

Annual Report 2010

Part One | Annual Review





Foreword: From the Chancellor



Roberthill

THE HON. ROBERT M. HILL Chancellor

Above: The Hon. Robert Hill Photo by Stuart Ramson As 2010 drew to a close, it gave me the opportunity to reflect on my first five months as Chancellor of the University of Adelaide.

It is an honour to have been appointed the University's 15th Chancellor, succeeding the Hon. John von Doussa AO QC, who has contributed so much to the law, justice and public life. The University of Adelaide is a highly valued part of South Australian life, but is also important nationally and internationally in terms of its teaching and research. My responsibility is to support the University to build on that reputation as a great institution for education and scholarship. The University plays a very important role in the lives of more than 24,000 students and University Governance plays an important role in making the students' time at the University a rich and rewarding experience.

In late September, I had my first opportunity to preside over five Graduation Ceremonies in Bonython Hall. The ceremonies included the conferral of the Degree of Doctor of the University (*honoris causa*) on prominent philanthropist, Mr Kym Bonython AC, and two Adelaide alumni, Professor Peter Colman and Professor Brian Matthews. In April, the recipients of the D.Univ.(*honoris causa*) were: The Hon. Gregory Crafter AO, Dr Barbara Hardy AO, Mr Malcolm Kinnaird AC and the Hon. Ted Mullighan QC.

The University ended 2010 in a strong financial position, which has allowed the ambitious capital works program to continue apace. The new Engineering Building — Innova21 — is now complete, with students and staff having moved into the building some months ago.

In November, the new \$28 million Veterinary Health Centre at the Roseworthy Campus was officially opened. The 5,500m2 building houses both teaching and clinical areas and forms part of the new School of Animal and Veterinary Sciences. It includes the Companion Animal Health Centre — a veterinary clinic and hospital — the Veterinary Diagnostic Laboratory, as well as teaching laboratories and skills suites.

With an expected completion date of August 2011, the Hughes Plaza Learning Hub is also rapidly taking shape. When completed, it will transform the student experience on campus by becoming the largest and most dynamic student-learning hub in Australia, providing significant social and learning benefits for our students.

During 2010, progress was also made towards the commencement of work on Illumin8. This new building on the lower campus will become the home of a world-leading centre for science, housing the Institute for Photonics & Advanced Sensing, a state-of-the-art 400-seat lecture theatre along with outstanding science laboratories.

Amongst my other engagements, those of interest included: a tour of the University on my first official day in office; attendance at the Annual Florey Lecture, where the keynote speaker was Baroness Professor Susan Greenfield; dinner with senior members of the Adelaide Business Community, including the Governor and Board of the Reserve Bank; the John Bray Law Network Annual Oration and Reception; St Mark's College 85th Anniversary Dinner; the Development and Alumni 1960 Golden Jubilee Celebration and Luncheon; a meeting of the University Chancellors' Council, which allowed me to meet with many of my contemporaries from around Australia for the first time; the Roseworthy Old Collegians Association 2010 Dinner; and the Royal Institution of Australia Council Dinner.

Finally, I would like to thank all members of Council, its Sub-Committees and Council Secretariat for their work during the year. It has been a privilege to work with such a dedicated group of individuals and I look forward with pleasure to the year ahead.

Report of the Council of the University of Adelaide

For the period 1 January 2010 to 31 December 2010

To His Excellency, Rear Admiral Kevin Scarce AC CSC RANR Governor of South Australia.

May it please Your Excellency, I have the honour to transmit to you the Report of the Council of the University of Adelaide for the period 1 January 2010 to 31 December 2010, furnished in compliance with Section 25 of the University of Adelaide Act 1971 (1 June 2007).

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From the Vice-Chancellor and President



James A 17

JAMES A. MCWHA Vice-Chancellor and President

Over the past decade, the University has demonstrated a consistent pattern of achievement against the goals of our Strategic Plan. We have strengthened our financial position by growing our student body. We have achieved economies of scale, greater viability for many of our programs, funded much-needed upgrades of our facilities, and seeded critical initiatives such as our research institutes. This Report reveals how that achievement was further consolidated and extended in 2010 across all areas of our operations.

The pressure on universities continually to perform to the expectations of governments and the community remains. The Federal Government's agenda to fuel economic development through expansion of higher education brings particular challenges, especially when its investment remains inadequate.

Endorsement of the value of higher education from the highest levels brings a welcome recognition that universities are vital institutions contributing enormously to social development. Yet an unresolved paradox exists: economic development is contingent on increased levels of participation in higher education, but higher education cannot grow sufficiently without the public funds generated by a prosperous economy.

Growth and funding are a difficult balancing act, and this is the environment within which the University of Adelaide must chart its path. The challenges ahead of us — but also the opportunities and rewards — are many.

We must continue to build new pathways and find new ways to attract students from the widest range of backgrounds to sustain continued growth in what will be an increasingly competitive environment from 2012.

Our international student numbers have remained strong, yet national issues around visas, the strong Australian dollar and perceptions about safety means that there is little room for complacency in this area.

We face the challenge of attracting and retaining the highest quality staff to underpin and further build our research excellence and the quality of learning and teaching we provide for our students. We need to explore new styles and modes of learning, especially the opportunities afforded by new digital technologies. We have only just begun this journey, but I would like to commend the Faculty of Science for its moves to develop an iPad-enhanced curriculum from 2011. Our engagement with the global education services provider Colloquy will also lead to a range of programs being delivered through flexible integrated distance learning methods.

Finally, we must strive continuously to reduce our impact on the environment.

In facing these challenges, we can take heart from the fact that the fundamentals are so strong. Recent results in the inaugural Excellence in Research for Australia (ERA) confirmed our outstanding quality as a research institution: some 86% of our research discipline areas have been rated at or above world class. We continue to register in the top 1% of universities in the world, and we can be very proud of this.

Equally, the recent Course Experience Questionnaire conducted by Graduate Careers Australia saw the University placed in the top echelon of Australian universities for each criterion, including teacher quality, skills development and overall student satisfaction. This is a great credit to our staff and their hard work to enhance the learning experience for our students in recent years. Our long-term investment in delivering a positive student experience is now returning significant outcomes, further strengthening our reputation in the community.

As Vice-Chancellor, I am privileged to lead this great University. I thank the members of Council and the Senior Management team for their commitment and untiring work. I thank all our professional and academic staff, our affiliates and volunteers, for their wonderful contribution to their University, and I congratulate them on their many achievements.

Our core values — leadership, prestige, innovation, excellence, discovery and relevance — have led the University to the position of strength, trust and respect it enjoys today. They will also shape our work as we face a future of uncertainty and challenge, but also of great opportunity.

Mission, Vision and Values

Mission

To be recognised internationally as a great research university and an Australian leader in research and teaching excellence, committed to the positive impact we can have on the lives of our students, staff and alumni as well as on the local, national and international communities.

Vision

The University of Adelaide will build upon its tradition of innovation through highimpact research and excellent teaching across a broad range of disciplines and professions. It will be a growing, internationally focused and financially sustainable institution, enterprising in its approach to new opportunities as they arise, and clear and consistent in its essential directions. It will provide a vibrant intellectual environment that will be satisfying for staff, rewarding for students, and engaging of the community, engendering a sense of pride in our contribution to contemporary society.

Values

We will pursue excellence in all that we do.

We will act with fairness, integrity and responsibility.

We will respect the rights and responsibilities of freedom of inquiry and expression.

We will encourage innovation, creativity and breadth of vision.

We will be engaged with the local, national and international communities.

2010 at a glance

Some highlights of 2010

January February March The University of Adelaide was awarded more Robinson Foundation launched at Government University of Adelaide researchers win two of than \$68.8 million in funding for research five categories in the inaugural Scopus Young House. Researcher of the Year Awards. infrastructure and research training. University jointly launches student recruitment Record number of offers made to potential program to address shortage of doctors in University of Adelaide team is part of an students rural and remote regions. international consortium granted \$5 million under Federal Government's new Australian Former SA premier John Olsen appointed to Super greenhouse \$30 million Plant Space Research Program. Accelerator officially opened at Waite Campus. chair Advisory Board of the Centre for Energy Prominent arts entrepreneur Kvm Bonvthon Technology. gifts to the University a sculpture by renowned British artist Bryan Kneale. August September July Six University staff awarded Australian Three University researchers named Young Tall Science Faculty announces plan to provide Learning and Teaching Council Citations for Poppies of Science for their work in fighting free Apple iPads for all first-year Science their outstanding contributions to student obesity and chronic neurological diseases. students in 2011. learning. Discipline of General Practice study shows Joanna Briggs Institute signs exclusive New \$31 million ARC Centre of Excellence in possible role of aged garlic extract in lowering partnership with Wolters Kluwer Health to Plant Cell Wall Biology to be headquartered at blood pressure. deliver advances in evidence-based practice the University's Waite Campus. to global customers in medical, nursing and The University's annual Open Day again allied health fields. Waite Research Institute launched by SA attracts a large number of visitors to the North Minister for Agriculture. Food and Fisheries. Terrace Campus. University joins South Australian Cancer the Hon. Michael O'Brien. Research Collaborative, a \$20 million initiative to fight cancer.



April

Research in the Environment Institute and the Institute for Photonics & Advanced Sensing wins \$2.2 million in funding through Federal Government's new Super Science Fellowships.

Former federal senator the Hon. Robert Hill is appointed the University's 15th Chancellor.

Dean of Law appointed to Committee of Experts for United Nations' International Labour Organization (ILO).

May

New Innova21 Building achieves Australia's first 6-Star Green Star design environmental rating for an education building.

Exhibition celebrating 125 years of medical history at the University opens in Barr Smith Library.

Plant Accelerator wins \$5 million Super Science Initiative grant to boost its research output.

June

Adelaide University researchers win \$2.5 million for industry-linked research in health, environment and ecology, mining, engineering and communications.

Professor Guy Maddern wins Australian Medical Association's Excellence in Health Care Award.

A record 50 teams of young entrepreneurs enter the University's annual eChallenge competition.

October

Australian Learning and Teaching Council names University of Adelaide flute teacher Elizabeth Koch OAM as most outstanding university teacher in South Australia.

Australian Research Council awards \$14.6 million for 44 new research projects at the University of Adelaide.

Final-year medical student Christopher Wong named 2011 Rhodes Scholar for South Australia.

November

Physicist Professor Tanya Monro named South Australia's Australian of the Year 2011 and also wins Telstra Business Women's Award.

Staff member Dr Eva Hornung wins Australia's richest literary prize, the \$100,000 Prime Minister's Literary Award.

Institute for International Trade welcomes 30 Chinese officials for unique Chinese Mayors Management Training Program.

December

University wins \$1.95 million for new equipment and facilities to support groundbreaking research in mining, highperformance computing, chemical testing for wine and food, and improvement in the tolerance of crops to drought and salinity.

Anthropology student Rebecca Richards makes history as Australia's first Indigenous Rhodes Scholar.

University of Adelaide water engineering researchers develop model to estimate potential urban water-supply shortfalls.



Source: Data Warehouse

	Persons		EFTSL	
	2010	2009	2010	2009
Total Student Enrolments	24,209	22,511	18,887	17,539
Commencing Student Enrolments	9,746	9,083	6,975	6,548
Aboriginal & Torres Strait Islander Students	198	177	148	122
International Students — onshore	6,403	5,758	5,309	4,747
International Students — offshore	645	549	258	234
By Level of Program				
Postgraduate Research	2,035	1,901	1,402	1,299
Postgraduate Coursework	4,897	4,342	2,802	2,481
Bachelor Degrees	16,574	15,532	14,158	13,274
Other	1,198	1,210	525	485
By Faculty				
Engineering, Comp. & Maths Sciences	4,733	4,303	3,772	3,450
Health Sciences	4,179	3,756	3,267	2,895
Humanities and Social Sciences	4,329	4,105	2,969	2,773
Sciences	3,148	2,997	2,406	2,331
Professions	8,273	7,748	6,125	5,746
Central Areas	577	549	349	344
By Campus				
North Terrace (includes hospitals)	22,328	20,886	17,595	16,386
Roseworthy	476	449	261	225
Thebarton	57	63	10	11
Waite	625	550	270	237
Other Australian	1,226	1,075	492	445
Offshore	645	549	258	234
By Gender				
Female	11,739	10,972	9,143	8,502
Male	12,470	11,539	9,743	9,037
By Attendance Type				
Full-time	18,703	17,092	16,653	15,714
Part-time	5,506	5,419	2,224	1,822

Research Activity

* Preliminary figures based on 2010 financial statements

Research Income	2010*	2009	2008	2007	2006
	\$000	\$000	\$000	\$000	\$000
Australian Competitive Research Grants	81,265	72,936	69,890	60,699	62,038
Other Public Sector Research Funding	38,680	42,407	41,005	28,649	27,462
Industry and Other Funding for Research	32,491	26,394	28,141	20,413	18,169
Cooperative Research Centres	2,963	4,144	6,027	6,011	6,813
Total University Research Income	155,399	145,881	145,063	115,772	114,482

Research Block Funding (2007-2011)	2011	2010	2009	2008	2007
	\$000	\$000	\$000	\$000	\$000
Research Training Scheme (RTS)	28,583	28,072	27,809	28,127	28,989
Research Infrastructure Block Grant (RIBG)	13,231	12,838	12,961	13,641	13,820
Institutional Grant Scheme (IGS)			15,744	16,232	16,500
Joint Research Engagement (JRE)	15,286	15,271			
Sustainable Research Excellence (SRE)	7,136*	4,551			

* SRE funding for 2011 is preliminary Note: IGS was replaced by JRE in 2010 Note: SRE started in 2010 Source: DIISRR research Block Grants funding announcements (www.diisr.gov.au)

Staff Statistics

Full-time and Fractional Full-time Staff Statistics

Casual staff figures for calendar year Source: DEEWR 2009 & 2010 Staff Data Collection

	Persons		FTE	
	2010	2009	2010	2009
Total Staff	3,159	3,047	2,852	2,765
Ву Туре				
Academic	1,405	1,353	1,258	1,217
Professional	1,754	1,694	1,594	1,547
Casual	n/a	n/a	n/a	422
Academic Staff by Faculty				
Engineering, Computer & Maths Sciences	239	221	223	210
Health Sciences	430	395	358	330
Humanities and Social Sciences	174	173	149	153
Sciences	367	373	348	354
Professions	166	162	151	143
Central Areas	29	29	28	28
Academic Staff by Function				
Teaching and Research	899	879	801	782
Research Only	493	463	445	425
Teaching Only	1	1	1	1
Other	12	10	11	10
Academic Staff by Gender				
Female	516	496	439	428
Male	889	857	819	790

Financial Performance

	Conso	Consolidated		ersity
	2010	2009	2010	2009
	\$000	\$000	\$000	\$000
INCOME STATEMENT				
Revenue	733,397	669,216	685,263	618,274
Expenses	673,451	601,217	621,171	551,221
Operating Result	59,946	67,999	64,092	67,053
Margin	8.2%	10.2%	9.4%	10.8%
BALANCE SHEET				
Net Assets	1,090,036	960,942	1,081,172	953,207
Current Ratio	1.6	1.6	1.2	1.0
Cash and Bank Bills	89,286	61,259	80,922	54,551

The University recorded an operating result of \$64.1 million in 2010, compared with the 2009 operating result of \$67.1 million. During 2010, the University continued to experience growth in student numbers and research performance. The University continues to reinvest in its students, staff and facilities. During 2010, construction was completed on the state-of-the-art Innova21 Engineering and Maths Building, the Plant Accelerator at the Waite Campus, and the new Veterinary Sciences School at Roseworthy Campus. Works have also commenced on the new Student Hub and Illumin8 New Sciences building.



Higher Education Environment

The Commonwealth Government

The past year was the first in which the University was bound by an interim agreement with the Commonwealth, in preparation for the move to full missionbased compacts and performance funding from 2011. Mission-based compacts are designed to articulate the ways in which the University is contributing to the Commonwealth's goals for higher education and set out a series of research and education targets and performance indicators. A proportion of the funds allocated to the University will be distributed based on performance against these indicators as assessed by the new regulatory and guality body, the Tertiary Education Quality and Standards Agency (TEQSA). TEQSA will also take on a role in accreditation, audit and streamlining regulatory processes to improve national consistency, replacing the Australian Universities Quality Agency (AUQA). It is anticipated that legislation to establish TEQSA will be introduced early in the Autumn 2011 sittings of Parliament.

In line with Commonwealth targets for participation, especially for low socioeconomic students, the University is maintaining a strategic focus on improving access for a broader range of students. The Higher Education Participation and Partnerships Program (HEPPP) provides funding for the University both to develop and improve partnerships with schools and communities and to reward the increased participation of low SES students. The Government has also highlighted the role of universities in workforce, skills and economic development, and there is a strong push for better-articulated pathways between VET and higher education. The University has embraced and strengthened this with a record number of specific credit arrangements and more collaborative partnerships with industry and TAFE SA.

The Government also committed to boosting funding generally and increasing the rate of indexation for higher education funding. The Higher Education Base Funding Review was announced in late 2010 and will consider a range of funding issues including the balance of private and public investment, the balance of private and public gain from participation in higher education, and will determine the most effective funding model to provide incentives and drive a high quality education system.

Infrastructure funding continues through the Education Infrastructure Fund (EIF) to fund priority capital and infrastructure projects across the sector. The Capital Development Pool funding has been abolished as part of government cuts in response to the Australian floods in January 2011, as has funding directed to the Australian Learning and Teaching Council (ALTC).

Funding for research has been overhauled in an attempt to better acknowledge the full cost of research funding and to concentrate areas of research strength. The first year of Excellence in Research Australia (ERA), an initiative aimed at assessing and rewarding quality in research, was 2010.



Global Opportunities

The University of Adelaide continues to develop its international reputation, exceeding commencing international student load targets at a time when growth has declined nationally.

Visa regulations have played some part in this and the State Government's pursuit of its vision of Adelaide as a university city has provided a unique competitive advantage. However, other countries relaxing their immigration laws as ours are tightened, combined with the strength of the Australian dollar, may undermine Australia's relative competitiveness going forward. There has been no significant decline in international enrolments at Adelaide despite tough economic conditions worldwide, reaffirming the value of investing in a University of Adelaide education.

