achieving excellence in learning & teaching

promoting research and scholarship of international standing

enabling staff and students to develop to their full potential
Dundee’s hallmark is a powerful blend of aspiration and pragmatism… this spirit of hard headed ambition characterises progress in 2007-8.

This has been a year of hard work and great commitment across the University, carefully realigning our resources - intellectual, financial and physical - and positioning ourselves to build on our strengths to deliver success in a changing and highly competitive environment.

Our new structure of colleges and schools is now well established, enabling progress on all fronts including exciting new cross college initiatives. Bridging academic disciplines is a theme of this year’s Annual Review and an essential pre-requisite for our future development. The benefits of a five year programme of campus redevelopment are tangible, giving the university a new appeal and making a positive difference to the daily experience of students and staff.

Rigorous preparation for the Research Assessment Exercise has dominated much of the year and our research performance – always a key feature of the University - continues to build in strength with recognition at the highest levels, a series of major awards and, most importantly, making a fundamental contribution to knowledge, understanding and improving lives.

The student experience has been enhanced by the new buildings – including the award-winning Dalhousie Building, the Library Extension, completion of the IT network improvement programme, the new Institute of Sport and Exercise and by cutting edge developments in e-learning. The Clinical Research Centre at Ninewells will add new momentum to our work on translational medicine. In the next three years provision has been made for new educational facilities at Ninewells and investment at Duncan of Jordanstone, in the Law School and Engineering.

As the growth in public spending reduces, funding issues have required detailed attention and some tough decision making but I am confident that the University is in good shape to meet its aim of achieving a 3% surplus of income over expenditure by 2011/12, enabling new academic initiatives. In highlighting the work of 31 professors appointed over the last year, at the Discovery Days in January, we demonstrated our continued drive for boosting research excellence across all disciplines, developing our intellectual capital and building strength in depth.

League tables are notoriously fickle but the high quality of teaching and student satisfaction at the University is now feeding into our results and has contributed to excellent results across a range of disciplines. These include first in the UK for Dentistry (Independent and Guardian) and for Medicine (Guardian). Other subjects to achieve high rankings are: Civil Engineering, Mathematics, Education, Art & Design, Architecture, Law, Geography, Town Planning, Computing, English, History, Pharmacology, Philosophy and Politics. The University has also been recognised for growth in its research income and for the first time was included in the 2007 listings of the world’s top 200 universities.

So much for league tables - measuring research in financial terms, the University has been awarded an impressive £62 million in research grants so far this academic year, with more to follow in the next few months. The wider value of research can be seen in high profile work across every discipline including the cultural impact of our work in the arts, the influence of legal opinion on public policy, the benefits of population based discoveries for people with cancer and diabetes, and the economic impact of new engineering and software solutions.
Cancer research at Dundee continues from strength to strength, boosted by new appointments, the return from sabbatical of Sir David Lane and the establishment of the new Division of Molecular Medicine. Translational medicine and biology is one of the University’s key themes and the recent announcement and launch of two further cutting edge facilities underpins our advance along this route. The Scottish Government’s pledge of £10 million to create the Scottish Cell Signalling Centre (SCILLS) at Dundee under the directorship of Sir Philip Cohen will significantly enhance our international profile in this area. The opening of the Clinical Research Centre at Ninewells – a first class “research hotel” equipped with superb imaging facilities - reinforces our strong partnership with NHS Tayside and builds on the presence of the Translational Medicine Research Centre whose laboratories are now supporting over 70 translational medicine programmes across Scotland.

Undergraduates have shown an enthusiastic response to their experience in Dundee in a variety of measures including The National Student Survey in which we participated for the first time. The International Student Barometer – which closely examines feedback from international students – also painted a very positive picture, ranking Dundee 13th in the UK. The PhD and post doctoral communities are also building in strength.

