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# MEMBERS OF THE BOARD

Members of the Board of Trinity College Dublin during the 2010/11 academic year were:

#### **Ex-Officio Members**

Provost, Dr John Hegarty (Chair) Vice-Provost/Chief Academic Officer, Professor Patrick Prendergast Senior Lecturer, Dr Aileen Douglas Registrar, Professor Jürgen Barkhoff Bursar, Professor Francis Boland

#### **Elected Fellows and Fellow Professors**

Professor Shane Allwright (2008-2012) Dr Sean Barrett (2010-2014) Professor Robert Gilligan (2010-2014) Dr Nicola Marples (2010-2014) Professor John McGilp (2008-2012) Professor Eunan O'Halpin (2008-2012) Professor Henry Rice (2010-2014) Professor David Singleton (2008-2012)

## **Elected Non-Fellow Academic Staff**

Dr Melanie Bouroche (2010-2014) Ms Mary Coffey (2009-2012) Mr William Dowling (2008-2012) Dr Hugh Gibbons (2010-2014) Professor Des O'Neill (2008-2012)

#### **Elected Non-Academic Staff**

Ms Noreen Murray (2010-2014) Dr Kieran J McGinley (2008-2012) Mr Fred Cowzer (2010-2012)

#### **Student Representatives**

President Graduate Students' Union, Ms Dearbhail Lawless (2010-2011) President Students' Union, Mr Nikolai Trigoub-Rotnem (2010-2011) Education Officer Students' Union, Ms Jennifer Fox (2010-2011) Welfare Officer Students' Union, Ms Stephanie Fleming (2010-2011)

#### **External members**

Olive Carmel Braiden, nominated by the Arts Council (2010-2014) Jackie Gallagher, nominated by the Minister for Education and Skills (2010-2015)

#### In Attendance Ex-Officio

Secretary, Ms Anne FitzGerald Treasurer, Mr Ian Mathews

# **CONTENTS**



	Introduction by the Provost	Р3
1	Academic Developments - Times Higher Education & QS World University Rankings	P5
	- Quality - TCD/UCD Innovation Alliance &	P5
	Innovation Academy	P5
2	Educational Matters - Student Body	P6
	- Admissions Statistics/Entrance Exhibitioners	P6
	- Scholarships	P6
	<ul> <li>The Curriculum – New Courses</li> <li>Commencements, Firsts and Gold Medals</li> </ul>	P7 P7
	- Trinity Access Programmes	P7
	- Provost's Teaching Awards	P8
3	The Student Experience	DO.
	<ul><li>Student Support Services</li><li>Student Achievements</li></ul>	P9 P9
4	Research Activities	
	- Research Themes	P12
	<ul><li>Research Funding</li><li>New Research Initiatives</li></ul>	P12 P12
	- Research Links with Other Institutions	P13
	- Scholarship and Award Success	P15
5	Innovation and Commercialisation	D10
	<ul> <li>Research Funding &amp; Intellectual Property</li> <li>Entrepreneurship and Innovation</li> </ul>	P18 P18
6	Human Resources	
	- Employment Control Framework	P19 P19
_	- Staff, New Blood Posts, Chair Recruitment	
7	New College Initiatives	P21
8	Capital Development Programme - Completed Projects	P24
	- Construction Projects	P24
	- Energy Conservation	P26
9	Fundraising	P27
10	Financial Position	P28
	Appendix I	
	<ul> <li>Income and Expenditure Account, year ended 30 September 2011</li> </ul>	P30
	Appendix II	1 30
	- Balance Sheet, year ended 30 September 2011	P31



# INTRODUCTION



This Annual Report outlines the College's position and highlights our achievements during the academic year 2010/11 which was another very successful and productive year for the College. Key milestones include:

#### **Research & Innovation**

The value of new research contracts signed in the year, which will impact the next three to four years in terms of research expenditure, increased by 96% to €109 million compared with the previous year's value of €55 million. Income to support funded research activity was €75 million in 2010/11. Trinity staff members excelled in research achievements and received national and international distinction. In the course of the year, six new spin out companies were approved to commercialise intellectual property developed at Trinity, 33 patent applications were filed and 12 commercial licenses were issued.

# Students

Trinity continues to attract intellectually strong students from Ireland and abroad. In 2010 Trinity attracted the second highest proportion of first preference applications in the CAO system. The accessibility of a Trinity education to all students of ability is an important element of our contribution to Ireland's future. Individuals from non-traditional learning groups, at different stages in their

lives, and from disadvantaged sectors, have the opportunity to benefit from a Trinity education through such pioneering programmes as, for example, the Trinity Access Programmes.

In 2010/11, eight new postgraduate degree courses commenced and 4,339 students had their degrees conferred. Students continued to enjoy the 'Trinity Experience' which extends beyond the curriculum to a rich tapestry of student clubs and societies that equip students for a life of leadership and civic participation.

#### Staff

The success of a university, and the delivery of its strategic objectives, cannot be attained without its key resource – its staff. To retain and improve the status of the College, Trinity must recruit, develop and maintain people of exceptional calibre. The Human Resources Office provided a training and development service for all staff. Thirteen New Blood Ussher Lectureships were approved using non-exchequer funding. This 'New Blood' programme, introduced in 2009/10, is an important driver of the Strategic Plan 2009-14 as it facilitates Schools in delivering the various actions of the plan. Seven candidates were appointed by the end of the 2010/11 academic year.

## **Capital Development**

The capital development programme on campus continued to thrive. A key development includes the official opening by the Taoiseach of the most ambitious construction project in Trinity's history, the Trinity Biomedical Sciences Institute on Pearse Street. Work continued on construction of The Lir, National Academy of Dramatic Art and the refurbishment 7-9 South Leinster Street (formerly Phoenix House) was completed.

#### **Financial Position**

The College continued to be extremely diligent and proactive in the manner in which it manages its finances, balancing its budget in 2010/11 and having no accumulated recurrent or capital deficit at 30 September 2011. This is a remarkable achievement in light of the level of cumulative recurrent funding reductions experienced over the last number of years and the limited flexibility in terms of its core expenditure base.

Although the College has managed its activity within budgeted resources, the approach adopted to date is not sustainable in the future. While the actions taken over the last number of years have resulted in an improvement of its financial forecasts to 2016 an accumulated

recurrent deficit is still forecasted if no further intervention is taken and delivered on. Therefore, the focus must continue on the three main areas of non-exchequer income generation – international student intake, commercialisation and philanthropy coupled with strategic reprofiling/reductions in pay and non pay expenditure where possible in order to facilitate Trinity's pursuit of its strategies and goals on a financially sustainable basis. The College will not be complacent in this regard.

### **International Standing**

Trinity was ranked in 52nd position in the top 100 world universities and 15th position in the top 200 European universities in the 2010/11 QS World University Rankings. In the Times Higher Education World University Rankings for 2010, TCD was ranked 76th in the top 200 world universities and 14th in the top European universities.

#### Conclusion

I wish to thank all the staff of the College, academic, administrative and support, for their part in our

achievements during 2010/11 – these could not have been attained without their dedication throughout the year.

I would also like to thank the Taoiseach, the Minister for Education and Skills, the Minister for Health, the Minister for Enterprise, Jobs & Innovation and the many Government Ministers whose support is greatly valued. The College is also indebted to the Board and Executive of the Trinity Foundation, the Higher Education Authority, Science Foundation Ireland, the Health Research Board, IRCHSS, IRCSET and the many other agencies and individuals, public and private, who have supported the College.

Patrick Prendergast Provost.

May 2012



# 1. ACADEMIC DEVELOPMENTS

# 1.1 Times Higher Education & QS World University Rankings

Recognised internationally as Ireland's premier university, Trinity College Dublin is ranked in 52nd position in the top 100 world universities and 14th position in the top 200 European universities in the 2010/11 QS World University Rankings. In the Times Higher Education World University Rankings for 2010, TCD is ranked 76th in the top 200 world universities and 15th in the top European universities.

#### 1.2 Quality

Recognised globally as a university of high quality in teaching and research, TCD's education is distinctive in being research-led and student-centred. The College is committed to maintaining the exceptional quality of its undergraduate and postgraduate degrees and research and a major strength lies in Trinity's commitment of its staff to its students.

Election to Fellowship is an honour marking the exceptional quality of the College's academic staff. Research achievement or scholarship of a high order is the primary qualification for Fellowship, coupled with evidence of the candidate's contribution to the academic life of the College, as shown in particular by participation in the work of his or her Discipline or School and an effective record in teaching.

Fifteen Fellows, including four Honorary Fellows: playwright, Thomas Kilroy; historian Prof John Morrill of the University of Cambridge; Prof John Nolan, former Professor of Endocrinology at Trinity College Dublin and St James's Hospital, Dublin; and Prof John Pethica, Principal Investigator with CRANN, TCD's Nanoscience Institute were announced on Trinity Monday 2011.

In 2010/11, the Quality Office facilitated the quality reviews of the School of Linguistic, Speech & Communication Sciences, the School of Business, the School of Psychology, and the Office of the Vice-Provost. The reports arising from these reviews were generally positive and provided constructive feedback to the areas under review.

