to the redesign of the Early Modern courts of the Victoria and Albert Museum.
Nearly 400 design students spent three days on Cockatoo Island, in Sydney Harbour, for the inaugural ‘Designer as Explorer’ workshop, as part of their Design Thinking subject. First-year students collaborated in groups from the four courses — Interior and Spatial Design, Visual Communication, Fashion and Textiles, and Industrial Design — to work on a mapping and inhabitation challenge. The workshop was considered a success, with staff noting a marked difference in student collegiality and a willingness to undertake other challenging projects.

> Professor Kees Dorst further developed the Centre for Designing Out Crime to have important links and activities in The Netherlands and England.

> Associate Professor Anthony Burke and Professor Gerard Reinmuth were selected as curators of the Australian Pavilion for the 2012 Venice Biennale of Architecture. They have since been approached to also convene the Architecture Biennale for the Canary Islands in 2012.

> Professor Lawrence Wallen was invited to curate the event World Stage Design in Cardiff in 2013.

> Adam Goodrum was commissioned by Galerie Gosserez in Paris to create a limited edition piece 'Carousel Console'.

**Engagement**

In 2011, the Faculty’s staff and students excelled nationally and internationally.

> Associate Professor Vicki Karaminas who was appointed to the governing board of the Popular Culture Association/American Culture Association in the United States.

> Adrian Lahoud’s work ‘Mediterranean Belt City’ received an honourable mention in the Geopolitical Borders Competition.

> Professor Peter McNeil won an Art Association of Australia and New Zealand book prize for his four-volume *Fashion: Critical and Primary Sources*. 

> Associate Professor Louise McWhinnie gave a master class on typography for the Design Institute of Australia.

> Dave Pigram, Senior Lecturer in the School of Architecture, won the International Lace Award, displayed at the Powerhouse Museum.

To increase its exposure to the wider community, the Faculty held a number of exhibitions in highly regarded galleries this year, including the Powerhouse Museum and CarriageWorks.

In 2011, students from across the Faculty won a number of national and international awards.

> Master of Animation student Sarah Eddowes was selected for France’s Annecy International Animation Film Festival 2011.

> Visual communications student Louella Pleffer’s film *Ain’t in that Grave* was shown at the St Kilda Film Festival.

> Fashion student Jacqueylin Wellington won the Australian Wool Fashion Award.

> Industrial design student Joshua Sung hoon Mun won gold in the James Dyson Student Award.

> PhD student Christian Tietz was part of the winning team for the World Habitat Award 2011.

> Recent graduate Bronwyn O’Brien won second place at the St Kilda Film Festival.

**Future plans**

> open and make full use of new facilities including studios and computer/technical support spaces for new degrees, high-end digital teaching support and more staff offices

> the School of the Built Environment to evaluate the model of their master’s and PhD programs based on the School of Design’s new model.

> collaborate with the UTS Business School, with design thinking and innovation to become more formalised in courses and activities.

**Major research projects**

- **Centre for Designing Out Crime**
  Funding: $450,000 (Department of Attorney General and Justice)
  Recipient: Professor Kees Dorst

- **Building occupants survey system Australia**
  Funding: $300,000 (ARC Linkage Projects funding scheme, over three years)
  Recipient: Leena Thomas, in conjunction with the University of Sydney and Investa

- **Digivore: the impact of location-specific urban digital social information networks and public displays on the City of Melbourne**
  Funding: $238,000 (ARC Linkage funding scheme, over three years)
  Recipients: Professor Tom Barker and Dr Hank Haeusler, in conjunction with Fixex Property Group, Malatesta Holdings, Committee for Melbourne, SmartSlab, City of Melbourne and The Sonnenreich Corporation

- **Responsive transport environments: spatial and visual user information technologies to allow improved passenger flow and a better customer experience**
  Funding: $128,600 (ARC Linkage funding scheme, over three years)
  Recipient: Professor Tom Barker, in conjunction with Arup, RailCorp, City of Sydney Council and Grimshaw Architects

- **Process protocol for energy efficiency on construction sites**
  Funding: $109,000 (NSW Department of Environment, Climate Change and Water)
  Recipient: Dr Peter Smith

- **Emerging technologies in timber construction**
  Funding: $66,000 (NSW Forest and Wood Products Australia)
  Recipients: Associate Professor Perry Forsythe and Dr Grace Ding
Teaching

Strengthening ties with the engineering and information technology industry to support the UTS model of practice-based learning was the foundation of teaching in the faculty this year.

The establishment of the Alcatel-Lucent University at UTS was the first facility of its kind in Australia. In 2011, the faculty launched a joint program provided by the telecommunications company Alcatel-Lucent and UTS to strengthen postgraduate courses for students who aspire to work with the most advanced carrier-grade IP networks, including Australia’s National Broadband Network.

The faculty worked on the development of harmonised graduate attributes between engineering and IT this year. There was a general review of subject outlines and a map of graduate attribute development through all courses was drafted. The faculty sought input from industry, professional body representatives and IT students, concentrating on industry views of the future of IT, employability requirements and graduate attribute development. The faculty board approved the new graduate attributes framework in October 2011.

Faculty academic Associate Professor Hadi Khabbaz was a successful recipient of a 2011 Australian Learning and Teaching Council (ALTC) citation for outstanding contributions to student learning.

Research

In 2011 the faculty enhanced its research profile in support of the University’s research strategy.

In preparation for the 2012 Excellence for Research in Australia (ERA) Professor Mary-Anne Williams was appointed Chair of Mathematics, Information and Computing Sciences and 20 applicants were submitted from the faculty for ERA Research Evaluation Committees.

The Faculty’s research staff and students received external recognition this year.

- Dean Professor Hung Nguyen was a finalist in the NSW Australian of the Year.

PhD student and IBM Fellowship recipient Rony Novianto with ‘Smoky the Bear’ robot.

PhD student and IBM Fellowship recipient Rony Novianto with ‘Smoky the Bear’ robot.

- UTS researchers Christian Sax and Hannes Lau won an Innovation Island prize in the Tech23 2011 awards for their LiquidKeyboard™.

- PhD student Rony Novianto was awarded the only IBM PhD Fellowship in Australia.

- Two Endeavour Research Fellowships were awarded: Shan Chen will work with the social media group at Indiana University in the United States and Mitesh Patel will be involved in the ongoing European Union-funded Green Advanced Space Propulsion project at the Center for Autonomous Systems, located at the KTH Royal Institute of Technology in Sweden.

- PhD student Benjamin Johnston had his thesis nominated to the Association for Computing Machinery — a first for UTS.

- Faculty researchers and staff were also recognised at the Vice-Chancellor’s Awards for Research Excellence. Dr Keith Willey was awarded the UTS Medal for Teaching and Research Integration and Professor Chengqi Zhang was a joint winner for the Research Leadership award.

To continue to foster research success within the faculty, a successful early career researcher day was held in December, involving three future Fellows from the University of New South Wales, University of Sydney and University of Wollongong in a research ambitions and career aspirations strategy workshop.

Engagement

Raising the profile of the faculty in the community, including in high schools, was a priority in 2011.

The Faculty organised the Zunz lecture in December — a high-profile highlight for the faculty, marking the 10th anniversary of the Zunz series. This included an appearance by Sir Jack Zunz and a panel discussion on the topic ‘Do great buildings make great cities?’

Eight seminars in the Dean’s Leadership in Innovation Seminar Series were delivered in 2011 by distinguished internationally recognised researchers.
The faculty hosted π (Pi) Day in March—a special public event co-hosted by UTS and IBM. Led by Pi expert Professor Jonathan Borwein the history, pop culture and hard maths of the world’s favourite transcendental number were explored on what is now designated International Pi Day.

The faculty had an unprecedented level of participation at RoboCup this year—up from one team in 2003 to four teams in 2011. The faculty also won the Austrade competition to host the Vietnam robot team.

This year the faculty held hands-on days at various high schools, resulting in an increase in the numbers of students from varied backgrounds participating in these programs. Nearly one thousand high-school girls from 21 schools participated in faculty programs from March to December. Engineering also held its first teachers day, with a second day held in mid-December.

2011 saw the introduction of four sub-groups to the faculty’s industry advisory network. These sub-groups were introduced to discuss how industry can assist the faculty to advance its work and interaction with industry, with a particular focus on the development of research and consulting capability.

The network held a successful breakfast forum on the topic Smart Futures: Connecting Physical and Virtual Worlds, bringing together faculty and industry participants to discuss and interact on new developments and activities in this field.

Future plans
> develop a conversion Master of Engineering degree
> prepare and finalise external accreditation of courses
> develop new master’s degree by coursework in analytics and a suite of coursework courses in biomedical engineering.