Opportunities to compete internationally are not just confined to increasing our international student numbers. There are complex social and environmental issues facing Australia and our region, including climate change, regional security, pandemic disease, social cohesion, bio-ethics and water quality. Addressing these challenges will require high quality research and innovative applications of knowledge as well as improved understanding of problems and their causes. The University is well placed to contribute in these areas and to make a significant impact on our local and global communities.

Higher Education and the State Government

The State Government's Strategic Plan has a goal to "better align institutions of higher education with the State's economic and social priorities". The University has responded to this by focusing its research activities around areas of strength and ensuring congruence with national and state priorities. We have also supported the State Government in achieving strategic goals relating to increases in international and domestic student numbers.

Further opportunities exist for exports of the University's education and research capabilities. With our diverse range of academic programs, strong links with industry and impressive record in research and development, the University is well positioned to partner with the State in this endeavour, to achieve a lasting impact on our society. As the strongest university contributor to R&D in South Australia, it is critical to our continued growth that we pursue a high level of engagement with State Government planning objectives. The South Australian Strategic Plan, together with associated documents such as the State Infrastructure Plan and the 30-year Plan for Greater Adelaide, are significant for the University, as they provide the framework for State Government priorities and investment in South Australia and help us to support these. The University's membership of the SA Strategic Plan Alliance also reinforces our connections with and contributions to the State.

Demographic predictions indicate that due to the ageing profile of our population, Year 12 enrolments in South Australia will continue to decrease and the ability to maintain local student numbers will be critical. Though this may be offset in part by the increase of the school leaving age to 17 and the State's goal of increasing the percentage of students completing Year 12 or its equivalent to 90% by 2014, innovative measures, improved outreach and support services and new collaborative partnerships will be required to improve the participation of traditionally under-represented groups. Nevertheless, recent years have seen domestic demand for university places increase and the University is pursuing a number of access and participation strategies, including a targeted approach to recruiting students from the northern suburbs of Adelaide and the Spencer Gulf region.



Governance

Election of Chancellor

In April, the University Council announced the appointment of the Hon. Robert Hill as the University's 15th Chancellor. He succeeded the Hon. John von Doussa AO QC, who retired from the position on 25 July after six years of outstanding service to the University as its 14th Chancellor. A University of Adelaide graduate in arts and law, Mr Hill is known locally, nationally and internationally, having been a former Permanent Representative of Australia to the United Nations and a federal politician. He is currently Chair of the Australian Carbon Trust Ltd and an Adjunct Professor in Sustainability.

University Budget 2011

Council approved the University Budget for 2011 at its December meeting, and also received the associated Capital Management Plan for 2011–2015. The 2011 Budget provides funding: to ensure the continued development of Research Institutes and Centres as part of the University's Great University strategy; for learning and teaching initiatives which will enhance curriculum development, the student learning experience and teaching quality; to continue an extensive Universitysponsored scholarship program; for significant growth-related cost pressures in several faculties; and for the delivery of major capital works on all campuses. In developing the Budget, the University considered the budget submissions and targets of each of its faculties and administrative divisions.

2010 University Performance Report

In May, the Council considered the annual University Performance Report. The Report is designed to give the Council an opportunity to judge the University's performance against targets set in the current 2008–2012 University Strategic Plan. Its structure reflects the organisation of the Plan with its three chapters on research and research training, education, and services and resources; it presents the University's performance in the context of national, South Australian and Group of Eight benchmarks. This year the Report included new performance metrics for the services and resources section of the Strategic Plan and for the University's success in recruiting and retaining students from a low socioeconomic background. Performance metrics related to Australian Research Council and National Health and Medical Research Council grants were also included.

The report revealed that the University remains in a strong position, firmly within the Group of Eight (Go8) grouping on all indicators. It continues to attract a large share of the best students in the state and to perform particularly well in research on a per capita basis. The solid performance detailed by the Report suggests that the University is well-placed to respond to changes to the higher education sector proposed by the current Federal Government.

Risk Management

Council approved the University of Adelaide Internal Audit Plan 2011–2013 (October 2010) in December. The Plan is reviewed annually in order to ensure that it focuses on areas of higher risk to the successful operation of the University. The internal audit plan for the year 2011 summarises the primary functions and processes within the University and sets out the proposed internal audit coverage.

Council also received the Operational Risk Management Annual Report. It noted that the University's Risk Management Committee had been responsible for initiating a review of the University's Risk Matrix, for co-ordinating ongoing reviews of enterprise risks, and for providing the conduit through which the escalation of risks can be managed.



Controlled Entities

Council received the quarterly management reports of the University's wholly controlled entities and approved their budgets and business plans for 2011.

International Marketing and Student Recruitment

Council was mindful of the maintenance of international student numbers, research into international student decision-making, the implementation of the University's international marketing and recruitment strategy, and the recruitment of higher degree by research students. It also considered the implications of a potential downturn in international student numbers as a result of changes to the criteria for the granting of student visas and global finances including the strong Australian dollar.

National Governance Protocols

Since 2008, the Higher Education Support Act 2003 has contained no provisions enabling the imposition of the National Governance Protocols as a specific condition of a higher education provider's Commonwealth Grant Scheme funding. However, the Protocols are still regarded by the Minister for Education as an ongoing benchmark for good governance practice. In October the University Council received a report demonstrating how provisions of the University of Adelaide Act 1971 and its own internal policies ensured compliance with the Protocols for the period 1 September 2009 to 31 August 2010.

Annual Meeting of the University Community

The annual meeting of the University Community was held on 15 February 2010. Both the Chancellor and the Vice-Chancellor and President addressed the gathering, focusing on the University's considerable achievements over the past year and its plans for the future. As always, the meeting was well-attended by members of the University Community.

Honorary Degrees

In 2010, the University awarded honorary doctorates to seven distinguished citizens for their outstanding service to society.

At its April graduation ceremonies the University admitted to its degree of Doctor of the University (*honoris causa*): the Hon. Gregory Crafter AO, a former state parliamentarian and University councillor; Mr Malcolm Kinnaird AC, founder of successful South Australian engineering firm, Kinhill Pty Ltd and 2003 South Australian of the Year; Dr Barbara Hardy AO, a well known environmentalist and promoter of science education; and the Hon. Ted Mullighan QC, a former Supreme Court judge and champion of justice for Indigenous people and reconciliation.

In September the University admitted Mr Kym Bonython AC and professors Peter Colman and Brian Matthews to the degree of Doctor of the University (*honoris causa*). The late Mr Bonython has made a significant contribution to the Australian arts community as a collector, gallery owner and writer. Professors Colman and Matthews are both University of Adelaide graduates who have gone on to make outstanding contributions in the field of structural biology that have led to the development of new drugs.



Council Membership

In 2010, the Council comprised:

Ex-officio Members

- The Hon. John von Doussa AO QC Chancellor (until 25 July 2010)
- The Hon. Robert M. Hill Chancellor (from 26 July 2010)
- Professor James McWha Vice-Chancellor and President
- Professor Christopher Findlay AM Presiding Member and Chair, Academic Board

Appointed Members

- Mr Charles Bagot
- Ms Kate Castine
- Ms Dianne Davidson
- Mr Ian Kowalick
- Ms Pamela Martin (Deputy Chancellor)
- Ms Loewn Steel
- Mr Stephen Young

Co-opted Members vacant

Elected Members

Academic Staff:

- Dr Rodney Crewther
- Professor Valerie Linton (resigned 29 March 2010)
- Professor Anthony Thomas FAA (elected 1 August 2010)

General Staff:

- Mr Jeremy Kwan
- Mr Christakis Soteriou

Students:

- Ms Ai Chen (until 5 March 2010)
- Mr Sam Kirchner (until 5 March 2010)
- Ms Sophie Plagakis (until 5 March 2010)
- Ms Lavinia Emmett-Grey (elected 6 March 2010)
- Mr Xu Ting (elected 6 March 2010)
- Mr Christopher Wong (elected 6 March 2010)

Graduates:

- Ms Carolyn Anderson (until 5 September 2010)
- Professor Simon Maddocks (re-elected 6 September 2010)
- Dr John Radcliffe AM (re-elected 6 September 2010)
- Dr Susan Robinson (elected 6 September 2010)

Standing Committees of Council as at 31 December 2010

Academic Board

Chair — Professor Christopher Findlay AM

Audit, Compliance and Risk Committee Chair — Mr Charles Bagot

Convenors' Committee

Chair — The Hon. John von Doussa AO QC (until 25 July 2010) The Hon. Robert M. Hill (from 26 July 2010)

Finance Committee

Chair — Mr Ian Kowalick

People and Culture Committee Chair — Ms Kate Castine

Senior Executive Review Committee

Chair — The Hon. John von Doussa AO QC (until 25 July 2010) The Hon. Robert M. Hill (from 26 July 2010)

Special Degrees Committee

Chair — The Hon. John von Doussa AO QC (until 25 July 2010)

The Hon. Robert M. Hill (from 26 July 2010)

Above

The University of Adelaide Council and Senior Management – Council Meeting 7/10, 11 October 2010

Standing: Ms Heather Karmel, Council Secretary, Professor Birgit Lohmann, Pro Vice-Chancellor (Learning and Quality); Professor Birgit Lohmann, Pro Vice-Chancellor (Learning and Quality); Professor Simon Maddocks; Professor Nick Harvey, Executive Dean, Faculty of Humanities and Social Sciences; Professor Anthony Thomas; Professor Justin Beliby, Executive Dean, Faculty of Health Sciences; Mr Stephen Young; Professor Fred McDougall, Deputy Vice-Chancellor and Vice-President (Academic); Mr Ian Kowalick, Chair, Finance Committee; Professor Christopher Findlay AM, Chair, Academic Board; Mr Paul Duldig, Vice-President (Services and Resources); Mr Christopher Wong; Professor Mike Brooks, Deputy Vice-Chancellor and Vice-President (Research); Professor Pascale Quester, Executive Dean, Faculty of the Professions; Mr Xu Ting; Mr Jeremy Kwan; Mr Christakis Soteriou; Professor Peter Dowd, Executive Dean, Faculty of Engineering, Computer and Mathematical Sciences; Ms Lavinia Emmett-Grey

Seated: Dr Rod Crewther; Ms Kate Castine, Chair, People and Culture Committee; Professor James A. McWha, Vice-Chancellor and President; The Honourable Robert M. Hill, Chancellor; Ms Pamela Martin, Deputy Chancellor; Dr John Radcliffe AM; Ms Dianne Davidson

Absent: Mr Charles Bagot, Chair, Audit, Compliance and Risk Committee; Mr Shane McGregor, Chief Financial Officer; Dr Susan O'Connor; Professor Richard Russell AM, Pro Vice-Chancellor (Research Operations); Ms Loewn Steel; Professor John Taplin, Pro Vice-Chancellor (International)

Senior Management as at 31 December 2010

Deputy Vice-Chancellor and Vice-President (Academic) Professor Fred McDougall

Deputy Vice-Chancellor and Vice-President (Research) Professor Michael Brooks

Vice-President (Services and Resources) Mr Paul Duldig

Pro Vice-Chancellor (Learning and Quality) Professor Birgit Lohmann

Pro Vice-Chancellor (Research Operations) Professor Richard Russell AM

Pro Vice-Chancellor (International) Professor John Taplin

Executive Dean, Faculty of Engineering, Computer and Mathematical Sciences Professor Peter Dowd

Executive Dean, Faculty of Health Sciences Professor Justin Beilby

Executive Dean, Faculty of Humanities and Social Sciences Professor Nicholas Harvey

Executive Dean, Faculty of the Professions Professor Pascale Quester

Executive Dean, Faculty of Sciences Professor Robert Hill

Council Secretariat

Council Secretary Ms Heather Karmel

Senior Officer Mr Andrew Starcevic

Senior Officer Ms Anne Wildy

Council Officer Mr Mariusz Kurgan Top Level Organisational Structure

at December 2010



Planning and Quality

Since the release, in early 2008, of the 2008–2012 University Strategic Plan: Building a Great Research University, both the Global Financial Crisis (GFC) and changes to Commonwealth policy have had significant implications for the higher education sector. As part of the University of Adelaide's comprehensive process of strategic planning, the Plan was revised to take preliminary account of the changing environment with a revision approved by Council and released in December 2009. This did not result in a change of direction for the University, but rather allowed us to reconfirm our approach and commitment to building a great research university and to ensure a clear alignment of our goals to those of government and the community.

The Plan sets out the University's mission and vision, high-level goals and strategies for the core areas of business: Research and Research Training, Education, and Services and Resources. Integral to the Plan is the pursuit of research excellence, focus, scale and support for key Institutes; continued increases in student numbers and enhancements to the quality of their experience; and the effective management of resources, structures and processes. It also establishes high-level targets that enable the University to regularly review progress. It is these strategic priorities that have also formed the basis of the University's Interim Compact Agreement with the Commonwealth.

The Strategic Plan lays the foundations for becoming internationally recognised as a "great research university", to significantly develop our research performance and reputation and to create a university community that thrives on research and innovation. In a great research university, education and research are not alternatives but integrated, mutually supportive and equally valued activities. Research-intensive universities such as the University of Adelaide are able to provide their students with an excellent and distinctive education as a direct result of the proximity, integration and dissemination of extensive high-quality research activity.

The University intends to build on this distinction and to ensure that it is central to the student experience. The curriculum and teaching will continue to be influenced by research and be developed and presented by excellent teachers: some may be primarily focused on teaching, but all will incorporate current research in their pedagogical practice. Students at the University of Adelaide will be given the opportunity, wherever possible, to apply the research methodologies that they learn in meaningful ways and on meaningful issues, drawing together the skills that they learn as part of their program of study.

There will be a full review of the existing Strategic Plan throughout 2011, with the aim of developing and adopting a new plan from 2012.



Operational Planning

The University Operational Plan supports the Strategic Plan by outlining the major operational activities required to implement and achieve the University's strategies. Aligned with the Strategic Plan, it identifies the targets and major operational plans for the core areas of the University's business. It also highlights the major priorities of the Divisions and Faculties over the next three years.

Together with the supporting Faculty and Divisional Business Plans, the University Operational and Strategic Plans form part of a systematic Institutional Planning and Performance Framework (IPPF). The IPPF has been progressively developed since its introduction in 2004 and the cornerstone of this framework is the ongoing review of past performance and implementation of practices leading to continual improvement such as annual progress reports. This process is supported by development of a suite of performance reports, which analyse the University's performance against the Sector, the Group of Eight (Go8) and the State: at the Portfolio-level for Learning and Teaching, Research and Research Training, and Services and Resources; and at the Faculty/School level.

The annual update of student load and research income projections for the University provides the basis for the budget outlook considered by Senior Management. This defines the financial parameters around which the priority operational objectives are set. Priorities for the University in 2011 are continued growth with a focus on access, excellence, quality and innovation in education, research and service provision. In line with these objectives, Faculty and Divisional targets were determined, providing the financial underpinning for the development of individual Faculty and Divisional Business Plans, major strategic initiatives and the 2011 Budget.

The culmination of these processes was the development of a University Operational Plan for 2011–2013. This Plan highlights Senior Management's collective view of the areas in which the University will focus its energy and resources during the next planning period to support most effectively the achievement of the University's strategic goals between the current Strategic Plan and the next, scheduled for release in early 2012.



Postgraduate Coursework Programs

Following a request to the Department of Education, Employment and Workplace Relations (DEEWR) for the transfer of Commonwealth Grant Scheme (CGS) Load from undergraduate to postgraduate, the University was given agreement for 150 Equivalent Full-Time Student Loads (EFTSL) for Architecture, 50 EFTSL for Education, and 100 EFTSL for Nursing. This is a net increase of 300 EFTSL on a 2010 base of 409 EFTSL. Over the next three years the University will receive an additional 50 EFTSL in each year to accommodate the Veterinary Science pipeline taking us to 859 EFTSL in 2013. The majority of postgraduate places remain fee-based. First preference domestic applications processed by GRADSTART for entry in 2010 were up on 2009 entry numbers by 27.5%. Offers for the corresponding period were up 24.2%.

The University's Strategic Plan includes growth in postgraduate coursework student numbers. In order to achieve this growth, a decision was taken to offer a related number of postgraduate coursework programs online. In 2010, the Master of Applied Project Management was successfully offered to a global audience. A further six programs will be offered online in 2011.



Summer and Winter School

In line with the University's Strategic Plan, there has been a focused effort to increase domestic, international, non-award, crossinstitutional and study abroad enrolments in Summer and Winter School. It is evident that this focused effort has resulted in significant growth in enrolment numbers for 2010. There was an increase of 20% in Summer School (1626 enrolment, up from 1359 in 2009) and 89% in Winter School (956 enrolments, up from 506 in 2009). This reflects an overall increase in enrolments of 39% for Summer and Winter School 2010 (2582 enrolments, up from 1865 in 2009). A number of factors have played a key role in this increase, including the development of the Summer and Winter School Office within the Office of the Deputy Vice-Chancellor (Academic), targeted seed funding and underwriting of new courses to meet identified student desire, centralised marketing campaigns, streamlining of student administrative processes, and administrative support to academics, faculties and schools.

With the aim of increasing short-term study abroad enrolments in Summer and Winter School, packaged programs were developed that combined study and cultural excursions. There was an increase of 81% in study abroad Summer and Winter School enrolments (38 enrolments, up from 21 in 2009). These programs have been expanded and improved for the 2011 Summer and Winter School with the aim of increasing enrolments. The programs have been positively received by overseas universities, agents and thirdparty providers, with an increasing number promoting them.

Collaboration with TAFE SA

The University has become the leading public university in South Australia with regard to the number of specific credit transfer arrangements with TAFE SA. Together we have created mutually beneficial partnerships that add value to our programs through the discovery, development and provision of innovative pathways, joint research and co-delivered programs.