Throughout the year, Trinity continued to engage with the principal national stakeholders involved in quality assurance/quality improvement through its participation in the activities of the Irish Higher Education Network, the Irish Universities Quality Board and the Irish Universities Association.

# 1.3 Innovation Alliance & Innovation Academy The TCD-UCD Innovation Alliance is a partnership

working with the education sector, the State and its agencies alongside the business and venture capital communities to develop a world-class ecosystem that will drive enterprise development in Ireland.

The Innovation Academy, the educational centrepiece of the TCD-UCD Innovation Alliance was officially opened in November 2010. It accepted its first intake of 33 PhD students from TCD and UCD in its new city-centre location at Foster Place at the beginning of the 2010/11 academic year and offered core modules for the Graduate Certificate in Innovation in Entrepreneurship for the first time.

The Academy's mission is to transform the PhD experience by imbuing graduate research and education with creative thinking and innovation. The Academy will develop a new breed of graduate, where a disciplinary and technical expertise is fused with an ambition to create new enterprises, enhance public service and further harness Ireland's cultural heritage.

The Academy received €1.7 million in funding through the HEA's PRTLI Cycle 5 which enabled the employment of four facilitators between Trinity and UCD.

Stanford President Dr John L. Hennessy addressed students at the Innovation Academy on 'Innovation and Entrepreneurship: An educational opportunity' in April 2011. He was appointed the Alliance's first international advisor the previous year and was visiting Dublin to attend an Innovation Alliance external board advisory meeting.



# 2. EDUCATIONAL MATTERS

#### 2.1 Student Body

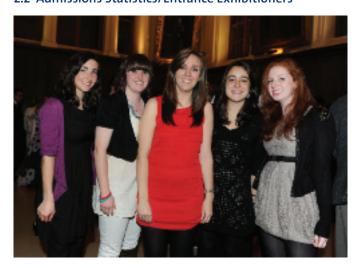
Representing every county in Ireland and more than 110 nationalities, the College's student population is also diverse in social class and age.

In total, there were 16,747 registered undergraduate and postgraduate students in 2010/11. Of these, approximately 79% were from the island of Ireland, 11% from other EU countries, 4% from North or Central America, and 6% from other parts of the world including students from European non-EU countries.

The College is committed to increasing the number of non-traditional students admitted to undergraduate programmes, including those from socio-economically disadvantaged backgrounds, students with a disability and mature students. The Strategic Plan (2009-14) makes a commitment to increase the proportion of students targeted from under-represented groups from 15% to 22% of CAO new entrants by 2013.

In 2010, 17% of all CAO places were filled by non-traditional students. Forty five percent of these were mature students.

# 2.2 Admissions Statistics/Entrance Exhibitioners



Entrance Exhibition Awardees from Malahide Community School, Aideen Costello, Maeve Killen, Fiona Lawler, Sinead Costello and Fiona Lynott.

In 2010, Trinity attracted the second highest proportion (11%) of first preference applications in the CAO system. The College continues to attract the highest number of academically-able students. A total of 54,481 pupils sat the Leaving Certificate in 2010. Of those that applied to the CAO 1,160 achieved 560 points or more and 39% of these students accepted a place in Trinity College.

A total of 436 first-year students were awarded special 'Entrance Exhibition Awards'. The students receiving these awards each achieved 560 points or higher in their Leaving Certificate examination or equivalent second level examination. The successful students represented 29 counties in Ireland along with the United Kingdom, Belgium, France, Germany and Sweden.

## 2.3 Scholarships



Natural Sciences student, Andrea Waitz, celebrates with her friends on the announcement of her election as scholar.

Trinity Foundation and Non-Foundation Scholarships have long been a measure of academic achievement. Undergraduate students, at the end of their second year (or third year in the case of medical students), sit a special examination and only those who achieve first class honors are awarded a scholarship for a period of up to five years. In 2010/11, eighty six students were awarded these prestigious scholarships on Trinity Monday 2011.

Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (28); Faculty of Engineering, Mathematics and Science (27); Faculty of Health Sciences (21); and Multi-Faculty (10).

# **EDUCATIONAL MATTERS**

#### 2.4 The Curriculum - New Courses

The following courses commenced at the beginning of the 2010/11 academic year:

## Postgraduate

Degree

M.Sc. in Healthcare Infection Management

M.Phil. in Intercultural Theology and

**Interreligious Studies** 

M.Phil. in Conflict Resolution and Reconciliation

M.Sc. in International Politics

M.Sc. in European Employment Studies

M.Sc. in Development Practice

M.Sc. in Dementia

M.Sc. in Disability Studies

The Higher Education Authority's PRTLI Cycle 5 funding resulted in the creation of new structured PhD programme in a number of research areas across the college, to be led by Trinity or by a partner institution with TCD input. The PRTLI funding for 90 TCD PhD studentships was announced in 2010/11 with a view to recruitment for the 2011/12 academic year.

# 2.5 Commencements, Firsts and Gold Medal Awards



Honorary Degree recipients Michael Johnston, Lubna Olayan and Jonah Barrington

A total of 4,339 degrees were conferred (2,563 primary degrees and 1,776 higher degrees) in 33 separate Commencement ceremonies in 2010. Three hundred and eighty eight students received first class honors at the degree examinations in 2010/11 and, of these, 81 were awarded Gold Medals.

Honorary conferring took place at the Commencement ceremonies on 10 December 2010 and 1 July 2011. At the Winter Commencements, Derek Briggs, Sr Cyril Mooney, Pat Matthews and Norah Kelso were honoured.

Recipients of honorary degrees at the Summer Commencements were Jonah Barrington, Michael Johnston and Lubna Olayan.

#### 2.6 Trinity Access Programmes

The Trinity Access Programmes (TAP) are a range of initiatives aimed at increasing the participation rate at third level of young adult and mature students from underrepresented socio-economic groups. The programmes were established as part of an overall strategy to address low progression rates to third level by students in particular socio-economic groups and are an illustration of the College's social mission in action.

TAP owes its continued success to a network of highly productive partnerships with schools, further education colleges, families, students, Trinity staff, businesses, community groups and other Higher Education institutions, nationally and internationally.

TAP receives its funding from the Higher Education Authority through the Strategic Initiatives Fund, the Department of Education and Skills and a number of individual and corporate donors. These funds support the following initiatives:

- The School and Community Outreach Links
- The Pre-University Preparation Courses: Young Adults and Mature Students, TCD
- The Partnership Courses in Liberal Arts: TCD and City of Dublin Vocational Education Committee Colleges (CDVEC)
- The Post Entry Progression Programme
- Research and Evaluation.

There were 157 admissions to Trinity College through the Trinity Access Programmes in 2010/11, an increase of 38% to the previous academic year.

Linking with over 40 primary and second-level schools which have little or no tradition of progression to third-level, TAP, with the assistance of some 30 College departments, enabled over 4,000 students, parents and teachers to participate in on-campus activities during 2010/11, such as the Maths and Science Scholars Programme for 6th class pupils, the Med Day for Junior Cycle students, and Summer Schools.

#### 2.7 Provost's Teaching Awards



Dr Desmond Ryan, Dr Janine Stockdale, Dr Áine Kelly and Dr Paula Murphy, recipients of the Provost's Teaching Awards 2011

The Provost's Teaching Awards are the College's principal means of acknowledging those academic staff who have made an outstanding contribution in the pursuit of teaching excellence in Trinity and who promote teaching as a scholarly activity.

Recipients in 2011 were: Dr Áine Kelly, School of Medicine, Dr Desmond Ryan, School of Law, Dr Janine Stockdale, School of Nursing and Midwifery (Early Career Award), and Dr Paula Murphy, School of Natural Sciences. All recipients were recognised for their dedication and commitment to teaching and learning excellence.



# 3. THE STUDENT EXPERIENCE

The 'Trinity Experience' extends beyond the curriculum to a rich tapestry of student clubs and societies that equip students for a life of leadership and civic participation. The tutorial service for students also contributes to the personal ethos.

#### 3.1 Student Support Services



At the heart of all the College's activities is the commitment to the intellectual and personal development of all of its students. To enhance the student experience, Student Support Services offer a comprehensive range of administrative and support services including Accommodation and Catering, the Student Health Centre, Counselling Services, the Chaplaincy, Careers Advisory Services, the College Day Nursery and the Sports and Recreation Department. These services ensure that the welfare of students and their social, cultural and emotional development are provided for and managed in a balanced and holistic manner.

#### 3.2 Student Achievements

During the academic year 2010/11, students and student societies were successful in many areas. The Undergraduate Awards of Ireland saw eight Trinity College students presented with gold medals by guest of honour, Mary Robinson at the 2010 awards ceremony in the Royal Irish Academy. The awards, which are open to undergraduate students from Irish universities, are designed to inspire, support and celebrate the ideas of undergraduate students.

PhD student and Irish director, Neasa Hardiman, won a BAFTA for Best Children's Drama for 'Tracy Beaker Returns' at the BAFTA awards ceremony in London in 2010. Neasa who is doing a PhD in film studies at Trinity, is lead director on both series of the BBC drama, developed from the novels by Jacqueline Wilson.