<table>
<thead>
<tr>
<th>Major research projects</th>
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</thead>
<tbody>
<tr>
<td><strong>Dissecting key steps of the miRNA-mediated gene regulation and its implication in immune response and cancer</strong></td>
</tr>
<tr>
<td>Funding: $630,528 (Future Fellowship, over five years)</td>
</tr>
<tr>
<td>Recipient: Dr Gyorgy Hutagner</td>
</tr>
<tr>
<td><strong>Supra-classical quantum simulation in physically restricted models of quantum computation</strong></td>
</tr>
<tr>
<td>Funding: $583,416 (Future Fellowship, over five years)</td>
</tr>
<tr>
<td>Recipient: Dr Michael Bremner</td>
</tr>
<tr>
<td><strong>Mining complex concurrency relationship patterns for dynamic customer/asset interaction modelling through novel industrial behaviour networks</strong></td>
</tr>
<tr>
<td>Funding: $380,000 (ARC Linkage Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipients: Professor Chengqi Zhang and team, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
<tr>
<td><strong>An optimal electrical drive system for plug-in hybrid electric vehicles</strong></td>
</tr>
<tr>
<td>Funding: $380,000 (ARC Discovery Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipient: Professor Jian Guo Zhu, Centre for Intelligent Mechatronic Systems</td>
</tr>
<tr>
<td><strong>A general Bayesian multilinear analysis framework for human behaviour recognition</strong></td>
</tr>
<tr>
<td>Funding: $378,000 (ARC Discovery Projects funding scheme, over three years)</td>
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<tr>
<td>Recipients: Professor Dacheng Tao, Professor Stephen Maybank, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
<tr>
<td><strong>Adaptive cyber-physical technologies with attention driven commonsense behaviours</strong></td>
</tr>
<tr>
<td>Funding: $320,000 (ARC Discovery Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipients: Professor Mary-Anne Williams, Professor Peter Gardenfors, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
<tr>
<td><strong>Development of globally optimal solutions to simultaneous localisation and mapping for robot navigation</strong></td>
</tr>
<tr>
<td>Funding: $320,000 (ARC Discovery Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipients: Dr Shoudong Huang, Professor Gamini Dissanayake, Centre for Intelligent Mechatronic Systems</td>
</tr>
<tr>
<td><strong>Determination of the condition and strength capacity of in-service timber poles in energy networks</strong></td>
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<tr>
<td>Funding: $280,000 (ARC Linkage Projects R2 funding scheme, over four years)</td>
</tr>
<tr>
<td>Recipients: Associate Professor Jianchun Li, Professor Bijan Samali and Professor Keith Crews</td>
</tr>
<tr>
<td><strong>Quantum effects in zero-error communication</strong></td>
</tr>
<tr>
<td>Funding: $260,000 (ARC Discovery Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipients: Associate Professor Runyao Duan, Professor Andreas Winter, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
<tr>
<td><strong>A framework for physical and social collaboration: towards the smarter planet vision</strong></td>
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<tr>
<td>Funding: $220,000 (ARC Linkage Projects funding scheme, over three years)</td>
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<tr>
<td>Recipients: Professor Mary-Anne Williams and team, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
<tr>
<td><strong>Approximate reasoning with qualitative spatial constraints involving landmarks</strong></td>
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<tr>
<td>Funding: $150,000 (ARC Discovery Projects funding scheme, over three years)</td>
</tr>
<tr>
<td>Recipients: Associate Professor Sanjiang Li, Associate Professor Jochen Renx, Professor Anthony Cohn, Centre for Quantum Computation and Intelligent Systems</td>
</tr>
</tbody>
</table>
Teaching

Developing the curriculum to support the UTS model of practice-oriented learning, building the student profile of the future and creating enhanced teaching and learning spaces were major areas of focus in 2011 at the Faculty of Law.

Four mentoring programs launched by the faculty in 2010 continued in 2011, with notable success in improving the first year experience of students in the Bachelor of Laws and Juris Doctor programs.

> The peer-mentoring program for first-year students involved 41 mentors and 549 invited student participants. The program resulted in a 40 per cent decrease in first-year student course withdrawals from the previous year.

> The staff mentoring program for students who have the potential to succeed in their degree but who are experiencing difficulties that may be assisted by a mentor had success with three students who were on academic caution now achieving a credit average.

> The international students program continued to address the specific needs of UTS: Law international students, such as language difficulties.

> The high achievers mentoring program — an exclusive program that fosters connections between high achieving UTS: Law students and eminent members of both the legal profession and related fields — grew from 13 participants and mentors in 2010–11 to 17 participants and mentors in 2011–12.

Assistance and guidance were also offered to students this year in the form of a tort engagement study group. This group, funded by a first-year experience grant through the University’s Institute for Interactive Media and Learning, will develop the capacity for students to be part of a student-driven learning community.

The faculty developed and sought accreditation for a number of new postgraduate courses for commencement in 2012. The Juris Doctor has been expanded with the development of the Juris Doctor and Master of Business Administration combined degree, which enhances the level 9 Australian Qualifications Framework master’s level outcomes embedded in the degree.

The study of intellectual property law expanded with the introduction of a revamped Master in Intellectual Property and two new courses: a Graduate Diploma in Intellectual Property and a Graduate Certificate in Intellectual Property.

State-of-the-art dual social/study student spaces were refurbished and opened in March 2011, with a high level of student occupancy and positive feedback.
Research
A major highlight for 2011 was the faculty’s research being ranked at world standard — a ranking of 3 — in the Excellence in Research for Australia (ERA) initiative. This ranking places UTS: Law above the national average of 2.7 for law and at the top of the Australian Technology Network institutions.

In further support of the University’s research strategy, the faculty set out to build partnerships with community and industry to enhance the profile of the faculty and to attract higher degree by research students.

As part of its strategy to attract high-quality higher degree by research students, the faculty established the Quentin Bryce Law Doctoral Scholarships in 2010, named after Her Excellency Ms Quentin Bryce, AC, CVO, Governor-General of Australia. Four PhD students were awarded the doctoral scholarships in 2011, valued at $25,000 a year for three years. In 2012, the scholarships will be increased to $30,000 a year for three years and will be offered to up to five law PhD students. There is a part-time option so that students who need to study part-time are not excluded.

Future plans
> develop a program of law student career development events.

Major research projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Funding</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-slavery project</td>
<td>$350,000</td>
<td>Anti-Slavery Australia</td>
</tr>
<tr>
<td>LiberLII</td>
<td>$212,600</td>
<td>AustLII</td>
</tr>
<tr>
<td>Labour rights for women and girls</td>
<td>$40,000</td>
<td>Anti-Slavery Australia</td>
</tr>
</tbody>
</table>

Engagement
Supporting greater community engagement and debate, the Anti-Slavery Australia research centre collaborated with CNN International to hold a public forum at the Melbourne Festival on ending modern slavery. The panel, hosted by CNN anchor Anna Coren, included the centre’s director, Associate Professor Jennifer Burn, the Federal Minister for the Status of Women, the Hon. Kate Ellis, MP, and leading human rights advocates. CNN and Anti-Slavery Australia are now exploring options for a joint initiative in Sydney in 2012.

Breakfast was served to over 100 guests, students and staff before the UTS Annual Lawyers and Ethics Eminent Speaker Lecture in April. Former federal court judge, the Hon. Kevin Lindgren, QC, delivered the lecture, entitled Ethical Underpinnings of Business Law. Mr Lindgren discussed cases with ethical and legal dimensions and, in a lively discussion, reflected on some difficult decisions he made as a barrister and judge. This annual lecture program promotes the faculty’s profile and relationship with alumni, industry and community.

The faculty also addressed the issue of graduate employability by hosting a careers networking night with 200 students and 40 professionals in attendance. The evening started with a panel of four lawyers from diverse backgrounds discussing their work, followed by refreshments and opportunities for networking.

This year the faculty further built on its research capacity by aligning its research centres, particularly AustLII (the Australasian Legal Information Institute — the faculty’s joint facility with the University of New South Wales’ law faculty that provides free internet access to Australasian legal materials), with industry partners. AustLII was awarded an American Bar Association grant of $212,600 to develop LiberLII (Liberian Legal Information Institute), recognising the faculty’s strong international relationships.

The faculty is the home of Anti-Slavery Australia, the only specialist legal research and policy centre in Australia focused on the abolition of slavery, trafficking and extreme labour exploitation. The centre was granted $40,000 by Good Shepherd Australia and New Zealand to conduct a review of labour rights for women and girls. Anti-Slavery Australia was also awarded funding of $350,000 over three years from the Attorney-General’s Department.

This year the inaugural Michael Whitbread Scholarship was awarded to Juris Doctor student Danielle Mansour.

The Michael Whitbread Scholarship of $3000 is awarded to assist with travel costs to London for students to undertake a two-week unpaid internship at Barristers’ Chamber, 7 Bedford Row. This scholarship will help UTS: Law students attain real-world international experience.
Teaching
To help build the University’s reputation and capacity to attract students and staff, the Faculty of Nursing, Midwifery and Health introduced flexible and student-friendly learning spaces and laboratories, with better technological capabilities.