Equity and Accessibility Initiatives

In line with the Commonwealth's focus on increasing access to and participation in higher education for students from low socioeconomic backgrounds, the University has embraced a new approach to access and equity initiatives. The Access and Participation Unit was established in late 2009 and is working to ensure a coordinated, collaborative, strategic and flexible approach to increasing access for under-represented students. Access and Participation's primary focus is the development and implementation of initiatives in disadvantaged areas, with particular emphasis on regional and remote students and those in the northern suburbs of Adelaide; and on the development and maintenance of relationships with key internal and external stakeholders. These aims are being achieved through a range of new and strengthened partnerships with organisations such as TAFE SA, The Smith Family, schools, industry and government agencies.

Aboriginal and Torres Strait Islander (ATSI) Education

A working party was established in May 2009 to develop an engagement strategy to increase access, participation and successful outcomes for ATSI students and staff in the University. In formulating its report, the working party took into consideration new initiatives and raised expectations emerging from the Commonwealth Government concerning Indigenous participation rates in higher education.

The recommendations of the working party, endorsed by the Vice-Chancellor's Committee in December 2009, aimed at ensuring equality of access, equity of educational participation and equitable and appropriate educational outcomes. It is anticipated that these recommendations will enable the University to best provide for the needs of ATSI students and to ensure improved educational outcomes. The working party recommended that the Humanities and Social Sciences (HUMSS) Foundation Program be broadened to include mathematics/sciences and health sciences streams and provide a preparatory learning program for ATSI students to successfully gain entry to the University's degree programs. The ATSI University Preparation Program will be launched in 2011.



Undergraduate Coursework Programs

The University's mission is to be recognised internationally as a great research university and an Australian leader in research and teaching excellence. Key objectives include: a focus on excellence in education and a positive student experience; a commitment to increasing access and pathways to University programs; continued sustainable growth in student enrolments; and efficiency in using resources to support the University's research focus.

In 2009, a Review of Undergraduate Program Structures was established as a 'health check' of the undergraduate curriculum, to ensure that it remains relevant to both students and employers in the context of the University's objectives and the deregulated higher education environment. The Review assessed curriculum renewal trends at other Australian universities and internationally, and sought input on a number of key questions from both students and staff in developing its recommendations.

The Review has concluded that the University of Adelaide's undergraduate programs already occupy a distinctive position in South Australia and the international market. It proposes that the University build upon its strengths and make the nexus between teaching and research more explicit through its programs. Radical change is not being proposed, although there is agreement that change is required to reduce complexity, increase flexibility and develop a sustainable suite of undergraduate programs with clear pathways to employment and postgraduate study.

It is anticipated that the reforms recommended by the Review will lead to innovations in the development of programs within a common and easily understood structure. Students will benefit from increased flexibility in designing their study pathways, and from more transparency in terms of academic program rules, definitions and nomenclature associated with their degrees. In addition, academic staff will be able to focus more on enhancing learning, teaching and research outcomes in accordance with the key objectives of the University's Strategic Plan.



Australian Universities Quality Agency (AUQA) Progress Report

In February 2010, AUQA visited the University to discuss the Progress Report submitted to AUQA at the end of 2009. The Audit Director was pleased to see evidence of widespread engagement with the implementation of the audit recommendations and affirmations, and was impressed that the University had rigorous systems in place for managing and monitoring the implementation process.

The University submitted an updated version of the Progress Report to AUQA to reflect the discussions and evidence presented during the AUQA Progress Report visit and was informed that the AUQA Board was satisfied with the Report submitted. This concludes the University's formal reporting requirements for the current AUQA audit round.

Reviews

Review activities are an integral part of the University's approach to quality assurance. The AUQA Audit Report commented positively on the 5-yearly program review cycle that has been implemented by the University. The following program reviews were conducted in 2010:

- Undergraduate Programs in Nursing
- Diploma of Languages and languagerelated courses
- Undergraduate Programs in Media
- Undergraduate Programs in Molecular and Biomedical Sciences
- Postgraduate Programs in Law
- Bachelor of Design Studies.

Organisational unit reviews are focused on the contribution to and alignment with the University's Strategic Plan and, as with program reviews, form an integral part of the University's quality assurance processes. The systematic review of academic organisational units on a 7-yearly cycle was implemented in 2009 and as a result, the following reviews were conducted in 2010:

- School of Mathematical Sciences
- School of Mechanical Engineering
- School of Medical Sciences
- School of Chemistry and Physics.

The Centre for Learning and Professional Development (CLPD) was also reviewed in 2010.

Accreditation

Certain programs at the University are accredited by professional organisations. Such accreditation ensures that graduates of a program are professionally qualified and competent to work in their chosen vocation. It also serves as a quality measure for individual programs. In 2010, a number of programs were re-accredited.

The Master of Architecture was reaccredited by the Australian Institute of Architects until 2013 and the Master of Landscape Architecture was re-accredited by the Australian Institute of Landscape Architects until 2014.

The following programs were all reaccredited by the Australian Institute of Physics for five years:

- Bachelor of Science with a major in Physics or Theoretical Physics
- Bachelor of Science (High Performance Computational Physics) Honours
- Bachelor of Science (Optics and Photonics)
- Bachelor of Science (Space Science and Astrophysics)
- Bachelor of Engineering (Electrical and Electronic))/Bachelor of Science (Physics).

The Doctor of Clinical Dentistry programs (in Endodontics, Oral Pathology, Orthodontics, Paediatric Dentistry, Periodontics and Prosthodontics) received interim accreditation from the Australian Dental Council. The accreditation process was not completed before the November 2010 meeting of the Australian Dental Council Board meeting and it is expected that the final reports and decisions on accreditation will be finalised by 31 March, 2011.

Learning and Teaching



Policies

The Vice-Chancellor, on behalf of the Council and on the recommendation of Academic Board approved the following policies and procedures:

- Admissions to Coursework Programs
 Policy
- Coursework Academic Programs Policy
- Academic Credit Arrangements Policy
- Academic Honesty and Assessment Obligations for Coursework Students Policy
- Course Work Students: Academic Dishonesty Procedures
- Assessment for Coursework Programs Policy.

In addition, the Vice-Chancellor, on the endorsement of the Vice-Chancellor's Committee, approved the conversion of the University Medals Policy, the Parchment Replacement and Re-Issue Policy and the Subsidised Student Accommodation Scheme to student administration business processes.

Grading Schemes

An extensive review of the University's grading schemes was undertaken in 2009. The report of the Grading Working Party was approved by the Vice-Chancellor on behalf of Council and on the recommendation of Academic Board for implementation.

Transition Unit – First-year Experience

The first-year experience is pivotal in improving retention rates. In recognition of this, a three-tiered approach to orientation provides commencing students with 'just in time' support and information throughout this critical period. The first tier is a comprehensive schedule of orientation week activities; the second is transition to university sessions called 'Reality Bites'; and the third is UniStep (University Student Transition Experience Program), an extended semester-long orientation program. This program of activities, events and academic and life skills sessions is designed to enhance the student experience and reduce the gap between students' expectations and experiences. Increasing the number and frequency of UniStep sessions proved to be successful in increasing student awareness of support services and helping students feel connected and involved with university life. Almost three-quarters of respondents to a UniStep survey reported that their awareness of support services had increased as a result of UniStep and that UniStep had assisted their transition to university.

Peer networking programs continue to provide support and information to commencing students and an expansion of school-based programs provided greater numbers of first-year students with the opportunity to participate in locally hosted programs. In addition to SmoothStart, the University-wide equity mentoring program, there were 13 schoolbased programs offered in 2010.

Orientation

Approximately 4000 commencing students attended orientation week with over 1600 attending the Vice-Chancellor's Welcome in Bonython Hall. Study preparation sessions, library and campus tours, IT information sessions and transition-touniversity sessions attracted over 3500 students. A Welcome Centre was based on Goodman Lawns where services were able to promote themselves and a Welcome Team was on hand to answer questions and lead campus tours. A free BBQ, competitions, music and entertainment were also on offer.

The International Student Centre coordinated 17 Orientation programs for students commencing Pre-enrolment English programs, Summer and Winter School, Degree programs at the commencement of each semester and trimester, and specialised programs for AusAID students.

In 2010, 49 Peer Mentors were actively involved in all aspects of the Semester 1 and Semester 2 orientations and contributed 4771 hours towards, administrative tasks, social programs, campus tours and staffing the Welcome Centre.

Airport reception services were arranged for 845 students and 112 accompanying family members, with temporary onarrival accommodation arranged for 226 students.



Scholarships

In 2010, there was a consolidation of the recommendations of the Review of Undergraduate Scholarships undertaken in June 2009. While the University's scholarships target students who demonstrate academic merit, a substantial number of scholarships such as the Adelaide Access Scholarships and the Adelaide Start-Up Scholarships also address students who are in financial need, from rural or isolated areas, from non-English speaking backgrounds and/ or students who have a disability. This focus complements the emphasis of the Bradley Review, which seeks to increase the participation and outcomes for students from equity groups, and particularly those from low SES backgrounds.

The South Australian Tertiary Admissions Centre (SATAC) has been given the responsibility for the application and assessment process of the University's equity scholarships on behalf of the University.

Since 2009, many Commonwealth scholarships have been administered by Centrelink, with the exception of Indigenous scholarships, which universities still oversee. Commonwealth Scholarships awarded prior to 2009 to non-Indigenous students are in the process of being 'grandfathered', and it is anticipated that most will have been utilised by the end of 2011.

In 2010, the Coursework Scholarships Committee approved the following numbers of University and Commonwealth equity scholarships:

- Adelaide Access Scholarships (78)
- Adelaide Start-Up Scholarships (100)
- Vice-Chancellor's scholarships (2) these were awarded to one male and one female student, both of whom had outstanding academic records.
- Indigenous Commonwealth Accommodation Scholarships (10)
- Indigenous Commonwealth Education Costs Scholarships (26)
- Commonwealth Accommodation Scholarships Indigenous Enabling Scholarships (10)
- Commonwealth Education Costs Scholarships Indigenous Enabling Scholarships (32)
- Indigenous Access Scholarships (42).

The University of Adelaide has two merit scholarship schemes, the University of Adelaide Undergraduate Scholarships and the University of Adelaide Principals' Scholarships.

The Adelaide Undergraduate Scholarships, worth \$10,000 for one year, were awarded to all South Australian students who demonstrated outstanding academic merit by achieving a Tertiary Entrance Rank (TER) of 99.95 (excluding all bonus points). In 2010, 27 students were awarded South Australian Merit Scholarships.

The University of Adelaide Principals' Scholarships, worth \$5000 for one year, were awarded to one student from each school in South Australia, Northern Territory, Broken Hill and border Victoria who nominated eligible students. Eligible students must have achieved a TER of 80 or greater (after the addition of the University's Fairway Bonus if applicable) and made a significant contribution to their school or wider community. In 2010, 121 students were awarded a University of Adelaide Principals' Scholarship.

The Andy Thomas Scholarship is awarded to academically outstanding students who have also made a significant contribution to their school and to the wider community and showed potential for leadership, creativity and innovation in the future. This valuable scholarship provides a living allowance of \$5000 for up to four years and for students' contribution amounts (HECS) to be paid by the University.

In 2010, the Scholarships Office assumed the role of administering most postgraduate coursework scholarships, which had previously been undertaken by the Adelaide Graduate Centre.







Excellence in Education

The Strategic Plan (2008–2012) states that "In a great research university, education and research are not alternatives but integrated, mutually supportive and equally valued activities" and identifies as the primary education goal for the University to "provide a distinctive learning experience of high quality for our students". The Excellence in Education project was established in March 2009 as an overarching project to support the University's primary education goal to "provide a distinctive learning experience of high quality for our students".

The Excellence in Education project consolidates projects from across the University that will impact positively on student satisfaction. Each of the focus areas identified at the inception of the project saw significant progress during 2010, to a point where most projects identified initially are now at a mature stage with their own web presence. An annual progress report to the 15 September 2010 meeting of the University Learning and Teaching Committee (ULTC), highlighted the following:

- The latest available data for Overall Satisfaction as measured by the Course Experience Questionnaire indicate that the University is making progress toward achieving the objective of being in the top 50% nationwide in all discipline groups within five years and has reached this objective in the broad discipline area of Health.
- The undergraduate attrition rate has remained stable from 2007–08 to 2008– 09 at 12% despite continued increase in student numbers.
- Significant improvement at school level against the following measures: first-year Student Experience of Learning and Teaching (SELT) overall satisfaction; and compliance with the SELT policy requirements that all teaching staff and courses should be evaluated through a SELT survey at least once every two years.

Communication is key to the long-term success of the project and as such, engagement with the Marketing and Strategic Communications team has been established.

In addition to the University-wide projects included under the Excellence in Education umbrella, the University has continued its support for faculty-based school level initiatives through the 2010 University Implementation Grants for Learning and Teaching Enhancements. The purpose of this funding scheme is to improve learning and teaching outcomes at the University. Twenty-nine applications were received and a total of \$135,522 was allocated to projects ranging from the development of early intervention strategies for at-risk students in the Faculty of Engineering, **Computer and Mathematical Sciences** to the enhancement of professional skills for students in the School of Animal and Veterinary Sciences.

e-Enhanced Learning and Teaching Project

The e-Enhanced Learning and Teaching Project, funded as a Vice-Chancellor's Strategic Initiative, improved the quality of the student experience through the innovative use of new technologies in teaching.

University of Adelaide Excellence in Education Awards

- Dr Craig Willis, School of Civil, Environmental and Mining Engineering
- Dr Eleanor Peirce and Dr Mario Ricci, School of Medical Sciences (Team award)
- Dr Rob Cover, School of Humanities
- Dr Laura Grenfell, Law School
- Dr Kerry Wilkinson, Dr Michelle Wirthensohn, School of Agriculture, Food and Wine and Dr Michelle Picard, Adelaide Graduate Centre (Team award).

External Learning and Teaching Awards

National Teaching Fellowship

Associate Professor Elizabeth Koch OAM from the Elder Conservatorium of Music was awarded a National University Teaching Award for teaching excellence by the Australian Learning and Teaching Council.

In addition, the School of Civil, Environmental and Mining Engineering, in collaboration with Mining Education Australia, won an Australian Learning and Teaching Council Award for Programs that Enhance Learning.

National Staff Awards

Australian University Learning and Teaching Council Citations

The following University of Adelaide staff were awarded Citations for Outstanding Contributions to Student Learning for 2010:

- Dr Steven Grainger (School of Mechanical Engineering)
- Dr Natalie Williamson (School of Chemistry and Physics)
- Ms Catherine Snelling and Ms Sophie Karanicolas (School of Dentistry)
- Dr Ben McCann (School of Humanities)
- Mr Joshua McCarthy (School of Architecture, Landscape Architecture and Urban Design).

New Academic Programs

The following programs were approved in 2010.

Program Name	Faculty
Master of Clinical Nursing	Health Sciences
Master of Counselling and Psychotherapy	
Graduate Diploma in Counselling and Psychotherapy	Health Sciences
Graduate Certificate in Counselling and Psychotherapy	
Master of Physician Assistant Studies	Health Sciences
Master of Surgical Science	Health Sciences
Master of Arts (Food Studies)	
Graduate Diploma in Food Studies	Humanities and Social Sciences
Graduate Certificate in Food Studies	
Professional Certificate in Food Studies	
Certificate III in Music (Aboriginal Studies)	Humanities and Social Sciences
Certificate IV in Music (Aboriginal Studies)	
Graduate Diploma in Commerce	Professions
Master of International Business	
Graduate Diploma in International Business	Professions
Graduate Certificate in International Business	
Master of Biotechnology (Biomedical)	
Graduate Diploma in Biotechnology (Biomedical)	Sciences
Graduate Certificate in Biotechnology (Biomedical)	
Bachelor of Science (Advanced)	Sciences
Master of Research Studies	Graduate Centre



External Learning and Teaching Grants

Australian Learning and Teaching Council (ALTC) Strategic Priority Projects

The University won a grant for \$220,000 from the ALTC for a project entitled "Harmonising higher education and professional quality assurance processes for the assessment of learning outcomes in health". The project leader is Professor Maree O'Keefe, Associate Dean (Learning and Teaching) in the Faculty of Health Sciences.

Associate Professor Ray Petersen and Dr Catherine Leahy from the Faculty of Health Sciences were awarded grant funding of \$220,000 to investigate ways to assist students with mental health issues.

The University is a partner with the University of Sydney and University of Queensland in an ALTC project entitled "Assessing and assuring Australian graduate learning outcomes: Principles and practices within and across the disciplines". Professor Geoff Crisp, Director, Centre for Learning and Professional Development, is involved in this project, which will receive a \$216,000 ALTC grant.

University Staff Awards

Vice-Chancellor's Award for Excellence in University Teaching

In 2010, the Vice-Chancellor's Award for Excellence in Teaching was awarded to Ms Sophie Karanicolas and Ms Cathy Snelling from the School of Dentistry.

The winners of this award were chosen from the pool of prize-winners of the Stephen Cole the Elder Award for Excellence in Teaching. In 2010, these were:

- Ms Sophie Karanicolas and Ms Cathy Snelling (School of Dentistry)
- Associate Professor David Walker ((School of Civil, Environmental and Mining Engineering)
- Dr Craig Willis (School of Civil, Environmental and Mining Engineering)
- Associate Professor Simon Pyke (School of Chemistry and Physics)

Faculty Teaching Prizes

Faculty of Engineering, Computer and Mathematical Sciences

Faculty Prize for Excellence in Teaching

- Associate Professor Finnur Lárusson, School of Mathematical Sciences
- Dr Wen Soong, School of Electrical and Electronic Engineering
- Dr Matthew Sorell, School of Electrical and Electronic Engineering
- Dr Braden Phillips, School of Electrical and Electronic Engineering
- Associate Professor Mike Liebelt, School of Electrical and Electronic Engineering
- Mr Peter Ramsey, School of Electrical and Electronic Engineering
- Mr Darryl Bosch, School of Electrical and Electronic Engineering
- Dr Craig Willis, School of Civil, Environmental and Mining Engineering

Executive Dean's Award

• Dr Craig Willis, School of Civil, Environmental and Mining Engineering

Faculty of Health Sciences

Executive Dean's Prizes for Excellence in Teaching

- Associate Professor John Kaidonas, School of Dentistry
- Professor Anthony Pohl, School of Medicine
- Dr Anne Wilson, School of Population Health and Clinical Practice
- Dr Andrew Linn, School of Population Health and Clinical Practice
- Dr Hugh Kildea, School of Population Health and Clinical Practice
- Ms Adriana Milazzo, School of Population Health and Clinical Practice

Faculty of Humanities and Social Sciences

Executive Dean's Prize for Excellence in Teaching

• Dr Rob Cover, School of Humanities

Faculty of Humanities and Social Sciences Prize for Excellence in Teaching

- Dr Benito Cao, School of History and Politics (early career teacher)
- Ms Guila Tiver, Elder Conservatorium of Music (individual teacher)

Faculty of the Professions

Awards for Excellence in Learning and Teaching

- Dr Laura Grenfell, Law School (undergraduate teaching)
- Ms Tanya Court, School of Architecture, Landscape Architecture and Urban Design, and Ms Athena Kerley, Learning Advisor of the Faculty's Student Hub (team teaching)

Faculty of Sciences

- Dr Frank Grutzner, School of Molecular and Biomedical Science (first five years of teaching)
- Ms Hilary Coleman, School of Chemistry and Physics (postgraduate student involved in teaching)
- Dr. Bertram Ostendorf, School of Earth and Environmental Sciences (more than five years teaching).