Over 300 Trinity College students were commended at the inaugural Dean of Students' Roll of Honour ceremony in April 2011, for their participation in extracurricular, voluntary activity both inside and outside the College. The Roll of Honour was launched by the Dean of Students, Prof Gerry Whyte, and aims to recognise the learning outside the classroom which students gain through extra-curricular voluntary activity.

School of Mathematics student, Ruadhai Deavan, was one of nine students nationwide to be awarded with a Hamilton Prize to mark the best undergraduate mathematic students in the country.

Engineering student Liam Ryan was presented with the 'One to Watch' award at the Eircom Golden Spider Awards in 2010 for his new business venture, SafeText.ie. The Eircom Spider Awards honour Irish individuals for their outstanding achievements online, recognise online excellence and innovation, and present a unique platform to highlight emerging trends and future potential growth sectors.

The Historical Society was represented by two debating teams at the World Universities Debating Championships (WUDC) in Gaborone, Botswana, where they competed against over 300 teams from across the world who reached the final stages of the competition. The WUDC is the world's largest debating tournament, and one of the largest annual international student events in the world. The Trinity teams were only the fifth and sixth Trinity teams to make it to the knock-out stages in the competition's thirty year history. Niamh Ní Mhaoileoin also achieved the distinction of being ranked the eight best individual speaker in the world at the tournament.

Catherine Murphy was awarded the top speaker prize at the 2011 European Universities Debating Championships competition which was held in Galway while Law Society student, Mark Thuillier, was named overall winner in the individual category at the 2011 annual *Irish Times* debating championship, and was awarded with the Christina Murphy Memorial Trophy.

School of Biochemistry and Immunology student, Lara Dungan beat off international competition to win two awards at the British Society of Immunology annual congress in 2011. Lara's research, which aims to shed light on the underlying causes of autoimmune diseases such as Multiple Sclerosis, won her both the 'Bright Sparks in Immunology' award and the 'Young Scientist of the Year' award.

Ruth Doyle, who is studying for a PhD in Geography, was announced as joint winner of the Environmental Protection Agency poster competition at the annual



Postgraduate Conference in January 2011. The prizes, which are awarded to Ireland's brightest researchers, will help promote Ruth's research which is based in the TCD led CONSENSUS project, a cross-border analysis of consumption, environment and sustainability in Ireland.

Law students, Bridget English and Rebecca Russell-Carroll, were the winners of the McCann FitzGerald All-Ireland Business Law Challenge, 'The Advocate', which took place in March 2011 in the Four Courts. The Trinity team beat off competition from other third level legal students from around the country to take the top prize of €2,000 and a place on a summer internship programme.

Business Studies and Politics student Daniel Philbin Bowman was the winner of the 2011 Business Student of the Year for his outstanding achievements and entrepreneurial flair. The competition, open to final year business students, is sponsored by the Trinity Business Alumni in association with the Business School in Trinity College and Bank of Ireland.

Trinity's student publications, *The University Times* and *Trinity News*, were recognised in eight categories at the 2011 National Student Media Awards, with students taking home a quarter of all awards on the night. For the second year in a row *The University Times* picked up the prestigious 'Newspaper of the Year' award while *Trinity News* editor Aoife Crowley was named 'Editor of the Year'.

A postgraduate student in the School of English, John Curran, won the prestigious Agatha Award in the 'Best Non-Fiction' category at the 2011 Malice Domestic Convention held in Washington DC, for his book Agatha Christie's Secret Notebooks: Fifty Years of Mysteries in the Making.

In 2011, three Trinity College students were selected from more than 350 applicants to participate in the Washington Ireland Programme, a cross-community charity which offers young leaders from Ireland and Northern Ireland the opportunity to live and work in Washington DC while completing leadership training and public service projects.

The Dublin University Players were successful for the third year in a row at the 2011 Board of Irish College Societies (BICS) awards and won the 'Best Event in a Large College Award' for the TCD Shakespeare Festival. The award recognises the effort made by the student society to bring the festival, which is one of the highlights of the Irish theatre calendar, to actualisation. Trinity Bridge and

Card Society was also successful on the night winning the award for 'Most Improved Society'. First year student of English, Joel Loll-McKeever, won the award for 'Best Fresher in a Large College' along with DIT's Ruth Murray.

Daniel O'Donovan, School of Chemistry, won one of two Higher Education Authority's *Making An Impact* awards. Daniel's research focuses on the development of a new generation of anti-depressant drugs which will be more effective and have fewer side-effects.

Alms on the Highway a new collection of work by the M.Phil in Creative Writing students at the Oscar Wilde Centre for Irish Writing, School of English was launched by the Minister for Arts, Heritage and Gaeltacht Affairs.

Sport Scholarships were awarded to 28 Trinity students at a special ceremony in December 2010. The scholarships were awarded by the Department of Sport and Dublin University Central Athletic Club (DUCAC) in 13 different sports including, rowing, football rugby, running and athletics, camogie, Gaelic football, hurling, hockey, kayak, orienteering, pentathlon, soccer, squash and volleyball.

Four student sportsmen and women were awarded with University Colours in 2011. The Trinity Pink, designed to correspond to the Light Blue of Cambridge and Dark Blue of Oxford, is awarded on individual merit which is generally assessed in terms of outstanding club performance, representative selection or external achievement. Pinks were awarded to Ruairi Short (Orienteering), Daniel Johnston (Croquet), Darragh Sweetnam (Climbing) and Hannah Lowry-O'Reilly (Fencing).

Notable student sporting club highlights in 2010/11 include: the Ladies Boat Club won six VIIIs competitions during the season; Sarah Donal was the first club member to be selected to compete at the World Championships for Ireland; the Fencing Club won the Intervarsities and Colours Match for the 4th consecutive year; Harriers & Athletics Club continued to be a dominant force at Intervarsity level and the Club was awarded the Colleges and Universities Sports Association of Ireland (CUSAI) Intercollegiate Event of the Year; the Volleyball Club won the CUSAI Women's League; and the Rugby Club won the Annual Colours Match and the All Ireland 7s competition – they then represented Ireland at the Europeans 7s and claimed the title.



# 4. RESEARCH ACTIVITIES

#### 4.1 Research Themes

Trinity's research strategy encompasses all major academic disciplines and is committed to world-class research activities in key areas across science, engineering, social sciences, medicine and the arts. The College's strategic focus is on five key areas – European & International Integration, Culture & Creative Arts, Materials & Intelligent Systems, Biosciences & Translational Research, and Transport, Energy & Environment. In each of these areas Trinity has significant research activities, linked nationally and internationally, building on a cornerstone of inter-disciplinarity to deliver research of global consequence.

Engaging with TCD on research matters takes place on many levels: the College has significant research partnerships with multinational and indigenous industry; it operates a unique 'researchers in residence' programme to embed partners at the heart of collaborative research projects; with the Science Gallery, Trinity is opening a window to the world of research in its broadest sense, fostering curiosity, stimulating debate and engaging the minds of tomorrow's investigators; through its policy of Creativity in the Community – at local, national and global levels - Trinity is committed to delivering world class research for societal benefit.

#### 4.2 Research Funding

Research income has reduced over the past twelve months by approximately  $\[ \in \]$ 7 million (9%) to  $\[ \in \]$ 75.1 million from 2009/10 levels. However, the value of new research contracts signed in the year, which will impact the next three to four years in terms of research expenditure, has increased by 96% to  $\[ \in \]$ 109 million compared with the previous year's value of  $\[ \in \]$ 55 million.

The contribution to indirect costs from research activity, however, continues to be below the full economic cost of hosting the research resulting in the core budget cross-subsidising research activity. This position is not sustainable.

There were 1,702 active research accounts and research activity supported 1,417 individuals in 2010/11.

Source of Research Activity (Income) Funding	Year ended 30 Sept 2011
Science Foundation Ireland Enterprise Ireland Higher Education Authority Commission of the European Communities Others	41% 3% 4% 11% 41%

#### 4.3 Trinity College's New Research Initiatives

Trinity spearheads several major national longitudinal studies, including children's research and ageing, and activities in nanoscience and telecommunications research supported by Science Foundation Ireland centres of excellence on campus. Trinity Health, the College's Academic Medical Centre combines best practice in patient care with cutting edge research and teaching in a single governance model based on world-leading healthcare centres. Similarly, Trinity's major research institutes and centres in areas such as neuroscience, globalisation, immunology, molecular medicine and the Trinity Long Room Hub for the arts and humanities are firmly established among the international leaders in their fields. Trinity is actively involved in significant national collaborative research ventures such as the National Digital Research Centre (NDRC), Molecular Medicine Ireland (MMI) and the National Institute for Bioprocessing Research and Training (NIBRT).

In addition to Trinity College's ongoing interdisciplinary research initiatives in these areas, the following new projects were among those launched during 2010/11:

# TCD to Provide Free Online Access to its Research

In a move aimed at broadening access to its research and scholarship, Trinity adopted a policy to make its scholarly articles available to the public for free and open online access in October 2010. The new policy confirms the College's commitment to disseminating its research outputs and scholarship as widely as possible. This move places Trinity at the forefront of academic institutions worldwide that are pioneering the move to Open Access.