The faculty also reviewed its accommodation needs for the next few years as per the accommodation schedule for the faculty’s development plan. Staff and students were kept well informed of the plans and progress to ensure minimal disruption to teaching and learning throughout the year.

Internationalising the student experience to support the UTS model and the future student profile saw the implementation of master classes with distinguished international scholars.

Internationalising the student experience to support the UTS model and the future student profile saw the implementation of dual PhD programs with international partners in nursing, midwifery and health services management in 2011.

This year, the faculty embedded an English language proficiency policy and strategy in all its undergraduate courses. Targeting students in the faculty who were in need of English language training (conducted by the University’s ELSSA Centre) saw a vast improvement in student retention and progress.

Research
The research reputation of the faculty was boosted by the high ranking received in the Excellence for Research in Australia (ERA) initiative. The faculty achieved an ERA ranking of 4 in 2011 — above world standard. UTS was the only university in New South Wales to achieve this ranking in the nursing category, which also included midwifery.

A number of significant appointments were made to further support the faculty’s research reputation. Professor Jon Adams was appointed Chair in Public Health and was also a recipient of the faculty’s career development award. Debra Jackson, a newly appointed professor, was appointed editor of the Journal of Clinical Nursing.

Developing plans for the UTS health futures research theme area, and implementing ongoing strategies for the faculty’s research strengths, were priorities in 2011.

Professor Patricia Davidson, Director of the Centre for Cardiovascular and Chronic Care (CCCC), led a panel discussion as part of the UTS health futures series concerned with developing a sustainable health care system drawing on the increased knowledge of consumers. Professor Lynn Chenoweth also made a major contribution to the event based on her aged care program of research.

As of July, the CCCC became solely located within the faculty, adding significantly to the faculty’s research infrastructure. Established in 2011, the centre has four core staff and achieved three scholarships, one postdoctoral award and Australian Research Council (ARC) funding.

Early-career researchers were supported in 2011 as the faculty increased its focus on researcher development and provided timely information about fellowship and scholarship opportunities. A director of research studies role was established to support and develop research students in the faculty.

The faculty’s staff had a number of research successes this year.

> Dr Sally Inglis was awarded the NSW Cardiovascular Research Network Life Science Research Fellowship (Cardiovascular) from the Heart Foundation, worth $530,000 over four years, to further her body of work on nurse-led interventions for peripheral arterial disease.

> Two of only five Cardiac Society of Australia and New Zealand Affiliate Clinical Development Awards were received by early career researchers, Dr Sally Inglis and Dr Phillip Newton, to fund their attendance at the society’s annual scientific meeting in Perth. Phillip was also awarded the Chancellor’s Postdoctoral Research Fellowship.

> Two 2012 Endeavour Research Fellowships were awarded to Dr Mona Abed and Professor Cathrine Fowler.

Through pursuing research that has a strong impact on the health of communities, the faculty developed a model of antenatal care for overweight and obese women, which was rolled out through NSW Health. The Faculty was also involved in a World Health Organization Collaborating Centre (WHOCC) AusAID-funded project to increase maternal health capacity in Papua New Guinea, with $10 million in project funding.

Through the Health-Science Alliance, Australia’s first such alliance, the faculty
sought to pursue high-level collaboration and build new research opportunities. Contributions were made to the alliance by Clinical Professor of Nursing Lin Perry and Associate Dean (Research) Christine Duffield, and the profile of the faculty was raised through the publication of research articles on the alliance’s website.

The faculty achieved funding through major competitive grant processes in 2011, including being contracted for research projects. SA Health commissioned the faculty to conduct a review of its nursing career structure backfill 2011 program and the Australian Commission for Safety and Quality in Health Care commissioned the faculty to pilot and implement a new observation response chart for use in clinical health care settings.

Engagement

In 2011, the faculty increased industry and community engagement through seminars, master classes and community programs.

Nominated NSW Health employees took part in master classes by visiting academics from the United States. Professor Kate Lorig led a cardiovascular master class and Professor Kathleen Potempa led a health leadership master class.

Other master classes were delivered in the faculty by Professor Billie Hunter from Swansea University, Professor Jane Sandall from King’s College London and UTS, Dr Ruth Deery from the University of Huddersfield, Professor Mavis Kirkham from Sheffield Hallam University and UTS, Associate Professor Sue Kruske from Charles Darwin University, and Dr Helen McLachlan and Dr Della Forster from La Trobe University.

A UTS: Speaks public lecture on giving babies the best start in life was held in August. The event attracted 400 attendees from industry and the community.

Professor Patricia Davidson was invited to speak at Calvary Mater’s Department of Palliative Care’s education day at the University of Newcastle as part of National Palliative Care Awareness Week.

Workshops to engage members of the community in health at UTS and highlight the faculty’s facilities were held in 2011. Hands-on nursing and midwifery workshops were made available to schools and interested parties, both on and off campus; and workshops for TAFE students were also held in the final semester of their Enrolled Nurse (EN) qualification.

The faculty also connected with international partners this year, including a simulated education unit in Oman and the Al Ain Hospital in the United Arab Emirates. Work is planned for 2012 in the Al Ain Hospital, with development of the emergency triage staff assessment program with Professor Denise Dignam and Associate Professor Margaret Fry.

Future plans

- continue to implement strategies for the escalating costs in clinical education for undergraduate nursing and midwifery courses.
- monitor and evaluate student-learning outcomes from newly built control centres to enable recording and playback of team-based simulation encounters and use of high definition presentation facilities in laboratories.
- continue to strengthen the faculty protocol framework in 2012 in order to support growth in teaching and research.

Major research projects

Impact of birthplace on neonatal and maternal health care outcomes for low-risk pregnancies
Funding: $790,175 (National Health and Medical Research Council (NHMRC))
Lead investigator: Professor Caroline Homer

Youth OutReach for Diabetes (YOuR-Diabetes) (addressing a gap in current diabetes programs by providing support to young people as they make the transition to adult health services)
Funding: $735,989 (NHMRC)
Lead investigator: Professor Lin Perry

Impact of increasing the proportion of assistants in nursing to patient, nurse and ward level outcomes
Funding: $300,000 (ARC Linkage project)
Lead investigators: Professor Christine Duffield and Dr Michael Roche

The role of continuity of midwifery care in supporting women to attempt a vaginal birth after a caesarean section
Funding: $257,548 (NHMRC)
Lead investigator: Professor Caroline Homer

Exploration of how the features of a birthplace, including design, objects, materials and colours, could influence the outcome of a woman’s labour
Funding: $160,000 (ARC Discovery Grant, over three years)
Recipient: Professor Maralyn Foureur and Professor Caroline Homer (in collaboration with the Faculty of Design, Architecture and Building, Griffith University and Canberra University)
Teaching

2011 saw the first intake of students to the Graduate Certificate in Science and the Master of Science. Initial intake was strong despite the late 2010 launch of the courses and even stronger enrolment figures are envisaged for 2012. From 2012, there will be additional shared majors with engineering in biomedical engineering and with the Sydney Institute of Marine Science (SIMS) in marine science.

Internationalisation of the student experience led the faculty to continue to establish articulation pathways for graduates of certain Singapore polytechnics. In addition, the faculty held discussions over credit transfer arrangements with Nanjing University of Science and Technology, with whom the faculty has a memorandum of understanding, for teaching programs in environmental sciences.

To build the international profile of the faculty, an Associate Dean (International) commenced in 2011. The faculty embarked on a review of the curriculum in first-year chemistry; this review will flow into 2012 to provide recommendations for 2013 implementation.

One of the challenges the faculty faced in 2011 was poor retention rates for a range of its courses. This led the School of the Environment to undertake a student survey on reasons for leaving courses, and the School of Physics and Advanced Materials to appoint a special project officer to look into recruitment and retention issues for the school.

Research

Following on from 2010, this year the faculty continued to focus on targeted recruitment in support of the university’s overarching research strategy.

Distinguished Professor Matt Wand joined the School of Mathematics in early 2011 and Professor Peter Green, a distinguished statistician, joined the school later in the year. The faculty’s recruitment strategy was bolstered throughout the year by the award of prestigious fellowships to a number of early- and mid-career researchers. Seven early-career researchers have been awarded the highly competitive UTS Chancellor’s Postdoctoral Research Fellowships: Dr Alan Huang (School of Mathematics); Dr Catherine Burke (The iThree Institute); Hao Liu, Xanthe Spindler and Liwu Zhang (School of Chemistry and Forensic Science); and Katherina Petrou and Olivier Lacza (Plant Functional Biology and Climate Change Cluster).

Three researchers were awarded Australian Research Council Future Fellowships: Professor Guoxiu Wang and Professor Shari Forbes (School of Chemistry and Forensic Science); and Gyorgy Hutvagner (Centre for Health Technology).