Academic Professional Development

Thirty University of Adelaide teaching staff participated in two Graduate Certificate programs in Online Education and in Higher Education, with 14 staff graduating from the programs in 2010. In addition, 38 academic staff completed the Teaching at University course and 178 sessional staff completed professional development courses in higher education pedagogy.

Professional and Continuing Education (PCE) delivered professional development programs to 130 University professional and academic staff in 2010. Staff participated in one- and two-day courses in areas such as communication, management and supervision, administration, project management and customer service. PCE also delivered tailored training solutions to groups of staff from the Barr Smith Library, the International Office and the School of Chemical Engineering.

Throughout 2010, PCE's Professional Education Program enrolled over 1000 people from the public and private sector into its one- and two-day public courses. PCE also delivered tailored training solutions for groups of staff from 49 local, national and international corporate clients.

University Medallists

Engineering, Computer and Mathematical Sciences	 Justin Chun Mun Fong — BE (Mechatronic) with BMa&CompSc Alexandra Jane Venning — BE(Aerospace) with BSc Gregory Peter Oates — BE (Chemical–Process & Product Engineering) Phillip Edward Lemon — BE (Petroleum) & BE (Mechanical) Randolph James Brazier — BE (Electrical & Electronic) & BSc (Physics) Brittany Erin Coff — BE (Civil & Structural)
Health Sciences	Joseph Puccini — B. Health Sciences Honours Michelle Elyse Beer — B. Psychology Honours Karen Maree Griffin — B. Dental Surgery Irene Ruderman — B. Medicine & B. Surgery Kam Panh Truong — B. Health Sciences Honours
Humanities and Social Sciences	Adam Paul Bugeja — BA Honours Melissa Siobhan Phillips — BA with B. Teaching
The Professions	Eleanor Claire Mitchell — LLB with Honours Daisy Georgina McGregor — BEc Honours Wei Lu — B. Commerce Honours
Sciences	Nikita Simakov — BSc Honours Sophie Jayne Underwood — BSc Honours Claire Marie Weekley — BSc Honours

Research and Research Training

Introduction

The research environment at the University of Adelaide in 2010 was challenging, competitive, exciting and full of opportunities. Through our institutes and centres, our research community brings together innovative minds from diverse areas to work on some of the big challenges facing the world: for example, food security, the sustainable management of natural resources, developing new energy sources, genetic developments in health, reproductive health, and the use of new lasers and optical systems for environmental monitoring.

Special research highlights from 2010 include the resurrection of the primary component of Siberian mammoth blood, using DNA preserved in bones over 25,000 years old, to show how mammoths survived the extreme Arctic cold. In another part of the University, a team of researchers has developed a new bushfire warning system that can alert authorities and people living in fire-risk areas reliably and efficiently. Meanwhile, our medical researchers have demonstrated that the gender of the baby affects the way it responds to stressors during pregnancy, which could lead to gender-specific therapies in complicated pregnancies.

With such talented and dedicated staff, there is every reason to be optimistic and excited about the future of research at the University of Adelaide.

Research figures at a glance:

No. **1** university in the State for research in collaboration with industry Consistently ranked in the top 1% of the world's universities

2 out of 5 Scopus Young Researchers of the Year 2010 National Award Winners Member of the Group of Eight (GO8) research-intensive universities

\$115 million received in commencing research

4 University of Adelaide graduates received Fulbright Scholarships in 2010 University of Adelaide final-year medical student named our **103rd** Rhodes Scholar

11

Research Tuesday

events sharing

Completion of **278** postgraduate research qualifications in 2010

More than 80% of all NHMRC training fellowships awarded in South Australia **5** Future Fellowships in round 1, and 8 in round 2 of 2010

^{Over} \$31 million

revenue across more than 500 commercial agreements

44 University Research Centres Opening of **\$30 million** Plant Accelerator

70% ARC Discovery project grant funding in South Australia in 2010

6 Super Science Fellowships in 2010 5 South Australian of

Awarded 70% of NHMRC project grant funding in South Australia in 2010 136 Australian Postgraduate Awards and 150 new Divisional Research Scholarships awarded

5 World-class Research Institutes

à

Research Institutes





The Robinson Institute

Director: **Professor Robert Norman** BSc (Hons), M BChB(Hons) MD, FRANZCOG, FRCPA, FRCPath, FRCOG, CREI

The Robinson Institute brings together over 300 research staff and students and four leading research centres at the University of Adelaide. By focusing on the earliest stages of life, the Robinson Institute is looking at preventing disease and promoting health in children and adults across generations. The Institute bridges the gap between research discoveries and medical practice, with many of the Institute's senior researchers also being leading clinicians in their fields.

The Robinson Institute had great success in 2010 in terms of winning National Health and Medical Research Council (NHMRC) Project Grants. Members of the Robinson Institute were involved in 18 grants totalling \$9,663,018. Nearly a third of all NHMRC projects at the University of Adelaide were awarded to Robinson Institute researchers, totalling 20% of all South Australia's funding. Members also attracted ARC project funding in the form of Discovery and Linkage Grants - \$435,000 was awarded to two projects involving Robinson Institute members. Nine Robinson Institute members received fellowships from major funding bodies (NHMRC, ARC and the National Breast Cancer Foundation), totalling \$4,248,312.

In 2010, the Robinson Foundation was launched to support the life-giving research of the Robinson Institute.

Focus

• Reproductive health, stem cell research and health across generations.

Key Research Centres

- Research Centre for Reproductive Health
- Research Centre for Early Origins of Health
 and Disease
- Centre for Stem Cell Research
- Australian Research Centre for Health of Women and Babies



The Institute for Photonics & Advanced Sensing

Director: **Professor Tanya Monro** BSc(Hons), PhD

The Institute for Photonics & Advanced Sensing (IPAS) was founded on the success of the Centre of Excellence in Photonics, a joint centre of the University of Adelaide and the Defence Science and Technology Organisation (DSTO), and on the recognition of the importance that new forms of Advanced Sensing will have in the world. IPAS brings together over 130 physicists, chemists and biologists to pursue a new transdisciplinary approach to science. The Institute is developing novel photonic, sensing and measurement technologies that will change the way science is undertaken within traditional discipline areas, stimulating the creation of new industries, and inspiring a new generation of scientists to be engaged in solving real-world problems. The Institute's research targets applications in four key market areas: defence and national security; environmental monitoring; preventative health; and food and wine.

In 2010, planning approval was granted by the Development Assessment Commission for a new building on the North Terrace Campus, which will provide new accommodation and facilities for IPAS.

Focus

• Optical fibres, lasers, luminescence, surface chemistry, proteomics and virology.

Key Research Centres

• Centre of Expertise in Photonics



Institute for Mineral and Energy Resources

Director: **Professor Stephen Grano** BEng(Metallurgical)(Hons), MSc, PhD

Launched in 2010, the Institute for Mineral and Energy Resources (IMER) is one of Australia's first interdisciplinary research institutes specifically designed to address one of the biggest challenges facing Australia: to continue growing the economically critical mineral and energy resources industries in a technically, economically, socially and environmentally sustainable manner.

IMER addresses the complex research challenges faced by the mineral and energy sectors by providing integrated research, education, professional development and consulting services across all aspects of the mineral and energy resources industries, from exploration through processing to international trade. The University of Adelaide is unique within Australia in having strong research and teaching groups in geology and geophysics, petroleum engineering and mining engineering.

Focus

• Petroleum engineering, mining engineering, petroleum and minerals, geoscience and geothermal energy, energy technologies.

Key Research Centres

- Centre for Energy Technology
- Centre for Tectonics Resources and Exploration
- Centre for Geothermal Energy



The Waite Research Institute

Director: **Professor Roger Leigh** BSc(Hons) PhD

The Waite Research Institute was launched in July 2010. It brings together researchers from a range of disciplines including plant biology, genetics, soil sciences, agronomy and agricultural economics. The Waite Research Institute undertakes research aimed at finding solutions to global problems including the challenge of ensuring global food security, and ensuring Australia's agricultural, wine and food industries remain competitive by providing innovated researchled developments.

The Institute continues a long history of excellence in agricultural research at the University of Adelaide, and assembles world leaders in agriculture, wine-making and food manufacturing. These experts today collaborate to address major food-supply challenges of the 21st century: for example, climate change, increased costs of energy, labour and capital, limited natural resources (especially water and nutrients), and environmental degradation.

A major highlight in 2010 was the opening of the \$30 million Plant Accelerator facility. As the largest and most advanced public facility of its type in the world, the Plant Accelerator delivers plants automatically to imaging, robotic and computing equipment to allow rapid phenotypic assessment of plant varieties.

Community engagement is a priority for the Waite Research Institute, and 2010 activities included the public forum and information session for the launch of the FOODplus Research Centre, and the selection of Professor Mark Tester (Director of the Plant Accelerator) to speak at TEDx Adelaide 2010, about the major challenges facing the world as it tries to meet world food demands in the face of global environmental change.

Focus

• Plant and animal sciences, viticulture and oenology, agronomy, soil science and agricultural economics, food and nutrition.

Key Research Centres

- Centre for Soil Plant Interactions
- Australian Centre for Plant Functional Genomics
- FOODplus



The Environment Institute

Director: **Professor Mike Young** BAgSc, BEc, MAgSc, GAICD

The University of Adelaide established the Environment Institute to tackle some of the most serious environmental challenges facing Australia and the world. Research undertaken within the Institute delivers knowledge and understanding that will underpin a step change to improving the management of natural resources, including water, soil, land and native flora and fauna, particularly under changing climatic and economic conditions.

The Institute brings together leading research groups at the University of Adelaide in the fields of science, engineering and economics relating to the management and use of natural resources and infrastructure. In 2010, over \$10.2 million was awarded for this research from a range of government and industry schemes.

The Environment Institute engaged with the community in numerous ways in 2010. The 'Water is Life' project, a partnership between the Environment Institute and Conservation Ark, was launched at the Adelaide Zoo. The project features the sounds of water and water-dependent species as the background to a poem specially commissioned from Sean Williams, called "Reflections on Water". Also the Institute and RiAus collaborated to support participation in the Genographic Project. Adelaide residents had the opportunity to find out about their deep migratory history at the free public participation event held in October 2010 at the Adelaide Central Market.

Focus

• Management of natural resources under changing climate and economic conditions.

Key Research Units

- Australian Centre for Evolutionary Biology and Biodiversity
- Australian Centre for Ancient DNA
- Water Research Centre
- Marine Biology Program
- Landscape Futures Program
- · Climate and Ecology

Research Centres

The University now has 44 approved University Research Centres, across the spectrum of our research strengths.

In 2010, a number of new centres were announced, including the Centre for Heart Rhythm Disorders, the JM Coetzee Centre for Creative Practice, the Centre for Housing, Urban and Regional Planning, the Indo-Pacific Governance Research Centre and the Centre for Wine Economics.

In 2011, three new national ARC Centres of Excellence will commence. These are prestigious hubs of expertise through which high-quality researchers maintain and develop Australia's international standing in research areas of national priority.



The ARC Centre of Excellence in Plant Cell Wall Biology

The ARC Centre of Excellence in Plant Cell Wall Biology, supported by \$19.25 million from the ARC over seven years and directed by Professor Geoffrey Fincher, is based at the University's Waite Campus. The Centre includes the University of Melbourne and the University of Queensland, together with many other national and international partners.

Major new drivers of international research in plant science include the central roles of cell walls as renewable sources of transport fuels, as functional foods to improve human health, and as a source of raw materials for industrial processes. The Centre will build an international team with scale and focus at the scientific. technical and training levels, generating outcomes that will significantly enhance biotechnologies that underpin Australian crop industries valued at over \$8 billion per annum, associated food industries valued at about \$40 billion per annum, and massive emerging industries related to renewable transport fuels and biomaterials.

ARC Centre of Excellence for the History of Emotions

The University of Adelaide is a partner organisation for the new ARC Centre of Excellence for the History of Emotions headquartered at the University of Western Australia. The Centre has secured funding of \$24.25 million over 7 years.

Emotions shape our mental, physical and social wellbeing. The Centre's research will brilliantly illuminate this crucial aspect of Australia's cultural and social heritage, help explain the causes and consequences of mass emotional events (e.g. moral panics) and invigorate Australian culture through major reflective performances in drama, opera and art. By addressing the big question of how societies think, feel and function, it will provide greatly enhanced understanding of how to improve emotional health among modern Australians.

ARC Centre of Excellence for Particle Physics at the Tera-Scale

The University of Adelaide is a partner organisation for the new ARC Centre of Excellence for Particle Physics at the Tera-Scale, headquartered at the University of Melbourne, which has been awarded \$25.2 million over seven years by the ARC.

The Centre will, for the first time, coordinate tera-scale high energy physics research across Australia, creating new research groups at the universities of Adelaide and Sydney, and augmenting groups at the universities of Melbourne and Monash. It will greatly enhance international linkages. Through it, the Australian Government will liaise with key scientific organisations active in high energy physics, advanced computing and accelerator science. The advanced Grid computing program will develop important relationships with national and state computing facilities, and major corporations. Building upon the huge media interest in the Large Hadron Collider, the Centre will highlight the benefits of big science.

Excellence in Research for Australia (ERA)

The ERA initiative aims to provide a transparent system to assess research quality, utilising a combination of metrics focused on researchers, research outputs, research income, esteem and applied measures. The University of Adelaide submission in July 2010 was one of the largest compliance documents ever submitted by the University, with 380,000 lines of XML code, capturing 15,280 research outputs, including 11,311 journal articles in 3366 outlets, and approximately \$380 million awarded in research income. The University was assessed in 21 of the 22 two-digit Field of Research (FoR) codes, and in 75 of the 157 four-digit FoR codes.

The ERA outcomes confirm many of our fundamental research strengths. In considering the national outcomes, the University of Adelaide found itself in an elite group of various institutions unsurpassed in six major discipline areas: Physical Sciences, Earth Sciences, Environmental Sciences, Agricultural and

Sustainable Research Excellence 2010

The Sustainable Research Excellence (SRE) program aims to address an identified shortfall in the funding available to meet the indirect costs associated with Australian Competitive Grant (ACG) research, and to support universities to build and maintain research excellence.

All universities were required to undertake both a Transparent Costing (TC) project and the ERA project (see above) in order to be eligible for SRE funds, which are currently valued at \$52 million. As part of this process, in 2010 the University of Adelaide undertook two online surveys to determine the proportion of staff time attributable to ACG activity. A responses rate of at least 67% was required from over 1500 University of Adelaide staff, and response rates of approximately 85% were achieved for both. The outcomes of submissions are expected in the first quarter of 2011. Veterinary Sciences, Medical and Health Sciences (BCH), and Studies in Creative Arts and Humanities. These were all rated at 'well above world standard'. At the sub-disciplinary level (4-digit FoR), we were unsurpassed in 24 areas. These outcomes reinforces our position as one of Australia's leading research institutions.

Some highlights of high research performance across the University were:

- 19 (86%) of our major discipline areas ranked at or above the ERA defined level of 'world standard'.
- We received the only '5' ('well above world standard') nationally in the sub-discipline of Paediatrics and Reproductive Medicine.
- We shared the equal highest score with one other institution in the following subdisciplines: Soil Science, Horticultural Production, Nutrition and Dietetics, Demography, and Performing Arts and Creative Writing.

- We shared the equal highest score with two other institutions in the following sub-disciplines: Crop and Pasture; Medical Microbiology; Nursing; Atomic, Molecular, Nuclear, Particle and Plasma Physics; and Applied Ethics.
- Our Research Institutes aligned well with ERA high performers. As examples, the following sub-discipline areas all scored the highest possible rating of '5':
 - Optical Physics (Institute for Photonics & Advanced Sensing)
 - Soil Sciences, Plant Biology, Crop and Pasture Production, and Horticultural Production (Waite Research Institute)
 - Geology (Institute for Mineral and Energy Resources)
 - Paediatrics and Reproductive Medicine, Nutrition and Dietetics (Robinson Institute)
 - Evolutionary Biology (Environment Institute)



Commonwealth Funding

Australian Research Council (ARC)

In 2010, the University of Adelaide was awarded more than \$17.1 million by the ARC for 53 new research projects starting in 2011.

A total of 36 new Discovery Projects have been awarded, including:

- \$710,000 to Associate Professor Frank Grützner (School of Molecular & Biomedical Science) — Evolution and function of sex chromosomes and genes in mammalian reproduction
- \$710,000 to Professor Graeme Hugo (School of Social Sciences) — Climate change and migration in China: theoretical, empirical and policy dimensions
- \$700,000 to Dr Mark Hutchinson (School of Medical Sciences) — Toll like Receptor signalling as a mediator of sex differences in pain, opioid and alcohol action
- \$425,000 to Associate Professor Matthew Roughan (School of Mathematical Sciences) — Internet traffic-matrix synthesis
- \$155,000 to Associate Professor Rachel Ankeny (School of History and Politics) — What shall we have for tea? Toward a new discourse of food ethics in contemporary Australia.