Green eMotion Initiative to Pave the Way for Electric Vehicles

The Irish launch of an EU funded electric vehicle project which sees the School of Engineering partner with ESB, Codema and Cork City Council was launched in Trinity by the Minister for Communications, Energy and Natural Resources in June 2011. The Green eMotion EU Project aims to advance the use of electric vehicles and involves collaborations with car manufacturers, energy utilities,



universities, and technology and research institutions across Europe.

The four Irish based partners will receive €1.5 million in funding out of a total budget of €24 million. The consortium will work together to conduct research and studies into national electric car use and the different technologies that can be deployed to maximise sustainable transport methods.

International Response Initiative for Natural Disasters

Trinity College's Centre for Global Health teamed up with the Cochrane Collaboration to develop an international initiative called Evidence Aid to provide reliable, up-to-date evidence on interventions that might be considered in the context of natural disasters and other major healthcare emergencies such as health, shelter, communication, construction, education, security and support for displaced people. Established following the tsunami in the Indian Ocean in December 2004, Evidence Aid uses knowledge from research based evidence accompanied by commentaries and contextual information.

#### 4.4 Research Links with Other Institutions

Among the research links with other institutions formed during the 2010/11 academic year were:

Trinity and Saudi Arabian University form research alliance A new alliance was established between Trinity College Dublin and the King Abdullah University of Science and Technology (KAUST). The ACRAB project is a collaboration between TCD's Computational Spintronics group headed by Prof Stefano Sanvito, School of Physics and CRANN Principal Investigator, and KAUST's Prof Udo Schwingenschlögl's research group. The research project will develop a range of theoretical/computational techniques to study electron transport in complex materials systems. The project will also bring two additional alliances: it will establish a relationship between CRANN at TCD and KAUST, and also will bring together researchers from the Trinity Centre for High Performance Computing (TCHPC) and the KAUST supercomputer centre.

National Children's Research Centre Signs a Strategic Partnership with School of Medicine

Trinity's School of Medicine signed a strategic partnership with the National Children's Research Centre in relation to paediatric research into children's illnesses and diseases. As part of the agreement, the National Children's Research Centre, funded in its entirety by the Children's Medical & Research Foundation (CMRF), has

awarded €5 million in funding to the new research programme which will have implications for the development of more targeted treatment of children's inflammatory diseases such as eczema, asthma, childhood rheumatic diseases and cystic fibrosis.

TCD and UCD Microbiologists Establish New Joint Academy
The Dublin Academy of Pathogenomics & Infection
Biology (DAPI) was formed in 2010 to enhance synergy in
research and teaching between microbiologists based in
Trinity College Dublin and in University College Dublin.
The Academy involves laboratories that are using
functional genomic methods to study bacterial
pathogens of humans and animals. Initially, DAPI is
focused on research topics in bacteriology, and is
intended to span other areas of microbiology relating to
infectious disease in the future. The founding of DAPI
reflects the strength of Dublin internationally as a centre
for research and teaching in the areas of pathogenomics
and infection biology.

Trinity College Dublin Signs Partnership Agreement with Top Engineering Schools in Europe and China

The School of Engineering signed a partnership agreement between the top Engineering Schools in Europe and China in January 2011. The new agreement in engineering education will provide opportunities in undergraduate and graduate education, as well as research. It will also promote student exchange between Irish and Chinese students as well as collaboration with Chinese industry.

Partnership Agreement with Ballyfermot College of Further Education to Foster Creativity

A partnership agreement between Ballyfermot College of Further Education (BCFE) and Trinity's Creative Arts, Technologies and Culture Initiative was signed in July 2011, which will enable greater collaborative links in creative practice and teaching between both institutions. BCFE's Irish School of Animation which has produced international award winning graduates in animation and the film industry joined forces in an Animation Hub with Trinity College's Graphics, Vision and Visualisation Group (GV2) to produce an animated short movie.



# RESEARCH ACTIVITIES

#### 4.5 Scholarship and Award Success



New RIA members Prof Thorfinnur Gunnlaugsson, Prof Jane Ohlmeyer and Prof Shane O'Mara with RIA President, Prof Luke Drury (second from left)

Trinity staff members continued to excel in research achievements and received national and international distinction. Awards received by Trinity researchers include:

The Royal Irish Academy enrolled four Trinity College academics as new members in 2011.

The new members include Prof Thorfinnur Gunnlaugsson, Professor in Chemistry; Prof Shane O'Mara, Professor of Experimental Brain Research in the Trinity College Institute of Neuroscience (TCIN) and director of the Institute; Prof Colm O'Morain, Professor of Medicine at Tallaght Hospital and Dean of Health Sciences at Trinity; and Prof Jane Ohlmeyer, Professor of Modern History. Election to the Royal Irish Academy (RIA) is the highest academic honour in Ireland and is a public recognition of academic achievement.

Government funding of €19.5 million, together with an industry contribution of almost €4.8 million, for the Centre for Telecommunications Research (CTVR) was announced by the Minister for Research and Innovation, Seán Sherlock TD in May 2011. The state funding, provided via Science Foundation Ireland, will directly support 76 high-quality research positions in Ireland's largest telecommunications research centre. Headquartered in Trinity College Dublin, CTVR draws together researchers from six other universities and research institutions, including National University of Ireland, Maynooth, Dublin Institute of Technology, Dublin City University, Tyndall

National Institute in Cork, University College Cork and University of Limerick.

Profs Luke O'Neill and Ken Wolfe were each successful in securing special funding from the prestigious European Research Council (ERC). Prof O'Neill, Professor of Biochemistry at the School of Biochemistry and Immunology, received an ERC grant allocation of €3.48 million to assist with his pioneering research into the immune system. Prof Wolfe, Professor of Genome Evolution at the Smurfit Institute of Genetics and the School of Genetics and Microbiology received €1.5 million in funding under the ERC Advanced Grants programme which will go towards research on the evolution of yeast species.

An international research consortium led by Trinity, that aims to develop a new Alzheimer's disease treatment, was selected for grant funding of €6 million by the European Commission Seventh Framework Programme (FP7) in May 2011. The consortium NILVAD, comprising 18 European universities, hospitals and pharmaceutical companies, will conduct European clinical trials of NILVADIPINE in the treatment of Alzheimer's disease. TCD researchers at the School of Medicine and St James's Hospital led by Prof Brian Lawlor, Conolly Norman Professor of Old Age Psychiatry at TCD and Consultant Psychiatrist at St James's Hospital, are coordinating this major clinical trial that will determine whether NILVADIPINE can improve memory and also slow the rate of progression of Alzheimer's disease.

Thirteen Trinity research projects were awarded funding through Science Foundation Ireland's Principal Investigator Programme in June 2011. This represented the largest number (13 out of 44) awarded to a third level institution. The successful groundbreaking research projects were led by Prof Thorfinnur Gunnlaugsson, School of Chemistry; Prof Fiona Newell and Prof Carol O'Sullivan, School of Psychology and School of Computer Science and Statistics; Prof Vinny Cahill, School of Computer Science and Statistics; Dr Mike Lyons, School of Chemistry; Dr Louise Bradley, School of Physics; Prof Georg Duesberg, School of Chemistry and CRANN; Prof Luiz Da Silva, School of Engineering; Prof Michael Coey, School of Physics and CRANN; Prof Sylvia Draper, School of Chemistry and CRANN; Prof Michael Rowan, School of Medicine, Prof Padraic Fallon, School of Medicine; Dr Adrian Bracken, School of Genetics and Microbiology; and Dr Frank Wellmer, School of Genetics and Microbiology.

Prof Jonathan Coleman, Associate Professor of Physics and Principal Investigator at CRANN was named among

the top 100 materials scientists of the past decade by *Times Higher Education* in April 2011. Prof Coleman is the only Irish scientist named in the top 100 and one of the youngest on the list. Ranked 61st in the world, Prof Coleman was chosen from a list of approximately 500,000 materials scientists, ranking him among the top 0.02 percent in the field.

President Mary McAleese presented Prof Samson Shatashvilli, Professor of Natural Philosophy, School of Mathematics and Director of the Hamilton Mathematics Institute with a Royal Irish Academy (RIA) Gold Medal in recognition of his outstanding contribution to the physical and mathematical sciences.

Dr John Gilmer, School of Pharmacy and Pharmaceutical Sciences received the 2010 Enterprise Ireland Commercialisation Award in Lifesciences at the Big Ideas Showcase in October 2010 for Solvotrin Therapeutics Ltd, his TCD spinout company working to deliver new innovative drugs to the cardiovascular market.

Director of CRANN and Professor of Chemistry John Boland, was awarded the distinction of Fellow of the American Association for the Advancement of Science (AAAS) for his contributions to the field of surface chemistry, particularly the role of stress in controlling reactivity.

Researchers were awarded €500,000 in EU funding to develop new energy efficient water supply technology in a collaborative research project. The Hydro-BPT Project team consists of Dr Aonghus McNabola, School of Engineering, Prof Paul Coughlan, School of Business and Dr Prysor Williams of the School of Environment, Natural Resource and Geography at Bangor University.