Through the Associate Dean (International), the faculty initiated international research links in Asia and further afield with the Delft University of Technology. This is in addition to existing individual international collaborations.

The faculty also upgraded its research facilities throughout the year with an award of close to $500,000 from the Cancer Institute of NSW for an excimer laser ablation system and inductively coupled plasma mass spectrometer (LA-ICP-MS). The LA-ICP-MS studies trace metals and other elements in tissue and their effects on health — a more cost-effective approach to imaging than current X-ray techniques. Access to this unique and developing technology could lead to a better understanding of the progression and treatment of many disorders such as heart disease and Parkinson’s disease.

Engagement

The faculty continued to build on its relations with industry and the community this year.

The faculty’s UTS Science Engage public lecture series continued in 2011. These lectures provided a way for the faculty’s researchers to communicate with the community. The lectures included:

> Earth vs Mars — battle of the planets: How can comparative planetology teach us more about Earth and global warming?
> Fish behaving badly: How human interactions are changing the way fishes function
> Catching crooks — Guilty before proven innocent! Is crime scene investigation forensic science?

An Australian Learning and Teaching Council National Teaching Fellowship, worth $350,000, was awarded to Associate Professor Les Kirkup. The fellowship will be employed to bring research thinking into science degrees from the first year of study.
The project to build the bioskills laboratories, including the facility to produce anatomical specimens using the preservation technique of plastination, neared completion during 2011. This work was supported by a generous donation from the Jerry Schwartz Foundation.

The faculty’s industry advisory group continued to inform the teaching and research of the faculty and contribute to the development of work-ready graduates.

Future plans

- Work on a growth strategy to create, by 2016, a viable medium-sized Faculty of Science from which further growth, whether in science or in aligned disciplines in other faculties, can be supported.
- Construction of a science precinct, including a new science building set for completion during 2014.

Major research projects

- **Identifying how bacterial cells find their middle: a new perspective**
  - Funding: $327,000 (ARC Discovery Projects, over three years)
  - Recipient: Professor Elizabeth Harry [The iThree Institute]

- **Australia’s ocean microbiome: How the diversity and functionality of microbes influence key oceanographic provinces**
  - Funding: $320,000 (ARC Discovery Projects, over three years)
  - Recipient: Dr Justin Seymour [Plant Functional Biology and Climate Change Cluster]

- **Quest for zero optical loss**
  - Funding: $320,000 (ARC Discovery Projects, over three years)
  - Recipient: Professor Michael Cortie [Institute for Nanoscale Technology]
Introducing our newest school

UTS: Pharmacy, Australia’s newest school of pharmacy within the University’s Graduate School of Health, was officially launched by Vice-Chancellor Professor Ross Milbourne on 29 November. Pharmacy is the first discipline to be established under the Graduate School of Health and will be followed by other allied health disciplines in the coming years.

The school's first offering in 2012 will be the Master of Pharmacy, approved by UTS and the Australian Pharmacy Council. Demand for this practice-based program was strong; applications outnumbered places available by three to one.

The launch of the school followed the inaugural meeting of the UTS: Pharmacy National Academic Advisory Committee. The national committee is chaired by Pharmaceutical Society of Australia past president Warwick Plunkett and was established to provide strategic advice on the needs of industry, government, the profession and the community. Committee members include pharmaceutical industry CEOs, a senior government official, and other pharmacy leaders and practising pharmacists.

Professor Shalom Benrimoj was appointed head of the new school. Professor Benrimoj was foundation professor of pharmacy practice and the Dean of the Faculty of Pharmacy at the University of Sydney. He is a visiting professor at the University of Granada. Professor Benrimoj was awarded Australian Pharmacist of the Year in 2000 and received the Andre Bedat Award in 2010 from the International Pharmaceutical Federation. He is widely published and his research interests lie in the future of community pharmacy.

As of December 2011, four full-time academic staff (three associate professors and one senior lecturer) were employed by the school. These new academic staff have extensive experience in developing and delivering Master of Pharmacy programs and also have strong research interests. An executive officer, educational designer, and marketing and communications manager have also been employed to aid in the development of the new curriculum.

Staff members at the UTS: Pharmacy Christmas Cocktails Launch in November. From left to right — Dr Maria Sukkar, Associate Professor Kylie Williams, Jim Woulfe, Nicole Scott, Professor Shalom Benrimoj, Dr Julie Funnell, Associate Professor Beata Bajorek and Associate Professor Mary Bebawy.
Teaching
The first year of the Master of Pharmacy will be delivered in 2012. The curriculum has been developed using the UTS model of practice-oriented learning to ensure students are practice oriented, engaged with the profession and given a global perspective.

Work will continue on developing the curriculum for the Master of Pharmacy, concentrating on the second year of the program. Additional practitioner teachers will be recruited to assist in the continued development and delivery of the course, and student feedback will be sought to assess and monitor the program.

There will be recruitment of international students for both the coursework (around 15 per cent of total cohort) and research degrees.

Development of international exchange schemes for students, both through the Master of Pharmacy (International) and other research degrees, will be a priority.

There will also be recruitment of staff from overseas institutions and support for visiting scholars from other countries.

The school will apply for teaching and learning grant money to support its course development activities and the development of a model for comprehensive course mapping and content management.

Research
Further recruitment will occur to secure research staff who can contribute to the research activities and teaching of the school.

At least three National Health and Medical Research Council (NHMRC) grant applications will be submitted in 2012, with the aim of each academic member of staff having at least one major grant and three research students. Other research funding opportunities will also be applied for as they arise.

In addition to its current cohort, it is expected that at least six research degree students will commence in 2012. Activities such as regular presentations and workshops will be established, and the UTS Framework for Doctoral Education will be implemented.

Further recruitment of higher degree by research students will occur to contribute to the research activities of the school.

Engagement
The school will continue to develop its external partnerships and relationships with the pharmaceutical industry, the health care industry, government and relevant institutions to ensure the relevance of its courses, facilitate clinical placements, foster research collaborations and secure services.

Future plans
> Master of Pharmacy students and staff to move into the newly renovated level 13 of the University’s Tower Building in early 2012.

Major research projects

**Professional integration**
Funding: $1,200,000 (Australian Government Department of Health and Ageing, over three years)
Recipient: UTS, Price Waterhouse Coopers, Australian General Practice Network

The increasing burden of stroke with ageing: Using CARAT to optimise preventative treatment in the community
Funding: $499,375 (National Health and Medical Research Council, over three years)
UTS member of recipient team: Associate Professor Beata Bajorek

**Microparticles and selective trait dominance in multidrug resistant cancers**
Funding: $396,273 (National Health and Medical Research Council, over three years)
UTS member of recipient team: Associate Professor Mary Bebawy

**Microparticle mediated transfer of p-glycoprotein in conferring multidrug resistance in cancer**
Funding: $345,125 (NSW Cancer Council, over five years)
UTS member of recipient team: Associate Professor Mary Bebawy

**Deep sequencing of glioma derived microparticles**
Funding: $100,000 (NSW Cancer Council Innovator Grant, over two years)
UTS member of recipient team: Associate Professor Mary Bebawy

**Post-marketing observational study of the safety and efficacy of a new non-prescription pain-relief medication**
Funding: $74,879 (Reckitt Benckiser Healthcare [UK] Ltd)
UTS member of recipient team: Associate Professor Kylie Williams

**Learning outcomes for pharmacy curriculum**
Funding: $20,000 (Australian Learning and Teaching Council, over three years)
UTS member of recipient team: Jim Woulfe
OUR STUDENTS

PHOTO: TOBY BURROWS

UTS Business School students in the u.lab, a multi-disciplinary innovation hub.
Increasing the number of international students at UTS was a major priority in 2011.

This year we continued developing the student profile of the future and building our reputation in attracting students through integrated equity and diversity planning. In support of this, UTS awarded 11 new scholarship types across the University, including the full allocation of Vice-Chancellor’s Merit Scholarships.

Following on from last year, UTS further embedded its widening participation strategy (WPS) across the University in order to attract and retain students from low socioeconomic backgrounds. Further information on the WPS is available in the ‘our equity and diversity’ section of this annual report.

The University’s Student Services Unit built on their successful equity and diversity strategies in 2011 with a number of new and improved initiatives for students and staff:

- Students with disabilities and students experiencing financial and/or educational disadvantage were offered textbook vouchers, rental subsidies for UTS student accommodation, Indigenous student equity grants, equity grants and interest free loans.
- A careers service website for students with disabilities was developed.
- Student workshops were provided on exam anxiety, understanding depression, social phobia and mental health.
- Invigilators were trained regarding students with mental illness.
- Staff workshops were conducted for mental health awareness, and acceptance and commitment therapy.
- Over 1000 students consulted disability service officers who assessed, assisted and referred students to academic liaison officers, library special needs liaison staff, website assistive technologies, and multi-format reading materials.
- Counselling was provided to approximately 2500 students and staff.
Our Indigenous students

There are over 250 Indigenous students enrolled across five faculties at UTS with the numbers of Indigenous students enrolling in mainstream courses showing a steady increase. Forty-three offers were made to Indigenous students in 2011 through the University’s Jumbunna Indigenous House of Learning direct entry program, resulting in 34 acceptances. Of these acceptances, 31 students participated in the direct entry program. The decision to suspend intake into the undergraduate Indigenous ‘away-from-base’ programs in the Faculty of Arts and Social Sciences and the UTS Business School for 2012 will be initially reflected with some decline in student numbers.