16 Linkage Projects (collaborations between the University and external partners such as government and industry), were awarded, including:

- \$610,000 to Dr Carl Howard (School of Mechanical Engineering) — Novel vibroacoustic technologies for detecting bearing and wheel defects in rail vehicles
- \$410,000 to Professor Andy Lowe (School of Earth and Environmental Sciences)
 — Species and gene turnover across environmental gradients — a landscapelevel approach to quantify biodiversity and resilience for climate adaptation
- \$90,586 to Dr Susan Oakley (School of Social Sciences) — Creating better pathways into civic participation for young homeless people through sustainable accommodation and support program models.

The University was also awarded a grant under the ARC Discovery Indigenous Researchers Development Fund:

• \$105,756 to Associate Professor Jennifer Baker (School of Population Health and Clinical Practice) — Intersectoral collaboration and capacity building for better outcomes for Aboriginal people in Port Augusta.

National Health and Medical Research Council (NHMRC)

University of Adelaide health researchers were awarded over \$30 million in new NHMRC funding, including \$22.8 million in project grant funding in 2010. A total of 45 new project grants were awarded to the University and our partners, starting in 2011.

Breast cancer researcher Professor David Callen from the School of Medicine won the biggest block of funding (\$1.3 million) for three separate projects investigating the role of Vitamin D in breast cancer, as well as developing new pathways to stop the spread of tumours.

The Head of the University's School of Paediatrics and Reproductive Health, Professor Julie Owens, was awarded the University's largest single grant (\$891,732) for a project investigating the link between growth-restricted babies and diabetes and obesity in later life.

Among the other projects awarded to the University of Adelaide and its affiliates are:

- \$1.08 million to Professor Caroline Crowther (School of Paediatrics and Reproductive Health) for two individual projects: \$632,979 to investigate whether the right diet and lifestyle can help treat borderline gestational diabetes in pregnant women; and \$447,281 to review the link between corticosteroids and improved health in pre-term babies.
- \$744,021 to Professor Wayne Tilley (School of Medicine) to research the role that male hormones play in protecting women from developing breast cancer and improving treatment options.
- \$662,065 to Associate Professor Kaye Roberts-Thomson (School of Dentistry) to test a non-invasive treatment for dental decay in young children.
- \$590,048 to Associate Professor Simon Koblar (School of Medicine) for a project to understand the role of a gene his group has discovered in repairing the brain after stroke.

Other funding

Science and Industry Endowment Fund (SIEF)

A successful 2010 SIEF application from the School of Chemistry and Physics received funding of \$6 million over 5 years. The project, entitled "Solving the Energy Waste Roadblock", will focus on developing advanced materials for the selective capture and conversion of CO2 to value-added products. It will be led by Dr Christian Doonan and Dr Chris Sumby.

Linkage Infrastructure, Equipment and Facilities (LIEF)

The University of Adelaide was awarded \$1.95 million for new equipment and facilities under the ARC LIEF grant scheme. This funding will support:

- \$700,000 to a team led by Associate Professor Joel Brugger (School of Earth and Environmental Sciences) — Highperformance electron microprobe analyser optimised for the microanalysis of sulphides and heavy elements.
- \$430,000 to a team led by Professor Derek Leinweber (School of Chemistry and Physics) — Enhancement of South Australian high-performance computing facilities.
- \$370,000 to a team led by Dr Kerry Wilkinson (Waite Research Institute, School of Agriculture, Food and Wine)
 — Advanced gas chromatography mass spectrometry instrumentation for the analysis of highly complex systems.
- \$300,000 awarded to a team led by Associate Professor Heike Ebendorff Heidepriem (Institute for Photonics & Advanced Sensing, School of Chemistry and Physics) — Ultraviolet, visible and infrared spectroscopic ellipsometers for advanced materials and device characterisation.
- \$150,000 awarded to a team led by Dr Ann McNeill (Waite Research Institute, School of Agriculture, Food and Wine) — Non-invasive rapid plant phenotyping for root architecture in soil and acquisition of micro-nutrients.

Premier's Science and Research Fund

Professor Rob Norman (Robinson Institute) and Professor Tanya Monro (Institute for Photonics & Advanced Sensing) were awarded in December 2010 a \$700,000 Premier's Science and Research Fund Grant from the South Australian Government to develop Sensing Technologies for Advanced Reproductive Research. The grant will allow the establishment of a collaborative transdisciplinary laboratory for the development of photonics-based reproductive health technologies. This will also lead to an improved understanding of the physiology and pathology of pregnancy, enable the optimisation of outcomes for women and animal breeders and result in improved health policies and agricultural practices.

The University's Centre for Energy Technology and Petratherm (an Adelaidebased explorer and developer of geothermal energy) were awarded a grant under the Premier's Science and Research Fund to reduce the cost of solar thermal technology by up to 40% through the integration of solar thermal, geothermal and combustion technologies. The project aims to design and develop an integrated solar, geothermal and combustion system to achieve high-efficiency base load power generation.

Research Commercialisation

Contract research and consulting business reached new heights in 2010, generating in excess of \$31 million revenue across more than 500 commercial agreements. Technologies have returned over \$3 million in royalties, driven primarily by the University's wheat and barley varieties. ARI, the University's commercial arm, awarded \$430,000 to promising early-stage technologies through the Commercial Accelerator Scheme, bringing the total investment for that program to just under \$2 million over the last three years, and were also able to secure further investment from the Trans Tasman Commercialisation Fund into the spin-out company, Snap Network Surveillance (\$700,000 so far).

The ongoing commitment of ARI to provide commercial training and development has resulted in nearly 700 researchers attending ARI commercial awareness sessions.

Highlights

The University of Adelaide is leading a collaboration between Australia and Indonesia on the production of a universal flu vaccine. A new technology, invented by Dr Alsharifi (the University's School of Molecular and Biomedical Science) and Professor Arno Müllbacher (Australian National University), has helped to generate a new influenza vaccine — GammaFlu™ — that provides cross-protection against current influenza viruses as well as any other unknown strains that may arise in the future. The scientists established the company Gamma Vaccines Pty Ltd and began commercialising its gamma-irradiated influenza vaccine in 2010 to capture part of the global market for flu vaccines, which is estimated at US\$4 billion annually.

Researchers from the School of Medical Sciences have discovered that a class of molecules attenuate disease progression in an animal model of Parkinson's disease. This discovery has now been covered by a current Patent Cooperation Treaty (PCT) application.



Collaborations

Milky Way's magnetic attraction

An international research project funded by the ARC involving the University of Adelaide has revealed that the magnetic field in the centre of the Milky Way is at least 10 times stronger than the rest of the Galaxy. Researchers from the Max Planck Institute for Nuclear Physics in Germany, the University of Adelaide, Monash University and from the United States published these findings in *Nature*. The findings will affect diverse fields, from star formation theory to cosmology.

Hypersonic aircraft for satellitelaunching space vehicles

A University of Adelaide team is part of an international consortium granted \$5 million under the Commonwealth Government's new Australian Space Research Program. The partners will investigate and develop hypersonic scramjet propulsion technology for a future scramjet-based "access-to-space" industry, rather than just conventional rockets. The other partners in the program are the University of Queensland, the University of New South Wales, the University of Southern Queensland, the University of Minnesota in the US and international aerospace organisations DLR in Germany, the Japanese Aerospace Exploration Agency and CIRA of Italy, as well as the Defence Science and Technology Organisation, the Australian Youth Aerospace Forum, BAE Systems Australia, Boeing Research and Technology Australia, AIMTEK Pty Ltd and Teakle Composites Pty Ltd.

Newborn blood test to detect allergy risk

Professor Tony Ferrante, an immunologist from SA Pathology and the Children's Research Centre at the University of Adelaide, has devised a simple blood test to predict whether newborn babies are at high risk of developing allergies as they grow older. In collaboration with the University of Western Australia and the Princess Margaret Hospital for Children, Professor Ferrante's research team has refined the new marker for allergy risk, originally discovered in 2007, but now modified to a simple and manageable blood test at birth.

These studies and clinical trials were funded by the Channel 7 Children's Research Foundation and the NHMRC.



Research for better surveillance and submarine stealth

Two University of Adelaide research projects won funding under the Department of Defence's Capability and Technology Demonstrator (CTD) Program to develop quieter diesel engine submarines and an image-content search capability for improved surveillance and reconnaissance. The University's School of Mechanical Engineering will receive \$1,120,000 to develop an adaptive exhaust silencer to reduce the noise from the diesel engines used on submarines. The University's Australian Centre for Visual Technologies will receive \$684,000 to develop technologies that will help Defence search vast available databases of video and still imagery.

Collaboration to deliver healthier grains

Collaboration between CSIRO's Food Futures Flagship, the University of Adelaide, the University of Melbourne and the University of Queensland will bring together Australia's foremost plant and human nutrition researchers with the aim of boosting the healthy fibre content of common grains. The new High Fibre Grains Cluster will focus on wheat, barley and rice. One of the primary research goals is to boost the amount of beneficial compounds, such as beta glucans and arabinoxylans, which are key contributors to the soluble component of dietary fibre in the various grains. The Cluster will invest more than \$7 million over three years, with the university partners receiving more than \$3.4 million from the Flagship Collaboration Fund.

Research Training and Scholarships

The University of Adelaide has an outstanding history of high quality research training. In 2010, over 300 research-intensive postgraduate degrees were awarded, including 270 PhDs.

The future for those undertaking higher degrees by research at the University of Adelaide continues to be bright. In total, 542 new students enrolled in 2010, comprising 380 domestic students and 162 international students.

In 2010, 136 University of Adelaide students were recipients of Australian Postgraduate Awards. The University also administered 150 Divisional scholarships, and 45 scholarships for international research students that covered tuition fees and paid a living allowance. An additional 15 scholarships were presented to international students to cover their tuition fees only. The successful recipients came from a diverse range of countries, including Venezuela, Ethiopia, Romania, Nigeria and Ecuador.

The Adelaide Graduate Centre is constantly evolving to meet the changing needs of students and their supervisors, playing a vital role in ensuring that candidates are well administered and students are supported at every stage of their research training. A highlight in 2010 was the seamless transfer of international research admissions from the International Office to the Adelaide Graduate Centre. This has now brought all facets of the administration of higher degree by research students into one central location.

Three Minute Thesis

The Graduate Centre offered the inaugural Three Minute Thesis Competition in 2010, an exercise in developing academic and research communication skills. The event was open to higher degree by research students who had just three minutes and one static slide to explain their thesis topic and its significance to an intelligent but non-specialist audience. Dr Jacqui Miller won the competition with her research thesis presentation, 'Protein for Premmies'.

China Scholarships

The China Scholarship Council (CSC) and the University of Adelaide jointly offer prestigious postgraduate research scholarships to students from the People's Republic of China to undertake a postgraduate research degree at the University. In September 2010, 24 CSC students arrived in Adelaide, and began their studies in a diverse scope of projects, including:

- Parasite wasps that attack light-brown apple moth: why do some species occur in vineyards and not others?
- How Does Glucose Protect the Retina from Ischaemic Injury?
- Investigating Function and Evolution of Genes and Proteins Involved in Metabolic Control in Mammals
- Experimental and Molecular Modelling Study of Nanoporous Carbons
- Entrepreneurship, High-Tech Industrial Clusters, and Regional Economic Growth
- East Asia Integration from the Perspective of Constructivism
- Climate Change Impacts on Ecosystem Stability.

Awards and Achievements

Scopus

The inaugural Scopus Young Researcher of the Year Awards were presented by Universities Australia and Elsevier with University of Adelaide researchers winning two of the five categories.

Professor Corey Bradshaw won the Life Sciences and Biological Sciences category for his significant conservation achievements, including successful changes to fishing practice to help conserve endangered grey nurse sharks following his findings on threats to the species; and work detailing the link between loss of natural forest cover and increased flood risk which has been used in key international reports aimed at helping governments shape conservation policy.

Professor Prash Sanders won the Medicine and Medical Sciences category for his work establishing South Australia's first dedicated clinical and experimental electrophysiology laboratories and group, attracting clinicians and researchers from around the world, and his contribution to the facility as a leading training centre for electrophysiologists. The University was also represented by other finalists in the Physical Sciences category (Professor Tanya Monro) and the Life Sciences category (Professor Frank Grützner).

SA Science Excellence Awards

Two members of the Environment Institute were finalists in the South Australian Science Excellence Awards. Professor Barry Brook was awarded "Community Science Educator of the Year" and Professor Andy Lowe was a finalist for "Excellence in Research Collaboration" for linking the science of climate change and the loss of species to policy makers.

Associate Professor Simon Pyke (School of Chemistry & Physics) was a finalist in the Tertiary Science Educator category.

Channel 9 Young Achiever Award

The Science and Technology Award was presented to Dr Tara Pukala in March 2010. Dr Pukala is the first woman to be appointed to a senior lecturing role in the Chemistry Discipline at the University. She leads a research group focused on developing new approaches towards understanding the structure and interaction of protein complexes.

Tall Poppies

Associate Professor Leonie Heilbronn, Dr Gabrielle Todd and Dr Mark Hutchinson from the Faculty of Health Sciences were among eight young South Australians recognised for their outstanding contributions to scientific research. Associate Professor Heilbronn is looking at the link between obesity and metabolic diseases such as Type 2 diabetes and heart disease. Neuroscientist Dr Gabrielle Todd is investigating how the brain controls movement and the pathological changes that lead to disorders such as Parkinson's disease. Dr Todd is looking at novel approaches to reduce movement dysfunction, lessening the burden of this disease on patients and their carers. Since 2000, more than 30 University of Adelaide researchers have been named Young Tall Poppies of Science.

Young Investigator Award

Dr Kylie Dunning from the Faculty of Health Sciences was named the 2010 Young Investigator Award winner for her work to help preserve the fertility of female cancer survivors. Dr Dunning examined the latest technology for female fertility preservation, which involves growing ovarian tissue in a three-dimensional gel scaffold, enabling eggs to grow and develop as normally as possible outside the body.

The Young Investigator Award rewards scientific excellence in South Australia's young researchers and their ability to communicate and 'sell' that science. As winner, Dr Dunning received The Hon. Carolyn Pickles Award of \$10,000. Prizes of \$3000 each were awarded to the two runners up, Chantelle McIntyre and Zlatko Kopecki, who are both PhD candidates from the School of Paediatrics and Reproductive Health at the University of Adelaide.

South Australia's Australian of the Year

University of Adelaide physicist Professor Tanya Monro was named South Australia's Australian of the Year 2011. The awards celebrate the achievement and contribution of eminent Australians who are considered "role models for us all" in helping to create a better Australia. Professor Monro was recognised for her work in the field of photonics technology that allows the generation and control of light using glass optical fibres. This enables the creation of new tools for scientific research and solutions for problems in areas such as information processing, surgery, health monitoring, military technology, agriculture and environmental monitoring. She was one of four nominees for the SA Australian of the Year Award 2011, which also included Professor Peter-John (PJ) Wormald from the University's Discipline of Surgery.

Telstra Business Women's Award

In November 2010, Professor Tanya Monro won a national Telstra Business Women's Award, in the White Pages Community and Government Award, which recognises the outstanding achievements of women who work in government departments, statutory bodies or not-for-profit organisations. The awards recognise, reward and celebrate the achievements of inspirational women.

Engagement and Outreach

Research Tuesdays

Research Tuesdays profile the University of Adelaide as the premier research university in South Australia. The monthly presentations share some of our University researchers' most fascinating discoveries with member of Government, industry and local communities, and address key state, national and global priorities while expanding general knowledge of specific research topics.

In 2010, 11 Research Tuesday presentations were held. There were attended by over 2300 people, with audience numbers increasing by 15% each month. Satisfaction rates over 90% give great confidence that the series will continue to be a valued experience available to everyone interested in scientific and medical research in South Australia.

Centre for Automotive Safety Research seminar series

In 2011 the Centre for Automotive Safety Research hosted a series of free public seminars, aiming to address major topics in the fight to reduce road trauma and highlight the latest research. Topics included:

- Vehicle Regulations for Pedestrian Safety
- Young Drivers
- Motorcycling Issues in Road Safety
- Speeds of Vehicles in South Australia
- Electronic Stability Control (ESC) and High Speed Rural Road Crashes
- Vehicle Crashworthiness
- Impact Testing how it's used.



Water Wednesday

Water Wednesday is a series of public forums held to discuss water-related issues and is presented by the Water Research Centre. Each forum consists of three presentations from distinguished speakers followed by open discussion and audience participation. All presentation podcasts are available to download, and in 2010 covered topics including:

- Is storm water flowing to sea really wasted?
- Is there really spare water in the South East?