An award for the best article published in 2010 in one of the top ranking US-political science journals, *Political Research Quarterly* (PRQ), went to political science lecturer Dr Gail McElroy and Professor of Comparative Political Behaviour and Pro Vice-Provost/ Chief Academic Officer Michael Marsh, for their article 'Candidate gender and voter choice: analysis from a multimember preferential voting system'.

Eighteen TCD researchers were awarded funding to support cutting-edge research projects under the SFI Research Frontiers Programme in August 2011. The awards aim to support the development of Ireland's human capital by providing employment and training to some of Ireland's most talented researchers. The

awardees were Dr Arun Bokde, Dr Veronica Campbell, Dr Christian Kerskens and Dr Jacintha O'Sullivan, School of Medicine; Dr Mauro Ferreira, Dr Graham Harper, Prof John McGilp and Dr Matthias Moebius, School of Physics; Dr Sinead Ryan, Prof Samson Shatashvili, Dr Stefan Sint and Prof Richard Timoney, School of Mathematics; Dr Gary Moran and Dr Derek Sullivan, School of Dental Science; Dr Isabel Rozas, School of Chemistry; Dr Biqiong Chen, School of Engineering; Dr Siobhan Clarke, School of Computer Science and Statistics; and Dr Derek Doherty, School of Biochemistry and Immunology.

Professor of Medicine, Colm O'Moráin and consultant gastroenterologist at the Adelaide and Meath Hospital, Dublin incorporating the National Children's Hospital (AMNCH) was presented with a Lifetime Achievement Award at the Irish Healthcare Awards 2010.

Dr Emma Stokes, Senior Lecturer in Physiotherapy became the first Irish Vice-President of the World Confederation of Physical Therapists, a global professional organisation representing 350,000 physiotherapists worldwide in August 2011.

The American Society for Microbiology (ASM), the oldest and largest life sciences professional organisation in the world, has appointed Chair of Microbiology and Head of the School of Genetics and Microbiology, Prof Charles Dorman, Ambassador to Western Europe.

Fifty-five researchers from Trinity were successful in the 2011 Irish Research Council for Science, Engineering and Technology (IRCSET) EMPOWER and EMBARK funding schemes.

Four Trinity College Dublin projects were successful in the Irish Research Council for Humanities and Social Sciences (IRCHSS) awards under its Research Development Initiative in March 2011. The successful Principal Investigators were Dr Michéal Collins, Economics; Dr Yvonne Scott, History of Art and Head of Department; Prof Robbie Gilligan, Head of School of Social Work and Social Policy; and Dr Kathleen McTiernan, lecturer in Psychology.

The Head of the School of Languages, Literatures and Cultural Studies, Dr Sarah Smyth was awarded the prestigious Medal of Pushkin in the Moscow Kremlin by Presidential Decree. This medal is awarded annually to no more than ten recipients in recognition of their outstanding contribution to the promotion of Russian language and culture in the world.

# RESEARCH ACTIVITIES

Trinity Law Academic, Dr Eoin O'Dell was appointed by the Minister for Jobs, Enterprise and Innovation to chair the new Copyright Review Committee in a bid to radically reform copyright in Ireland.

Philosophy lecturer Dr Stefan Storrie won the prestigious Turbayne International Berkeley Prize competition organised by the University of Rochester in the US for his essay 'Berkeley's apparent Cartesiansim in De Motu'. The annual international prize recognises the best essay on any aspect of Irish philosopher George Berkeley's philosophy.

Professor of Pathology, John O'Leary, Consultant Histopathologist at St James's Hosptial and Director of Pathology at the Coombe Women and Infants University Hospital was presented with a Lifetime Achievement Award at the 6th annual Oxford RNAi conference for his extraordinary contribution to cancer medicine.

Researchers from the Institute of Molecular Medicine and the Centre for High-Content Analysis who investigate how white blood cells (T lymphocytes) move in the body during an immune response were the winners of GE Healthcare's High-Content Analysis (HCA) Award. The award recognises the outstanding contribution of HCA to scientific understanding and celebrates its positive impact on data quality and quantity, and in transforming the efficiency of research and discovery.

Prof Luke Drury, Andrews Professor of Astronomy at the School of Mathematics was elected 54th President of the Royal Irish Academy.

Two Psychiatry researchers were awarded grants for their projects which intend to build capacity for better clinical services for individuals and families affected by psychosis. Dr Brian Fitzmaurice, Clinical Senior Lecturer in Psychiatry, and Dr Gary Donohue, Senior Lecturer in Clinical Psychology and Neuropsychology, based in the School

of Medicine, received grants totalling in excess of €300,000 from the Genio Trust.

Solas, a virtual community for children with chronic illnesses developed by the Centre for Health Informatics, won the Astellas Changing Tomorrow Award. The awards were set up to recognise exceptional work being undertaken by professionals working in health, and highlight their commitment and day-to-day effort in the improvement of the provision of healthcare for patients in Ireland.

Miravex, a Trinity College campus company specialising in the areas of optics and image analysis for the cosmetic investigation of skin conditions, was announced as the winner of the first Irish Technology Leadership Group (ITLG) *University Innovation Challenge Award* in November 2010.

The French Government awarded the honour of 'Chevalier de l'Ordre des Arts et des Lettres' to Dr Charles Benson, Keeper of Early Printed Books and Special Collections in Trinity College Library in recognition of his work in developing and promoting resources for the study of French in Trinity College.

'Leaders', a photographic exhibition that showcased the contribution made by migrant networks in Ireland and compiled by the Trinity Immigration Initiative Migrant Networks Project and supported by An Post, was awarded a Chambers Ireland Award for Corporate Social Responsibility.

Trinity College Dublin's Science Gallery beat off competition from 422 other nominees to take the prize for Best Cultural Institution at the 3rd annual Shorty Awards in New York in May 2011. The awards honour the best producers of real time social media content on the web and are determined by a combination of popular vote and by the members of the Real-Time Academy of Short Form Arts and Sciences, comprised of leaders in technology, journalism, business and culture.



# 5. INNOVATION AND COMMERCIALISATION

Trinity Research & Innovation (TR&I) promotes and manages the interface between TCD researchers, funding agencies and industry, through four divisions: Research Development, Contracts, Technology Transfer and Entrepreneurship.

In line with the National Development Plan and the College's Strategic Plan, TR&I seeks to promote the successful exploitation of new ideas incorporating new technologies. TR&I provides supports all along the research continuum, from submission of funding applications, to contract negotiation, intellectual property management, technology transfer, commercial exploitation and entrepreneurship training. TR&I fosters interactions with industry, including establishing research collaborations and licensing TCD's intellectual property. In addition it supports and approves the formation of TCD campus companies.

#### 5.1 Research Funding

During the 2010/11 academic year, the 1,062 research funding applications supported by the Research Development office resulted in the Contracts Office's signature of 557 new research contracts with a total value to TCD of €109,449,871.

#### **5.2 Intellectual Property**

The Technology Transfer Office received 61 disclosures of novel intellectual property, filed 33 new patent applications, granted 12 commercialisation licences and approved six new TCD campus companies.

## 5.3 Entrepreneurship and Innovation

The Entrepreneurship section supported 49 postgraduate students and researchers on the Entrepreneurship Programme.



Trinity Innovation Award recipient, Dr Gerard Lacey (centre) with the Provost, Dr Patrick Prendergast, and Dean of Research, Professor Vinny Cahill.

The 2011 Trinity Innovation Award was presented to Trinity computer scientist and entrepreneur, Dr Gerard Lacey. Dr Lacey's second spin-out company, Glanta Ltd, was founded in 2010 to commercialise the SureWash hand hygiene training system which was developed in the course of over five years' research in Trinity. Dr Lacey is an active supporter and motivator of entrepreneurship education.



# 6. HUMAN RESOURCES

Trinity's Human Resources function supports the College in achieving its strategic goals through the recruitment, retention and development of excellent people.

To ensure the efficient delivery of these services Human Resources is structured into four main areas, namely Recruitment, Staff Planning and Payroll, Staff Relations and Staff Development.

#### **6.1 Employment Control Framework**

Pending the revision of the Employment Control Framework (ECF) which expired in December 2010, the College operated against a background of uncertainty in relation to staff recruitment. In March 2011, a revised ECF was issued to the University sector, and in the face of considerable criticism from within and outside the HE sector, a further revised ECF was issued in June 2011.

Noting the revised ECF's consistency with the interim arrangements for employment control which it had previously agreed, the College Board on considering the new ECF agreed that it was prepared to work within its terms. In relation to the proposed ceiling on numbers of core funded staff, this is done on a voluntary basis, having regard to the provisions of the Universities Act 1997. The College achieved its December 2010 employment ceiling target of 1775 fte, and under the terms of the 2011 ECF worked in 2010/11 to a further reduction of 20 ftes by the end of December 2011.

The Board also noted that unlike prior ECFs the 2011 framework does make provision for promotions. However, there are some compliance requirements, involving the maintenance of an appropriate balance between grades, which are designed to ensure containment of pay and pensions liabilities.