In 2011 UTS implemented a new Indigenous Education and Employment Policy (IEEP) and UTS’s first Indigenous Education Strategy 2011–2014. Overseeing the implementation of the strategy is the newly established Vice-Chancellor’s Indigenous Strategies Committee, which will oversee outreach and recruitment, student services, Indigenous studies and Indigenous research at UTS. Further information on the policy is available in the ‘our equity and diversity’ section of this annual report.

This year, Jumbunna continued to operate and refine its Indigenous student monitoring and tracking program. This program is aimed at increasing the retention and completion rates of Indigenous students studying at UTS. Jumbunna’s student services staff met regularly with the coordinators of the programs in which Indigenous students are studying to identify any areas where additional support or assistance with tutoring are required.

With increased funding in 2011, Jumbunna established a new learning development team, enabling students to access substantial academic support through one-to-one or small group consultations about assignment preparation, writing skills, study planning and learning skills.

Two new Indigenous Honours Scholarships were established this year, for commencement in 2012, with a value of $10,000 each. These scholarships will help to attract more Indigenous students to UTS. Indigenous startup scholarships were also introduced. These scholarships will provide each commencing undergraduate student with a financial scholarship as a start-up payment.

Further increased internal funding supported the creation of two Indigenous academic internships, also for commencement in 2012. Another successful partnership — the Indigenous internship program — with Career Trackers has enabled 14 Indigenous students to obtain cadetships or internships as a means of support during their course of study.

Jumbunna continued to host a series of social and cultural events throughout 2011, aimed at engaging students and staff across the University, promoting Indigenous topics of interest and providing the opportunity for discussions and interactions.

UTS participated in Indigenous Literacy Day, in association with Jumbunna and The Co-op Bookshop — a day of activities, workshops and talks aimed at both Indigenous high school students and their teachers to build aspiration towards university studies and support Indigenous literacy.

Jumbunna is introducing an Elder-in-Residence program from 2012 to support our Indigenous staff and students, and act as an Indigenous knowledge source at UTS.

Our international students

Increasing the number of international students at UTS was a major priority in 2011. UTS international continued building the number of recruitment activities in established and emerging markets, while providing comprehensive training to recruitment agencies on best practice in attracting international students.

We continued to conduct an extensive recruitment program this year, in Australia and overseas, and more than 200 agent counsellors were formally briefed on updates at UTS. This year we also established representative offices in India and China, and local representatives in Indonesia and Vietnam.

Despite a difficult international environment — including the high value of the Australian dollar, changes to visa and migration regulations and increased competition from the United States, United Kingdom and Canada — UTS saw a 5.2 per cent increase in enrolments of international students. Improving the conversion of university offers to enrolments is an ongoing challenge.

Also having an impact on international student intake was the release of the review of the student visa program by the Hon. Michael Knight, AO. The review revealed a new set of issues pertaining to compliance and the need to assess the genuineness of international applicants with the necessity to review a student’s financial as well as their academic abilities.

UTS International will work across the University to put measures in place to ensure students’ financial viability is assessed and will work closely with agents to ensure our visa success rates are not affected and our students benefit from faster and less stringent visa assessment.

UTS International continued to conduct the annual International Student Barometer (ISB) and international student surveys. UTS maintained an overall satisfaction rate of 86 per cent and analysis of the ISB and international student surveys for 2011 showed significant improvements in ‘arrival satisfaction’; an area previously of concern for our students.

This year, we also monitored students’ satisfaction with lectures, course content and learning spaces. Extensive pre-departure workshops were held in international students’ home countries, particularly India, China and Vietnam.

To improve the satisfaction levels of our international students, UTS launched the Community Connections program — a program whereby a ‘street team’, consisting of students from the University’s international leadership program BUILD, welcomes new students and provides free or low-cost social events and activities.

Student EFTSL by citizenship

- [Graph showing student EFTSL by citizenship]

Domestic students
International students
The Community Connections program will be further developed in 2012 with initiatives such as picking up international students from the airport.

To further foster relationships between international and domestic students, the University’s Student Services Unit introduced ‘speed-friending’. Based on a student idea from the subject User-Centred Design Methods, speed-friending provides the opportunity for students to meet in an informal setting and find out what is going on at UTS and how to get involved. Three speed-friending events were held in 2011.

Another initiative launched in 2011 was Conversations@UTS, sessions run by staff and alumni volunteers to help improve the English language skills of international students.

Our global student experience

Over the past two years UTS has worked to develop a new internationalisation strategy. Becoming a truly internationalised university will enable UTS to enhance the intercultural capacities and experiences of its students.

A key part of this strategy is our international leadership program BUI LD, which we launched in 2010. This year, BUI LD continued to provide our students with a broad range of international experiences without them needing to commit to a full semester or year of credit-based studies overseas. The program has proved a huge success with a participation rate of 1300 students, compared to 743 in 2010.

In 2011, 621 students travelled overseas, including 250 on exchange for one or two semesters, 169 on in-country studies and 202 on short-term programs. These students travelled to 52 countries, compared to 42 in 2010. The BUI LD program has also encouraged travel to non-traditional destinations with 59 per cent of travel destinations being in Asia, including South Asia.

Overall this year, UTS saw a 10 per cent increase in international experiences, with BUI LD accounting for over 61 per cent of these activities.

Another initiative launched in 2011 was Conversations@UTS, sessions run by staff and alumni volunteers to help improve the English language skills of international students.

Another way in which we assisted our students this year was through StudentJobs@UTS. Over 2000 students registered on the database, with over 400 students placed in roles during the year (of which 26 per cent were international students).

One of the University’s key objectives is to provide our students with a vibrant university environment, with state-of-the-art social spaces. In July this year, our new on-campus student residence, Yura Mudang, opened with 71 per cent occupancy. This building will house 720 students and significantly increase the housing options available to our students, with the UTS housing service now looking after 1143 student beds.

In October the Australian Parliament passed legislation that will allow universities to charge a fee for student services. In light of this new student services and amenities fee, which will be introduced in 2012, SAU has been developing implementation and communication strategies to ensure a smooth transition for our students.

Services and facilities for our students

This year UTS monitored our student administration activities, including enrolment, admissions, fees, examinations, results and student centres, and compared these with those of 10 other universities. A student satisfaction survey conducted in March, and completed by over 6000 students, placed UTS in the top 25 per cent of universities surveyed.

As well as looking into our student administration activities, our Student Administration Unit (SAU) worked on improving communication with students in 2011. Our new student enquiry management system, AskUTS, was launched, allowing students to make inquiries online and also track the status of the assistance received. Our Start at UTS website, which handles student self-administration and enrolment access, was further enhanced and uptake by our student community resulted in a decreased need for on-campus attendance for enrolments.

Overall, UTS saw a 10 per cent increase in international experiences, with BUI LD accounting for over 61 per cent of these activities.
This year, the UTS Library took part in a range of activities to promote itself as a place for knowledge, learning and research. These included Earth Hour, Library Fun Day, Online Library Fun Day, Indigenous Literacy Day and the Talk It Up! forum program.

2011 saw an expansion of the library’s successful Indigenous Read@UTS project; a reading group that aims to improve fluency and familiarity with reading and other academic literacy skills for Indigenous students who may be new to tertiary studies.

2011 also saw growth in the use of social media in the library, with QR codes (barcodes that can be read by a mobile phone camera that directly links a user to a relevant website), mobile series and popular social media applications in regular use this year.

Forward planning for the library is focused on preparations for the ‘library of the future’, including the completion of building works and implementation of radio frequency identification (RFID) smart chip collection management for the library’s underground retrieval system.

Further information on the library is available in the ‘our campuses and resources’ section of this annual report. High-level performance indicators for the library are provided on page 81.

UTS Union

Attracting elite athletes to UTS by providing a well-balanced student life has been a long-term strategy of the UTS Union. The opening of the Multi-Purpose Sports Hall in April this year with a gala sports day has provided UTS with a state-of-the-art teaching and learning facility as well as a centre for recreational and competitive sport.

The UTS Union was recognised this year through a number of awards: the Hub at Haymarket won the best new facility at the 2011 Australasian Campus Union Managers’ Association awards in September; the late Tom O’Sullivan, former chief executive officer, won the Outstanding Contribution to Industry Award; and Aimee Purcell, sports club manager, was awarded the Joe Curtis Memorial Award.