Research Centres	ENVIRONMENT	SOCIAL INNOVATION	MINERAL & ENERGY RESOURCES	AGRICULTURE	SENSING & COMPUTATION	FUNDAMENTAL DISCIPLINES	HEALTH & BIOMEDICAL SCIENCES
						_	
Adelaide Centre for Economics (ACE)							
Adelaide Centre for Neuroscience Research							
Adelaide Radar Research Centre							
ARC Centre for Excellence in Plant Cell Wall Biology							
Australian Centre for Ancient DNA (ACAD)							
Australian Centre for Evolutionary Biology & Biodiversity (ACEBB)							
Australian Centre for Plant Functional Genomics (ACPFG)							
Australian Centre for Visual Technologies (ACVT)							
Australian Institute for Social Research (AISR)							
Australian Research Centre for Health of Women & Babies (ARCH)							
Australian Research Centre for Population & Oral Health (ARCPOH)							
Centre for Biomedical Engineering (CBE)							
Centre for Clinical Research Excellence (CCRE) in Nutritional Physiology							
Centre for Defence Communications and Information Networking (CDCIN)							
Centre for Digestive Health & Nutrition							
Centre for Energy Technology (CET)							
Centre for Geothermal Energy							
Centre for High Performance Integrated Technologies & Systems (CHiPTec)							
Centre for International Economic Studies (CIES) Centre for Labour Research							
Centre for Labour Research Centre for Molecular Genetics of Development & Disease (CMGD)							
Centre for Molecular Generics of Development & Disease (CMGD) Centre for Orofacial Research & Learning (CORAL)							
Centre for Quantification & Management of Risk							
Centre for Soil Plant Interactions							
Centre for Stem Cell Research (CSCR)							
Centre for Subatomic Structure of Matter (CSSM)							
Centre for Tectonics & Resource Exploration (TRaX)							
Centre of Expertise in Photonics (CoEP)							
Children's Research Centre							
Data Management & Analysis Centre (DMAC)							
Defence Systems Innovation Centre (DSIC)							
Ethics Centre of South Australia							
Fay Gale Centre for Research on Gender							
Fertiliser Technology Research Centre							
FoodPlus Research Centre							
Freemason's Foundation Centre for Men's Health							
Institute for Geometry & its Applications (IGA)							
International Centre for Financial Studies (ICFS)							
Research Centre for Reproductive Health (RCRH)							
Research Centre for the Early Origins of Health & Disease (EOHaD)							
Simpson Centre for Military & Post-deployment Health							
South Australian Centre for Economic Studies (SACES)							
Water Research Centre							
Wine Economics Research Centre							

Internationalisation

Highlights of the University's international activities in 2010 were:

- Continued growth (11.7%) in international student numbers, well above the national average
- The University won the 2010 SA Business Export Award (Education and Training Category)
- Our international students reported a high overall satisfaction level (88%) with living and studying in Adelaide
- The University held its biggest ever graduation ceremony at an offshore location
- The University was very successful in attracting scholarships for its students from local and overseas sources
- The University was chosen to host the 2012 International Forum of the Academic Consortium 21.

International Student Enrolments

The University achieved substantial growth in its international student enrolments, notwithstanding the increased international competition and the troubles facing Australian international education due to immigration changes, the strengthening of the Australian dollar, publicity surrounding attacks on Indian students in Melbourne, and the unwelcoming image stemming from the migration debate during the federal election campaign. The overall international student load increased by 11.8%, from 4981 Equivalent Full-Time Student Loads (EFTSLs) in 2009 to 5567 EFTSLs at the end of 2010. International students comprised 29.5% of the University's total student load, and 27.3% of the student load on the University's local campuses. Particularly pleasing was the strong growth (27%) in new higher degree by research (HDR) students. Many of these HDR students were on scholarships funded through joint sponsorship agreements between the University and governments of source countries in the Asia-Pacific region.

The total number of international students (persons rather than student load) reached 7045 in 2010, an 11.7% increase on the previous year; 645 of these students were enrolled offshore in Singapore. The top source countries were (in order) China, Malaysia, Singapore, Hong Kong, Vietnam, India, Indonesia and USA, with students also drawn from 86 other countries. <image>

The University won the 2010 SA Business Export Award (Education and Training Category). International students make a substantial contribution not only to the revenue of the University, but also to the South Australian economy as a whole. International education is the No.1 service export industry in South Australia.

China continued to be by far the largest source country for the University's international students. There was also pleasing growth from other markets, including Indonesia, Saudi Arabia, Vietnam, Malaysia, Singapore and Hong Kong.

In addition to enrolment of international students, the University hosted a number of groups of international visitors for programs of several weeks' duration. Nine students from the Saudi Geological Survey were at the University for six months undertaking English language and Geology courses as part of a professional development program. Fifteen trade officials from 14 Pacific Island Forum member countries undertook a training program in how to become competent trade negotiators, conducted by our Institute for International Trade. Funded by AusAID, the trade training program was strongly endorsed by Pacific Island officials, so much so that AusAID has decided to fund a new training program consisting of ten modules to begin in



April 2011. The School of Education hosted 10 Cambodian visitors from the Ministry of Education for an Australian Leadership Awards Fellowship program on educational assessment. The Institute for International Trade conducted a training program for 26 Chinese mayors, led by the Vice-Minister of Housing and Urban-Rural Development in China, Madam Du Juan. An important outcome is that Madam Du is to recommend this training program be endorsed by the Central Government, which if successful, would be a major feat for the University.

The University's Professional and Continuing Education Centre (PCE) saw a growing demand for its range of English language programs, cultural programs and English teacher training services) for international students and visiting groups. It conducted short-term study tour programs for 24 groups made up of over 450 students from Japan. China. Vietnam. the United States and Korea; it had over 750 students undertaking its Pre-enrolment English Program, which provides a direct entry pathway to undergraduate and postgraduate programs at the University of Adelaide, and over 200 students enrolled in the General English for Academic Purposes program. PCE is a TOEFL Testing Centre and runs regular tests for international students from a wide range of institutions in Adelaide.

International Admission and Recruitment

The University made several changes affecting its admission and recruitment of international students. English-language entry requirements for research degree students were increased (with effect from 2011), as were those for a number of postgraduate coursework degrees. The University recognised the Pearson Test of Academic English as an alternative measure of English language proficiency. More resources were devoted to use of the internet in attracting potential students, including increased use of remote technologies for student recruitment activities such as Skype interviews and webinars to enhance and support incountry travel activities, and using web analytic tools to track the number of visits to our University website from overseas, the specific pages that are visited, and any inquiries or other actions that may follow. The Asia-Pacific countries with the most visits to the University's websites are China, India, Malaysia, and Indonesia. The University is now using Facebook and Twitter to reach more international students, and is also beginning to promote what we have to offer on other websites such as http://studyinternational. tv. The International Office introduced a comprehensive recruitment strategy to reach international students who are already in Australia, and improved its administrative processes to achieve a 15% increase in the conversion rate

of applications to acceptances. It also developed an online application system and international applications admissions service to be delivered by SATAC, commencing during 2011.

The University's LLM degree was added to the Thai Government's list of recognised qualifications for aspiring magistrates and judges. Council held a workshop in September on international marketing and student recruitment.

The University re-registered on the CRICOS Register and published a list of its education agents, in response to amendments to the federal Education Services for Overseas Students Act (ESOS).

International Student Experience

This year's International Student Barometer survey of our international students' experience found a high overall satisfaction level (88%), with particularly high scores being evident for international HDR students (92%). Students from India and Vietnam showed the highest overall satisfaction (94%), followed by Malaysia (92%), Indonesia (89%), China (88%), and Singapore (86%). Areas identified as needing attention were: the friendships they have made with the local community (their accommodation impacts on this measure); and the provision of relevant work experience.

The University made further efforts to promote the social integration of international students. The International Student Centre organised a Cultural Networking Program, complementing the Language Exchange Program introduced in the previous year. The focus of the new program is on social and cultural interaction rather than language learning. Students met their exchange partner(s) at least twice a month; in addition, there was a range of social events organised so that all participants in the program could mix. The University held the annual World Week in September to celebrate and promote the diversity and rich cultural backgrounds of our University community. It included food, music, dance, performance and other cultural practices, plus workshops ranging from henna design and Aboriginal artwork, to sushi making.

The University met regularly with South Australia Police (SAPOL) concerning the development of a safety plan for international students. The University added emergency contact numbers (campus security and police) to the information printed on student ID cards.

An International Careers Evening was held on campus in October, following the very successful evening for students from Hong Kong run by Development and Alumni in September. The International Careers Evening is for domestic students seeking overseas experience, and for international students seeking work experience in Australia. There were speakers from the Department of Immigration and Citizenship, a graduate auditor, Australians Abroad, and Projects Abroad. The main speakers' program and the networking opportunity that followed saw 150 students



participating. International students showed strong support for a variety of programs organised by the Careers Service. These included National Career Development Week activities, which attracted over 500 students, and site visits to Codan Engineering, the Adelaide Flight Training Centre and Clemenger BBDO, to consider possible pathways to employment.

Two University of Adelaide students won the first and third prizes in the annual Merdeka Awards for Malaysian students in their final year at a South Australian university. These awards are for students with outstanding academic achievements, who have demonstrated contributions to furthering relationships between South Australia and Malaysia. The University was a corporate sponsor of Indofest and the Malaysian Carnival, organised by the student communities from these countries. The Malaysian Carnival was awarded 'Best Community Event 2010' by the Adelaide City Council. A University of Adelaide student (Megan Payne) won a \$15,000 grant under the Prime Minister's Youth Forum Challenge to create a community project to support international students. This was one of only six grants awarded nationally.

Study Abroad and Student Exchanges

In 2010, 247 University of Adelaide undergraduate students studied overseas for one or two semesters as part of their degree, on a student exchange. This was an increase of 10% on the previous year. Students enrolled at 70 partner tertiary institutions. in 22 countries: the most popular destinations were the United States, the UK and Canada, Australian Government OS-HELP loans were taken up by 126 students, while 26 received externally funded student exchange scholarships from the Cheung Kong, Endeavour Exchange and University Mobility in the Asia-Pacific (UMAP) schemes. These scholarships were for study in the USA, Chile, China, Hong Kong, Thailand, Malaysia, Indonesia, Japan and Vietnam. Each scholarship awardee received \$5,000 to subsidise their costs. In addition, the University received Endeavour Exchange and Cheung Kong funding for 26 students from six different countries to study here.

The University introduced a revamped, online survey of returning exchange students to evaluate the quality of their experiences overseas. The free form





responses by returned students about what they gained from their student exchange that they would not have achieved by studying in Adelaide, and about what they thought overall of their student exchange experience, were very positive, and showed the educational value of the University supporting student exchanges. In addition, 92% rated the overall experience as excellent, and 89% would recommend an exchange at their host university to other University of Adelaide students.

Also for the first time, there was a pilot survey of other forms of overseas study experiences (e.g. short-term programs, internships, research trips), which identified about 120 students who had undertaken such overseas trips in 2009.

The annual Student Exchange Fair was held in April to encourage Adelaide students to consider overseas study and to give them an opportunity to discuss this possibility with representatives from our exchange partner institutions. Due to the lcelandic volcano's eruption, a number of European partners were unable to attend, however, the Fair was the busiest so far. An innovation this year was the addition of a Language Fair for prospective exchange language students, held in March. The University did very well with Endeavour Student Exchange scholarships, receiving a total of 112 scholarships — an increase of 60% on the previous year's allocation.

Three of our students received the prestigious Prime Minister's Australia Asia Endeavour Awards. The University received three of the four awards to students at South Australian universities, and 7.5% of the national awards. Our awardees are going to China and Japan.

During the year, the University signed new student exchange agreements with quality universities in Canada, Germany, Indonesia, Korea, the UK and the USA.

International Research Collaborations

The University agreed to extend the 'cotutelle' joint PhD scheme currently operating with French universities, to partner institutions outside of France. There has been interest in similar schemes with a number of other countries, especially in Asia. Under the cotutelle scheme, the PhD student has a supervisor at each university, spends a minimum of one year full-time at each institution, and receives both a PhD from the University of Adelaide and a doctorate from the overseas university, with both testamurs clearly indicating a jointly awarded degree.

The University participated in a proposal by a consortium of the 10 leading wine research and teaching universities around the world, headed by the University of Bordeaux in France, to establish a joint doctoral program in oenology and viticulture. The President of the Chinese Academy of Sciences, Professor Lu Yongxiang, visited the University's Waite campus in November to strengthen the links between the University and the Academy. A key issue of mutual concern to China and Australia is research into solutions for global food security.

Singapore Venture

Following the recommendation of the feasibility study conducted in 2009, the University expanded its programs at the Ngee Ann-Adelaide Education Centre (NAAEC) and launched the Bachelor of Innovation and Entrepreneurship and Bachelor of Nursing (Post Registration) in 2010. The NAAEC reported an 18% increase in enrolments: the total student population now stands at 653.

For 2011, the University will continue to increase its program offerings at the NAAEC and penetrate the full-time undergraduate market. The University will launch its first research degree, Master of Clinical Science, and the Bachelor of Commerce in mid-2011. The Bachelor of Commerce will initially be offered on an advance standing basis for polytechnic diplomates, and the full 3-year program will be introduced in 2013 with the capability to articulate both domestic and international students. The University is in the process of lodging an application for EduTrust registration, a certification that will allow the NAAEC to enrol international students.

Internationalisation of the Curriculum

Academic staff were provided with professional development on internationalisation of the curriculum as part of three centrally delivered Cultural Diversity modules as well as more specifically tailored modules within Faculties, while a further module was offered for staff dealing with higher degree by research students. The vision of valuing diversity as a basis for effective learning and education for global citizenship is also promoted in the staff development courses and workshops provided for academics and sessional teaching staff.

International Alumni

International alumni have strong interest in the University, reflected in their high take-up rate of membership of the onLION alumni website, higher than among our domestic alumni. The take-up rate among our alumni with a valid address was 36% in Iran, 34% in Japan, 31% in Singapore, 30% in Hong Kong, Indonesia and Thailand, 29% in Germany, 28% in China, 25% in the USA and the UK, 19% in Malaysia.

Several of our international alumni had notable successes during 2010. One of our LLM graduates, Mr Phuntsho Wangdi, was appointed Attorney-General of Bhutan. Professor Deep Saini, who obtained his PhD in plant physiology at the Waite Campus, was appointed Vice-President at the University of Toronto and Principal of its Mississauga Campus. The Singapore Distinguished Australian Alumnus Award for 2010 was presented to Dr Tony Tan Keng Yam, former Deputy Prime Minister, who received his PhD in Applied Mathematics from the University. Mr Peng Gaojian was the 2010 Australia China Alumni Awards winner of the AusAID Scholarships Award. He is Deputy Director-General, Department of Politics, Human Resources and Social Security, Legislative Affairs Office of the State Council in Beijing. Mr Peter Ong was one of only eight people to be awarded the Meritorious Service Medal on Singapore's National Day. He is Head of the Civil Service and Permanent Secretary (Special Duties) within the Prime Minister's Office, Permanent Secretary for National Security and Intelligence Coordination, and Permanent Secretary for Finance.

The University held its biggest-ever graduation ceremony in Singapore, with 193 students from 13 countries —Singapore, Malaysia, Hong Kong, Indonesia, Myanmar, India, Nepal, China, Mauritius, Thailand, the Philippines, Vietnam and Australia.

Eliza Chui, the Deputy Director of this University's International Office, was appointed as the new Education Commissioner for Austrade in the northeast Asian region.





International Partnerships

During the year, the University signed 91 international agreements with a total of 73 overseas institutions. Thirty-nine of these were renewals of existing agreements. The increased number of agreements over the previous year reflected the University's diversification strategy into Latin America, Indonesia and Korea, the need to increase the number of student exchange places in the most popular destinations (Canada, UK and USA), the growth in sponsors of international students, and the larger number of agreements that were due for renewal. At the same time, the University terminated or did not renew 53 agreements that were inactive or not strategically important.

The countries most strongly represented among the new agreements were China (agreements with 12 institutions), the UK (9), the USA (8), Korea (5) and Indonesia (5). This is the first time the University has entered into agreements with institutions in Brazil and Libya. The University participated in the activities of the Academic Consortium 21 (AC21), which comprises leading research-intensive universities around the world. The University sent a high-level delegation to the 2010 International Forum in Shanghai, and commenced preparations for the 2012 International Forum, which the University will host in June 2012. The University was elected to the AC21 Steering Committee.

International visitors to the University included the Vice-Chancellor of the University of Canterbury (New Zealand), the presidents of Yeungnam University (Korea), Korea Institute of Science and Technology Information and Henan Agricultural University (China), the President of the Chinese Academy of Sciences, Morocco's Minister of Agriculture and Fisheries, the Minister of Education and Culture from Cyprus, the Governor of Shandong Province in China, and the Minister for Social Development and Urbanisation from the Government of Sarawak (Malaysia).



Community Engagement

Art & Heritage Collections

The Collections audit begun in 2009 was completed in June 2010. Thirtynine Collections of the University of Adelaide were identified, an increase of three collections over the initial audit and including a new one, the School of Chemistry Collection. Art & Heritage Collections directly manages 23 collections. An upgrade of the collections database now enables Art & Heritage Collections to evaluate the significance of each collection and to keep more detailed notes of artefacts. Work on the collections is assisted by 22 Art & Heritage Collections volunteers.

Art & Heritage Collections presented a program of cultural events in 2010, hosting and supporting 40 presentations featuring 111 speakers and artists. The aggregated audience was around 6000 people, an average of 150 people per event. This is a significant increase on 2009 and reflects the strategy of working collaboratively across the University as well as with outside industry partners. All projects were well received, but three are due special mention:

Drowning Dr Duncan & Gay Law Reform in South Australia: a collaboration with the Adelaide Law School and artist Suzanne Bruce, presented during Law Week.

Re-enactment of the historic 22-hour ride by William Horn from Moonta to Adelaide, organised by the Copper Coast communities: 25 riders riding from Moonta to the University, where they were officially welcomed by the Lord Mayor of Adelaide and the representative of the Vice-Chancellor.

Art & Heritage Collections End of Year Picnic and Tour of Roseworthy Campus: 150 people attended this opportunity to celebrate a new era for Roseworthy.

Development and Alumni

In 2010, Development and Alumni continued to increase the scope and level of engagement and communication with local, interstate and international alumni. In 2011, work on growing the 'mutual value' strategy will enable even stronger relationships to be built with alumni and the broader University community.

Alumni Relations

Several key objectives of the Alumni Relations Strategic Plan were further implemented in 2010, including the expansion of the Student and Industry Program, the Alumni Privileges Package, and the International Alumni Relations Plan. All five faculties now have a Development and Alumni Officer providing support to further Faculty and School alumni and fundraising programs. The alumni online program, Adelaide onLION, continued to grow steadily and linking with other social media has become a significant tool in reconnecting with alumni. The Alumni Advisory Committee, chaired by the Vice-Chancellor, met four times during 2010 and provided feedback and advice on specific areas pertinent to the future development of the alumni program, including International Alumni Relations and Social Media.

Alumni Awards

The Honours Alumni University Medal for 2010 was presented to Ms Claire Marie Weekley (First Class Bachelor of Science Honours degree in the Discipline of Chemistry) and the Postgraduate Alumni University Medal was presented to Dr Clancy William James (PhD Physics and Astrophysics).