The 2011 ECF contains significant provisions in relation to the funding of future pension liability: any new post created, not funded from core resources, is subject to an employer's pension contribution charge of 20% of gross pay. This has significant cost implications for posts funded from these sources, and also presents significant administrative and process issues to be considered in budgeting, accounting, recording and reporting for various employment types. Work to clarify the scope of this contribution, and the administration of same commenced in 2011.

The College's personnel and payroll systems were never designed for the complex reporting now required. The HR Office has adapted its procedures in order to overcome this obstacle and ensure that an accurate headcount return can be produced at relatively short notice.

#### 6.2 College Staff

In the context of further reductions in funding levels, the College, under the direction of the Planning Group entered another round of cost saving and income generating measures. In relation to cost savings and pay costs, the focus was placed on preserving those positions which are essential to the academic mission of the College, in line with the requirements of the ECF. Where reductions in numbers occurred some knock-on effect to the quality of the activities and services provided is inevitable, but the College has sought to minimise this through use of the Public Services Agreement to facilitate the introduction of change, and through prioritised replacement and non replacement decisions in relation to foreseeable vacancies. In addition, however, such implications have been minimised through the goodwill and cooperation displayed by staff in adapting to these measures in various ways, and this has ensured that the impact of funding and employment level reductions on College operations has been minimised.

#### New Blood Posts

Following the success of the introduction of the 'new blood' Ussher programme in 2010, a second call was announced. Thirteen posts were approved for filling, of which three were awarded to the Faculty of Arts, Humanities and Social Sciences, four to the Faculty of Engineering, Mathematics and Science, two to the Faculty of Health Sciences and four are joint Faculty appointments. From this second call seven candidates were appointed before the end of the academic year 2010/11.

#### Chair Recruitment

The College advertised 12 Chair (Professorial) appointments during the academic year 2010/11, but only seven were successfully filled, which is equivalent to a 58% success rate. The national economic situation, specifically in relation to remuneration within the public sector and the general uncertainty surrounding research funding were reported across the faculties as proving a deterrent to candidates.

Six of the 12 positions were within the School of Medicine. Three of the six were newly established academic consultant Chairs arising from the recommendations of the Fottrell report. These Chairs are funded jointly by the education and health sectors. Professors of both Haematology and Nephrology were filled, with the recruitment process for a Professor of Palliative Medicine continuing into the next academic year. The Chair of Child and Adolescent Psychiatry and the Gabriel Stokes

stipend award were also successfully completed, and the appointment of the Professor-Consultant in Gastroenterology continues.

In the Faculty of Arts, Humanities and Social Sciences, three Chair selection processes were held. The successful candidates for the Samuel Beckett Chair of Drama and Theatre Studies, and Chair in Cognitive Neuroscience of Ageing commenced in post on 1 September 2011.

The remaining Chair, that of the endowed AIB Chair of Childhood Research, is to be re-advertised in the coming academic year, as no successful candidate was identified.

In the Faculty of Engineering, Mathematics and Science, three competitions were held, two in Mathematics (which were not filled) and the Chair of Geology and Mineralogy (1843), who commenced on 1 September 2011.



# 7. NEW COLLEGE INITIATIVES AND KEY EVENTS

There were several new initiatives and key events in the College during the academic year 2010/11.



Her Majesty Queen Elizabeth II meets with students of the College

On 17 May 2011 Her Majesty Queen Elizabeth II and His Royal Highness the Duke of Edinburgh visited Trinity College Dublin, founded by Queen Elizabeth I. In honour of the royal visit, the Provost, Dr John Hegarty hosted a reception in Trinity's Long Room situated in the College's 18th century Old Library building.

In providing a contemporary showcase of Ireland, the Queen met with members of Trinity's staff, students and academic community along with representatives from the sciences, medicine, arts, humanities and culture from both Trinity College and the wider university sector in Ireland, as well as those from leading Irish institutions and society and members of the local community. The groups highlighted areas in which Ireland excels: biological and life sciences; music and visual arts; literature and theatre; history and culture; physical sciences; environment and energy; medicine; politics and society.

HSH Prince Albert II of Monaco viewed the Book of Kells in the Old Library, met with Trinity College students and

had an opportunity to engage with the university's leading research during his visit to the College in April 2011 on the occasion of the 50th anniversary of his parents' state visit to Ireland. His Serene Highness announced the establishment of The Princess Grace Research Fellowship at Trinity.

Prof Patrick Prendergast was elected Provost of Trinity College Dublin on 1 April 2011. A Professor of Bio-Engineering and former Vice-Provost/ Chief Academic Officer at Trinity, he became the Provost elect after election by Trinity College staff and students. The Provostship has a term of ten years, during which the Provost is responsible for leading the College in achieving its core mission in education and research, and in strengthening its position as Ireland's leading university on the world stage. The Provost also plays a central role in the College's collegial way of life and cultural climate, and in continuing Trinity's active engagement with society. The 43rd Provost of Trinity College Dublin, Dr John Hegarty completed his ten year term of office on 29 July 2011.

'Ireland in Turmoil: the 1641 Depositions,' an exhibition to raise awareness about one of the most bloody and traumatic moments in Irish history with a view to promoting greater understanding between the different traditions on the island of Ireland was opened by the President of Ireland, Mary McAleese in the Long Room, Old Library in October 2010. Dr Ian Paisley also spoke at the exhibition opening. The transcribed and digitised 1641 Depositions, witness testimonies of the violent massacres of the 1641 Irish Rebellion, was also launched online as a publicly available free resource. The online resource sees the culmination of a three-year collaborative research project between TCD and the Universities of Aberdeen and Cambridge, using the latest research technology.

Trinity College Dublin celebrated 300 years of the foundation of its School of Medicine in 2011. A programme of events marking the tercentenary ran throughout the year and included an exhibition in the Old Library 'The Best Doctors in the World are Doctor Diet, Doctor Quiet, and Doctor Merryman', a students' debate, a series of Tercentenary lectures in affiliated hospitals and international scientific conferences.

In a joint celebration to mark 300 years of Botany, Chemistry and Medicine at Trinity College, Dr Henry Oakeley, Garden Fellow at the Royal College of Physicians of London opened a new Physic garden on the main campus of Trinity College. The garden features sixty plants of medicinal interest and aims to highlight where some medicines come from. The School of Botany also held two special events, which included the launch of *Trees of Trinity College* booklet and a public lecture by Professor of Botany at Oxford University, Liam Dolan on 'Botany: Seeding the Future'.

Trinity College celebrated 50 years of collecting, displaying, and promoting modern and contemporary Irish and international art, in particular the College Gallery Picture Hire scheme, founded in 1959/60 and still running today. The scheme allows students and staff with rooms and offices on campus to engage with art during their normal daily routines. The anniversary year launched with a special collaborative exhibition co-curated by Catherine Giltrap, College Art Collections Curator, and the Douglas Hyde Gallery staff, juxtaposing emerging Irish contemporary artists against works by influential 20th century modern artists active during the formative decades of Trinity's modern art collection. This was followed by an exhibition of both Irish and international highlights from the collections at the Royal Hibernian Academy and a programme of related events, complemented by a commemorative

book 'George Dawson: An Unbiased Eye. Modern and contemporary art at Trinity College Dublin since 1959', supported by the alumni through the Trinity College Association and Trust.

In January 2011 it was announced that distinguished writers, publishers, composers and experts in creative technologies will be joining TCD as adjunct professors and lecturers as part of Trinity's new Creative Arts, Technologies and Culture Initiative (CATC). Those appointed under this dynamic new approach to the CATC include three of Ireland's leading composers, award winning playwright Michael West, composer Bill Whelan, and Disney Research Director, Jessica K. Hodgins. Bestselling author, Sir Terry Pratchett has also joined the staff at Trinity as an adjunct Professor in the School of English under the CATC Initiative. These renowned experts will be giving master classes to Trinity students and engaging in collaborative research among other activities as part of their new adjunct professorships and lectureships over the next three years.

Dr Catherine Morris was appointed as the National Library of Ireland/Trinity College Dublin Cultural Coordinator. This joint appointment is the first of its kind in Ireland. As part of Trinity's pioneering CATC initiative and the National Library's Outreach and Education strategy, it marks a new level of partnership and structured engagement between an Irish university and a major cultural institution. Recognising the wealth of existing and potential links, expertise and collections, and their close proximity at the heart of Dublin city, the appointment signifies the commitment of both institutions to forging a dynamic new collaborative model of education, exhibition, practice and research in cultural heritage.

The Trinity Alumni Career Network, launched in 2010, is an initiative aimed at assisting the College's alumni considering a career change during the current challenging economic climate. It runs a programme of panel discussions, workshops, career advice and networking opportunities for its graduates on an annual basis. This initiative was further developed in May 2011 when a new student focused online facility, the Career Network, was launched. This resource aims to provide Trinity students with access to an online community of alumni and facilitates career planning and research for students by allowing them to connect directly with alumni, benefit from their experience and receive advice in areas of relevance to the student.