This year’s orientation day was attended by over 5000 students. Over 100 clubs and societies engaged new and returning students in activities and events across the day, which culminated in the nine-hour music festival, O’Fest. Overall, in 2011, over 10,000 students were involved in the activities of the UTS Union clubs and societies.

Listening to our students

There are a number of ways UTS deals with student issues, complaints and needs. Student welfare is generally looked after by the Student Services Unit, the Student Ombud and the Equity and Diversity Unit.

The Student Ombuds Office had 14 formal requests for assistance during the year relating to academic or administrative matters. Approaches from students that did not fall within the Student Ombuds Office terms of reference, because they were either not enrolled or registered students at UTS or the office was not a last resort, were confidentially recorded as informal requests for assistance. In 2011 there were 79 informal requests for assistance.

The Equity and Diversity Unit is the contact for students with concerns or complaints involving discrimination or harassment. Generally, staff will help students resolve equity matters themselves. Further information on complaints handled by the Equity and Diversity Unit is available in the ‘our equity and diversity’ section of this annual report.

The Student Administration Unit worked with the Governance Support Unit this year to improve examination and assessment procedures and communication with students, and assisted with updating the student rules in relation to misconduct to make the system more transparent.

Key performance indicator — Student satisfaction with facilities and services

Results for each of the metrics comprising this KPI plateaued in 2011 after steady improvement since 2007. Recent passage of the Federal Government’s Student Services and Amenities Bill should enable improvement of this indicator in future years.

Note: KPI results are not final until endorsed by the UTS Council in April 2012.
Our graduates
In 2011, we held 31 local graduation ceremonies, with over 5500 graduates and over 15,000 guests. Our city ceremonies were held at the Sydney Convention and Exhibition Centre due to the refurbishment of the UTS Great Hall.

International ceremonies were also held with our partner universities, one each in Hong Kong and Shanghai. Over 100 PhDs were awarded locally and at international ceremonies, and 19 university medallists were in attendance.

Our sporting events
> UTS won the Eastern University Games for the second year in a row in July, winning gold medals for netball, handball and touch football. This was the third time in four years UTS has won the games.
> UTS had over 400 students, staff, alumni and friends wearing the teal and black in this year’s City2Surf.

Our sporting heroes
> Science student Alyssa Healy was named UTS’s Sports Woman of the Year in 2011. Alyssa represented Australia in women’s cricket on four occasions across the 2010–11 summer, including the Australian Test team that reclaimed the Ashes from England in January. Alyssa is also an integral member of the NSW Breakers, who won the 2011 Women’s National Cricket League against Victoria.
> Business student Gavin Woods was named UTS’s Sports Man of the Year in 2011. Gavin represented Australia at the world championships in Shanghai, finishing ninth. Gavin went on to represent Australia at the world league, finishing in fifth place. Gavin has been a member of the Australian men’s water polo team for over 16 years, attending three Olympic Games.
OUR STAFF

PHOTO: JOANNE SANDS

Jock Collins, Professor of Social Economics, UTS Business School.
The workforce of the future

An ageing workforce is an ongoing problem for the university sector, particularly at UTS where the workforce is predominately middle-aged. About a third of UTS staff have worked for over 10 years at the University.

This year UTS continued to work on its University-wide, five-year workforce renewal plan by building on the five strategic priorities designed to develop target workforce profile scenarios. These are to:

> increase the pool of potential academic staff
> grow and develop the capability of our existing workforce
> expand and diversify the options for new career academics
> formalise succession planning, and
> strengthen the transfer of knowledge.

In 2011, our Human Resources Unit (HRU) further refined and implemented workforce strategies and planning at faculty and unit level in order to overcome the workforce gaps resultant from our older workforce. Faculties and units undertook a forecast of their future workforce needs: how many people, and what roles and capabilities are needed. Based on this information, HRU prepared summary and gap analysis of demand as well as supply and capability assessments.

Looking ahead, in 2012 HRU will partner with faculties and units to discuss the gap analysis and assist in identifying priority workforce risks and strategies for incorporation into 2012–14 action plans.

Reviewing the academic career and promotion framework was a major priority for 2011. UTS considered options for a more flexible and attractive academic career model that will meet forecast demand for academic staff arising from growth and the replacement of the ageing workforce. Preliminary work was completed on the development of an academic career framework that will offer choices in terms of career profiles. As a result of the review of the Academic Promotion Vice-Chancellor’s Directive and the Progression of Academic Staff Guidelines, greater flexibility has been introduced for academic staff to achieve promotion and progression.

Reviewing the academic career and promotion framework was a major priority for 2011.
Maintaining workplace standards

In 2011, we developed and reviewed our policies, directives, guidelines and procedures. Some of this work was undertaken to align with the new enterprise agreements for our support staff and academic staff, which were approved by Fair Work Australia in August 2010. The following were updated or created in 2011.

> Academic Promotion Vice-Chancellor’s Directive
> Code of Conduct [policy]
> Employment of Casual Academic Staff Guidelines
> Fixed-term Employment Guidelines
> Leave without Pay Guidelines
> Outside Work Vice-Chancellor’s Directive
> Parental Leave Guidelines
> Parking at UTS Vice-Chancellor’s Directive
> Personal and Community Leave Guidelines
> Professional Experience Program [PEP] Vice-Chancellor’s Directive
> Progression of Academic Staff from Level A to B Guidelines (effective 1 January 2012)
> Sick Leave Guidelines
> Staff and Students with Carers’ Responsibilities Vice-Chancellor’s Directive

> Support Staff/Senior Staff Group Probation and Academic Staff Probation Guidelines
> Workplace Adjustment Procedures.

Planning and negotiation has commenced for a new enterprise agreement for our senior staff group, which will be finalised in 2012.

Recruiting staff

Following on from HRU’s review of the University’s recruitment framework, a new eRecruitment system was selected this year. Implementation of the new system will further support and streamline our staff recruitment process, including the provision of the technological architecture required for workforce planning initiatives such as the use of resourcing strategies. Implementation of the new system is scheduled to begin in the first half of 2012.

A number of strategies were implemented this year to recruit national and international academic staff. HRU coordinated national and international secondments and placements of high-profile academics in support of the University’s research strategy. We continued our UTS Distinguished Visiting Scholars Scheme and facilitated ‘by invitation’ appointments of high-calibre researchers. Further, a review of the Chancellor’s Postdoctoral Research Fellowship guidelines, as well as research risk management procedures for all research programs, was undertaken.

Staff development and support

UTS continually looks at ways to streamline and improve its performance and development processes for its staff.

In 2011, HRU completely revamped the University’s induction processes and resources, embedding the Australian Technology Network induction framework. The Starting at UTS induction program is a staged process to integrate new staff members into the University and to prepare them to succeed in their new role.

Another way in which HRU supported staff throughout the year was through the leading academics program. Over 100 academic managers participated in the one-and-a-half-day foundation program, Creating the Context for Leadership, with over 60 of these also participating in one or more subsequent topic-specific modules or master classes. HRU received very positive feedback, including numerous examples of how participants have used the program to improve their skills.

HRU also updated their website this year to include a new web-based resource kit for supervisors of casual academics.

A new staff survey will be undertaken in 2012. This is our third survey (the first was undertaken in 2007), so the outcomes will provide information that can be used to track our progress and to plan for our future workforce.
Staff equity and diversity

HRU continued to promote the University’s equity and diversity staffing strategies in 2011.

A review of the pay equity data for 2011 was conducted with our Equity and Diversity Unit. Possible patterns and causes of any significant pay gaps were identified and both Units discussed whether there were any discrimination issues.

The Workplace Adjustment Procedures were developed collaboratively with the Equity and Diversity Unit. These procedures outline the processes for staff, prospective staff and supervisors or managers in the provision of appropriate workplace adjustments for staff and potential staff living with a disability or ongoing illness.

A review of the Academic Promotion Vice-Chancellor’s Directive was completed in 2011, allowing for consideration of the impact of personal circumstances or approved working arrangements.