Looking forward, the University remains determined to pursue a vision which promotes translational research, new approaches to professional education and development, creative and innovative working between disciplines and a focus on contemporary issues like globalisation, climate change and energy security. The University will continue to be driven by academic initiatives, transforming the lives of our students through higher learning and contributing to the economic, social and cultural development of Scotland through research and knowledge transfer.

In writing this review I am acutely conscious of the many achievements which cannot – for reasons of space – be explored in detail. A summary of activity in each College is outlined below and a more formal annual report and accounts will be published by January 2009. Finally I would like to take this opportunity to thank the staff, students, Court and friends of the University of Dundee who make it what it is today.

Sir Alan Langlands
Principal and Vice Chancellor
The College of Art, Science and Engineering, has a new name which neatly encapsulates our identity. In 2007-8 we have seen the launch of the Northern Research Partnership, a multimillion pound Scottish Funding Council research pooling initiative. It brings together leading researchers in the School of Engineering, Physics and Mathematics and the School of Computing, with their counterparts in the University of Aberdeen and Robert Gordon University. New NRP staff include Professor Manuel Trucco (Computing) and Professor Dong Jeng (Civil Engineering) from the University of Sydney.

Other key appointments include Professor Ping Lin (Mathematics) from the National University of Singapore and Professor Vicki Hansen, Leverhulme Visiting Professor in the School of Computing. Vicki is based at the IBM Research Labs in Hawthorne, New York. Her research with computing has attracted a major award from IBM, to develop tools to support older workers. This is the first such IBM award to be made outside the USA.

The Institute of Medical Science and Technology (IMSaT), has moved into state-of-the-art premises in Wilson House at Ninewells and is developing exciting research projects under the direction of Professor Andreas Meltzer. We are delighted to welcome world famous surgeon, Professor Sir Alfred Cuschieri, as IMSaT’s senior scientific advisor.

In July, Duncan of Jordanstone hosted the International New Craft – Future Voices Conference and Exhibition. These events grew out of Georgina Follett’s major AHRC research award on Past, Present and Future Craft Practice. They provided a wonderful opportunity to see and hear from leading craftspeople from around the world. The exhibition was stunning.

We have been developing our portfolio of high quality and innovative courses, notably for post-graduates. This year four new MSc programmes were launched: Forensic Art (jointly with Life Sciences); Medical Technology; 3D Animation (a collaboration between Duncan of Jordanstone and Computing) and Advance Practice Management for Architects. Several more exciting and distinctive new MScs are planned for 08 and 09.

As a world class university we must build our international reputation for education and research. Many academics have been very active in developing international links. The articulation agreement which Duncan of Jordanstone has signed with Nankai Teda University in China is a particularly important example of this. We are also building our international alliances in the USA, in India as well as in China. Hard work by many colleagues in research, teaching and internationalisation is positioning CASE for continued success.

Professor Anne Anderson OBE
Vice Principal and Head of the College of Art, Science and Engineering
Session 2007-8 has seen substantial achievement for the College of Arts and Social Sciences. Several academics have won prestigious awards and prizes. Substantial funding for research has also been won in an increasingly competitive environment. The biggest of this year’s awards has been the School of Social Sciences’ £400k Europe wide study into the monitoring of homelessness by Town and Regional Planning. Other large grants have been awarded to the School of Psychology from the Engineering and Physical Science Research Council and to History (School of Humanities) from the Arts and Humanities Research Council for a study of the smaller Scottish towns in the Enlightenment.

Much of the College’s research is international in scope, such as the UNESCO Centre for Water Law, Policy and Science’s EU-funded study of water use and needs on four river basins in Costa Rica, India, Vietnam and South Africa. Closer to home is the School of Education, Social Work and Community Education’s involvement, with colleagues from the University of Durham, in the largest randomised controlled trial in education in the UK, to study the effectiveness of peer learning in English and mathematics in 125 Fife primary schools. The contemporary resonance of what we do is exemplified too by the establishment of the Scottish Institute of Policing Research, which from its Dundee hub, involves most of the other Scottish universities with the common aim of carrying out research that will assist Scotland’s police to meet the challenges of the 21st century. The abilities and efforts of our students, including those involved in our highly successful Enterprise Gym, have been recognised too. An exemplar is the George D Gray Award for the best BEd dissertation won by Karen Crichton, the fifth time the prize has been awarded to a Dundee student since 2003.