# **NEW COLLEGE INITIATIVES AND KEY EVENTS**

The College's new Equality Policy was launched in April 2011. Trinity aims to provide an inclusive environment which promotes equality and values diversity. The Equality Policy is a composite policy comprising staff, student and service user equality issues within the framework provided by the Employment Equality Acts, Equal Status Acts and Disability Act. Its purpose is to outline the College's commitment to promoting equality in all aspects of the College's activity: employment, education and service provision; and to detail how these commitments will be implemented.

The Equality Fund programme, established by the Equality Committee, aims to facilitate equality initiatives and to promote and celebrate diversity in all College areas. In 2010/11 it supported 16 staff and student projects under the themes 'Plural identities: beyond stereotyping', 'Enriching the inclusive College community', 'Treat others as they would like to be treated', 'Supporting Dignity and Respect', 'Building equal participation- envisaging the future', and 'Silent, silenced or private?'

A Self Management Tool developed by the College's Unilink service to assist students with mental health difficulties was launched in March 2011. The new Self Management Tool promotes a better balance between students' academic and social activities by helping them draw from previous experiences and learn new coping strategies. The tool aims to help students monitor their own mental health by identifying behaviours, triggers and warning signs of becoming unwell.

A new online resource for deaf and hard of hearing students, www.ds3.ie, was launched by Trinity on the occasion of *Better Options*, an information forum on higher education options for students with disabilities which was hosted by TCD in 2011.

The Housekeeping Department was announced as a finalist at the Q Mark for Quality Management Systems at the 2011 National Q Mark Awards ceremony. This was the first time Trinity College participated in the event which aims to celebrate the drive, commitment and achievement of all nominated companies that are committed to providing quality services in Ireland.

The Trinity Long Room Hub building designed by McCullough Mulvin Architects was the winner of the Educational Category at the 2011 Royal Institute of Architects of Ireland (RIAI) architecture awards. Sixteen awards covering various categories were presented at the event which is run by the RIAI. The aim of the RIAI awards is to communicate to the public the variety and quality of contemporary Irish Architecture.

The Treasurer's Office Procurement Department won the *Innovation in Public Procurement* award at the inaugural National Procurement Awards in November 2010. The National Procurement Awards is a new awards programme which recognises excellence in the public and private sectors in Ireland, bringing positive exposure to the procurement activities undertaken.



# 8. CAPITAL DEVELOPMENT PROGRAMME

During 2010/11 the Trinity Biomedical Sciences Institute on Pearse Street was completed and work continued on the construction of The Lir, National Academy of Dramatic Art. The College completed the refurbishment 7-9 South Leinster Street.



#### 8.1 Completed Projects

**Biomedical Sciences Development** 

The Trinity Biomedical Sciences Institute was officially opened on 17 June 2011 by the Taoiseach, Enda Kenny, TD. The Institute is one of the most ambitious projects undertaken by the College, both in scale and strategy and represents the second phase of TCD's Pearse Corridor Development. The €131 million eleven storey building (35,000 sq.m.) will bring 700 researchers together in one building with the common goal of addressing major challenges in health and disease through leading edge scientific research.

The facility received €80 million in state funding under the Higher Education Authority Programme for Research in Third Level Institutions (PRTLI), co-financed by the ERDF, and National Development Plan 2007-13 medical education funding, with the balance financed by the College. The new facility will house research from across five schools: Medicine; Biochemistry and Immunology; Pharmacy and Pharmaceutical Sciences; Chemistry; and Engineering, collaborating on research in immunology, cancer and next generation medical devices. The Trinity Biomedical Sciences Institute is structured around three interlinked research centres, the Centre for Study of Immunology, Centre for Cancer Drug Discovery and Centre for Medical Device Technologies.

The Institute will also house the School of Medicine, where all its undergraduate pre-clinical medical education, training and research will be conducted.

In a departure from the traditional university model, the TCD researchers will also work alongside industry through

# CAPITAL DEVELOPMENT PROGRAMME

the provision of dedicated industry-academic collaborative and commercial laboratory space. The building includes 3,000 sq.m. of dedicated post-incubation wet laboratory as recommended by the Innovation Taskforce, providing the research-ready infrastructure necessary to facilitate the growth of both the indigenous biotechnology sector and the attraction of new foreign direct investment in this field.

The development adjoins Pearse Railway Station and the design incorporates a new entrance to the station. In addition to the laboratory space for industry-academic collaboration, the commercial space will include shops and office accommodation.

#### Other projects

Other capital projects undertaken during the academic year include the refurbishment of a building in South Leinster Street to provide accommodation for the School of Linguistic, Speech and Communication Sciences and the Centre for Deaf Studies and to house the Student Counselling Service; two separate projects to upgrade and expand the teaching and research facilities for Microbiology in the Moyne Institute; and grounds improvement projects.

#### **8.2 Construction Projects**

#### The Lir, National Academy of Dramatic Art

Work started in September 2010 on an externally funded project to convert and extend some of the former industrial units in the Trinity Enterprise and Technology campus to provide accommodation for The Lir National Academy of Dramatic Art in Trinity College Dublin. The Lir was developed in collaboration with the Cathal Ryan Trust in association with the Royal Academy of Dramatic Art (RADA) and will be ready to accept its first intake of students in September 2011. The development will include facilities such as a fully flexible black box studio, a technical workshop, a dance studio, rehearsal, practice and teaching rooms, a wardrobe/workshop, a café/bar and Box Office.

#### Wellcome Trust-HRB Clinical Research Facility

A tripartite agreement between TCD, Wellcome Trust and St. James's Hospital in 2009 allows for the construction of the Clinical Research Facility at St. James's Hospital. The tender process for this contract has been completed and work will start on site in late 2011. The 10 bed facility will be some 1,300 sq.m. and will include special clinical research areas for exercise physiology, neurophysiology and gene and molecular therapies. It will be adjacent to

the HRB funded three Tesla MRI (Centre for Advanced Medical Imaging) and the TCD Institute of Cardiovascular Sciences, which is being funded by the Baggot Street Trust, will be co-located in the same building. The facility will come into service during 2013.

## Trinity Centre Tallaght Hospital, Phase 2

The College continues to work on planning and fundraising to support the provision of an Institute of Population Health associated with the Trinity Centre at AMNCH Tallaght. Proposals to buy and fit out three floors of a building to accommodate the Institute are at an advanced stage.

#### Front Square Accessible Pathways

In late 2010, the College began a project to provide accessible pathways across the cobbled areas through the main Front Square. When completed, these pathways will provide accessible routes from the main College Green entrance to all buildings in the historic west end of the College. These new pathways greatly enhance the College's accessibility and are of major benefit to students, staff and visitors to the College with impaired mobility. Funded from the Disability Services Capital Allocation, this project is due to be completed for the beginning of the new academic year 2011/12. The accessible pathways will be extended through the Regent House archway to the College Green gate, and into Fellows Square in 2012.

#### **Additional Student Residences**

Trinity College has identified an initial requirement of 1,000 student residential units with potential demand for a further 2,500 units that will enable it to increase the level of residential accommodation for Irish and international students. Options to meet this requirement are being explored.

#### Pearse Street Development

The College's plan for the redevelopment of its Pearse Street property is for a phased development of new buildings on the north side of the College sports grounds and the refurbishment of retained nineteenth century terraced houses along the College's northern boundary. The proposed area of the completed development is scheduled at 18,400 sq.m. (including 4,400 sq.m. of refurbished / retained building area).

The timing of this development is predicated on the availability of finance and the prioritisation of the College strategic capital developments.

#### Development Plan

A Development Plan identifying the scale and direction of future major developments for Trinity College over the next 10 – 20 years was adopted by the College Board in March 2011. The plan takes into account the proposed increases in student numbers and academic activity and the particular principles regarding space set out in the College's Strategic Plan 2009-2014. A key feature of the Development Plan is the designation of quarters of the College for the development and consolidation of areas of related academic activity.

#### 8.3 Energy Conservation

Trinity consumed 35.7 million kWh of electricity and 38.07 million kWh of natural gas and oil during 2010/11. Consumption grows year on year as a consequence of the occupancy of the new buildings. As part of the College's commitment to energy conservation, the new Trinity Biomedical Sciences Institute incorporates a trigeneration plant that will provide electrical power, heating and cooling for the building in a cost effective manner. Continuing work on refurbishments and energy reduction

projects were implemented to improve and reduce energy consumption. The energy reduction programme set up a monitoring and targeting (M&T) system for selected buildings and then worked to reduce energy consumption within them. The project has been extended to cover over 75% of College energy consumption. Trinity's objectives are to maintain energy savings already made and to continue working to reduce the energy consumption of its buildings while planning to maximise energy conservation in any proposed new buildings.

Trinity College continues to work with its colleagues in the e3 group, comprising UCD, DCU and DIT, and additionally with the National Energy Procurement Service using collective purchasing power to procure the most advantageous electricity and gas tenders from suppliers. Trinity continues to source a large proportion of its electricity from renewable wind generated electricity suppliers. This approach, coupled with the measures outlined above is an effective way to substantially reduce CO2 emissions.



# 9. FUNDRAISING

The future of Trinity College depends primarily on its people - staff and students - as well as investment in its teaching, research, innovation and outreach.