The recipients of the 2010 Distinguished Alumni Award were:

- William Middleton Griggs MBA 2009, MBBS 1981 in recognition of his significant achievement as an authority on the medical treatment of trauma victims, and for his humanitarian response in regions struck by disaster.
- Chris Chow Pang Chong BE (Hons) 1961 in recognition of his significant contribution to the engineering profession in Malaysia and his ongoing support and commitment to the University's alumni relations program over many years.



Alumni Communications

With over 17,500 members, the University of Adelaide's online community — Adelaide onLION — continues to reconnect alumni from around the globe with their alma mater and each other. With access to mentors, jobs and the ability to add professional profiles, Adelaide onLION is now an integral part of the University's alumni program.

The University's bi-annual alumni magazine, *Lumen*, highlights the latest research and educational strengths of the University and provides a forum for sharing the achievements of alumni with over 55,000 print subscribers, 9500 email subscribers and 67,500 online readers around the world per edition. And the University's alumni e-newsletter, *The Roar*, continues to expand its reach with over 16,000 subscribers receiving alumni and University news directly to their inbox each month.

Over 17,000 of the University's alumni are making use of Perpetual Email – a free email forwarding service that allows alumni to keep a single University-based email address, no matter where life takes them.

Alumni Events

The Student and Industry Program continued to be a great success with events held in Psychology, Accounting, Marketing, Education, Mathematical Sciences, and Biology. The program was expanded to include an event that focused on a region rather than on a discipline, with students from Hong Kong invited to network with graduates and business representatives from the Hong Kong–Australia Business Association (SA Branch).

The Golden Jubilee for graduates of 1960 was held in October. The reunion included a commemoration ceremony in Bonython Hall and a reunion luncheon. Over 100 graduates, from as far away as the United States, the United Kingdom and Singapore, as well as across Australia, made the special effort to attend. Bob Cowan, who graduated with a Bachelor of Science, gave the Golden Jubilee address.

Over 100 alumni events were held both within Australia and overseas during 2010. Overseas events included: a reunion luncheon in Kuala Lumpur at the home of prominent architect and alumnus Hijjas Kasturi; a wine tasting in Hong Kong; reunion dinners in Singapore and Kuching; a prominent speaker seminar in Bangkok; a performance from the Australian String Quartet for our alumni in London: and the inaugural China Alumni Network event held in Beijing. Australian-based events included a lunch for federal and South Australian parliamentary alumni held at the University; a cocktail function for alumni in conjunction with the Mechanical Engineering Students Final Year Project Exhibition; and a cocktail event for Sydney alumni held at the National Maritime Museum to coincide with the University-sponsored travelling exhibition "Quest for the South Magnetic Pole". The Medicine 125th Anniversary provided a great opportunity for alumni to reconnect with the University via a series of events throughout the year. The celebrations culminated in a Gala Dinner with over 500 alumni and friends attending.

Numerous events organised by local and international alumni networks included: the "Blueprint for Success" series offered by the West Malaysia Network; the ever popular Roseworthy Old Collegians Association Annual Dinner; and the Friends of the University of Adelaide Library continued an impressive line-up of speakers in 2010 through their Author and Scholar Events.

Development

Adelaide Benefactors Circle

The Adelaide Benefactors Circle is the University of Adelaide's university-wide donor recognition program. In June, the Vice-Chancellor hosted a successful dinner for major benefactors at the National Wine Centre. Those attending the dinner were from the Custodian (over \$100,000), Founder (\$50,000-\$99,999) and Partner (\$10,000-\$49,999) levels of giving to the University of Adelaide. This Thank You dinner has become an annual event.

End of Year Event

Over 500 guests attended an Arabian Nights-themed annual university-wide Thank You event. The guests were addressed by the Vice-Chancellor and included significant benefactors, volunteers and key suppliers to the University. The Vice-Chancellor's speech focused on the significant contribution made to the University by guests at the event.

Annual Appeals

The two Annual Appeals conducted by the University were again able to provide significant support to their projects, with generous support from Alumni and Friends of the University as well as the general public.

The Barr Smith Library Appeal was boosted by a significant individual contribution and was therefore able to raise over \$150,000, which is a higher than usual amount. The funds raised assist with the purchase of books and electronic resources that help to maintain the library as an outstanding resource for students, staff and Alumni. The Friends of the Library maintained their role as a very strong support group for this appeal.

The Vice-Chancellor's Scholarship Appeal, which supports financially disadvantaged students, including at least one rural student each year, raised nearly \$90,000. With two new recipients in 2010, there are now 10 students receiving an undergraduate scholarship from this appeal. Given that this is a new appeal, this result is outstanding as it provides a real opportunity to recipients who may not have been able to afford to attend our University without scholarship support.



Giving to Adelaide

A Giving Policy aimed at consolidating an accurate and transparent record of giving to the University of Adelaide has been prepared, to ensure our benefactors' support is recognised and acknowledged.

The biennial Heritage Foundation fundraising dinner raised a net \$125,000 with guests enjoying a silver-service buffet in Bonython Hall and a cameo performance by trumpeting icon James Morrison in Elder Hall.

Scholarships

A total of 57 Undergraduate and Postgraduate Scholarships were renewed or awarded for the first time in 2010. This represents a total of over \$730,000 provided by donors to support recipients over the next three years. The scholarships were spread over all faculties with the Solstice Media Scholarship in the Media School becoming the first ever in that school. Also of note were the new Thyne Reid Indigenous Scholarships offering support to the best and brightest Indigenous students.

Nearly 400 attended the annual Scholarship Recognition Ceremony hosted in Bonython Hall by the Vice-Chancellor. The event not only allowed donors to present their scholarship to their recipient, but also to meet the recipients' families and be personally thanked for their scholarship support.

Bequest Program

The Vice-Chancellor hosted the annual Hughes Bequest Society luncheon in 2010 for over 60 staff and guests, to thank those in the community who have remembered the University in their Wills. Presently we have 118 Bequestors, with 13 new Bequests confirmed in 2010.

As part of the program, several Friends and Benefactors Events were held in 2010:

- School of Dentistry
- Institute for Photonics & Advanced Sensing
- School of Agriculture, Food and Wine at the Waite campus
- School of Engineering, Computer and Mathematical Sciences
- Hartley Music Event presented by students from the Elder Conservatorium
- Robinson Institute
- Ageing Series and Financial Planning for the Future Presentations
- Canberra Luncheon for Benefactors
- School of Animal and Veterinary Sciences and tour of Roseworthy Campus
- School of Education
- Victor Harbor Alumni morning tea with a presentation by Professor Mike Young.



Elder Hall

The 2010 Lunchtimes at Elder Hall concert series continued to be one of the most popular events on the North Terrace Campus. Presented by staff and students from the Elder Conservatorium with a host of visiting artists from interstate and overseas, the concerts drew consistently large audiences with a number of sold out performances. More than 15,000 tickets were sold and average attendance was 450 per concert over 30 concerts. Subscriptions continue to increase: more than 220 seats (or 33% of hall capacity) were bought by Gold Card subscribers.

Concerts in 2010 featured many alumni, all making their mark in the music world both in Australia and abroad. These included pianists Kristian Chong, Michael lerace and Antony Hunt. Alumni Peter Handsworth (now lecturer in Clarinet at the Elder Conservatorium) and oboist Sally Dean (based in Portugal) presented exciting recitals. Other alumni featured are now some of Australia's brightest stars. These include singers Greta Bradman, Jessica Dean and Catriona Barr as well as up-and-coming guitarist Aleksandr Tsiboulski. Conductor Luke Dollman, also a graduate, conducted a sold-out performance of Beethoven's 5th Symphony, and the other Elder Conservatorium ensembles delighted audiences throughout the year. There were concerts by visiting artists, ensembles

and chamber music groups. As always, the concerts by the Australian String Quartet, resident at the University, were very popular. All styles of music, from renaissance through to jazz and 21st century, ensured a wonderful mix of performances.

The series also received a generous anonymous donation in 2010. This donation, along with the financial support provided by the Doris West Bequest, enabled the Elder Conservatorium to engage a diverse range of visiting artists throughout the year to ensure the ongoing success of the series.

The Evenings at Elder Hall series continued to showcase the Elder Conservatorium student choirs and ensembles and provides a vital opportunity for the students to perform in public to a wide range of audience. Sponsors included Barossa Valley Estate wines, ETSA Utilities through the Helpmann Academy, and the Greek Orthodox Community of South Australia in its second year of a three-year sponsorship package. Highlights of the year included the Elder Conservatorium Symphony Orchestra with pianist Konstantin Shamray in Rachmaninov's 3rd Piano Concerto and the final concert of the year, "The World of Maria Callas". Both sold-out concerts received critical acclaim.

Office for Community Engagement

The Office for Community Engagement works closely with all spheres of government, industry and local communities to ensure that the University's teaching and research activities have the widest possible impact.

Throughout the year, the Director, Community Engagement, Mr Martyn Evans, met with senior Government and Opposition Members of Parliament in Adelaide and Canberra in order to strengthen the relationship between the University and parliamentary decision makers.

The Office has maintained its efforts to develop and enhance the University's relationships with the State and Federal Governments, their agencies and other key stakeholders through targeted networking activities such as: offering sponsored invitations to those with a particular subject interest to the Committee for Economic Development of Australia (CEDA); high profile speaker lunches; invitations to Research Tuesdays, graduation ceremonies, and special events; and personally escorted tours to communicate University activities and achievements.

Negotiations for the University to partner with US education provider Kaplan to establish a new university in South Australia were a significant focus of the Office's government relations activity, as were issues relating to the construction of the new photonics building at the North Terrace Campus, Adelaide City Council long-Oterm leases for the University Boat Shed and Playing Fields, the sale of University rural properties, and submissions for ARC Centres of Excellence.

The Office continued its work to increase the University's presence in Adelaide's northern suburbs through regular attendance of City of Playford Partnership Networking Breakfasts, interaction with public and private secondary schools and the Northern Advanced Manufacturing Industry Group, Concept2Creation program.

The University, with an established presence in the northern region through Roseworthy Campus, has engaged in a collaborative approach to exploring future community growth. Under the State Government's 30-year plan for Greater Adelaide, it is anticipated that a population increase of up to 110,000 will occur in the region over the next three decades. A Memorandum of Understanding to establish the Roseworthy Alliance signed in July 2010 between the Light Regional Council, local landowners, including the University of Adelaide, and developers —has paved the way for a shared urban planning process that will benefit the Roseworthy community and the State of South Australia. The Alliance also underpins the University's commitment to increasing young people's access and participation in higher education, particularly northern Adelaide.

Coordinated by the Office, the first Northern Enterprise Education Day (NEED) was held at the Roseworthy Campus. Modelled on the successful Western Region Enterprise Day (WRED), it offered students from Adelaide's northern and the State's mid-north regions the chance to interact with young successful business entrepreneurs. Through various activities, students from Year 10 and 11 were educated about the basics of running a business. Officially opened by Mr Nick Champion MP, Federal Member for Wakefield, the day was attended by 75 students from Trinity College, Xavier College, Riverton High School, Craigmore High School, Balaklava High School and Faith Lutheran School. Teachers were also invited to participate in a Teachers' Learning Program delivered by Professor Noel Lindsay, Director of the University's Entrepreneurship, Commercialisation and Innovation Centre (ECIC).

Also coordinated by the Office, the 14th WRED was held in September at the North Terrace Campus. The theme for WRED 2010 was social enterprises focusing on the not-for-profit/charity organisations. WRED was started in 1997 as a way for younger students to learn about business enterprise and entrepreneurship and to strengthen school and community links between the University and the western region of Adelaide. The opening ceremony in Bonython Hall was attended by upper primary and secondary students, teachers,



principals, parents, volunteers, and a number of community leaders, including State Minister for Youth, the Hon. Grace Portolesi MP, who officially opened proceedings. The day was a success, with 127 primary and 65 secondary students attending from 14 schools in the council areas of Port Adelaide Enfield, Charles Sturt and West Torrens. Some 59 volunteers (facilitators, presenters and others) and 17 teachers supported the activities of the day.

At the beginning of the year, the Office assisted the Australian Refugee Association (ARA) set up a Homework Club for secondary school students in the City — at the University's North Terrace Campus. ARA Homework Clubs have been running for a number of years at various locations, with a current total of seven spread throughout the western and northern suburbs of Adelaide. Students receive mentoring from a mix of university students and staff, teachers, retired teachers, members of the general community and mainstream high school students.



The Office was a key driver in having the Oliphant Science Awards held in Bonython Hall this year — a move away from the Freemasons Hall where it had been previously held. This is South Australia's largest student science competition, run by the South Australian Science Teachers Association (SASTA). The University's sponsorship of the event was promoted by SASTA to every science teacher in South Australia.

The Office assisted in organising the inaugural locally-hosted joint South Australian and Federal Parliamentary Alumni Networking Luncheon at the state-ofthe-art Innova21 building. It was held in recognition of the significant contribution that our parliamentary alumni have provided to Australia's political landscape over many years and to encourage them to become more active alumni. Some 35 current and former parliamentarians attended.

Throughout the year, the Director, Community Engagement provided faculty adviser support to the University's SIFE (Students In Free Enterprise) members.

Open Day

Open Day is one of the University's major community events. Each year, it attracts thousands of visitors to the North Terrace Campus, with a wide variety of activities, displays, performances, exhibitions and talks offering an insight into University life. Open Day also offers a window on the many opportunities for study at the University.

In recent years, the number of visitors on Open Day has been consistently high, and 2010 was no exception.





Professional and Continuing Education

Professional and Continuing Education (PCE) plays an important role in linking the University with the local, national and international community. In 2010, over 5690 students studied with PCE, which offers its programs through three business streams: Community Programs, Professional Education and the English Language Centre (ELC).

PCE's Professional Development programs enrolled over 1000 people in public courses throughout 2010, and delivered over 49 tailored training solutions to another 700 participants. Tailored training was developed and delivered for local, national and international corporate clients in both the public and private sector.

In 2010, over 600 students studied in PCE's Year 12 Holiday Revision Program. The program runs during school holidays throughout the year, supporting University recruitment efforts by raising awareness of the University throughout secondary schools. PCE's Community Language Program continued to thrive, attracting 490 learners across a selection of nine languages in over 24 classes. The most popular languages in 2010 were Spanish, Chinese and French.

PCE welcomed 24 International Study Tour groups in 2010. Over 450 students from Japan, China, the United States, Vietnam and Korea, came to the University for between two and sixteen weeks and studied programs developed to meet specific educational needs in subject areas including English, TESOL Methodology, Economics, Medicine and Migration Law.

The Pre-enrolment English Program (PEP) attracted over 750 students during 2010. Successful completion of this program provides a direct entry pathway to undergraduate and postgraduate programs at the University of Adelaide. General English for Academic Purposes (GEAP) attracted over 220 students from 24 different countries.

PCE also engages with the community through its highly successful Homestay Accommodation Program, placing international students with local families for a first-hand experience of everyday Australian family life. Homestay is a wonderful way for students and locals to expand their awareness of other cultures and to develop lifelong friendships. PCE placed over 550 students with Adelaide families throughout 2010.

In 2010, PCE won a tender to deliver the Department of Education, Employment and Workplace Relations (DEEWR) Education 2011 Endeavour Language Teacher Fellowships program. PCE will deliver this program in collaboration with Austraining International. The three-week program offers language and trainee language teachers the opportunity to participate in intensive overseas language and culture study programs. The languages are Arabic, Bahasa Indonesian, Chinese (Mandarin), Japanese, Korean, French, German, Italian and Spanish.





Radio Adelaide

Through its community radio station Radio Adelaide, the University extends its cultural and intellectual resources to the broader community. Radio Adelaide in turn makes a major contribution to the University's commitment to community service.

The station connects listeners with community life and the issues that affect them. It provides an educational and healthy environment for more than 400 volunteers of all ages, who contribute through creating media, technical maintenance and administration and providing advice to management.

Each week, more than 88,000 people listen to Radio Adelaide's innovative and diverse programs via its FM broadcast signal. A high-quality audio stream allows audiences around the world to provide feedback. The station's website now features substantial online content and averages more than 10,000 visitors each month, with 30,000 podcasts downloaded each month.

In 2010, Radio Adelaide took a further step towards its Digital Radio service, with the installation of transmission equipment and a unique Virtual Private Network (VPN) between all 36 metropolitan community radio stations. The service will launch in 2011.

An exciting program initiative of 2010 was *Nganampa Wangka*, *our languages* of *South Australia*, with the Mobile Language team in the Department of Linguistics. The program aims to maintain, reclaim

and revive Aboriginal languages in South Australia and Radio Adelaide distributes it to stations across the state, particularly where language speakers live.

Other programming highlights of 2010 included a national broadcast to over 100 stations from the WOMADelaide festival, a live broadcast from the opening night of the Adelaide Festival, *Sistas Yarnin*, stories of 16 South Australian Aboriginal women, *Writers' Week Rewritten*, a new Chinese youth program *Ni Hao Weekend* and *Live Music Fest*, an ambitious celebration of South Australia's's live music, with over 90 acts playing live to air across one week in September.

Radio Adelaide is a Registered Training Organisation and provides nationally accredited training to all volunteers and a range of external clients. Mentoring programs are in place for culturally and linguistically diverse youth. The station also works with schools and community radio stations in Mt Gambier, Roxby Downs, Port Pirie, Tanunda, Adelaide and Alice Springs to accredit their broadcasters with national qualifications. In 2010, two of these trainees moved on to University enrolment in media or journalism.

Student Radio continues to rebuild several years after surviving the impact of Voluntary Student Unionism. During 2010, directors Casey Briggs and Chrissy Kavanagh provided outstanding leadership, curating a diverse selection of programs.



Volunteer Program

The University of Adelaide Volunteer Program, under the patronage of Mrs Lindsay McWha, provides an integral link between the University and the wider community and adds to the richness of university life by involving a diverse range of people in a variety of activities.