Much teaching now takes place in the award-winning Dalhousie Building on Hawkhill, opened by the Queen in July 2007. Teaching quality, already high and recognised as such, is improving, with recently published league tables placing several of our disciplines within the UK top band – the School of Law, as well as Education, Geography, History, English, Town and Regional Planning, Politics and Philosophy. Facilities for our growing numbers of postgraduates have been improved, with a new state of the art Postgraduate Centre opened in the Old Technical Institute in the autumn of 2007. The international complexion of the University is enhanced by the wide range of countries from which our postgraduates are drawn: the Law School’s new suite of Masters programmes has attracted students from Croatia, India, Iraq, Kazakhstan, Norway, Pakistan, Uganda, the United States, and Zimbabwe. Other new programmes launched this year include the Centre for Energy, Petroleum and Mineral Law and Policy’s unique Executive Masters in Oil and Gas Leadership for senior managers in these industries, and Geography’s MSc in Sustainable Catchment Management.

Professor Christopher Whatley
Vice Principal and Head of the College of Arts & Social Sciences
The College of Life Sciences continues to build on its reputation as one of Europe's leading research centres with record levels of research income during the year from research councils, charities and the commercial sector. It has come to epitomise the synergy between basic science and medical research and, particularly through the work of the Drug Discovery Unit and the Translational Medicine Research Collaboration, Life Sciences at Dundee demarcates the very frontier of advances in translational medicine methodologies and practices.

Scotland’s position as an international leader in the biotechnology field is to be strengthened further with the creation of a £10 million national life sciences institute in Dundee. The planned Scottish Institute for Cell Signalling in association with the College of Life Sciences will create the strongest research complex of its kind in Europe, becoming a new engine for the city’s economy and driving forward Scotland’s £1 billion life sciences sector.

Meanwhile the links between research and teaching are being strengthened with the development of innovative new taught postgraduate programmes and the Centre for Anatomy and Human Identification’s plans to engage with Interpol to internationalise its unique training for disaster victim identification. The UK National Disaster Victim Identification advanced training programme which is set to train 500 police officers in two years has had its first intake and so far 245 officers have completed. Academic Year 2008-09 will see the first intake of students to the MRes in Crop & Environmental Science run jointly between CLS and the Scottish Crop Research Institute as well as the MSc in Human Anatomy. The first intake of students to the MSc in Forensic Anthropology is due in 2009-10. Encouraging new generations of young people into science is also important to us and over 500 students from primary and secondary schools across Dundee, Angus and Perth have visited the College this year for Life Science Master-classes and courses on laboratory techniques as well as Advanced Higher workshops, all of which were co-ordinated and taught by lecturers at the School of Learning and Teaching.

The College’s publication record and peer citation figures have made Dundee one of the top five universities in Europe for research in biology and biochemistry as well as molecular biology and genetics. In the last year alone the College produced 361 research papers in scientific publications worldwide. In financial terms, the total value of research grants awarded to the College over the last year was £48.7 million almost double the £28.1 million of the previous year.

Professor Peter Downes OBE
Vice Principal and Head of the College of Life Sciences
The College of Medicine, Dentistry and Nursing harnesses an interdisciplinary approach to the education of health professionals and to research platforms in translational medicine where existing and developing strengths in molecular and cellular biology are being taken into the clinic and making significant contributions to the understanding of the causes, development, detection and treatment of human disease. In order to maximise these strengths the College has been undergoing a restructuring process over the last year with particular emphasis on restructuring the Schools of Medicine and Nursing & Midwifery.