Significant funding is required if the College is to confirm its position as one of the world's leading universities. To this end, Trinity Foundation raises funds from the College's alumni and friends.

Now more than ever, it is clear that if the College wishes to represent Ireland globally, we cannot rely on State funding alone - securing private support is becoming ever more essential to Trinity's future. In the period 1 October 2010 to 30 September 2011, €15.1 million was secured in private donations (€14.5 million in 2009/10). The benefits of this private support can be seen throughout the College.

Planning for the next phase of fundraising is underway, working with the College's overall Global Relations Strategy currently being developed. This will ensure The Foundation activities better support the College's Strategic Plan for the period 2009-14 and beyond. Current priority projects include:

- Completing the funding for the Biomedical Sciences Institute on Pearse Street
- Refurbishment of the Library with expanded Humanities research facilities
- New Business School Building
- Development of building on the South East Corner of campus

- Various projects supporting the College's 'Engagement with Society' theme, such as the Science Gallery programmes and bursaries for students on the Trinity Access Programmes (TAP)
- A number of professorships and lectureships in all three faculties.

Central to the College's fundraising success is the outstanding contribution of the many volunteer groups that support Trinity including the TCD Association and Trust, the Business School's Advisory Board, the Engineering Advisory Board, the External Advisory Board of the Trinity Long Room Hub, the Medical School's Tercentenary Board, the Trinity Business Alumni, the Science Gallery Governing Board, Classics Advisory Board, National Institute for Intellectual Disability Management Committee, South Asia Initiative Advisory Board, the USA Fund and the UK Trust. These volunteers give their time, strategic input and considerable financial support. The College is extremely grateful for the support of these groups. Special mention is due to the Board of Trinity Foundation, which plays a key role in co-ordinating the College's philanthropic strategy. Trinity's alumni and friends continue to support the College through the Annual Fund, volunteering to help with College initiatives and in many other ways.



# 10. FINANCIAL POSITION

The Funding Statements for the year ended 30 September 2011, as prepared on the agreed harmonised basis for the Irish University sector were approved by the Board on 25 January 2012. The Funding Statements represent Part I of the financial reporting requirements of the Universities Act and reflect the core teaching/unfunded research and research grants and contracts activity in the Income & Expenditure Account. The College's external auditors, KPMG, identified no material control weaknesses and issued an unqualified audit opinion on the Funding Statements. The Consolidated Financial Statements, which represent Part II of the financial reporting requirements and prepared in accordance with generally accepted accounting standards, are expected to be finalised in 2012.

The actual outturn for the year was a surplus of €0.1m (2009/10: €0.18m) which reflects a robust financial performance in difficult circumstances and has been achieved against the backdrop of a continued significant reduction in state funding in 2011. Total income (excluding funded research) decreased by 1.6% to €192 million with State Grant accounting for 37% [2010:38%], Student Fees 52% [2010:51%] and Other Income 11% [2010:11%]. Taking account of the 'Free Fees Initiative' funded by the State, the total core income funded from exchequer sources amounts to 65% (2010: 63%). Total expenditure (excluding funded research) decreased by 3% to €192 million with the pay (excluding funded research) representing 74% of expenditure similar to 2010. The cumulative core funding reserve was €0.25m at 30 September 2011.

Research activity reduced in 2010/11 by approximately €7 million (9%) over 2009/10 levels however the value of new research contracts signed in the year increased by 96% to €109 million which will impact the next three to four years. The indirect cost recovery rate remains static at 18%. Investment in research activity from exchequer sources reduced slightly, representing 70% of the total the portfolio compared with 72% in the previous year. While the outlook for research funding, particularly investment from exchequer sources, remains uncertain, it is important that College continues to improve grant application success rates, redirect the focus towards non Exchequer funding sources and increase the recovery of indirect costs of research activity. Total net assets of the College continued to grow during the year, increasing by €18 million to €705 million at 30 September 2011 with capital investment continuing at pace mainly relating to the Trinity Biomedical Sciences Institute, The Lir Academy of Dramatic Art and refurbishment costs of 7-9 South Leinster Street. Financial risk assessments were conducted during the year in accordance with the College's Risk Policy and reported to the Finance Committee.

The College continued to be extremely diligent and proactive in the manner in which it manages its finances, balancing its budget in 2010/11 and having no accumulated recurrent or capital deficit at 30 September 2011. This is a remarkable achievement when one considers the level of cumulative recurrent funding reductions experienced over the last number of years and the limited flexibility in terms of its core expenditure base. This position has been achieved by effectively adopting a 'coping' type financial strategy – increasing income from its existing asset base where possible and reducing expenditure in an opportunistic manner through the non-replacement of staff and reduction in the non-pay budgets across Schools and Support Areas with strategic procurement playing an important role reducing the full impact of reductions in approved non-pay budgets.

Although the College has managed its activity within budgeted resources, the approach adopted to date is not sustainable in the future. While the actions taken over the last number of years have resulted in an improvement of its financial forecasts to 2016 an accumulated recurrent deficit is still forecasted if no further intervention is taken and delivered on. Therefore, the focus must continue on the three main areas of non-exchequer income generation – international student intake, commercialisation and philanthropy coupled with strategic reprofiling/reductions in pay and non pay expenditure where possible in order to facilitate College's pursuit of its strategies and goals on a financially sustainable basis.

In spite of the reduced recurrent funding environment since 2008, the College has approved investments in world class infrastructure, Ussher academic posts, philanthropy, outreach, research institutes, internationalisation, information systems, and commercialisation that have amounted to c.€190 million with approved funding strategies in place. At this time, the College is currently well positioned financially and has capacity to invest in proposals that are consistent with the mid-term review of the College's Strategic Plan, have robust implementation plans with clear targets, agreed milestones and deliverables along with a positive return on investment within an appropriate timescale.

The implementation of a new Annual Budgetary Cycle (ABC) was challenging and its completion in 2010/11 was the first stepping stone towards implementing a strategically aligned resource allocation mechanism. It is however likely to take a number of years for the ABC to be fully effective given the fixed nature of the majority of core expenditure currently being consumed.

# FINANCIAL POSITION

In the years ahead, there is no doubt that the future financial environment will continue to provide significant challenges to the College's ability to plan strategically as a result of:

- global economic uncertainty
- limited visibility on the levels of future government funding
- reliance on exchequer funding for core and research funding
- uncertainty around the re-introduction of tuition fees
- a lack of a dynamic State funding model
- no agreed framework for renewal and resilience provisioning
- barriers to recovering the full economic cost of key activities
- increased competition in student and staff recruitment
- external factors influencing student and staff retention.

It has been a good year financially with the College succeeding in balancing its budget for 2010/11 in a contracting funding environment. The College is currently financially well positioned in terms of its capacity to invest in certain proposals that will enable it to safely deliver on its strategic objectives in an efficient, effective and financially sustainable manner. Given the financial outlook, it will not be complacent and must continue to focus and deliver on the future targets set for the three main areas of non-exchequer income generation — international student intake, commercialisation and philanthropy.



# **APPENDIX 1:**

INCOME AND EXPENDITURE ACCOUNT YEAR ENDED 30 SEPTEMBER 2011

	2011	2010
	€'000	€'000
INCOME		
State Grants	71,243	73,931
Student Fees	99,445	98,672
Other Income	20,933	22,166
	191,621	194,769
Research Grants and Projects	75,109	81,977
TOTAL	266,730	276,746
EXPENDITURE		
Academic Faculties	105,387	109,481
Academic and Other Services	20,688	21,301
Premises	25,367	26,061
Amount Allocated for Capital Purposes	735	1,000
Central Administration and Services	14,888	14,737
General Educational Expenditure	9,141	9,186
Student Services	5,352	5,311
Miscellaneous Expenditure	9,959	10,075
Academic and Related Services	191,517	197,152
Research Grants and Projects	75,109	79,415
TOTAL	266,626	276,567
Surplus on Activities before Amortisation of Capital Reserves and Grants, Ancillary Services and Depreciation of Fixed Assets	104	179
Surplus on Ancillary Services	320	193
Depreciation of Fixed Assets	(27,269)	(28,877)
General Reserve Transfer	26,949	28,684
NET SURPLUS FOR YEAR	104	179

# **APPENDIX 2:**

BALANCE SHEET AT 30 SEPTEMBER 2011

	2011	2010
	€'000	€'000
FIXED ASSETS		
Tangible assets	776,978	792,230
Investment properties	54,245	17,891
	831,223	810,121
CURRENT ASSETS		
Bank and cash balances	198,858	160,620
Debtors and prepayments	51,177	47,443
Stocks	406	372
	250,441	208,435
CURRENT LIABILITIES		
Creditors and accrued expenditure	(238,904)	(205,450)
Bank balances	(370)	(4,365)
	(239,274)	(209,815)
NET CURRENT ASSETS/(LIABILITIES) LONG TERM LIABILITIES	11,167	(1,380)
Creditors due after one year	(137,727)	(121,663)
	704,663	687,078
REPRESENTED BY:		
General reserve	704,411	686,930
Revenue reserve	252	148
	704,663	687,078



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