The annual Volunteer Recognition event is held to coincide with South Australia's Volunteer Day and on Friday 11 June 2010 a morning tea was held in Bonython Hall, hosted by Mrs McWha, and attended by volunteers from all campuses of the University. Invited guests included The Governor of South Australia, His Excellency Rear Admiral Kevin Scarce, the Lieutenant Governor of South Australia, Mr Hiew Van Le, and the Shadow Minister for Volunteers, the Hon. Mr Mark Goldsworthy MP. The Keynote Speakers for the event were Ms Tupp Carmody and Ms Mirna Heruc, who spoke of the work being undertaken by the University Archives and the Art & Heritage volunteer groups - in total, 75 people who contributed almost 5850 hours to the University.

At the end of 2010, some 1618 volunteers were registered, contributing approximately 128,494.5 volunteer hours. These statistics do not include over 1400 Clinical Titleholders, who gave varying amounts of their time throughout the year. Using the figure of \$22.08 per hour recommended by Volunteering Australia, the dollar contribution to the University amounted to over \$2,837,158.50.

The following areas are currently involved in the University of Adelaide Volunteer Program:

- Development and Alumni
- Art & Heritage Collections
- University Archives Volunteer Group
- Confucius Institute
- Barr Smith Library Volunteer Group
- Florey Medical Research Foundation
- International Student Centre Peer Support Program
- Radio Adelaide
- University of Adelaide Theatre Guild
- Waite Precinct Volunteer Program
- Don Dunstan Foundation
- CLPD Volunteer Program
- PCE English Language Centre
- Western Region Enterprise Day (WRED)
 Thebarton Campus
- Research Branch Research Ethics and Compliance Unit
- Research Institutes Office of the Deputy Vice-Chancellor (Research)
- Freemasons Foundation Centre for Men's Health
- Student Centre JP Service
- Roseworthy Agricultural Museum
- Roseworthy Railway Group.

Waite Historic Precinct

The Waite Historic Precinct comprises the Waite Arboretum, the Urrbrae House Historic Precinct, which is an accredited museum, and the Waite Conservation Reserve. Both the Waite Arboretum and Urrbrae House are listed on the South Australian (formerly 'State') Heritage Register and National Estate. The Precinct offers a range of facilities and activities for the public, including tours.

Community Engagement staff at the Urrbrae House Historic Precinct are responsible for the delivery of community engagement and educational activities within the Precinct while ensuring that the care and conservation of this unique heritage site are maintained. In 2010, activities at Urrbrae House were managed around University-funded major restoration work on the roof, ceilings, balcony and kitchen of the 1890s building. About \$300,000 worth of work was completed by Built Environs, addressing falling damp and safety issues in the building.

In May–June a new primary school education program was piloted at the Precinct, with 150 Year 6–7 students from Reynella East Primary School attending. The Waite Primary Horizons Pilot Project was a collaborative venture between the Office for Community Engagement and the Prospective Students' Office, with assistance from staff in the School of Agriculture, Food and Wine.

The volunteer-supported Urrbrae House Schools' Program, an interactive educational experience aimed at primary students in Years 4–6, continued in 2010 with 650 children attending the free weekly program. The Program was featured on television on Channel 7's *Postcards*, hosted by Keith Conlon, with the grandeur of Urrbrae House described "as a pure gem in the eastern suburbs". In addition to the work undertaken with primary school children, Urrbrae House also provided specialised history tours for students from local high schools and TAFE.

Urrbrae House sponsors a diverse range of community and cultural activities. Events held at the House in 2010, often in association with the Friends of Urrbrae House and other community groups, included activities during SA History Week, a Bush Dance, a school holidays historic games day, concerts, exhibitions, conferences and meetings. The longstanding Twilight Concert series run by the Friends of Urrbrae House in conjunction with Vivente Music was sold out in 2010.



In addition, Sunday afternoon concerts were held at Urrbrae House featuring talented students from the Elder Conservatorium.

A limited commercial program also runs at Urrbrae House involving the hire of space for private, business, University and Waite Campus collocated organisation functions. The Urrbrae House Historic Precinct is primarily a museum and heritage site, so the University ensures that events are appropriate and sympathetic to the site while giving the public access to this unique space for special occasions. In 2010 more than 6,400 people attended community and private events at the House.

With the installation of drip irrigation in the Waite Arboretum Elm Avenue in December 2009 and good winter and spring rains in 2010, the health of this heritage listed avenue of 68 trees was markedly improved.

Several research projects were established in the Arboretum during the year, including the tagging of 12 trees for observation and receptivity trials as part of a 3-year ARC research project on ornamental eucalypts, and the construction of a prototype Bluebanded Bee wall and nest blocks for research on pollination by native bees of a particular species.

Volunteer guides conducted 26 walks of the Arboretum and Urrbrae House gardens. Other activities included tours of the sculptures during South Australian Living Artists Week, and "Warp on the Wild Side", the successful Fringe Visual Arts Exhibition in Urrbrae in collaboration with Basketry SA and Friends of the Waite Arboretum.

The labyrinth constructed in January from recycled Arboretum timbers has attracted increased visitation to the gardens and Arboretum.

The TREENET 11th National Street Tree Symposium — co-sponsored by the University — was held in September and was attended by over 250 delegates, with the majority working in local government or private consultancies interstate and locally. TREENET is an independent notfor-profit organisation based at the Waite Arboretum and dedicated to improving the urban forest. It is a recognised affiliate of the University. Held over two days at the National Wine Centre and the Waite Arboretum, a series of presentations, practical demonstrations and workshops highlighted the science of tree-sensitive urban design. Some 30 volunteers assisted in making this the most popular arboriculture event in Australia.

A Trees and Habitat Creation Workshop, a collaborative project by TREENET and the Waite Arboretum, was held in the Arboretum in November and attracted 35 participants from six local councils and 10 arboriculture companies.

A grant of \$110,600 was secured from the Native Vegetation Council's Significant Environmental Benefits Grants Scheme to support the ongoing restoration of Grey Box Woodland in the Waite Conservation Reserve. Revegetation of the soil deposit site commenced with the planting of over 10,000 tube stock propagated from seed collected from the Reserve. The work of Reserve staff was assisted by volunteer growers, Urrbrae TAFE students who collected and propagated seeds, and many working bees by Friends of the Waite Conservation Reserve.

Many arboriculture businesses supported the Arboretum with donations of 360 truckloads of mulch. Neutrog Australia Pty Ltd continued its substantial donations of fertilizer for the Urrbrae House Rose Garden. Three more teak bench seats were donated and in the Urrbrae House Garden of Discovery, the Mediterranean Garden Society planted 140 trees, shrubs and understorey plants — all Australian natives.

Volunteers make a significant contribution to the care, development and activities of the Waite Historic Precinct and during the year, 133 volunteers contributed more than 6,400 hours of labour.



Infrastructure, Property and Technology

Technology Transformation

The principal priority for technology in 2010 was to establish and launch the agreed program of Information and Communications Technology (ICT) investments and initiatives within the strategic framework and direction described in the Technology Transformation Strategic Plan 2010-2011. One of the primary deliverables in 2010 was a comprehensive ICT Investment Plan. This has been developed to provide a framework investment and resourcing strategy to support the successful implementation of the Technology Transformation Strategic Plan. Specifically, the ICT Investment Plan forecasts the required investment in ICT over a 3-5 year period through a combination of strategic and operational initiatives that together represent the investment required to support and transform the technology capability of the University. The resulting priorities for investment are mainly targeted on reducing risk to the University's critical foundation services.

An important strategic milestone in 2010 was the University's agreement to adopt Service Oriented Architecture (SOA) as its preferred strategic direction for all University systems. SOA provides a framework that allows the building, deployment and integration of services independently of applications and the computing platforms on which they run. Having a single sound architectural plan for its core systems underpins opportunities to reduce unnecessary duplication of processes, increase the University's flexibility, and improve data availability for compliance and decision making.

The Digital Future vision is to provide capabilities that produce a competitive advantage to key research activities, enhance student and staff experience, support changing models of teaching and learning and streamline supporting business processes. The Technology Transformation Strategic Plan developed to support this vision determined three priority development themes within Technology Services — IT Just Works, Trusted Strategic Partner, and Predictable Governed Delivery of Change. Within the IT Just Works theme, significant improvements were made in the reliability of the University's IT systems, with measurable reductions in the number of system failures and user issues being reported through to the Service Desk. The work continues in this area with a focus on the start of semester, implementing a "Smooth Start" program to analyse issues that typically occur during this busy period and proactively taking steps to prevent them.

The Trusted Strategic Partner focus produced four main initiatives. A pilot program that provided a strategic partnership with the Faculty of Health Sciences successfully delivered a Faculty plan for online learning and research data management. On-site partners were introduced to work closely with the faculties resulting in fruitful relationships being developed and improvements in service and responsiveness. An engagement plan was developed to ensure that Technology Services are in regular contact with stakeholders to understand their needs and to gather feedback on services provided. Finally, a program was developed for introduction in 2011 to ensure all Technology Services staff are provided with opportunities to improve their understanding of the core activities of Research, Teaching and Learning.

The Predictable Governed Delivery of Change theme put in place a framework for initiating, managing and governing technology projects and a portfolio has been developed to maximise visibility, transparency and control of initiatives.





Key Technology Services Projects in 2010

Core Business Systems Upgrades

The upgrade of the Human Resources, Payroll and Student Administration systems was successfully completed in August with a very smooth cutover to the new system and minimal disruption to the University. The new online facility for staff to manage their leave was particularly welcomed. An upgrade to the Finance System was planned and is ready for execution in 2011.

Student Portal

The Student Portal (UNIFIED) was successfully launched at the start of the first semester. The project has delivered a platform that has provided a significant improvement in online user experience. In particular, it has enabled for students:

- Single sign-on to all existing core systems
- Central access to e-mail and calendar, Learning management, Student systems, Library
- Live information feeds such as announcements, important dates and events, campus maps
- A learning resource page that provides a summary of the students' course grades, lecture recordings, library searches, and library loans.

The Portal project team received an international Innovation Award from Oracle for the innovative use of middleware in the system design.

Staff Collaboration

A project is underway for delivery in 2011 of new integrated services for all University staff encompassing email, calendar, instant messaging and presence.

Casual Workforce Management Solution

The University employs over 3800 casuals per year and an average of 1100 casual timesheets are processed manually per fortnight. A proof of concept for a proposed system was completed and plans are in place for a 2011 implementation of an automated solution for management of the casual workforce to streamline processing, reduce manual effort for Schools, Faculties and Human Resources, and improve payment accuracy and timeliness.

Building Life Impact: current works

The University of Adelaide is undertaking a \$400 million investment in state-of-the-art facilities. During 2010, \$73 million was expended on major works with a number of projects reaching completion and now in full operation. This broad, multidisciplinary expenditure will improve the research and teaching facilities for staff and students on campus, strongly supporting the future direction for the University community. Additionally, work has continued on the refurbishment of poorly utilised space to improve both quality and function.



Nexus10

The major upgrade of 10 Pulteney Street, costing \$49 million, has provided the opportunity to colocate Commerce, Business, Economics and Education and develop the Education building as a common teaching hub. This work has been undertaken in stages, allowing the building to remain operational. The works also provided for the temporary relocation of the School of Mathematics prior to the opening of Innova21. The School of Economics took occupation of the 3rd and 4th floors in September.

As the upgrade project has progressed, further opportunities to enhance outcomes have been funded, including the expansion of the First-year Learning Centre on the ground floor following the vacation of Bradford College and the construction of a stair linking the ground floor to the upper basement level. Teaching and student spaces have been increased with the handover in July of the new teaching and student spaces in the upper basement.

Amenity for staff and students will be further increased with the completion of facilities and spaces on the Plaza. After a number of design iterations of the western Plaza, the design is now with Adelaide City Council for planning approval.



Plant Accelerator

The Plant Accelerator, headquarters of the Australian Plant Phenomics Facility, was officially opened by the Premier of South Australia, the Hon, Mike Rann, in January 2010. Funding for this new state-of-the-art plant research and analysis facility, located on the Waite Campus, was made available from the Federal Government (\$10 million), the Government of South Australia (\$10 million) and the University of Adelaide (\$5.9 million). The Plant Accelerator is a flagship National Collaborative Research Infrastructure Strategy (NCRIS) facility, purpose-built to generate automated, highthroughput, non-destructive measurements of living plants.

Plants are grown in climate-controlled greenhouses fitted with conveyor systems, which can be scheduled to present each plant to five imaging stations where images are taken with RGB, near infrared, far infrared and fluorescence devices.

Objective computational analysis of these images allows researchers to follow the plants' size, shape, colour, orientation, temperature, water use, chlorophyll content and more through the life of the plant. The plants' responses to environmental variations can also be analysed. By examining populations with this system, it is possible to identify genes responsible for traits such as tolerance to salinity and drought.

The Plant Accelerator building has been recognised through awards from the Australian Institute of Architects and the Master Builders Association, and further funding to enhance its infrastructure has been secured from the Education Investment Fund / Super Science Fund (\$5 million), which is being used to acquire controlled plant growth rooms, enhance the automated imaging infrastructure, and to install a gas fired tri-generation plant to minimise the energy costs and the carbon footprint.



New Veterinary Science building

The Veterinary Health Centre (VHC) located on Roseworthy Campus is the first of its kind in South Australia. It was officially opened by the Hon. Michael O'Brien MP on 12 November, 2010. The new 5500m2 stateof-the-art facilities for teaching, research and animal care, are part of a \$37 million investment for the School of Animal and Veterinary Sciences, with joint funding from the Commonwealth (\$15 million), the State Government (\$5 million) and the University (\$17 million). The VHC building includes a Companion Animal Health Centre, clinical and diagnostic pathology services, and extensive laboratory teaching and e-learning spaces. The teaching facilities and support spaces were completed ready for teaching in Semester 2, 2010. The Companion Animal Health Centre opened for business on 1 November, 2010.



Innova21

Innova21 is a nine-level building including basement built to accommodate the Faculty of Engineering, Computer and Mathematical Sciences. Innova21 commenced with the demolition of the Mathematics building in December 2007 and Practical Completion was achieved in June 2010. The relocation of occupants into all floors of the building was completed prior to the commencement of teaching in Semester 2 at the end of July.

In addition to the office and workstation accommodation on the upper floors of the building, Innova21 includes eight, 24-hour Computer Aided Teaching Suites (CATS), a collaborative teaching suite and five flatfloor, seminar-style teaching rooms in the basement, ground and second floors of the building, along with a conference room and lounge on level 7.

Innova21 is the first building in Australia to be awarded a 6-Star Green Star Design rating under the Education Version 1 tool, an achievement that recognises the University's commitment to environmentally sustainable design. Compilation of documentation to finalise a submission for an 'as built' rating in early 2011 has commenced and current modelling indicates the project is on target to achieve a 6-Star As Built rating.

The total project budget for Innova21 is \$102.9 million.



Hughes Plaza Learning Hub

The Learning Hub aims to provide the best on-campus experience in the Australian national tertiary education sector for all our students. Works commenced on site in January 2010, with construction of the Hub due for completion August 2011.

The Learning Hub will comprise three levels, containing a mix of quiet and group study areas, digital technologies and computer access, student services and facilities, social areas and food and beverage outlets. To date, the concrete slab has been completed and steel column installation commenced in October 2010.

The University has actively engaged with student and staff representatives in a cocreation process covering all aspects of the Hub development and informing decisions relating to the facilities and activities that should be located in the Hub. Discussions have continued with positive uptake regarding how services for students may be delivered. The key service principle for these activities is to provide a streamlined set of services that are delivered responsively and effectively, with students being referred only once to another service. There will be a continuing focus on further clarification of the service delivery model and the development of an operational plan for the Hub.

The consultation process with students and staff established for the internal fit-out and design of the Hub will continue throughout the life of the project. This will ensure that the Learning Hub embeds itself as the centre of the North Terrace Campus.



Illumin8 (incorporating the Institute for Photonics & Advanced Sensing)

The Illumin8 project is a six-level building including a basement with building plant and equipment to be accommodated in the upper level on the former Union Hall site. Illumin8 will provide a 420-seat lecture theatre accessed from the Barr Smith Lawns, accommodation for IPAS (the Institute for Photonics & Advanced Sensing) along with a research floor and two floors for flexible firstyear laboratory teaching.

The project will provide 10,146m2 Gross Floor Area (GFA) and is due for completion in Semester 1, 2013.

University Council approved funding to maximise the redevelopment of the site. The University funding (\$64.5 million) along with State and Federal Government commitments to the project, has increased the overall funding available for the Illumin8 project to \$97 million.

Services relocations were completed in early November and demolition of the Union Hall building commenced 17 November 2010.

Financial Overview

	Conso	lidated	University			
	2010	2009	2010	2009		
	\$000	\$000	\$000	\$000		
SUMMARY INCOME STATEMENT:						
OPERATING REVENUE						
Received under Higher Education Support Act	254,656	237,769	254,656	237,769		
Learning and Teaching	189,934	151,151	184,273	150,679		
Research Grants and Fees	158,938	140,587	138,420	134,088		
Research - Other	21,672	19,325	21,672	19,325		
Other	108,197	120,384	86,242	76,413		
Total operating revenue	733,397	669,216	685,263	618,274		
OPERATING EXPENSES						
Salaries, superannuation and related expenses	357,570	326,304	346,139	314,010		
Non salary expenses	315,881	274,913	275,032	237,211		
Total operating expenses	673,451	601,217	621,171	551,221		
OPERATING RESULT	59,946	67,999	64,092	67,053		
Operating Margin	8.2%	10.2%	9.4%	10.8%		
SUMMARY BALANCE SHEET:						
Total Assets	1,377,496	1,206,891	1,359,549	1,194,340		
Total Liabilities	287,460	245,949	278,377	241,133		
NET ASSETS	1,090,036	960,942	1,081,172	953,207		
Current Ratio	1.6	1.6	1.2	1.0		
Cash and Bank Bills	89,286	61,259	80,922	54,551		

The University of Adelaide Council has adopted two principal financial targets: An operating margin in the range of 3.0% to 5.0% (Operating result as a percentage of total operating revenue as shown in the Statement of Comprehensive Income). A current ratio of at least 1.0 (Ratio of current assets to current liabilities as shown in the Statement of Financial Position). The University continued to achieve these targets in 2010.





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The University of Adelaide

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