Also this year, further work was conducted in support of the University’s Indigenous employment and career strategy. HRU worked with line managers to identify and facilitate opportunities such as cadetships, traineeships and recruitment for Indigenous staff members. Further information on staff equity and diversity is available in the ‘our equity and diversity’ section of this annual report.
Recognising our academic staff

Academic progressions

**To Professor**

> Associate Professor Paul Ashton  > Faculty of Arts and Social Sciences
> Associate Professor Marian Haas  > UTS Business School
> Associate Professor Elizabeth Harry  > Faculty of Science
> Associate Professor Xiangjian He  > Faculty of Engineering and Information Technology
> Associate Professor Dikai Liu  > Faculty of Engineering and Information Technology
> Associate Professor Anita Stuhmcke  > Faculty of Law

**To Associate Professor**

> Dr Adel Al-Jumily  > Faculty of Engineering and Information Technology
> Dr Aaron Coutts  > UTS Business School
> Dr Philip Doble  > Faculty of Science
> Dr Susan Hood  > Faculty of Arts and Social Sciences
> Dr Jaya Kandasamy  > Faculty of Engineering and Information Technology
> Dr Hadi Khubbaz  > Faculty of Engineering and Information Technology
> Dr Sanjiang Li  > Faculty of Engineering and Information Technology

**To Senior Lecturer**

> Hera Antoniades  > Faculty of Design, Architecture and Building
> Maxine Evers  > Faculty of Law
> Dr Behzad Fatahi  > Faculty of Engineering and Information Technology
> Dr Jinchen Ji  > Faculty of Engineering and Information Technology
> Dr Sue Joseph  > Faculty of Arts and Social Sciences
> Dr Natalia Nikolova  > UTS Business School
> Susan Oguro  > Faculty of Arts and Social Sciences
> Dr Emi Otsuji  > Faculty of Arts and Social Sciences
> Dr Hokyong Shon  > Faculty of Engineering and Information Technology
> Dr Christina Nikitopoulos Sklibosios  > UTS Business School

1. Associate professor and professor appointments were effective from 1 January 2011.
2. Senior lecturer appointments, were effective from mid-2011.
Recognising our support staff

UTS congratulated our high-achieving support staff members who were recognised at the 2011 Career and Professional Development awards for their exceptional contribution to the University.

> Alberto Mendez, Survey Officer, Planning and Quality Unit
> Andrea Thompson, Senior Adviser, Governance Support Unit
> Des Saunders, Industry Liaison Manager, Faculty of Engineering and Information Technology
> Gemma Hawkins, Student Centre Manager, Student Administration Unit
> James Stuart, Manager Communication, Campus Development, Marketing and Communication Unit
> Nalinika Ekanayake, Project Manager, UTS International
> Sally Scholfield, Information Services Manager, University Library

Vale Tom O’Sullivan

UTS farewelled our great friend Tom O’Sullivan in November, after a long illness.

Tom O’Sullivan was the Chief Executive Officer of the UTS Union, a position he had held since July 2004. Having studied arts and law at the University of Sydney and the Australian National University, Tom’s professional life began in the music industry as a highly successful tour manager for a number of major Australian bands.

Tom was held in the highest regard within UTS, across the Australian university sector, and by politicians of all persuasions. At a time of increasing competition between universities, Tom brought student service organisations together and later helped to win the battle against voluntary student unionism. Tom also served as President and Vice-President of the Australasian Campus Union Managers Association Incorporated.

Tom passed away on the eve of the ceremony at which he was to be presented with the UTS Distinguished Service Award, only the fifth time the honour has been conferred. The award will be presented posthumously to Tom’s family in 2012.

Australia Day 2011 honours list

Staff
> Cecilia Drysdale Leary, OAM, co-developer, Graduate Diploma in Day Surgery Nursing
> Associate Professor Marie Lester, AM, former lecturer, School of Design
> Professor William Rawlinson, AM, former Associate Professor, Department of Cellular and Molecular, Faculty of Science
> Professor Jill White, AM, former dean, Faculty of Nursing, Midwifery and Health
> Geoffrey Youdale, AM, former lecturer, School of Civil and Environmental Engineering

Alumni
> Adrian Appo, OAM, BTeach
> Therese Manning, PSM, MAppSc
> Margaret Moore, OAM, GradDipEd
> Maree O’Halloran, AM, GradDipLegPrac
> Phillip Pender, CSC, BEd
> Nola Randall-Mohk, OAM, MA

Queen’s birthday 2011 honours list

Alumni
> Maureen Cleary, OAM, GradDipAdmin, MAdmin, PhD
> Susanne Gervay, OAM, MA
> David Macintosh, AM, BBus
> Joseph Waugh, PSM, GradDipLegPrac
> Cheryl Webster, OAM, MMAn
> George Williams, AO, GradDipLegPrac

PHOTO: DAVID PHILLIPS, CARE OF THE TERTIARY ACCESS GROUP
OUR EQUITY AND DIVERSITY

PHOTO: JANE POLLARD
High school students at this year’s UBURS summer school program.
A priority across the University this year was to build on our strategies to improve equity, diversity and social inclusion.

The University’s Equity and Diversity Unit further embedded our primary strategy in this area — UTS Widening Participation Strategy 2010–2015 (WPS) — as well as implementing a range of equity initiatives related to disability, Indigenous employment and women’s career development.

**Our Widening Participation Strategy**

The federal government has set a target of 20 per cent of the Australian domestic undergraduate student body to be represented by low socioeconomic status (SES) students and other underrepresented groups by 2020. The Australian rate for participation by students from a low SES background in 2011 is approximately 15 per cent.

A challenge for UTS, in common with other universities, is to remove the barriers that prevent students from disadvantaged backgrounds gaining access to university.

The UTS Widening Participation Strategy 2010–2015 was formally endorsed by the Vice-Chancellor in August. The aim of the strategy is to improve the participation and success rates of low SES students and students from Indigenous backgrounds through building aspiration, widening access, improving retention and success, and providing an inclusive community.

The WPS also links to the University’s key performance indicators to increase low SES and Indigenous student participation and create an inclusive university community (further information on the University’s KPIs are available in the ‘our planning and performance’ section of this annual report).

While the participation of low SES students at UTS plateaued in 2011 at 10.8 per cent (measured by postcode in September), it is anticipated that new 2012 widening access strategies will lead to an increase of students from low-SES backgrounds.

Through the federal government’s Higher Education Participation and Partnerships Program (HEPPP), 65 projects across the University — including outreach programs, and academic and personal support programs for UTS students — were allocated $3.3 million in funding.

The aim of the WPS is to improve the participation of low SES students
Key WPS projects in 2011

Building aspiration projects (targeting 20 priority schools in south western Sydney)
> the expansion of U@Uni, incorporating five summer schools and associated programs, HSC tutoring, discipline-specific activities for schools and regional school visits
> exhibition-based workshops for high-school students at the UTS Gallery
> workshops for students in web design and development as part of Social Inclusion Pathways for Refugee Youth
> help for Indigenous students to get into university by assisting them to finish years 10 and 12, as part of the Australian Indigenous Mentoring Experience program
> cross-university information resources for parents and parents’ experience days
> professional development for teachers.

Wide access projects
> the establishment of the UTS principals’ recommendation scheme
> the establishment of the UTS principals’ recommendation scheme which allows principals to nominate students from low SES backgrounds who demonstrate the capability to succeed at university

Retention and success projects
> the establishment of the UTS first-year experience program, with retention and success grants to faculties
> the expansion of the University’s successful peer mentoring program U:PASS

Inclusive community projects
> the maintenance of an accessibility website to build a positive community resource to acknowledge, support and inspire students with disabilities.

In addition to the funding received for these projects, a consortium of Sydney universities, including UTS, the University of Sydney, Macquarie University, the University of Western Sydney and the Australian Catholic University, successfully bid for HEPPP funding of $21.3 million over four years. The consortium will collaborate on joint projects [under the name Bridges to Higher Education] to increase the number of low SES students in tertiary education.

Cultural diversity initiatives
To complement the University’s WPS, this year UTS further developed a variety of initiatives to recognise and support our cultural diversity.

Our Student Services Unit organised activities to celebrate the University’s diverse student population. The annual InFusion festival, the network cafes, the student resident life program and the UTS peer network all contributed throughout the year, offering music, dance, food, public campaigns, education and training.

In 2011, UTS joined a collaborative network of eight Australian universities in the development of the courageous conversations about race (CCAR) resource manual. The manual is intended for facilitators of cultural competence workshops, using the courageous conversations model (a model whereby members of the University community are challenged to deepen dialogue by talking openly about race on campus and beyond).

Staff and students with disabilities
The UTS Disability Action Plan, implemented in 2010, was well underway and due for mid-term review at the end of 2011. Initiatives continued across the University to increase the recruitment, participation and retention of staff and students with a disability. The Disability Action Plan Committee continued its role in overseeing the plan’s implementation, and the Equity and Diversity Unit helped stakeholders meet their objectives under the plan.

After an extensive period of stakeholder consultation and collaboration, UTS’s first Workplace Adjustment Procedures were endorsed in late 2011. These procedures express UTS’s commitment to assisting people with a disability to do their jobs to the best of their ability while further enhancing the diversity of the UTS workforce. The procedures provide guidance and support to supervisors in the process of accommodating staff who may require workplace adjustments.

Domestic undergraduate student headcount by socioeconomic status (%)
Since 2003 we have also provided over 90 opportunities for work placements for people wanting to return to the workforce after the onset of an illness or disability. Some of these placements have evolved into paid positions at UTS or provided opportunities for candidates to secure employment elsewhere. In 2011, UTS and the Commonwealth Rehabilitation Service again reinforced their partnership by offering an information session to UTS supervisors.