Clinical and laboratory-based research is organised in major themes: Clinical Oncology & Pathology; Epithelial Biology & Genetics; Genome Damage, Stability & Signalling; Infection, Inflammation & Immunity; Molecular Toxicology and Neuroscience which interface strongly with the College of Life Sciences, particularly focusing on cancer, diabetes and cardiovascular disease; clinical immunology and inflammation; neurodevelopment/regeneration and affective disorders. Activities in Primary Care and Population Sciences form two overlapping research groupings investigating the contribution of the individual, the community and the health service to the basis of health and disease. Programmes of research in Health Informatics and Understanding and Management of Long-term Illness, have many interactions within and beyond the College, including the Social Dimensions of Health Institute (joint with the University of St Andrews). Over the last five years, external grant income to support all of these activities has been approximately £20m per year with the potential for significant growth.

As Dundee University celebrates its first 40 years, the quest for excellence in professional education continues to ensure that we train health professionals – including doctors, dentists and nurses - fit for practice in a constantly changing multi-professional environment. Our schools of medicine and dentistry have consistently led the best in the UK over recent years and this position was confirmed in the latest 2008 league tables which once again rank Dundee first in the UK for Dentistry (Independent and Guardian) and for Medicine (Guardian) while our School of Nursing - one of the largest providers of nursing education in Scotland – is using the opportunities of its unique position within the College to share learning across the health and social care professions. Leadership in Clinical Skills nationally will be enhanced by the formation of an Institute of Health Skills Education, to develop novel undergraduate and postgraduate programmes, including surgical skills, distance learning and patient safety initiatives. Working in partnership with NHS Tayside, the close association of the Schools of Nursing & Midwifery, Medicine and Dentistry provides rich ground for interdisciplinary learning.

**Professor Irene Leigh OBE**
Vice Principal and Head of the College of Medicine, Dentistry and Nursing
12 Months of Milestones

• The £14.5m Clinical Research Centre, a “research hotel” with state of the art imaging facilities at the heart of Ninewells, formally opens in July.

• The UNESCO Centre for Water Law, Policy and Science won a voice on the World Economic Forum Network’s Global Agenda Council on Water Security, shaping world policy on vital water issues, with the appointment of Professor Patricia Wouters.

• The £10m Scottish Institute for Cell Signalling got the go-ahead at Dundee. Its founding director Sir Philip Cohen was elected to the US National Academy of Sciences and one of its champions, Professor Dario Alessi was elected to the Fellowship of the Royal Society.

• One of Europe’s top 5 universities for research in biology and biochemistry as well as molecular biology and genetics according to publication record and peer citation figures.

• A £5m Wellcome Trust award has established the Wellcome Trust Centre for Gene Regulation and Expression under the directorship of Professor Angus Lamond.

• A unique programme training clinical fellows across basic science and medical research has been awarded jointly to the Colleges of Medicine and Life Sciences by the Wellcome Trust Clinical PhD programme.

• The Translational Medicine Research Collaboration’s £12m biomarker discovery laboratory opens in November providing laboratory services to over 70 translational medicine programmes across Scotland.

• Dundee’s cultural impact was recognised in a clutch of major awards – the Saltire Society’s Scottish History Book of the Year won by Professor Christopher Whatley for The Scots and the Union; the Saltire Society’s Research Book of the Year won by Professor David Robb for Life of Alexander Scott and the Sundial Scottish Book of the Year won by Professor Kirsty Gunn for The Boy and the Sea.

• The vision for a Victoria & Albert Museum presence in Dundee fostering creative research collaborations with Duncan of Jordanstone and raising the city’s cultural profile came a step closer to fruition with a feasibility study.

• Work on developing new miniature ultra fast lasers for applications in biophotonics and laser surgery was given a boost with a 10m Euro award to a consortium led by Dr Edik Rafailov of Electronic Engineering & Physics.

• Academics in Civil Engineering have been awarded one of the first UKIERI awards driving research collaborations with a network of leading institutes in India.

• Students from the Innovative Product Design and Interactive Media Design courses have been selected for the Microsoft Design Competition – the only UK team invited to Seattle.