The UTS Accessible Environments Advisory Group continued its strategic input into the UTS City Campus Master Plan by successfully ensuring that accessible facilities are included in all new and existing buildings.

**Indigenous staff and students**

UTS has a longstanding commitment to overcoming Indigenous disadvantage in employment and education. To demonstrate this commitment, UTS has had an affirmative action employment strategy since 1993.

The UTS Wingara Indigenous Employment Strategy 2011–2014 builds on previous strategies and focuses on the recruitment, retention and career development of Indigenous staff within the University.

This new strategy was developed to support the key objectives of the UTS Indigenous Education and Employment Policy (IEEP), which was endorsed and implemented in 2011. This policy sets out to realise the sentiments and commitments contained in the UTS Reconciliation Statement as well as to establish an explicit University-wide approach. The Wingara employment strategy will sit alongside the UTS Indigenous Education Strategy 2011–2014, with the IEEP as the overarching document. A key aspect of the Wingara objectives will be to provide employment opportunities for UTS Indigenous students, via cadetships, traineeships or internships.

The Vice-Chancellor has also mandated that from 2012 all faculties and administration divisions will be expected to employ at least one Indigenous person. This initiative aims to increase the number of Indigenous staff in mainstream academic and support roles. The IEEP and complementary strategies represents a new era for Indigenous education and employment at UTS, and was launched and celebrated in October at a public event, hosted by the Vice-Chancellor and attended by the Hon. Tanya Plibersek, MP, the Federal Member for Sydney and (then) Minister for Human Services and Social Inclusion.

The launch also featured the presentation of guernseys to the Vice-Chancellor from the Redfern All Blacks and La Perouse rugby league teams. UTS Wingara sponsored these teams, who played at the NSW Indigenous Knockout, one of the largest Indigenous sporting events in Australia. It is hoped that this sponsorship will develop further in years to come, and forge an authentic bond between UTS and the local Indigenous communities.
Gender equity

UTS again achieved Employer of Choice for Women by the Equal Opportunity for Women in the Workplace Agency (EOWA) in 2011. We are one of only 13 organisations (and two other universities) in Australia that have achieved this status each year since the citation’s inception 10 years ago. The recognition of UTS as a best-practice employer of choice for women by EOWA is a significant achievement as it recognises our sustained efforts to improve employment outcomes for women.

In 2011, women made up 60 per cent of support staff at UTS, with the proportion of women in senior manager positions at 40 per cent. Women represented 43 per cent of academic staff including 36 per cent of associate professors and 31 per cent of professors. In the 2011 promotions round, eight women and three men were promoted to senior lecturer, one woman and six men were promoted to associate professor and three women and three men were promoted to professor. Associate professor and professor appointments were effective from 1 January 2011. Senior lecturer appointments were effective from mid-2011. While this places UTS in a strong position across the tertiary sector, we are continually working towards improving these figures and the representation of women in senior roles.

To achieve this, UTS also continued to offer a targeted support program, including workshops and peer mentoring to women applying for promotion to the professorate.

With the current focus on research at UTS, it is important to ensure there are no barriers to women’s participation in research. To help ensure this in 2011 data was collected to identify any potential gender differences in research engagement and performance and this is being used to inform the development of targeted strategies to support increased research activity. Key priorities for this year included women in the science, engineering and technology disciplines.

With the current focus on research at UTS, it is important to ensure there are no barriers to women’s participation in research. To help ensure this in 2011 data was collected to identify any potential gender differences in research engagement and performance and this was used to inform the development of targeted strategies to support increased research activity.

While some common areas of difference in male and female research performance and participation across the University were identified, the report also highlighted considerable variations between faculties and disciplines. The final report will focus on strategies to support early and mid-career women at key transition points, with recommendations for strategic action at the faculty level.

A number of ongoing initiatives were aimed at also improving the representation of women in senior administrative and academic positions. These included our successful Women@UTS program this year, a program that offers a number of mentoring, networking and other professional development opportunities. The future pathways program also continued to be offered to female support staff. In 2011, this included two days of workshops for 25 participants to review and develop their career planning and leadership skills and the facilitation of networking opportunities. Additional CV-building sessions were offered to participants.

Helping our students

In support of our WPS, UTS offered personal, academic and financial support to its students. In 2011, the University provided, or administered, financial support of $803,000 through the following:

- UTS diversity access scholarships, valued at between $1000 and $4000, were awarded to 554 students demonstrating financial hardship.
- UTS equity grant fund, valued at $180,000 in 2011, was administered by the Student Services Unit to assist students in severe financial hardship. 2011 saw a significant increase in the number of inpUTS students — current and non-current school leavers who demonstrated educational disadvantage and who have never enrolled in university-level study — from 562 in 2010 to 723 in 2011. Once at university, the success rates for these students are broadly on par with the success rates of all students.

UTS also continued to offer individual equity scholarships that are discipline-specific or related to specific cohorts of students.

Handling complaints

To be a truly equitable university, it is essential that our students and staff are able to speak out about discrimination and harassment. The Equity and Diversity Unit (E&DU) is a contact point for staff and students with concerns or complaints that involve elements of unlawful discrimination or harassment. The unit also provides information and advice to staff on handling discrimination and harassment issues.

In most cases, E&DU staff assist students and staff to resolve matters themselves, at a low level, where this is appropriate. In 2011 five matters proceeded to an investigation stage. All other matters were handled through the provision of advice, information or support for students and/or staff seeking to address issues themselves, or through assistance in the resolution of matters at a local level.

In 2011 the unit handled 29 new student matters, a significant increase on the previous year’s inquiries. Similar to previous years, the largest number of matters (10) related to complaints about unfair treatment, policies or procedures that fell outside the formal definitions of discrimination or harassment. Of those which involved allegations of potentially unlawful discrimination and harassment, eight inquiries concerned allegations of unfair treatment on the ground of race (a category that includes colour, descent, national or ethnic origin and ethno-religious background), six involved allegations of sexual harassment, four related to disability and one concerned an allegation of age discrimination.

Of the matters that were investigated formally, two involved allegations of unfair treatment on the basis of race, and one was a complaint of sexual harassment. In two of the investigations the respondents were UTS staff members, while in the third matter the respondent was a student.

In addition to these cases, staff also dealt with a number of matters from previous years.

A report on the review of the Policy on Handling Student Complaints is being finalised, and will be distributed for consultation early in 2012.
Outlook and priorities for 2012

As well as continuing the successful implementation of the University’s WPS, the Equity and Diversity Unit will keep on developing better ways to improve equity, diversity and social inclusion at UTS in 2012, with the goals of:

> strengthening partnerships with other New South Wales universities, TAFEs, schools and community groups to improve higher education access for disadvantaged students on a state-wide basis
> increasing the number of Indigenous staff recruited to a range of mainstream positions across UTS, in addition to targeted initiatives such as the creation of Indigenous academic internships
> developing policies, training and resources in collaboration with the Student Services Unit, the Human Resources Unit (HRU) and Safety and Wellbeing to support staff and students with mental health issues and help supervisors manage these situations
> continuing to provide a more inclusive environment for staff and students with disabilities via the UTS Disability Action Plan
> reviewing current policies and procedures for handling staff and student complaints to provide clear guidance to complainants, respondents and supervisors
> developing a gender equity agenda for 2012–14
> supporting the promotion of women to the professoriate
> working closely with HRU to integrate equity into the University’s workforce planning and career development strategies.

Aunty Joan Tranter: UTS Indigenous Elder

Joan retired from the Equity and Diversity Unit in December after 11 years at UTS and more than 50 years in the workforce. Joan grew up on the Cherbourg mission — a Murri woman from Wakka Wakka country in Queensland.

Joan was a pioneer in the area of Indigenous education. Through her own life experience she knew the importance of a formal education and the doors it opened.

She worked for many years in the TAFE Aboriginal Education Unit, where she developed many innovative Aboriginal education programs, as well as supporting many Indigenous students through their studies.

At UTS, Joan made a huge contribution to education and cultural awareness through her unflagging commitment to reconciliation and opening up opportunities for education and employment for Indigenous people. She transformed the lives of others and, in the process, transformed UTS’s understanding as an organisation.

In recognition of her contribution to the University, Joan will be presented with the UTS Distinguished Service Award in 2012.
Master of Business Administration students learnt first-hand about boating and the work of Sailability Manly that provides access for disabled people of all ages to learn and experience sailing.
This year we confirmed our position as the leading university in Sydney that is ‘good to do business with’ and moved from identifying relationships to submitting proposals to partners and putting in place engagement plans. Our biennial reputation survey among business leaders showed that our work is continuing to be recognised and is having a significant impact in the business community. The survey also saw our overall reputation improve in an area usually dominated by more established institutions.

UTS distinguishes itself through three key differentiators:

> we are innovative
> we prepare practical graduates
> we are industry focused.

UTS has a ‘can do’ attitude and works with partners to establish productive relationships that achieve specified outcomes.